



# OTRS

Open Technology  
Real Services

## **Documentation**

# **OTRS 3.3 - Administrator-Handbuch**

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## OTRS 3.3 - Administrator-Handbuch

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# Vorwort

Dieses Buch soll das Leben von OTRS-Administratoren und -Neulingen erleichtern.

Die folgenden Kapitel beschreiben die Installation, Konfiguration und Administration von OTRS. Das erste Drittel des Textes beschreibt die Hauptfunktionalität der Software, während der Rest als Referenz aller vorhandenen Konfigurationseinstellungen dient.

This book continues to be a work in progress, given a moving target on new releases. We need your feedback in order to make this a high quality reference document: one that is usable, accurate, and complete. Please write to us if you find content missing in this book, if things are not explained sufficiently, or even if you see spelling mistakes, grammatical errors, or typos. Any kind of feedback is highly appreciated and should be made via our bug tracking system on <http://bugs.otrs.org>. Thanks in advance for your contributions!



# Kapitel 1. Einführung

## 1. Trouble-Ticket-Systeme - die Grundlagen

Dieses Kapitel enthält eine Kurzeinführung in Ticketsysteme, zusammen mit einer Erklärung des Kernkonzepts eines "Trouble-Tickets". Ein kurzes Beispiel illustriert die Vorteile der Nutzung eines solchen Systems.

### 1.1. Was ist ein Trouble-Ticket-System, und warum benötigen Sie eins?

Das folgende Beispiel soll verdeutlichen, was ein Trouble Ticket System ist und wie Sie damit in Ihrem Unternehmen Zeit und Geld einsparen können.

Max Mustermann ist ein Hersteller von Video-Rekordern. Herr Mustermann empfängt viele E-Mails von Kunden, die Hilfe benötigen. An manchen Tagen ist er aber nicht in der Lage, zeitnah auf Nachrichten zu reagieren. Einige Kunden werden dann ungeduldig und schreiben eine zweite E-Mail mit derselben Frage. Alle diese Support-Anfragen werden unsortiert im Posteingang von Herrn Mustermanns E-Mail-Programm gespeichert, womit er die Anfragen auch abarbeitet.

Weil Herr Mustermann nicht schnell genug auf all diese E-Mails antworten kann, wird er dabei von den Entwicklern Meier und Schulze unterstützt, die das gleiche E-Mail-System nutzen und auf den gleichen Posteingang zugreifen. Sie berücksichtigen dabei aber nicht, dass Herr Mustermann oft zwei identische Anfragen vom gleichen Kunden erhält. Manchmal kommt es vor, dass beide unabhängig voneinander auf die gleiche Anfrage antworten, was zur Folge hat, dass der Kunde zwei unterschiedliche Antworten erhält. Des Weiteren weiß Herr Mustermann wiederum nicht, was seine Kollegen dem Kunden genau geantwortet haben. Außerdem kennt er weder die Details der Anfragen oder die Lösungsvorschläge seiner Kollegen, oder wie oft bestimmte Probleme bei verschiedenen Kunden auftreten und wie viel Zeit und Geld er für die Unterstützung von Kunden bereits verbraucht hat.

In einem Meeting erfährt Herr Mustermann von sogenannten Trouble-Ticket-Systemen und wie sie Herrn Mustermanns Probleme mit den Kunden-Anfragen lösen können. Nachdem er sich im Internet erkundigt hat, entscheidet sich Herr Mustermann, das frei verfügbare Ticket-System "OTRS" auf einem Rechner zu installieren, der sowohl für seine Kunden, als auch für ihn und seine Mitarbeiter über das Internet erreichbar ist. Jetzt landen die Kunden-Anfragen nicht mehr in seinem persönlichen Posteingang, sondern direkt in einem Mail-Account, der für OTRS eingerichtet wurde. Das Ticket-System speichert alle eingehenden E-Mails in seiner Datenbank. Für jede Anfrage generiert das System automatisch eine Antwort, so dass der Kunde weiß, dass seine Anfrage angekommen ist und bald beantwortet werden wird. OTRS erstellt dabei für jede Anfrage eine eindeutige Referenz - die Ticket-Nummer. Die Kunden sind jetzt zufriedener, da sie wissen, dass ihre Anfragen berücksichtigt werden und senden keine Mehrfach-Anfragen mehr. Herr Mustermann und seine Kollegen können sich jetzt mit einem einfachen Web-Browser in OTRS anmelden und die Anfragen bearbeiten. Weil das System Tickets sperrt, die gerade beantwortet werden, wird keine Nachricht mehr versehentlich doppelt bearbeitet.

Stellen wir uns vor, dass Herr Schmidt eine Anfrage ans System gestellt hat und Herr Meier diese kurz und knapp beantwortet. Herrn Schmidt reicht diese Antwort jedoch nicht aus und so antwortet er auf die Lösungsmail am folgenden Tag. Herr Meier ist jedoch gerade mit anderen Dingen beschäftigt, so dass sich Herr Mustermann der Sache annimmt. Über die History-Funktion von OTRS kann er jetzt auf alle vergangenen E-Mails von Herrn

Schmidt und Herrn Meier zugreifen, deren Inhalt abfragen und eine ausführlichere Antwort versenden. Herr Schmidt erhält nun die Lösung für sein Problem, weiß aber nicht, dass diese von unterschiedlichen Personen stammt.

Natürlich handelt es sich dabei um ein verkürztes Beispiel-Szenario, das nur einige der Möglichkeiten und Features von Trouble Ticket-Systemen aufzeigt. Aber wenn Ihr Unternehmen eine große Anzahl von Kunden-Anfragen bewältigen muss und verschiedene Service-Mitarbeiter zu verschiedenen Zeiten auf diese Anfragen reagieren können müssen, kann ein Ticket-System sie dabei optimal unterstützen. Es hilft dabei, Arbeitsabläufe und -Prozesse zu vereinheitlichen, effizienter zu machen und Ihre Produktivität insgesamt zu steigern. Ein Ticket-System hilft Ihnen, Ihren Support- oder Help-Desk-Bereich flexibel zu strukturieren. Kommunikations-Abläufe zwischen Kunden und Service-Mitarbeitern werden transparenter. Das Resultat ist eine gesteigerte Service-Effizienz. Und zweifelsohne bedeuten zufriedene Kunden auch finanziell bessere Ergebnisse für Ihr Unternehmen.

## 1.2. Was ist ein Trouble-Ticket?

Ein Trouble-Ticket lässt sich im Wesentlichen mit einem Krankenblatt eines Krankenhauspatienten vergleichen. Bei der erstmaligen Einlieferung in das Krankenhaus wird das Krankenblatt im Zuge der Anamnese neu angelegt. Jeder Arzt trägt nun seine Diagnose sowie die verordnete Therapie und Medikation ein und dokumentiert deren Erfolg. Das Krankenblatt gibt nun einen schnellen Überblick, gewährleistet eine schnelle Einarbeitung und verhindert eine Mehrfachdosierung von Medikamenten. Ist die Krankheit besiegt und der Patient entlassen, wird das Krankenblatt archiviert.

Im OTRS werden Trouble-Tickets, also die Krankenblätter aus dem obigen Beispiel, als normale E-Mails behandelt und gespeichert. Schickt ein Kunde eine Anfrage an das Trouble-Ticket-System, wird das Krankenblatt eingerichtet - ein neues Ticket wird geöffnet. Die Antwort eines Mitarbeiters auf die Anfrage kann als Eintrag eines Arztes gesehen werden, eine erneute Antwort (bzw. Anfrage des Kunden auf dasselbe Ticket) als Veränderung oder Erweiterung des Krankheitsbildes. Ein Ticket gilt als erledigt bzw. geschlossen, wenn eine Antwort auf die Anfrage an den Kunden zurückgesendet wurde oder das Ticket über das System als geschlossen markiert wird. Antwortet ein Kunde auf ein bereits geschlossenes Ticket, wird es erneut geöffnet und um die neuen Informationen ergänzt. Um die Konsistenz der Daten sicherzustellen, werden alle Tickets mit all ihren spezifischen Informationen archiviert und verbleiben im System. Durch die Speicherung der Tickets als normale E-Mails ist es möglich, dass diese auch E-Mail-Anhänge enthalten können. Zusätzlich zu den normalen Informationen einer E-Mail, lassen sich beliebige Notizen zu jedem Ticket hinzufügen. Die Tickets selbst werden auf der Festplatte bzw. in einer Datenbank archiviert, ebenso zusätzliche Meta-Informationen des Tickets wie Notizen, an der Beantwortung des Tickets beteiligte Mitarbeiter, Zeit und Datum der Bearbeitung, Bearbeitungsdauer usw. Eine Sortierung oder eine Suche über den Datenbestand wird mit Hilfe aller vorhandenen Informationen zu den Tickets realisiert.

## 2. OTRS-Helpdesk

In diesem Abschnitt werden die Features des Open Ticket Request Systems (OTRS) vorgestellt. Des Weiteren wird näher auf die Systemanforderungen von OTRS eingegangen und erläutert, wie Kontakt zur OTRS-Community aufgenommen werden kann bzw. wie kommerzieller Support erhältlich ist.

### 2.1. Grundlagen

OTRS Help Desk (OTRS) ist eine Webanwendung, die auf einem Webserver installiert und mit einem Browser genutzt wird.

OTRS ist in mehrere Komponenten aufgeteilt. Die Basis bildet ein Framework, das alle grundlegenden Komponenten für die Applikation und das Trouble-Ticket-System enthält.



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Es können zusätzliche Komponenten wie das OTRS::ITSM-Modul, eine Knowledge-Base (FAQ) oder Netzwerk-Überwachungs-Lösungen installiert werden.

## 2.2. Features

OTRS bietet viele verschiedene Features. Die folgende Aufzählung gibt einen Überblick über die wichtigsten Eigenschaften und Fähigkeiten des OTRS-Frameworks.

### 2.2.1. Benutzeroberfläche

- OTRS enthält getrennte, moderne Benutzeroberflächen für Agenten und Kunden.
- Es kann mit jedem modernen Web-Browser und auf mobile Plattformen genutzt werden und ist für Retina-Bildschirme optimiert.
- Die Benutzeroberfläche kann mit Skins den eigenen Vorstellungen angepasst werden (z.B. gemäß der Corporate Identity Ihres Unternehmens).
- Umfangreiches und anpassbares Agenten-Dashboard mit persönlichen Ticket-Übersichten und Unterstützung für grafische Statistiken.
- Eine erweiterbare Reporting-Engine stellt verschiedene Statistiken und zeitlich planbare Reports zur Verfügung.
- Mit dem Prozess-Management ist es möglich, eigene Ticket-basierte Masken und Prozesse zu definieren (Ticket-Workflows).
- OTRS hat eine eingebaute Rechte-Verwaltung, die um hochgranulare Zugriffskontrolllisten (ACLs) ergänzt werden kann.
- Unterstützung in mehr als 30 Sprachen und verschiedenen Zeit Zonen.

### 2.2.2. E-Mail-Schnittstelle

- Unterstützung für MIME-E-Mails mit Anhängen.
- Automatische Umwandlung von HTML- in reine Text-Nachrichten (höhere Sicherheit vor schädlichen Inhalten und schneller durchsuchbar).
- Eingehende E-Mails können gefiltert und mithilfe komplexer Regeln vorverarbeitet werden, zum Beispiel zum Erkennen von Spam-Nachrichten und zur Verteilung in passende Queues.
- Unterstützung für PGP- und S/MIME-Standards mit Schlüssel- und Zertifikatsverwaltung und E-Mail-Verarbeitung.
- Automatische Antworten, für jede Queue konfigurierbar.
- E-Mail-Benachrichtigungen für Agenten über neue Tickets, Follow-ups oder freigegebene Tickets.
- Es ist möglich, eigene Definitionen zur Erkennung von Folge-Kommunikation zu treffen (z.B. Anruf#, Ticket# oder Anfrage#). Es stehen verschiedene Nummern-Generatoren (Datumsbasiert, zufällig, etc.) zur Verfügung, außerdem können eigene Generatoren verwendet werden. Folge-Kommunikation kann außerdem anhand von In-Reference-To-Header oder externen Ticket-Nummern erkannt werden.

### 2.2.3. Ticket

- OTRS nutzt Tickets, um interne und externe Kommunikation zu bündeln. Dieses Tickets sind wiederum in Queues organisiert.

- Es gibt verschiedene Möglichkeiten (z.B. Queue-, Status- oder Eskalationsbasiert) und verschiedene Detailgrade (klein/mittel/Vorschau) zum Betrachten von Tickets im System.
- Die Ticket Historie speichert alle Änderungen am Ticket.
- Tickets können zum Beispiel durch Antworten, Weiterleiten, Umleiten, Verschieben in eine andere Queue, Ändern von Attributen (Status, Priorität, etc.), Sperren oder Einbu-chen von Zeiteinheiten bearbeitet werden. Es ist auch möglich, mehrere Tickets gleich-zeitig zu bearbeiten (Stapelverarbeitung).
- "Warten bis"-Zeiten, Eskalationszeiten und das SLA-Management ermöglichen zeitge-steuerte Planung und Einschränkungen für Tickets.
- Tickets können mit anderen Tickets oder generischen Objekten (z.B. FAQ-Artikeln) ver-linkt werden.
- Automatische und zeitgesteuerte Aktionen können mit Hilfe eines sog. "GenericAgent" auf Tickets ausgeführt werden.
- OTRS enthält eine mächtige Suchfunktion, die komplexe und Volltextsuchen auf Tickets ermöglicht.

## 2.2.4. System

- OTRS unterstützt viele Betriebssysteme (Linux, Solaris, AIX, FreeBSD, OpenBSD, Mac OS 10.x, MS Windows) und Datenbanksysteme für das zentrale OTRS-Backend (MySQL, PostgreSQL, Oracle, MSSQL).
- Der OTRS-Kern kann durch Installation von Paketen erweitert werden. Viele Pakete sind frei verfügbar (wie FAQ, OTRS::ITSM etc.), zusätzlich stehen weitere Pakete als Fea-ture-AddOns für Service-Kunden der OTRS-Gruppe zur Verfügung.
- Integration von externen Backends für Kundendaten, z.B. Active Directory, eDirecto-ry oder OpenLDAP. Kunden können sich per Datenbank, LDAP, HTTPAuth oder Radius authentifizieren.
- Mit dem GenericInterface ist es leicht möglich, OTRS mit anderen Web-Services zu ver-binden. Einfache Web-Services können ohne Programmieraufwand angebunden wer-den, komplexe Szenarios mithilfe von eigenen Anpassungen. Der OTRS Ticket-Connec-tor erlaubt die Erstellung und Aktualisierung von, sowie die Suche nach Tickets aus Dritt-Applikationen via Web-Service.

Nachfolgend finden Sie einen Überblick über Veränderungen in den letzten Versionen von OTRS.

## 2.2.5. Neue Features von OTRS 3.3

### 2.2.5.1. Produktivität

- Ticketlisten im Dashboard und regulären Übersichten können jetzt anhand von auswähl-baren Spalten gefiltert und sortiert werden; die anzuzeigenden Spalten sind konfigu-rierbar.
- Die medium- und Vorschauansicht der Ticketübersichten sind jetzt sortierbar.
- Es wurde ein Kalender-Widget zum Dashboard hinzugefügt, das Tickets als Ereignisse anzeigen kann.
- Es wurde ein Widget zum Dashboard hinzugefügt, das Tickets pro Status und Queue in Form einer Matrize anzeigen kann.



- Agenten können nun wichtige Artikel markieren.
- Ein neues Baumauswahl-Widget erleichtert und beschleunigt die Arbeit mit verzweigten Daten (Queues, Services, etc.).
- Unterstützung für die Suche nach relativen Zeiträumen (z.B. "vor mehr als einem Monat") für dynamische Datums- und Datum-Zeit-Felder hinzugefügt.
- Es ist nun möglich, Vorlagen (vorher "Standard-Antworten") auch für die Erstellung neuer oder Weiterleitung bestehender Tickets zu definieren.
- Die Liste verfügbarer Prozesse kann nun per ACL gefiltert werden.
- Starten von Prozessen nun auch über die Kunden-Oberfläche möglich.
- An vielen Stellen wird Text nun nicht mehr nach einer festen Anzahl von Zeichen abgeschnitten, sondern abhängig vom verfügbaren Platz auf dem Bildschirm. So wird mehr Information sichtbar dargestellt.
- OTRS ist jetzt für Retina-Bildschirme geeignet. Bilder wurden für höhere Auflösungen angepasst und viele Symbole durch Schriftzeichen aus der FontAwesome-Schriftart ersetzt.
- Mithilfe des neuen "Management-Dashboard"-Features ist es jetzt möglich, grafische Statistiken (z.B. als Balken- oder Linien-Diagramm) im Dashboard anzuzeigen. Hinweis: Dieses Feature wird vom IE8 nicht unterstützt.

#### **2.2.5.2. Arbeiten mit externen Systemen**

- OTRS kann nun mehrere Kundenfirmen-Datenbanken nutzen (Danke an Cyrille @ belnet-ict).
- OTRS kann nun Kundendaten automatisch (permanent) in dynamischen Feldern speichern. Dies ist hilfreich für Reportingzwecke.
- OTRS kann nun eingehende E-Mails korrekt bestehenden Tickets anhand von externen Ticketnummern zuordnen.
- OTRS kann nun auch E-Mails über POP3/TLS-Verbindungen abholen.

#### **2.2.5.3. Installation & Administration**

- Der Web-Installer kann OTRS nun (zusätzlich zu MySQL) auch auf PostgreSQL-, Oracle- und SQL-Server-Datenbanken installieren.
- OTRS unterstützt MySQL 5.6 nun vollständig.
- Generic Agent-Aufgaben können jetzt bei konfigurierten Ticket-Ereignissen ausgeführt werden.
- Der neue grafische ACL-Editor erleichtert das Bearbeiten von Zugriffskontrolllisten (ACLs).
- Postmaster-Filter können jetzt negierte Filterbedingungen verwenden (Danke an Renée Bäcker).
- Postmaster-Filter können jetzt relative "Warten bis"-Zeiten und Besitzer/Verantwortlichen für neue Tickets auf Basis von eingehenden E-Mail-Daten festlegen.
- Kunden- und Agentenpasswörter können jetzt mit dem (im Vergleich zu SHA) stärkeren bcrypt-Algorithmus verschlüsselt werden.

- Viele Symbole wurden durch Schriftzeichen ersetzt, was das Erstellen eigener Skins mit angepasster Farbgebung stark erleichtert und zudem die Ladezeiten verbessert.

## **2.2.6. Neue Features von OTRS 3.2**

### **2.2.6.1. Stärkerer Fokus auf Kunden**

- Das neue "Kunden-Informationszentrum" bietet eine schöne Ansicht auf einen Kunden (bzw. die Kundenfirma). Sie können
  - Listen zeigen jetzt eskalierte, neue und offene Tickets der Kundenfirma und solche, die die Erinnerungszeit erreicht haben.
  - Kundenbenutzer (Kontakte), die zu dieser Firma gehören, mit ihren individuellen Ticketzahlen und Shortcuts zur Erstellung von neuen Tickets für diese Nutzer.
  - Eine allgemeine Ticket-Statusübersicht für diese Kundenfirma.
- Das neue "Zu Kunde wechseln"-Feature ermöglicht es Agenten, die über die notwendigen Berechtigungen verfügen, die Kunden-Oberfläche aus Sicht des jeweiligen Kunden zu betrachten.

### **2.2.6.2. Höhere Anpassbarkeit**

#### **2.2.6.2.1. Prozess-Management**

- Das neue Prozessmanagement macht es möglich, Prozesse in OTRS abzubilden.

#### **2.2.6.2.2. Verbesserungen der Kundenoberfläche**

- Die Kundenoberfläche unterstützt jetzt AJAX und ACLs umfassend.
- Die Kundenoberfläche setzt nun JavaScript voraus und ist nicht mehr kompatibel zu Internet Explorer 6 (und älter).
- In der Kundenoberfläche können Sie jetzt den Standard-Tickettyp für neue Tickets einstellen. Zusätzlich kann der Ticket-Typ versteckt werden, wobei alle Tickets mit dem Standard-Ticket-Typ erstellt werden.

#### **2.2.6.2.3. Verbesserungen in der Agenten-Oberfläche**

- Agenten können Tickets nun nach der Eskalationszeit suchen.
- Es ist nun möglich, dynamische Felder standardmäßig in der Ticketsuche anzuzeigen.
- Verbesserte Bildschirmnutzung in den Ticketmasken, durch die unnötiges Scrollen vermieden wird. In jeder Maske kann die Größe des Rich-Text-Editors jetzt separat konfiguriert werden.
- Es ist nun möglich, Tickets aus den Ticketmasken heraus in eine andere Queue zu verschieben (z. B. aus Ticket Schließen), nachdem eine Konfigurationsoption aktiviert wurde. Dies ist standardmäßig nicht aktiviert.
- Die Ticketsuche leitet nun direkt zur Detailansicht (Zoom) des gefundenen Tickets um, wenn nur ein Ticket gefunden wurde.
- Es ist nun möglich, die Artikeltyp-Auswahl in TicketActionCommon-basierten Masken auszublenden, was es ermöglicht, mehr Daten in der jeweiligen Maske sichtbar zu machen.
- Es gibt ein neues "Out of Office" Widget im Dashboard, welches alle Agenten-Kollegen auflistet, die derzeit nicht verfügbar sind.

- Der neue CKEditor 4 macht das Arbeiten mit Rich-Text-Inhalten (wie HTML-Mails) leichter und stabiler.

#### **2.2.6.2.4. Administrative Verbesserungen**

- Ereignisbasierte benachrichtigungen können nun nur für bestimmte Artikel-Sender-Typen versendet werden.
- Die Statistik-Engine von OTRS kann nun zusätzlich zu Tagen, Monaten und Jahren auch mit Wochen umgehen. Dies gestattet es beispielsweise, Reports über alle Tickets, die (in einer bestimmten Queue) "in der letzten Woche" eröffnet wurden, zu erstellen.
- Es ist nun möglich, angepasste DTL (Template)-Dateien in Custom/Kernel/Output/HTML abzulegen. Diese überschreiben dann die Dateien des Systems, genau wie dies bereits auch mit Perl-Dateien möglich ist.
- AdminSMIME kann nun Zertifikate in menschenlesbarer Form anzeigen.
- In der SysConfig können nun Datum und Datum+Zeit als Konfigurationstypen verwendet werden.

#### **2.2.6.3. Bessere Skalierfähigkeit**

##### **2.2.6.3.1. Ticket-Archivierung verbessert**

- Wenn tickets archiviert werden, wird die Information, welcher Agent das Ticket bereits gelesen hat, gelöscht, genau wie die Information, welche Agenten das Ticket beobachten. Diese Einstellung ist standardmäßig aktiv und reduziert die Datenmenge, die in großen Systemen mit vielen Tickets und Agenten anfällt.
- Es steht auch ein Skript zur Verfügung, welches diese Daten aus bereits archivierten Tickets entfernt.
- Archivierte Tickets werden nun immer als bereits vom Agenten gelesen angezeigt.

##### **2.2.6.3.2. Performance-Verbesserungen**

- Die Sitzungsverwaltung von OTRS ist nun bis zu 10-mal schneller, besonders bei vielen aktiven Nutzern.
- Es ist möglich, die Zahl der gleichzeitig aktiven Agenten und/oder Kunden zu beschränken, um eine Überlastung des Servers zu vermeiden.
- Signifikante Reduzierung der Anzahl an ausgeführten Datenbankabfragen in Ticketübersichten und Ticketmasken in Agenten- und Kundenoberfläche.
  - Dies wird die Last auf Datenbankservern reduzieren, besonders auf großen Systemen. In manchen Fällen wird OTRS dadurch auch sichtbar schneller.
- Die Geschwindigkeit der LDAP-Benutzersynchronisation wurde verbessert.
- Die Geschwindigkeit des Caches im Umgang mit vielen Dateien wurde erhöht.

#### **2.2.6.4. Bessere Zusammenarbeit mit Fremdsystemen**

##### **2.2.6.4.1. FAQ-Connector für das GenericInterface**

- Es ist nun möglich, die Daten des FAQ-Moduls (OTRS-Wissensdatenbank) mittels Webservice (GenericInterface) zu nutzen. Damit können FAQ-Artikel zum Beispiel zusätzlich in Ihrer Unternehmenswebsite angezeigt werden.

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## 2.2.7. Neue Features von OTRS 3.1

### 2.2.7.1. GENERIC INTERFACE - Ein Webservice Framework

- Der GI ist ein flexibles Framework, um Webservice Erstellung (Verbindung mit externen Services) zu erleichtern und ermöglichen.
- OTRS fungiert jeweils als Provider (Server - remote Anfragen beantworten) und Requester (Client - remote Abfrage stellen).
- Einfache Web Services können auch ohne Programmierkenntnisse über die Konfiguration des Generic Interface umgesetzt werden.
- Komplexe Szenarien können über individuelle OTRS Erweiterungen realisiert werden. Diese erweitern das Generic Interface um den notwendigen Perl Code.
- *Konnektoren* erlauben den Zugriff auf OTRS über die Web Services des Generic Interface. Beispielsweise erlaubt der Ticket Konnektor das erstellen/aktualisieren von Tickets, so dass diese, unabhängig vom Netzwerk Transport in einem Web Service verwendet werden können.
- Der Scheduler-Daemon unterstützt das asynchrone ausführen von Ereignissen. Das ist hilfreich um Webservice-Anfragen von OTRS an ein anderes System zu starten, nachdem die Agentenanfrage beantwortet wurde (z.B.: nachdem ein Ticket erstellt wurde). Ansonsten kann es passieren das die Anfrage blockiert wird, das resultiert wiederum in einer erhöhten Antwortzeit für den Agenten.

Mit dem Generic Interface können neue Web-Services ohne zusätzlichen Programmcode mithilfe bestehender OTRS-Module konfiguriert werden. Sie können auch kombiniert werden, um einen neuen Web-Service zu erstellen. Beim Konfigurieren einer neuen Web-Service-Verbindung muss ein Administrator folgendes hinterlegen:

- Ein neuer Web Service in der Admin Oberfläche
- Die grundlegenden Meta Daten (Transport Typ (SOAP), URL, etc.) und
- Existierende Operations (Teil eines Connectors) spezifizieren für jede Operation wie die Daten zugeordnet werden müssen (eingehend und ausgehend)

Ein Generic Interface Debugger hilft dem OTRS Administrator dabei zu überprüfen, wie Anfragen eingehen und wie diese in den verschiedenen Ebenen des GI behandelt werden.

#### 2.2.7.1.1. Aktuelle Features

- Netzwerkprotokolle: SOAP/HTTP. Andere wie REST und JSON werden in der Zukunft, je nach Kundenbedarf, hinzugefügt
- Konfigurierbares grafisches Daten-Mapping-Benutzerinterface für Schlüssel/Werte-Transformationen in Bezug auf eingehende und ausgehende Daten.
- Grafischer Debugger um die Konfiguration und den Informationsfluss des erstellten Webservices zu überprüfen.
- Ein Ticketconnector erlaubt die Benutzung von OTRS als ein Webservice für die Ticket-handhabung

#### 2.2.7.1.2. Zukünftige Features

- Weitere Netzwerkprotokolle (REST,JSON)
- Das Generic Interface ersetzt das iPhoneHandle als Backend für Mobile-Anwendungen

- Zusätzliche Konnektoren werden in der Zukunft zur Verfügung gestellt, damit ein größerer Teil von OTRS über Web Service angesprochen werden kann (bspw. die Erstellung, Aktualisierung oder Löschung von Agenten, Benutzern, Services oder CIs).

### **2.2.7.2. Dynamische Felder**

Die Dynamischen Felder ersetzten die existierenden Ticket- und Artikel-FreiText-Felder und Zeit-Felder durch eine dynamische Struktur. Diese erlaubt zudem die Erstellung individueller Eingabeformulare in OTRS.

- Eine unbegrenzte Anzahl von Feldern kann vom Administrator über ein grafisches Benutzerinterface konfiguriert werden.
- Die Felder können verschiedene Typen haben, welche sowohl für Tickets, als auch für Artikel verwendet werden können. Standardmäßig verfügbar sind:
  - Text
  - Mehrzeiliger Text
  - Kontrollkästchen
  - Einfachauswahl
  - Mehrfachauswahl
  - Datum
  - Datum/Zeit
- Neue eigene Feldtypen (bspw. eigener Feldtyp 'dropdown' mit einer externen Datenquelle) können mit wenig Aufwand hinzugefügt werden, da die Felder modular angelegt werden.
- Ein zukünftiges Szenario könnte sein, dass dynamische Felder für nicht Ticket-Objekte oder in eigenen Modulen benutzt werden könnten. Zum Beispiel: ein eigenes Modul fügt Objekte hinzu um "Bestellungen" in OTRS zu verwalten. OTRS kann dynamische Felder verwenden, um diese Eigenschaften/Daten anzufügen.
- Ein Datenbank Update Skript transformiert historische FreiText Felder und die zugehörigen Konfiguration in die neue Struktur.

### **2.2.7.3. VERBESSERUNGEN IM TICKET MANAGEMENT**

#### **2.2.7.3.1. Ticketerstellung verbessert**

- Mehrere Email Adressen können nun spezifiziert werden als 'An:', 'Cc:' oder 'Bcc:' wenn ein neues Telefon- oder Email-Ticket erzeugt wird.

#### **2.2.7.3.2. Unterstützung für eingehende Telefonanrufe**

- Eingehende Telefonanrufe können nun innerhalb eines existierenden Tickets erfasst werden (bisher konnten nur ausgehende Telefonanrufe erfasst werden).

#### **2.2.7.3.3. Ticket Übersicht Vorschau wurde verbessert**

- Es ist nun möglich Artikel mit einem bestimmten Sendertypen (bspw. Artikel von internen Agenten) über die SysConfig von der Anzeige in der Übersicht auszuschließen.
- Artikel eines bestimmten Typs können standardmäßig expandiert dargestellt werden. Dies ist konfigurierbar.

#### **2.2.7.3.4. Ticket verschieben verbessert.**

- Die Anzeige, die nach dem Verschieben eines Tickets erscheinen soll kann nun konfiguriert werden. Möglich ist entweder der Ticket Zoom (LastScreenView) oder die Ticket Liste (LastScreenOverview).

#### **2.2.7.3.5. Sammel-Aktion verbessert**

- Mit der neuen Sammelaktion, können eingehende E-Mails nun von mehreren Tickets gleichzeitig versendet werden. Weil Tickets unterschiedliche Queues besitzen können und diese Queues wiederum unterschiedliche Templates, Anreden und Signaturen, werden diese nicht in der E-Mail Sammelaktion verwendet.
- Eine zusätzliche Sammelaktion erlaubt die Konfiguration von Ticket Typen für die ausgewählten Tickets.

#### **2.2.7.3.6. Konfigurierbare ablehnbare Absender-E-Mail-Adressen**

- Diese Funktion erlaubt das Konfigurieren einer E-Mailadresse, die verwendet wird um zu verhindern das neue Tickets per E-Mail angelegt werden. Diese Funktion kann überall verwendet werden, wo es Kunden nicht erlaubt ist neue Tickets per E-Mail anzulegen.

### **2.2.7.4. Prozessautomatisierung**

#### **2.2.7.4.1. Eskalationsereignisse hinzugefügt**

- OTRS erstellt nun Ereignisse für jede der verfügbaren Eskalationsarten (Antwort, Update und Lösung). Dies erlaubt nun Aktionen (wie z.B. Benachrichtigungen) auszuführen bevor die Eskalation auftritt, während sie auftritt und in dem Moment wenn die Eskalation endet.

#### **2.2.7.4.2. Benachrichtigungsmechanismus verbessert**

- Ein neues Generic Agent Benachrichtigungsmodul erlaubt dem OTRS Administrator Nachrichten zu definieren, die angezeigt werden sobald sich ein Agent im Agenten-Interface anmeldet.

#### **2.2.7.4.3. Zeitberechnung verbessert**

- Alle Arten von Zeiten werden nun anhand des Anwendungsserver berechnet. Das löst eventuelle Probleme, die durch die Abweichungen der Taktzeiten zwischen den Anwendungs- und Datenbank-Servern verursacht wurden.

#### **2.2.7.4.4. GenericAgent verbessert**

- Der GenericAgent kann nun nach "Ticket Change time" filtern.
- Weiterhin kann der GenericAgent bei Übereinstimmung einen Ticketverantwortlichen setzen.

### **2.2.7.5. Benutzeroberfläche, RichTextEditor, Charset**

#### **2.2.7.5.1. Benutzeroberflächengeschwindigkeit verbessert**

- Die Geschwindigkeit für die Darstellung und Artikelanzeige wurde verbessert, danke Stelios Gikas <stelios.gikas@noris.net>!

#### **2.2.7.5.2. Rich Text Editor aktualisiert**

- IOS5 Unterstützung hinzugefügt
- Zitate können mit der Enter-Taste verlassen werden.



- Update von CKEditor 3.4 auf CKEditor 3.6, diese Verbesserungen beziehen sich auf die Versionen [CKEditor 3.5](#) und [CKEditor 3.6](#).
- IE9 Unterstützung verbessert.
- Größen veränderbare Dialoge.

### **2.2.7.5.3. Unicode-Unterstützung - Nicht-UTF-8 Kodierung entfernt**

- UTF-8 ist nun der einzig erlaubte Zeichensatz im OTRS.
- Alle Sprachdateien sind nun in UTF-8 formatiert, was die Benutzung und zukünftige Verbesserungen des Übersetzungs-Mechanismus vereinfacht.

### **2.2.7.6. Unterstützung von Datenbank Treibern**

#### **2.2.7.6.1. Verbesserte PostgreSQL Treiber kompatibilität**

- PostgreSQL 9.1 Unterstützung hinzugefügt.
- Ein neuer Legacy-Treiber ist nun für PostgreSQL 8.1 oder ältere Versionen verfügbar.

#### **2.2.7.6.2. Verbesserte MS SQL Treiber Kompatibilität**

- Der MS SQL-Treiber speichert Binärdaten nun in VARBINARY-Zeichenfolgen anstatt in TEXT-Zeichenfolgen oder NVARCHAR Zeichenfolgen anstatt VARCHAR-Zeichenfolgen (für bessere Unicode-Unterstützung).

### **2.2.7.7. MAIL integration**

#### **2.2.7.7.1. Mailverwaltung verbessert**

- Wenn Sie zu IMAP E-Mailkonten verwenden, ist es nicht möglich E-Mails aus einem speziellen E-Mailordner, neben dem INBOX-Ordner, zu verwenden,
- OTRS kann sichere Verbindungen zu IMAP-Servern über Transport Layer Security (TLS) aufbauen.

## **2.3. Hardware und Software-Anforderungen**

OTRS kann auf vielen Betriebssystemen installiert werden. OTRS kann auf Linux und den verschiedenen Unix-Derivaten (z. B. OpenBSD oder FreeBSD) betrieben werden. Ebenfalls läuft OTRS auch unter allen Windows-Versionen. Bezüglich der Hardware empfiehlt es sich, mindestens einen 2 GHz Pentium Xeon oder vergleichbare CPU, 2 GB RAM und eine 160 GB Festplatte zu verwenden.

Um OTRS zu betreiben, wird ein Web- sowie ein Datenbankserver benötigt. Weiterhin ist eine funktionierende Perl-Installation mit einigen Zusatzmodulen die Grundvoraussetzung für ein funktionierendes System. Der Webserver und Perl müssen auf der gleichen Maschine installiert sein, auf der später auch OTRS ausgeführt werden soll. Das Datenbank-Back-End kann auf der lokalen oder auf einer entfernten Maschine installiert werden.

Für den Webserver empfehlen wir die Verwendung von apache 2. Durch die Verwendung des Modules `mod_perl`, kann die Geschwindigkeit von OTRS enorm gesteigert werden. Prinzipiell sollte OTRS aber auf jedem Webserver betrieben werden können, der die Ausführung von Perl-Skripten unterstützt.

Sie können OTRS auf verschiedenen Datenbanksystemen verwenden. OTRS unterstützt aktuell MySQL, PostgreSQL, Oracle, oder Microsoft SQL Server. Wenn Sie MySQL als Datenbank im Einsatz haben, haben Sie den Vorteil das die Datenbank- und einige Systemeinstellung über ein Webfrontend konfiguriert werden können.

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Für Perl gilt mindestens die Version 5.8.8 zu verwenden. Es werden einige Zusatzmodule benötigt, die Sie entweder direkt über die Shell von Perl und CPAN oder mit Hilfe des Paketmanagers (yast, apt-get) Ihres Betriebssystems einspielen müssen.

Software-Anforderungen

### **2.3.1. PERL Unterstützung**

- Perl 5.10 oder höher

### **2.3.2. Web Server Unterstützung**

- Apache2 + mod\_perl2 oder höher (empfohlen)
- Webserver mit CGI support (CGI nicht empfohlen)
- Microsoft Internet Information Server (IIS) 6 oder höher

### **2.3.3. Datenbankunterstützung**

- MySQL 5.0 oder höher
- PostgreSQL 8.0 oder höher (8.2 oder höher empfohlen)
- Oracle 10g oder höher
- Microsoft SQL Server 2005 oder höher

Im Abschnitt für die Installation der für OTRS benötigten Perl-Module wird beschrieben, wie Sie Perl-Module manuell einspielen können.

Wenn Sie ein bereits vorgefertigtes OTRS-Paket für Ihr Betriebssystem zur Installation verwenden (rpm, Windows-Installer), sollten die benötigten Perl-Module automatisch installiert werden.

### **2.3.4. Webbrowser-Unterstützung**

Um OTRS zu benutzen benötigen Sie einen modernen Browser mit eingeschaltetem JavaScript Support. Die folgenden Browser werden nicht unterstützt:

- Internet Explorer vor Version 8
- Firefox vor Version 10
- Safari vor Version 5

Wir empfehlen immer die neueste Version Ihres Browser zu benutzen, da diese die beste JavaScript- und Rendering-Leistung besitzt. Mit großen Datenmengen oder großen Systemen können signifikante Performance-Unterschiede zwischen den verwendeten Browsern auftreten. Wir beraten Sie gerne über dieses Thema.

## **2.4. Community**

Um OTRS hat sich in den letzten Jahren eine große Community gebildet. Über Mailinglistentauschen sich Anwender und Entwickler zu den verschiedensten Themen rund um das Trouble Ticket System aus. Behandelt werden Fragen rund um die Installation, Konfiguration, Benutzung, Lokalisation und Entwicklung. Fehler in der Software können über ein Bug Tracking System gemeldet werden und erreichen so die zuständigen Entwickler bzw. gehen nicht verloren, so dass schnell Fixes bereit gestellt werden können.



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Die Webseite der OTRS-Community ist: <http://www.otrs.com/open-source/>.

## 2.5. Kommerzieller Support und Dienstleistungen für OTRS

Wenn Sie Hilfe bei der Konfiguration oder Anpassung von OTRS benötigen oder Sie auf der sicheren Seite sein wollen, zögern Sie nicht uns zu kontaktieren: Wir bieten eine breite Palette von professionellen Dienstleistungen, wie weltweiten Enterprise-Support, Consulting und Engineering einschließlich Prozess-Design, Implementierung, Anpassung, Anwendungsunterstützung und vollständig verwalteten Service an.

Unsere [Service Verträge](#) garantieren sofortige Hilfe und professionelle Unterstützung und nicht zu vergessen freien Zugang zu [OTRS Feature Add-Ons](#) - hilfreiche zusätzliche Funktionen für Ihr OTRS.

Die [OTRS Group](#) bietet [Trainingsprogramme](#) in verschiedenen Ländern an. Sie können entweder an einem unserer regelmäßig stattfindenden öffentlichen OTRS Administrator-Trainings teilnehmen oder an einer Inhouse-Schulung, die alle spezifischen Anforderungen Ihres Unternehmens abdeckt.



# Kapitel 2. Installation

Dieser Abschnitt beschreibt die Installation und die grundlegende Einrichtung des zentralen OTRS Frameworks. Dabei wird die Installation von OTRS aus dem Quellcode erläutert, wie auch über Binärpakete wie RPM oder ausführbare Dateien für Windows.

Dieses Kapitel beschreibt die Einrichtung des Web- und Datenbankservers, die Schnittstelle zwischen OTRS und der Datenbank, das Einspielen einzelner Perl-Module, das Setzen der richtigen Berechtigungen, die Einrichtung der OTRS-eigenen cron-Jobs sowie grundlegende Einstellungen in den OTRS-Konfigurationsdateien.

Folgen Sie den Schritten in diesem Kapitel, um OTRS auf Ihrem Server zu installieren. Dann können Sie sich über die Weboberfläche anmelden und das System administrieren.

## 1. Der einfache Weg - Installation fertiger Pakete

If available for your platform you should use pre-built packages to install OTRS, since it is the simplest and most convenient method. You can find them in the download area at <http://www.otrs.com>. The following sections describe the installation of OTRS with a pre-built or binary package on SUSE, Red Hat and Microsoft Windows systems. Only if you are unable to use the pre-built packages for some reason should you follow the manual process.

### 1.1. Installation des RPM auf einem SuSE-Linux-Server

This section describes the installation of our RPM package on a SUSE Linux server. We have tested against all recent SLES and openSUSE versions. Before you start the installation, please visit <http://www.otrs.com/downloads> and make sure you use the latest OTRS RPM package available.

#### 1.1.1. Vorbereiten der Datenbank für OTRS

You can use OTRS using different database back-ends: MySQL, PostgreSQL, Oracle or Microsoft SQL Server. The most popular database to deploy OTRS on is MySQL. This chapter shows the steps you need to take to configure MySQL on a SUSE-based server. Of course you can install the database on a dedicated database server if needed for scalability or other purposes.

#### Anmerkung

If you follow this chapter on openSUSE 12.3 and up you'll actually not install MySQL but MariaDB instead, a MySQL compatible fork of the MySQL code. This is no problem, it will work just as well (and even a little better at some points).

Installieren Sie MySQL als root mit folgenden Befehl:

```
linux:~ # zypper install mysql perl-DBD-mysql
```

This will install MySQL with the default options on your system. You'll need to change the defaults in order to make it suitable for OTRS. With a text editor open the file `/etc/my.cnf` and change the line with **max\_allowed\_packet** on it, and add a line below, like this:

```
max_allowed_packet=20M
query_cache_size=32M
```

Now execute **rcmysql restart** to re-start the database server and activate these changes. Then run **/usr/bin/mysql\_secure\_installation** and follow the on-screen instructions to set a database root password, remove anonymous access and remove the test database. Lastly, run **chkconfig -a mysql** in order to make sure mysql is automatically started at server startup time.

## 1.1.2. OTRS installieren

Install OTRS with via the command line using **zypper**. This will also pull in some dependencies such as the apache web server and some Perl modules. Make sure you copied the OTRS RPM file to the current directory.

```
otrs-sles:~ # zypper install otrs-3.3.*.rpm
....
Retrieving package otrs-3.3.3-01.noarch (1/26), 17.5 MiB (74.3 MiB unpacked)
Installing: otrs-3.3.3-01 [done]
Additional rpm output:
Check OTRS user ... otrs added.

Next steps:

[start database and Apache]
Make sure your database is running and execute 'rcapache2 restart'.

[install the OTRS database]
Use a webbrowser and open this link:
http://myserver.example.com/otrs/installer.pl

[OTRS services]
Start OTRS 'rcotrs start-force' (rcotrs {start|stop|status|restart|start-force| stop-force}).

((enjoy))

Your OTRS Team
http://otrs.org/

otrs-sles:~ #
```

*Skript: Kommando für die Installation von OTRS.*

Die OTRS-Installation ist fertig. Starten Sie Ihren Webserver neu, wie im unteren Skript gezeigt, um die OTRS spezifischen Änderungen zu laden. Ebenfalls sollten Sie den Befehl **chkconfig** aufrufen, um sicherzustellen das OTRS automatisch startet, wenn der Webserver neu gestartet wird.

```
otrs-sles:~ # chkconfig -a apache2
apache2 0:off 1:off 2:off 3:on 4:off 5:on 6:off
otrs-sles:~ # rcapache2 start
Starting httpd2 (prefork) httpd2-prefork: Could not reliably determine the server's fully
qualified domain name, using 10.x.x.x for ServerName
done
otrs-sles:~ #
```

*Skript: Starten des Webservers.*

## 1.1.3. Installation zusätzlicher Perl-Module

OTRS needs some more modules than can be installed by the RPM. You can post-install them manually. You can check what modules you are missing by running the `bin/otrs.CheckModules.pl` script located in the `/opt/otrs` directory. Some modules are only needed for optional functionality, such as communication with IMAP(S) servers or PDF

generation. On SLES you should add an external repository to the zypper configuration in order to get the modules needed for your system. Choose the module needed for your OS version from here: <http://download.opensuse.org/repositories/devel:/languages:/perl/>. Add the repository like this for SLES 11 SP2:

```
zypper ar -f -n perl http://download.opensuse.org/repositories/devel:/languages:/perl/  
SLE_11_SP2_Perl
```

On openSUSE 12.3 the extra repository is only needed for the Mail::IMAPClient module, which you'd only need if you need to collect mails from an IMAP server secured with TLS. The corresponding line would look like this:

```
zypper ar -f -n perl http://download.opensuse.org/repositories/devel:/languages:/perl/  
openSUSE_12.3/ Perl
```

The first time you use zypper after you added this repository, you will be prompted to add its key. Now you can install missing modules like below.

```
otrs-sles:/opt/otrs # zypper install -y "perl(YAML::LibYAML)"  
Refreshing service 'susecloud'.  
Retrieving repository 'perl' metadata [\]  
  
New repository or package signing key received:  
Key ID: DCCA98DDDF338C  
Key Name: devel:languages:perl OBS Project <devel:languages:perl@build.opensuse.org>  
Key Fingerprint: 36F0AC0BCA9D8AF2871703C5DCCA98DDDF338C  
Key Created: Wed Oct 10 22:04:18 2012  
Key Expires: Fri Dec 19 22:04:18 2014  
Repository: perl  
  
Do you want to reject the key, trust temporarily, or trust always? [r/t/a/?] (r): a  
Retrieving repository 'perl' metadata [done]  
Building repository 'perl' cache [done]  
Loading repository data...  
Reading installed packages...  
'perl(YAML::LibYAML)' not found in package names. Trying capabilities.  
Resolving package dependencies...  
  
The following NEW package is going to be installed:  
perl-YAML-LibYAML  
  
The following package is not supported by its vendor:  
perl-YAML-LibYAML  
  
Retrieving package perl-YAML-LibYAML-0.38-12.4.x86_64 (1/1), 75.0 KiB (196.0 KiB unpacked)  
Retrieving: perl-YAML-LibYAML-0.38-12.4.x86_64.rpm [done (55.7 KiB/s)]  
Installing: perl-YAML-LibYAML-0.38-12.4 [done]
```

The next step is to configure OTRS using the web installer, as described in this section.

## 1.2. Installation von OTRS auf einem Red Hat Enterprise Linux oder CentOS-System

This section describes the installation of our RPM package on a Red Hat Enterprise Linux (RHEL) or CentOS server. For OTRS 3.3 and up, RHEL 6 or CentOS 6 is a requirement, version 5 is not supported. Before you start the installation, please visit <http://www.otrs.com/downloads> and make sure you use the latest OTRS RPM package available.

### 1.2.1. Vorbereiten der Datenbank für OTRS

You can use OTRS using different database back-ends: MySQL, PostgreSQL, Oracle or Microsoft SQL Server. The most popular database to deploy OTRS on is MySQL. This chap-

ter shows the steps you need to take to configure MySQL on a RHEL-based server. Of course you can install the database on a dedicated database server if needed for scalability or other purposes.

Installieren Sie MySQL als root mit folgenden Befehl:

```
[root@otrs-centos6 ~]# yum -y install mysql-server
```

This will install MySQL with the default options on your system. You'll need to change the defaults in order to make it suitable for OTRS. With a text editor open the file `/etc/my.cnf` and add the next two lines under the `[mysqld]` section:

```
max_allowed_packet=20M
query_cache_size=32M
```

Now execute **service mysqld start** to re-start the database server and activate these changes. Then run **/usr/bin/mysql\_secure\_installation** and follow the on-screen instructions to set a database root password, remove anonymous access and remove the test database. Lastly, run **chkconfig mysqld on** in order to make sure mysql is automatically started at server startup time.

## 1.2.2. OTRS installieren

Install OTRS with via the command line using **yum**. This will also pull in some dependencies such as the apache web server and some Perl modules. Make sure you copied the OTRS RPM file to the current directory.

```
[root@otrs-centos6 ~]# yum install --nogpgcheck otrs-3.3.*.rpm
...
Dependencies Resolved
```

Package	Arch	Version	Repository	Size
Installing:				
otrs	noarch	3.3.3-01	/otrs-3.3.3-01.noarch	74 M
Installing for dependencies:				
apr	x86_64	1.3.9-5.el6_2	updates	123 k
...				
procmail	x86_64	3.22-25.1.el6	base	163 k

```
Transaction Summary
-----
Install      26 Package(s)

Total size: 80 M
Total download size: 6.0 M
Installed size: 88 M
Downloading Packages:
(1/25): apr-1.3.9-5.el6_2.x86_64.rpm           | 123 kB    00:00
...
(25/25): procmail-3.22-25.1.el6.x86_64.rpm    | 163 kB    00:00
-----
Total                                           887 kB/s | 6.0 MB    00:06
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : apr-1.3.9-5.el6_2.x86_64        1/26
  ...
  Installing : otrs-3.3.3-01.noarch            26/26
Check OTRS user ... otrs added.
```

Next steps:

```
[httpd services]
Restart httpd 'service httpd restart'

[install the OTRS database]
Make sure your database server is running.
Use a web browser and open this link:
http://myserver.example.com/otrs/installer.pl

[OTRS services]
Start OTRS 'service otrs start' (service otrs {start|stop|status|restart}).

((enjoy))

Your OTRS Team

Installed:
  otrs.noarch 0:3.3.3-01

Dependency Installed:
  ...

Complete!
[root@otrs-centos6 ~]#
```

*Skript: Kommando für die Installation von OTRS.*

The OTRS installation is complete. Now you should make sure that Apache is started and that it starts whenever the server reboots.

```
[root@otrs-centos6 ~]# chkconfig httpd on
[root@otrs-centos6 ~]# service httpd start
Starting httpd: httpd: Could not reliably determine the server's fully qualified domain
name, using 10.x.x.x for ServerName [ OK ]
[root@otrs-centos6 ~]#
```

*Skript: Starten des Webservers.*

### 1.2.3. Installation zusätzlicher Perl-Module

OTRS needs some more modules than can be installed by the RPM. You can post-install them manually. You can check what modules you are missing by running the `bin/otrs.CheckModules.pl` script located in the `/opt/otrs` directory. Some modules are only needed for optional functionality, such as communication with IMAP(S) servers or PDF generation. On Red Hat or CentOS we recommend installing these modules from the EPEL repository, a repository maintained by the Fedora project, which provides high quality packages for RHEL and derivatives. Check for more information [the EPEL web site](#).

If you're on RHEL 6 or CentOS 6, you can get the latest package for EPEL from [this site](#). You can add this repository to yum it in one go by copying the RPM URL you find on this page and executing this command:

```
[root@otrs-centos6 otrs]# yum -y install http://download.fedoraproject.org/pub/epel/6/i386/
epel-release-6-8.noarch.rpm
Loaded plugins: security
Setting up Install Process
epel-release-6-8.noarch.rpm | 14 kB 00:00
Examining /var/tmp/yum-root-7jrJef/epel-release-6-8.noarch.rpm: epel-release-6-8.noarch
Marking /var/tmp/yum-root-7jrJef/epel-release-6-8.noarch.rpm to be installed
Resolving Dependencies
--> Running transaction check
--> Package epel-release.noarch 0:6-8 will be installed
--> Finished Dependency Resolution
```

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing: epel-release	noarch	6-8	/epel-release-6-8.noarch	22 k

Transaction Summary

Install 1 Package(s)

Total size: 22 k

Installed size: 22 k

Downloading Packages:

Running rpm\_check\_debug

Running Transaction Test

Transaction Test Succeeded

Running Transaction

Installing : epel-release-6-8.noarch	1/1
Verifying : epel-release-6-8.noarch	1/1

Installed:

epel-release.noarch 0:6-8

Complete!

[root@otrs-centos6 otrs]#

The first time you use yum after you added this repository, you will be prompted to add its key. Now you can install missing modules like below.

```
[root@otrs-centos6 otrs]# yum -y install "perl(Text::CSV_XS)"
Loaded plugins: security
Setting up Install Process
Resolving Dependencies
--> Running transaction check
--> Package perl-Text-CSV_XS.x86_64 0:0.85-1.el6 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch          Version      Repository    Size
=====
Installing:
perl-Text-CSV_XS       x86_64        0.85-1.el6   epel          71 k
=====
Transaction Summary
=====
Install      1 Package(s)

Total download size: 71 k
Installed size: 154 k
Downloading Packages:
perl-Text-CSV_XS-0.85-1.el6.x86_64.rpm | 71 kB    00:00
warning: rpmts_HdrFromFdno: Header V3 RSA/SHA256 Signature, key ID 0608b895: NOKEY
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-6
Importing GPG key 0x0608B895:
  Userid : EPEL (6) <epel@fedoraproject.org>
  Package: epel-release-6-8.noarch (@/epel-release-6-8.noarch)
  From    : /etc/pki/rpm-gpg/RPM-GPG-KEY-EPEL-6
Is this ok [y/N]: y
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : perl-Text-CSV_XS-0.85-1.el6.x86_64          1/1
  Verifying  : perl-Text-CSV_XS-0.85-1.el6.x86_64          1/1
```



```
Installed:
perl-Text-CSV_XS.x86_64 0:0.85-1.el6
```

```
Complete!
[root@otrs-centos6 otrs]#
```

The next step is to configure OTRS using the web installer, as described in this section.

## 1.2.4. Installation der Oracle-Datenbanktreiber auf Red Hat / CentOS

If you want to deploy OTRS on an Oracle database, you'll need to compile and install the DBD::Oracle database driver. This is slightly more complicated than installing any of the other packages; this is because Oracle is a proprietary database and Red Hat nor the CentOS project are allowed to distribute drivers in their RPM repositories.

First of all, we'd need to install gcc, make and CPAN so we can compile and install the driver. Below you see the command on CentOS; on other versions it might look a little different.

```
[root@otrs-centos6 otrs]# yum -y install gcc make "perl(CPAN)"
```

The next step is to obtain and install the database client. For this you would need to sign up for a free account at the Oracle website. You can download the drivers from this page: <http://www.oracle.com/technetwork/database/features/instant-client/index-097480.html> Please choose the Linux x86 or x86-64 version corresponding to the architecture of your system. You can check this with the **uname -i**. It is either 'x86\_64' for x86-64 or 'i386' for x86. You should download the packages 'Instant Client Package - Basic', 'Instant Client Package - SQL\*Plus', and 'Instant Client Package - SDK'. Save them to a location on your disk. Now as the root user you can install the packages using the following command:

```
[root@otrs-centos6 otrs]# yum install oracle-instantclient*
```

After this you should set two environment variables and compile the DBD::Oracle driver. Again, perform these tasks as the root user. The steps are outlined below. Please note that for brevity some lines outputted by the commands have been removed.

```
[root@otrs-centos6 otrs]# export ORACLE_HOME=/usr/lib/oracle/11.2/client64
[root@otrs-centos6 otrs]# export LD_LIBRARY_PATH=$ORACLE_HOME/lib
[root@otrs-centos6 otrs]# cpan
cpan[1]> look DBD::Oracle
...
Fetching with LWP:
  http://www.perl.org/CPAN/authors/id/P/PY/PYTHIAN/CHECKSUMS
Checksum for /root/.cpan/sources/authors/id/P/PY/PYTHIAN/DBD-Oracle-1.62.tar.gz ok
Scanning cache /root/.cpan/build for sizes
DONE
...
Working directory is /root/.cpan/build/DBD-Oracle-1.62-ZH6LNy
[root@localhost DBD-Oracle-1.62-ZH6LNy]# perl Makefile.PL
...
[root@localhost DBD-Oracle-1.62-ZH6LNy]# make
...
[root@localhost DBD-Oracle-1.62-ZH6LNy]# make install
...
cpan[2]> exit
Terminal does not support GetHistory.
Lockfile removed.
```



Now you should edit the file Kernel/Config.pm to provide ORACLE\_HOME. The next step is to configure OTRS using the web installer, as described in this section.

## 1.3. Installation von OTRS auf einem Debian- oder Ubuntu-System

### Wichtig

Please install OTRS from source, and do not use the OTRS packages that Debian/Ubuntu provides.

The installation of required Perl modules is easier if you use the available packages:

```
apt-get install libapache2-mod-perl2 libdbd-mysql-perl libtimedate-perl libnet-dns-perl \
libnet-ldap-perl libio-socket-ssl-perl libpdf-api2-perl libdbd-mysql-perl libsoap-lite-
perl \
libgd-text-perl libtext-csv-xs-perl libjson-xs-perl libgd-graph-perl libapache-dbi-perl
```

## 1.4. Installation von OTRS auf Microsoft Windows-Systemen

### 1.4.1. Benutzen des Windows-Installer

Installing OTRS on a Microsoft Windows system is very easy. Download the latest installer for Win32 from <http://www.otrs.com/try/> and save the file to your local file system. Then simply double-click on the file to execute the installer, and follow the few installation steps to setup the system. The installation wizard will take care of installing all components for OTRS. The next step is to configure OTRS using the web installer, as described in this section.

### Wichtig

The Windows installer for OTRS contains all needed components for OTRS, i.e. the Apache web server, the MySQL database server, Perl (with all needed modules) and cron for Windows. However you can also use it to set up OTRS on the Microsoft IIS Web Server instead of on Apache. Also you can choose to not let it install the bundled MySQL, for instance if you want to deploy on a central MySQL database; a PostgreSQL database, on Microsoft SQL Server or on Oracle.

### 1.4.2. Installation der Oracle-Datenbanktreiber bei Windows Systemen

If you install OTRS using the Windows Installer, it will automatically configure all Perl modules you will typically need. There is one exception to this: if you need to deploy OTRS on an Oracle database, you'll need to post-install the Oracle driver. This is needed because there is no open source driver for Oracle available; we are not allowed to redistribute it in the OTRS package. There are two different perls you can use on Windows; you can choose the bundled Strawberry Perl, which is the default option and is recommended for proof-of-concept setups; or you can choose Active State perl which is a separate download and install. This last option is recommended for production setups.

#### 1.4.2.1. Installation von DBD::Oracle auf ActiveState Perl

If you have installed ActiveState Perl it already comes with the Perl database driver DBD::Oracle only this should be linked to the Oracle C client. OTRS only works on 32-bit

ActiveState Perl. This means you should also download the 32-bit Oracle client. Navigate to the Oracle client web site [Instant Client Downloads for Microsoft Windows \(32-bit\)](#) and choose 'Instant Client Package - Basic'. You'll need to sign up for a free Oracle Web account in order to download the software. Extract the download, a zip file, to the root of your drive, for instance C:\instantclient\_11\_2.

Now you should add the client libraries to your path and set an environment variable; 'ORACLE\_HOME'. Navigate to Control Panel > System and Security > System, choose 'Advanced System Settings', click on 'New' under 'System variables', enter 'ORACLE\_HOME' as Variable Name and use 'C:\instantclient\_11\_2' as the Variable Value. Select the 'PATH' variable, and append the directory 'C:\instantclient\_11\_2' to the path. If you now start a new cmd.exe session and run the otrs.CheckModules.pl script located in the OTRS directory, you should see that the DBD::Oracle driver is successfully installed. After this, you should restart the system in order for the other applications to detect the new environment variables.

### 1.4.2.2. Installation von DBD::Oracle auf Strawberry Perl

In order to compile the DBD::Oracle module, you need to have installed the components of the OTRS web installer in a path without spaces. It should NOT be in C:\Program Files\OTRS but it should rather be in C:\OTRSComponents or similar.

On Strawberry Perl you should compile the Oracle driver manually. The OTRS Windows Installer bundles 32-bit Strawberry Perl. This means you should also download the 32-bit Oracle client. Navigate to the Oracle client web site [Instant Client Downloads for Microsoft Windows \(32-bit\)](#) and download the packages 'Instant Client Package - Basic', 'Instant Client Package - SQL\*Plus', and 'Instant Client Package - SDK'. You'll need to sign up for a free Oracle Web account in order to download the software. Extract the downloads, all zip files, to the root of your drive, for instance C:\instantclient\_11\_2.

Now you should add the client libraries to your path and set an environment variable; 'ORACLE\_HOME'. Navigate to Control Panel > System and Security > System, choose 'Advanced System Settings', click on 'New' under 'System variables', enter 'ORACLE\_HOME' as Variable Name and use 'C:\instantclient\_11\_2' as the Variable Value. Select the 'PATH' variable, and append the directory 'C:\instantclient\_11\_2' to the path. After this, you should restart the system in order for the other applications to detect the new environment variables.

Now you can compile and install the DBD::Oracle module. For this, open a cmd.exe window, and start the cpan client. Download and extract DBD::Oracle via **look DBD::Oracle**, then type **perl Makefile.PL**, **dmake** and **dmake install**. Sample output is below.

```
C:\Users\max>cpan
cpan shell -- CPAN exploration and modules installation (v1.9800)
Enter 'h' for help.

cpan> look DBD::Oracle
Database was generated on Thu, 16 May 2013 14:52:41 GMT
Running look for module 'DBD::Oracle'

Trying to open a subshell in the build directory...
....
C:\OTRSC0-1\StrawberryPerl\cpan\build\DBD-Oracle-1.62-kq6los>perl Makefile.PL
Using DBI 1.623 (for perl 5.016003 on MSWin32-x86-multi-thread) installed in C:/
OTRSComponents/StrawberryPerl/perl/vendor/lib/auto/DBI/

Configuring DBD::Oracle for perl 5.016003 on MSWin32 (MSWin32-x86-multi-thread)
...
Checking if your kit is complete...
```

```
Looks good
LD_RUN_PATH=c:/instantclient_11_2/lib;c:/instantclient_11_2/rdbms/lib
Using DBD::Oracle 1.62.
Using DBD::Oracle 1.62.
Using DBI 1.623 (for perl 5.016003 on MSWin32-x86-multi-thread) installed in C:/
OTRSComponents/StrawberryPerl/perl/vendor/lib/auto/DBI/
Writing Makefile for DBD::Oracle
Writing MYMETA.yml and MYMETA.json
...

C:\OTRSCO~1\StrawberryPerl\cpan\build\DBD-Oracle-1.62-kq6los>dmake
... lots of output and compiler warnings ...

C:\OTRSCO~1\StrawberryPerl\cpan\build\DBD-Oracle-1.62-kq6los>dmake install
Files found in blib\arch: installing files in blib\lib into architecture depende
nt library tree
Installing C:\OTRSCO~1\StrawberryPerl\perl\site\lib\auto\DBD\Oracle\dbdimp.h
...
Appending installation info to C:\OTRSCO~1\StrawberryPerl\perl\lib\perllocal.pod

C:\OTRSCO~1\StrawberryPerl\cpan\build\DBD-Oracle-1.62-kq6los>exit

cpan> quit
Lockfile removed.

C:\Users\max>
```

### 1.4.2.3. Konfiguration von OTRS durch den Web Installer

The web installer may be used to configure basic OTRS settings as described in this section.

## 2. Manuelle Installation (Linux, Unix)

### 2.1. Vorbereiten der manuellen Installation

If you want to install OTRS from source, first download the source archive as .tar.gz, .tar.bz2, or .zip file from <http://www.otrs.com/try/>

Unpack the archive (for example, using **tar**) into the directory /opt, and rename the directory from otrs-x.x.x to otrs (see Script below).

```
linux:/opt# tar xf /tmp/otrs-x.x.x.tar.gz
linux:/opt# mv otrs-x.x.x otrs
linux:/opt# ls
otrs
linux:/opt#
```

*Skript: Erste Schritte bei der Installation von OTRS.*

OTRS should NOT be run with root rights. Next you should add a new user for OTRS. The home directory of this new user should be /opt/otrs. If your web server is not running with the same user rights as the new 'otrs' user, which is the case on most systems, you will need to add the new 'otrs' user to the group of the web server user (see Script below).

```
linux:/opt# useradd -r -d /opt/otrs/ -c 'OTRS user' otrs
linux:/opt# usermod -G www otrs
linux:/opt#
```

(SUSE=www, Red Hat/CentOS/Fedora=apache, Debian/Ubuntu=www-data)

*Skript: Anlegen eines neuen Nutzers 'otrs' und Hinzufügung zu desselben zu einer Gruppe.*

Im nächsten Schritt werden einige Demo-Konfigurationsdateien innerhalb der entpackten Quelldateien bzw. innerhalb des Homeverzeichnisses des OTRS-Benutzers kopiert. Die Dateien befinden sich in den Verzeichnissen /opt/otrs/Kernel bzw. /opt/otrs/Kernel/Config und haben die Endung .dist.

```
linux:/opt# cd otrs/Kernel/
linux:/opt/otrs/Kernel# cp Config.pm.dist Config.pm
linux:/opt/otrs/Kernel# cd Config
linux:/opt/otrs/Kernel/Config# cp GenericAgent.pm.dist GenericAgent.pm
```

*Skript: Kopieren von Beispieldateien.*

Zum Abschluss der Vorbereitungen werden noch die richtigen Zugriffsrechte für die Dateien des Ticket Systems gesetzt. Dazu kann das Skript **SetPermissions.sh** verwendet werden, das sich im Verzeichnis bin innerhalb des Homeverzeichnisses des OTRS-Benutzers befindet. Das Skript kann mit folgenden Parametern aufgerufen werden:

```
otrs.SetPermissions.pl {Homedirectory des OTRS Benutzers} {OTRS Benutzer} {Webserver Benutzer} [Gruppe des OTRS Benutzers] [Gruppe des Webserver Benutzers]
```

Läuft Ihr Webserver mit den Benutzerrechten des Benutzers 'otrs', dann lautet das Kommando also **otrs.SetPermissions.pl /opt/otrs --otrs-user=otrs --web-user=otrs**. Unter SUSE Linux wird der Webserver mit dem Benutzer wwwrun betrieben. Auf Debian-basierten Systemen ist dies www-data. Geben Sie hier das Kommando **otrs.SetPermissions.pl /opt/otrs --otrs-user=otrs --web-user=wwwrun --otrs-group=nogroup --web-group=www** ein, um die korrekten Zugriffsrechte zu setzen.

## 2.2. Installation der für OTRS benötigten Perl-Module

OTRS requires some additional Perl modules, as described in Table 3-1. If you install OTRS from source, you will need to install these modules manually. This can be done either with the package manager of your Linux distribution (yast, apt-get) or, as described in this section, through the Perl shell and CPAN. If you're using ActiveState Perl, for instance on Windows, you could use PPM, the built-in Perl Package Manager. We recommend using your package manager if possible.

You can verify which modules you need to install with **otrs.CheckModules.pl**. This script is located in the bin directory, in the home directory of the 'otrs' user (see Script below). Please note that some modules are optional.

```
linux:~# cd /opt/otrs/bin/
linux:/opt/otrs/bin# ./otrs.CheckModules.pl
o CGI.....ok (v3.60)
o Crypt::PasswdMD5.....ok (v1.3)
o Crypt::SSLeay.....Not installed! (Optional - Required for Generic Interface
SOAP SSL connections.)
o CSS::Minifier.....ok (v0.01)
o Date::Format.....ok (v2.22)
o Date::Pcalc.....ok (v1.2)
...
```

*Skript: Überprüfung benötigter Module.*

You should strive to install the missing modules from your Linux distribution's package management system. By doing so, the packages will be automatically updated when new

versions are available or when security issues are found. Please refer to your distribution's documentation on how to install additional packages. If the (correct version of) the module is not available from the package repositories, you can also install from CPAN, the Comprehensive Perl Archive Network.

Um eines der oben aufgeführten Module mit Hilfe von CPAN zu installieren, geben Sie als root das Kommando **perl -e shell -MCPAN** ein. Perl wird im interaktiven Modus gestartet und das CPAN Modul wird geladen. Ist CPAN bereits ordentlich konfiguriert, können Sie die für OTRS benötigten Module mit Hilfe des Kommandos **install** gefolgt vom Modulnamen einrichten. CPAN weist darauf hin, wenn Abhängigkeiten zwischen einzelnen Modulen nicht erfüllt sind und schlägt automatisch die zusätzlich benötigten Module für die Installation vor.

Führen Sie weiterhin die beiden Befehle **perl -cw bin/cgi-bin/index.pl** und **perl -cw bin/cgi-bin/customer.pl** und **perl -cw bin/PostMaster.pl** aus, nach dem Sie in das Verzeichnis /opt/otrs gewechselt sind. Wird bei beiden Befehlen die Meldung "syntax OK" angezeigt, verfügt Ihre Perl-Installation über alle von OTRS benötigten Module und Sie können im nächsten Schritt mit der Einrichtung des Webservers beginnen.

```
linux:~# cd /opt/otrs
linux:/opt/otrs# perl -cw bin/cgi-bin/index.pl
cgi-bin/installer.pl syntax OK
linux:/opt/otrs# perl -cw bin/cgi-bin/customer.pl
cgi-bin/customer.pl syntax OK
linux:/opt/otrs# perl -cw bin/otrs.PostMaster.pl
bin/otrs.PostMaster.pl syntax OK
linux:/opt/otrs#
```

*Skript: Crontab-Datei.*

## 2.3. Konfiguration des Apache-Webservers

First of all, you should install the Apache2 web server and mod\_perl; you'd typically do this from your systems package manager. Below you'll find the commands needed to set up Apache on the most popular Linux distributions.

```
# rhel / centos:
linux:# yum install httpd mod_perl

# suse:
linux:# zypper install apache2-mod_perl

# debian/ubuntu:
linux:# apt-get install apache2 libapache2-mod-perl2
```

To access the web interface of OTRS via a short URL, Alias and ScriptAlias entries are needed. Most Apache installations have a conf.d directory included. On Linux systems you can usually find this directory under /etc/apache or /etc/apache2. Log in as root, change to the conf.d directory and copy the appropriate template in /opt/otrs/scripts/apache2-httpd.include.conf to a file called otrs.conf in the Apache configuration directory.

Starten Sie Ihren Webserver neu, um die neue Konfiguration zu laden. Auf den meisten Systemen lässt sich der Webserver über den Befehl **/etc/init.d/apache2 restart** neu starten (siehe skript unten).

```
linux:/etc/apache2/conf.d# /etc/init.d/apache2 restart
```

```
Forcing reload of web server: Apache2.  
linux:/etc/apache2/conf.d#
```

*Skript: Neustart des Webservers.*

Das war bereits die grundlegende Konfiguration des Webservers für OTRS.

## 2.4. Einrichten der Datenbank

### 2.4.1. Manuelle Installation der OTRS Datenbank

The recommended way to configure the database is to run the Web Installer. If you can't use this for some reason, you can also configure the database manually, as described in this chapter. If you can't use the web installer to setup the OTRS database, you have to set it up manually. Scripts with the SQL statements to create and configure the database are located in `scripts/database`, in the home directory of the 'otrs' user (see Script below).

```
linux:~# cd /opt/otrs/scripts/database/  
linux:/opt/otrs/scripts/database# ls  
otrs-initial_insert.db2.sql      otrs-schema.mysql.sql  
otrs-schema.oracle.sql  
otrs-initial_insert.mssql.sql    otrs-schema-post.db2.sql  
otrs-initial_insert.mysql.sql    otrs-schema.postgresql.sql  
otrs-initial_insert.oracle.sql  
otrs-initial_insert.postgresql.sql otrs-schema-post.mssql.sql  
otrs-initial_insert.xml          otrs-schema-post.mysql.sql  
otrs-schema.db2.sql             otrs-schema-post.oracle.sql  
otrs-schema-post.postgresql.sql  
otrs-schema.mssql.sql          otrs-schema.xml  
linux:/opt/otrs/scripts/database#
```

*Skript: Für die Datenbankerstellung benötigte Dateien.*

Für die verschiedenen Datenbanktypen sind mehrere `.sql`-Dateien vorhanden, die nacheinander abgearbeitet werden müssen.

#### Die OTRS-Datenbank manuell Schritt für Schritt anlegen

1. Anlegen der Datenbank für OTRS: Legen Sie mit Hilfe Ihres Datenbankinterfaces bzw. Ihrer Datenbankoberfläche die Datenbank an, die später von OTRS verwendet werden soll.
2. Erstellen der Tabellen: Mit Hilfe der `otrs-schema.Datenbanktyp.sql`-Dateien (z. B. `otrs-schema.oracle.sql`, `otrs-schema.postgresql.sql`, usw.) können Sie die Tabellen innerhalb der OTRS Datenbank erzeugen.
3. Inserting the initial system data: OTRS needs some initial system data to work properly (e.g. the different ticket states, ticket and notification types). Depending on the type of database that you are using, you will need to use one of the following files: `otrs-initial_insert.mysql.sql`, `otrs-initial_insert.oracle.sql`, `otrs-initial_insert.postgresql.sql` or `otrs-initial_insert.mssql.sql` .
4. Erzeugen von "foreign keys" auf andere Tabellen: Abschließend müssen noch die "foreign keys" erstellt werden, über die die verschiedenen Tabellen in der OTRS Datenbank voneinander abhängen. Dies kann mit Hilfe der `otrs-schema-post.Datenbanktyp.sql`-Dateien erreicht werden (z. B. `otrs-schema-post.oracle.post.sql`, `otrs-schema-post.postgresql.sql`, usw.).

Nachdem Sie die Datenbank angelegt haben, sollten Sie die Zugriffsrechte dafür setzen und z. B. sicherstellen, dass nur ein bestimmter Benutzer ohne Datenbank-Administrati-



onsrechte Zugriff auf die OTRS Datenbank hat. Je nachdem, welche Datenbank Sie einsetzen, unterscheiden sich hier die Vorgehensweisen, es sollte jedoch möglich sein dies mit Hilfe Ihres Datenbankinterfaces bzw. Ihrer Datenbankoberfläche zu erledigen.

Wurden die nötigen Einstellungen für die Datenbank vorgenommen, muss nun noch dem Ticket-System mitgeteilt werden, welche Datenbank es verwenden soll. Öffnen Sie die Datei `Kernel/Config.pm` innerhalb des Homeverzeichnisses des OTRS Benutzers und passen Sie die dafür vorgesehenen Parameter an.

```
# DatabaseHost
# (The database host.)
$self->{'DatabaseHost'} = 'localhost';

# Database
# (The database name.)
$self->{Database} = 'otrs';

# DatabaseUser
# (The database user.)
$self->{DatabaseUser} = 'otrs';

# DatabasePw
# (The password of database user.)
$self->{DatabasePw} = 'some-pass';
```

*Skript: Anzupassende Einstellungen.*

## 2.5. Einrichten der von OTRS benötigten cron-Jobs

Damit OTRS voll funktioniert, werden einige cron-Jobs benötigt. Die cron-Jobs sollten mit denselben Benutzerrechten ausgeführt werden, die auch für die restlichen OTRS-Skripte vergeben wurden, d.h. die cron-Jobs sollten in die crontab des Benutzers 'otrs' eingetragen werden.

Alle Skripte für die verschiedenen cron-Jobs befinden sich im Verzeichnis `var/cron` innerhalb des Homeverzeichnisses des Benutzers 'otrs'.

```
linux:~# cd /opt/otrs/var/cron
linux:/opt/otrs/var/cron# ls
aaa_base.dist          generic_agent.dist     rebuild_ticket_index.dist
cache.dist             pending_jobs.dist     session.dist
fetchmail.dist        postmaster.dist       unlock.dist
generic_agent-database.dist postmaster_mailbox.dist
linux:/opt/otrs/var/cron#
```

*Skript: Für die Erstellung der Cronjobs benötigte Dateien.*

Alle Skripte tragen die Endung `.dist` und sollten zunächst so umkopiert werden, dass keine Endung mehr vorhanden ist.

```
linux:/opt/otrs/var/cron# for foo in *.dist; do cp $foo `basename $foo .dist`; done
linux:/opt/otrs/var/cron# ls
aaa_base          generic_agent-database.dist  rebuild_ticket_index
aaa_base.dist    generic_agent.dist          rebuild_ticket_index.dist
cache            pending_jobs                session
cache.dist      pending_jobs.dist          session.dist
fetchmail       postmaster                 unlock
fetchmail.dist  postmaster.dist            unlock.dist
```

```
generic_agent      postmaster_mailbox
generic_agent-database postmaster_mailbox.dist
linux:/opt/otrs/var/cron#
```

*Skript: Kopieren und Umbenennen der für die Erstellung der Cronjobs benötigten Dateien.*

Die folgende Tabelle gibt eine kurze Übersicht über die Aufgabe der verschiedenen Skripte.

**Tabelle 2.1. Die verschiedenen Skripte für die cron-Jobs von OTRS.**

Skript	Funktion
aaa_base	Über dieses Skript werden die grundlegenden Einstellungen für die crontab des Benutzers 'otrs' festgelegt.
cache	Löscht abgelaufene Cache-Einträge von der Festplatte. Leert den Cache von CSS- und JavaScript-Dateien.
fetchmail	Falls Nachrichten mit Hilfe von fetchmail in das System eingespeist werden sollen, kann dieses Skript verwendet werden.
generic_agent	Mit Hilfe dieses Skripts werden die Jobs des GenericAgents ausgeführt, die über eigene Konfigurationsdateien festgelegt wurden.
generic_agent-database	Mit Hilfe dieses Skripts werden die Jobs des GenericAgents ausgeführt, die über dem Administrations-Bereich innerhalb von "GenericAgent" angelegt wurden.
pending_jobs	Mit Hilfe dieses Skripts wird das System auf "wartende" (pending) Tickets überprüft.
postmaster	Mit Hilfe dieses Skripts wird die Nachrichten-Warteschlange von OTRS überprüft und noch nicht verarbeitete Nachrichten werden im System gespeichert bzw. zugestellt.
postmaster_mailbox	Mit Hilfe dieses Skripts werden die verschiedenen pop3-Konten abgefragt, die im Administrations-Bereich innerhalb von "PostMaster POP3 Account" eingerichtet wurden.
rebuild_ticket_index	Mit Hilfe dieses Skripts wird der Ticket-Index für die Queue-Ansicht neu erzeugt, wodurch die Anzeige beschleunigt wird.
session	Über dieses Skript werden alte und nicht mehr gültige Session-IDs entfernt.
unlock	Mit Hilfe dieses Skripts wird die Freigabe von Tickets innerhalb des Systems ermöglicht.

To setup all cron jobs, the script `bin/Cron.sh` located in the home directory of the 'otrs' user can be used. When this script is executed, it needs a parameter to specify whether you want to install, remove, or reinstall the cron jobs. The following parameters can be used:

`Cron.sh {start} {stop} {restart} [OTRS-Benutzer]`

Da die cron-Jobs für den Benutzer 'otrs' angelegt werden sollen, muss das Skript von diesem Benutzer ausgeführt werden. Sind Sie z. B. als Benutzer root am System angemeldet,



können Sie mit Hilfe des Kommandos **su otrs** zum OTRS-Benutzer wechseln. Nehmen Sie also die Installation wie folgt vor.

## Warnung

Bitte beachten Sie, dass durch die Verwendung von Cron.sh evtl. andere Cron-Jobs des OTRS-Benutzers überschrieben bzw. gelöscht werden. Um weitere, nicht von OTRS benötigte Cron-Jobs für den OTRS-Benutzer zu installieren, erweitern Sie bitte Cron.sh dementsprechend.

```
linux:/opt/otrs/var/cron# cd /opt/otrs/bin/
linux:/opt/otrs/bin# su otrs
linux:~/bin$ ./Cron.sh start
/opt/otrs/bin
Cron.sh - start/stop OTRS cronjobs
Copyright (C) 2001-2009 OTRS AG, http://otrs.org/
(using /opt/otrs) done
linux:~/bin$ exit
exit
linux:/opt/otrs/bin#
```

*Skript: Installation der Cronjobs.*

Mit Hilfe des Kommandos **crontab -l -u otrs**, das Sie als root ausführen können, wird die crontab-Datei des Benutzers 'otrs' angezeigt und Sie können überprüfen, ob alle Einträge vorhanden sind.

```
linux:/opt/otrs/bin# crontab -l -u otrs
# --
# cron/aaa_base - base crontab package
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# Who gets the cron emails?
MAILTO="root@localhost"

# --
# cron/cache - delete expired cache
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# delete expired cache weekly (Sunday mornings)
20 0 * * 0 $HOME/bin/otrs.CacheDelete.pl --expired >> /dev/null
30 0 * * 0 $HOME/bin/otrs.LoaderCache.pl -o delete >> /dev/null

# --
# cron/fetchmail - fetchmail cron of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# fetch every 5 minutes emails via fetchmail
*/5 * * * * /usr/bin/fetchmail -a >> /dev/null

# --
# cron/generic_agent - otrs.GenericAgent.pl cron of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# start generic agent every 20 minutes
*/20 * * * * $HOME/bin/GenericAgent.pl >> /dev/null
# example to execute GenericAgent.pl on 23:00 with
# Kernel::Config::GenericAgentMove job file
```

```
#0 23 * * * $HOME/bin/otrs.GenericAgent.pl -c "Kernel::Config::GenericAgentMove" >> /dev/
null
# --
# cron/generic_agent - GenericAgent.pl cron of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# start generic agent every 10 minutes
*/10 * * * * $HOME/bin/otrs.GenericAgent.pl -c db >> /dev/null
# --
# cron/pending_jobs - pending_jobs cron of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# check every 120 min the pending jobs
45 */2 * * * $HOME/bin/otrs.PendingJobs.pl >> /dev/null
# --
# cron/postmaster - postmaster cron of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# check daily the spool directory of OTRS
10 0 * * * $HOME/bin/otrs.ReprocessMails.pl >> /dev/null
# --
# cron/postmaster_mailbox - postmaster_mailbox cron of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# fetch emails every 10 minutes
*/10 * * * * $HOME/bin/otrs.PostMasterMailbox.pl >> /dev/null
# --
# cron/rebuild_ticket_index - rebuild ticket index for OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# just every day
01 01 * * * $HOME/bin/otrs.RebuildTicketIndex.pl >> /dev/null
# --
# cron/session - delete old session ids of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# delete every 120 minutes old/idle session ids
55 */2 * * * $HOME/bin/otrs.DeleteSessionIDs.pl --expired >> /dev/null
# --
# cron/unlock - unlock old locked ticket of the OTRS
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This software comes with ABSOLUTELY NO WARRANTY.
# --
# unlock every hour old locked tickets
35 * * * * $HOME/bin/otrs.UnlockTickets.pl --timeout >> /dev/null

linux:/opt/otrs/bin#
```

*Skript: Crontab-Datei.*

## 2.6. OTRS Scheduler-Dienst

OTRS wird mit einem Scheduler-Dienst ausgeliefert, der asynchrone Aufgaben ausführt.

The OTRS RPMs will set up the Scheduler Service automatically. If you install from source, you can install the service by copying the scripts/otrs-scheduler-linux file to /

etc/init.d and giving it the appropriate permissions. This will make sure the scheduler service starts when the system starts up.

### 3. Benutzen des Web-Installers

You can use the OTRS Web Installer, after you installed the OTRS software, to set up and configure the OTRS database. The Web Installer is a web page you can visit in your browser. The URL for the web installer is <http://localhost/otrs/installer.pl>.

Wenn der Webinstaller gestartet ist, folgen Sie den Anweisungen auf dem Bildschirm.

1. Lesen Sie die Informationen über die OTRS-Niederlassungen und klicken Sie auf "Weiter" um fortzufahren. (siehe untere Abbildung)

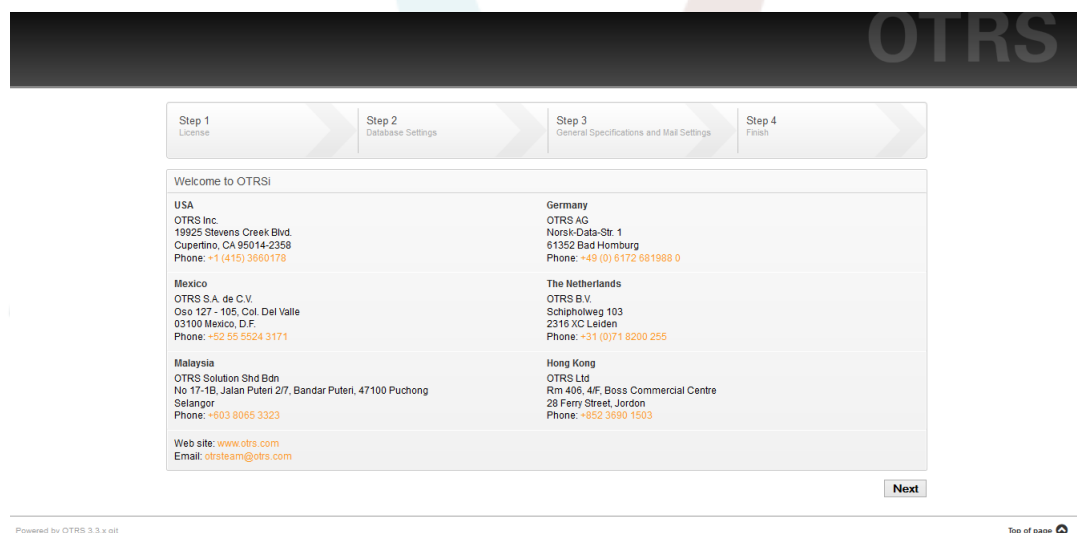


Abb.: Willkommensbildschirm.

2. Lesen Sie die GNU Affero General Public License und akzeptieren Sie sie durch Klick auf "Akzeptieren".

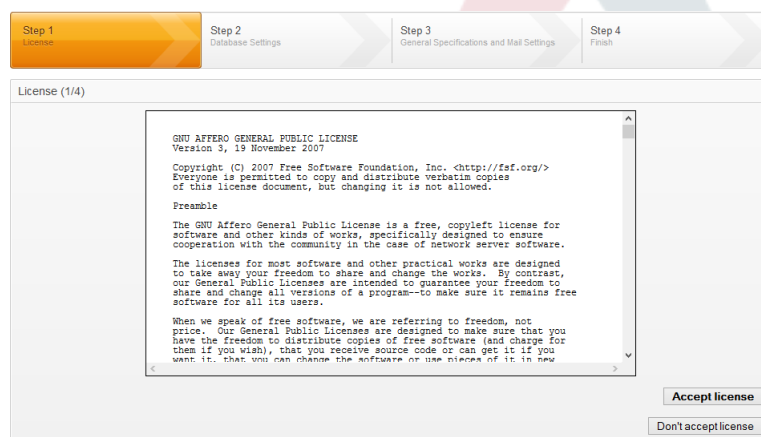


Abb.: GNU Affero General Public License.

3. Choose the database that you want to use with OTRS. If you choose MySQL, PostgreSQL or Microsoft SQL Server as a database, you can also select here if you want the web installer to create a database for you or if your database administrator has already created

an empty database for you that you would like to use. After that, click the Next button (see figure below).

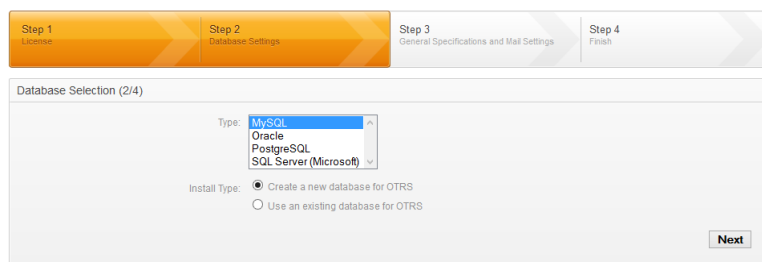


Abbildung: Datenbankeinstellungen.

4. Depending of the database you chose and if you wanted the web installer to create a database or use an existing one in the previous step, this screen might differ a little. Enter the credentials for the database in this screen.

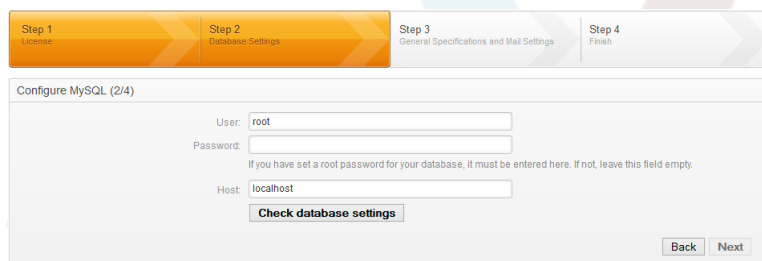


Abbildung: Datenbank-Benutzerdaten.

5. Erstellen Sie einen neuen Datenbankbenutzer, wählen Sie einen Namen für die Datenbank und klicken Sie auf "Weiter" (siehe untere Abbildung).

## Warnung

OTRS will generate a strong password for you. It's possible to enter your own password if you prefer this. The password will be written to the configuration file `Kernel/Config.pm` so there is no need to remember this password.

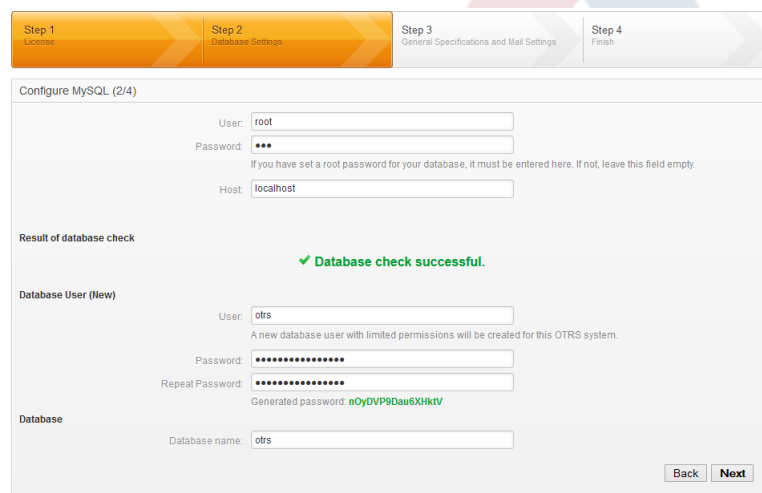


Abb.: Datenbankeinstellungen.

6. The database will be created if needed, and populated, as shown in this image. Click 'Next' to go to the next screen.

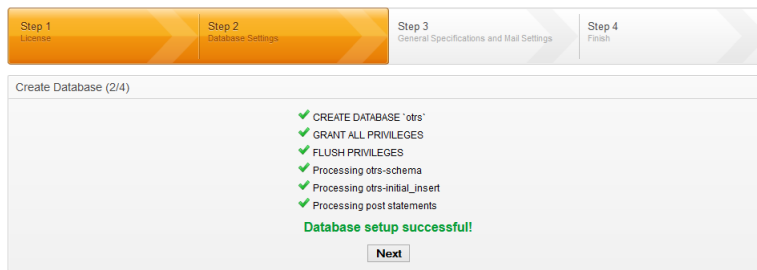


Abbildung: Bestätigung der erfolgreichen Datenbankeinrichtung.

7. Provide all the required system settings and click on 'Next' (see Figure below).

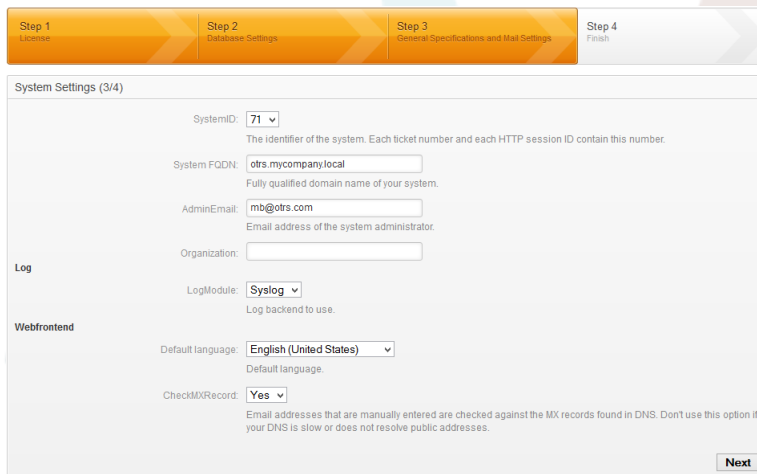


Abb.: Systemeinstellungen.

8. If desired, you can provide the needed data to configure your inbound and outbound mail, or skip this step by pressing the right button at the bottom of the screen (see Figure below).

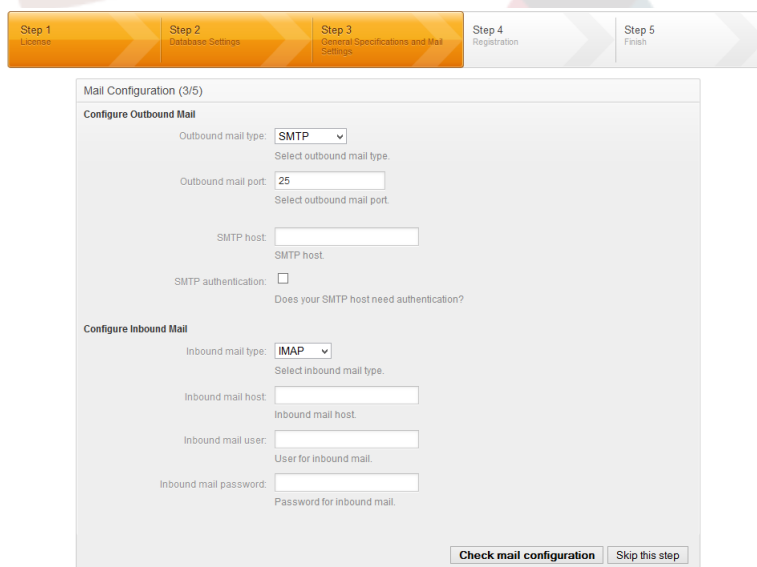


Abb.: E-Mail-Konfiguration.

9. Congratulations! Now the installation of OTRS is finished and you should be able to work with the system (see Figure below). To log into the web interface of OTRS, use the address

<http://localhost/otrs/index.pl> from your web browser. Log in as OTRS administrator, using the username 'root@localhost' and the generated password. After that, you can configure the system to meet your needs.

## Warnung

Bitte notieren Sie das generierte Passwort für den Benutzer 'root@localhost'.

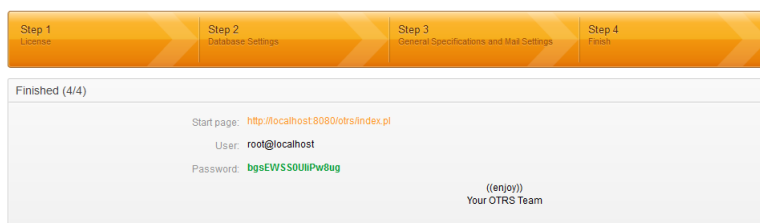


Figure: Web installer final screen.

## 4. Upgrade des OTRS Frameworks

Diese Hinweise sind für Leute gedacht, die von OTRS 3.2 auf 3.3 upgraden, und gilt für RPM-basierte und manuelle Upgrades (tarball).

### Anmerkung

Please note that OTRS 3.3 requires at least perl version 5.10.0. Make sure before you plan your upgrade that your server runs this version. You can check the version with the command **perl -v** on the command line. The only known Linux distribution that uses perl 5.8 and is still supported by its vendor is Red Hat Enterprise Linux (RHEL) 5 and its community supported derivative CentOS 5. If you're on any of these platforms and you plan to upgrade to OTRS 3.3 you should also plan migrating your operating system to a version with a supported perl, such as RHEL 6 or CentOS 6.

Wenn Sie eine ältere Version von OTRS einsetzen, müssen sie zuerst dem Upgrade-Pfad zur 3.1 folgen (1.1->1.2->1.3->2.0->2.1->2.2->2.3->2.4->3.0->3.1->3.2->3.3 ...)! Sie müssen ein vollständiges Upgrade auf jede Zwischen-Version inklusive der Datenbankänderungen und der Perlskripte durchführen.

Bitte beachten Sie, falls Sie von OTRS 2.2 oder früher upgraden, müssen Sie einen extra Schritt durchführen; bitte lesen Sie dazu [http://bugs.otrs.org/show\\_bug.cgi?id=6798](http://bugs.otrs.org/show_bug.cgi?id=6798).

Innerhalb einer Minor-Version können Sie einzelne Patch-Level-Versionen überspringen, falls Sie upgraden wollen. Beispielsweise können Sie direkt von OTRS 3.3.1 auf OTRS 3.3.4 upgraden. Wenn Sie so ein "Patch-Level-Upgrade" durchführen, können Sie Schritt 9 und 13-16- überspringen.

Bitte beachten Sie wenn Sie ein Upgrade von OTRS 3.3.6 oder früher durchführen, müssen Sie einen neuen Cronjob aktivieren, der den Scheduler-Prozess kontrolliert. Bitte kopieren Sie dazu die Datei /opt/otrs/var/cron/scheduler\_watchdog.dist nach /opt/otrs/var/cron/scheduler\_watchdog und aktualisieren Sie anschließend ihre Crontabs mit /opt/otrs/bin/Cron.sh start (als "otrs" user, nicht root).

1. Stoppen Sie alle relevanten Dienste.

z. B. (hängt von eingesetzten Diensten ab):

```
shell> /etc/init.d/cron stop
```

```
shell> /etc/init.d/postfix stop  
shell> /etc/init.d/apache stop
```

2. Sichern Sie folgende Daten in \$OTRS\_HOME (Standard: OTRS\_HOME=/opt/otrs):

- Kernel/Config.pm
- Kernel/Config/GenericAgent.pm
- Kernel/Config/Files/ZZZAuto.pm
- var/\*
- und die Datenbank

3. Bitte stellen Sie sicher das ein umfangreiches Backup vorliegt.

4. Installieren eines neuen Systems (optional)

Neues System aufsetzen (optional). Wenn möglich, installieren Sie zunächst auf einer separaten Testmaschine.

5. Installieren Sie das neue Release (tar oder RPM).

- Mit dem Tarball:

```
shell> cd /opt  
shell> mv otrs otrs-old  
shell> tar -xzf otrs-x.x.x.tar.gz  
shell> mv otrs-x.x.x otrs
```

Wiederherstellen alter Konfiguration Dateien

- Kernel/Config.pm
- Kernel/Config/GenericAgent.pm
- Kernel/Config/Files/ZZZAuto.pm

Wiederherstellung TicketCounter.log

Damit OTRS mit der richtigen Ticketnummer weiter arbeitet, stellen Sie die Datei TicketCounter.log in \$OTRS\_HOME/var/log/ (Standard: OTRS\_HOME=/opt/otrs) wieder her. Das ist vorallem dann wichtig, wenn Sie inkrementelle Ticketnummern verwenden.

Wiederherstellung article data

Wenn Sie OTRS so konfiguriert haben, dass Artikeldaten im Dateisystem gespeichert werden, müssen Sie den Ordner article nach \$OTRS\_HOME/var/ (Standard: OTRS\_HOME=/opt/otrs) wiederherstellen.

- Per RPM:

```
shell> rpm -Uvh otrs-x.x.x.-01.rpm
```

In diesem Fall stellt das RPM-Update die alten Konfigurationsdateien automatisch wieder her.

6. Eigene Themes



Hinweis: Die OTRS-Themes von 3.2 sind NICHT zu 3.3 kompatibel, verwenden Sie ihre alten Themes daher nicht weiter!

Themes befinden sich in `/opt/otrs/Kernel/Output/HTML/*/*.dtl` (Standard: `OTRS_HOME=/opt/otrs`).

Bitte beachten Sie das dtl-Dateien in UTF-8 sein müssen in OTRS 3.3.

## 7. Setzen Sie die Datei-Berechtigungen.

wenn der Tarball benutzt wird, führen Sie

```
shell> cd /opt/otrs/  
shell> bin/otrs.SetPermissions.pl
```

aus, um die Berechtigungen zu setzen, die für Ihr System benötigt werden.

## 8. Überprüfung benötigter Perl Module

Versichern Sie sich dass alle benötigten Perl-Module auf Ihrem System installiert sind und installieren Sie alle Module die fehlen.

```
shell> /opt/otrs/bin/otrs.CheckModules.pl
```

## 9. Schema aktualisieren:

Note: new tables created in the MySQL UPGRADING process will be created with the default table storage engine set in your MySQL server. In MySQL 5.5 the new default type is InnoDB. If existing tables, e.g. "users", have the table storage engine, e.g. MyISAM, then an error will be displayed when creating the foreign key constraints.

You have two options: (1) you can change the default storage engine of MySQL back to MyISAM so that new tables will have the same engine as the existing tables, or (2) change the existing tables to use InnoDB as storage engine.

Any problems with regards to the storage engine will be reported by the `otrs.CheckDB.pl` script, so please run it to check for possible issues.

```
shell> cd /opt/otrs/  
  
# MySQL:  
shell> bin/otrs.CheckDB.pl  
shell> cat scripts/DBUpdate-to-3.3.mysql.sql | mysql -p -f -u root otrs  
  
# PostgreSQL 8.2+:  
shell> cat scripts/DBUpdate-to-3.3.postgresql.sql | psql --set ON_ERROR_STOP=on --single-transaction otrs otrs  
  
# PostgreSQL, older versions:  
shell> cat scripts/DBUpdate-to-3.3.postgresql_before_8_2.sql | psql --set ON_ERROR_STOP=on --single-transaction otrs otrs
```

Note: If you use PostgreSQL 8.1 or earlier, you need to activate the new legacy driver for these older versions. Do this by adding a new line to your `Kernel/Config.pm` like this:

```
$Self->{DatabasePostgresqlBefore82} = 1;
```

Führen Sie das Migrationskript aus (als OTRS-Benutzer, nicht als root!):

```
shell> scripts/DBUpdate-to-3.3.pl
```

Do not continue the upgrading process if this script does not work properly for you. Otherwise data loss may occur.

10 Aktualisieren Sie die Konfiguration und löschen Sie die Caches. Bitte führen Sie folgendes aus (als Benutzer 'OTRS', NICHT als 'root'):

```
shell> bin/otrs.RebuildConfig.pl  
shell> bin/otrs.DeleteCache.pl
```

11 Starten Sie Ihre Dienste neu.

e. g. (depends on used services):

```
shell> /etc/init.d/cron start  
shell> /etc/init.d/postfix start  
shell> /etc/init.d/apache start
```

Now you can log into your system.

12 Installierte Pakete überprüfen

Prüfen Sie im Paketmanager, ob alle Pakete noch als korrekt installiert markiert sind oder eine Re-Installation oder ein Upgrade benötigen.

The following packages are automatically uninstalled after the upgrade process (if they were installed before):

- OTRSPostMasterFilterExtensions
- OTRSFreeTextFromCustomerUser
- OTRSExternalTicketNumberRecognition
- OTRSDashboardQueueOverview
- OTRSImportantArticles
- OTRSImportantArticlesITSM
- OTRSDashboardTicketCalendar
- OTRSMultiServiceSelect
- OTRSMultiQueueSelect
- OTRSDynamicFieldMultiLevelSelection
- OTRSEventBasedTicketActions
- OTRSTicketAclEditor
- OTRSCustomerProcessSelection
- OTRSACLExtensions
- OTRSGenericStandardTemplates
- OTRSExtendedDynamicDateFieldSearch
- OTRSDashboardTicketOverviewFilters

### 13 Check config settings of OTRSFreeTextFromCustomerUser

Note: This only applies if you used the package OTRSFreeTextFromCustomerUser previously.

If you used this module previously, you need to reconfigure it. The module is automatically uninstalled by the upgrading script as it is now a part of the OTRS framework.

If you want to keep using it, please enable the setting "Ticket::EventModulePost###930-DynamicFieldFromCustomerUser" to activate this feature and configure the mapping in the setting "DynamicFieldFromCustomerUser::Mapping".

### 14 Importieren Sie ihre ACLs in den neuen ACL-Editor (optional)

In OTRS 3.3, there is a graphical editor for ACLs in the administration interface. You will need to import your existing ACLs (e.g. in Config.pm or additional files) to the editor by using bin/otrs.ImportACLsFromConfig.pl in order to make them available in the editor. Please make sure to delete any ACLs from Config.pm (or other files) after successfully finishing the import procedure. Also you will need to use the deploy button in the ACL administration frontend in order to re-deploy the imported ACLs to your system.

### 15 Aktualisieren der Webserver-Konfiguration

Note: this applies only if you use the Apache web server, and do not use the configuration file directly from the OTRS installation directory (e. g. with a symlink from the Apache configuration directory).

Please update the the Apache configuration file for OTRS as there have been several changes (see scripts/apache2-httpd.include.conf).

### 16 Aktualisieren und Aktivieren der Cronjobs

There are several OTRS default cronjobs in \$OTRS\_HOME/var/cron/\*.dist. They can be activated by copying them without the ".dist" filename extension. Do this to make sure you get the latest versions of the cronjobs and new cronjobs as well.

```
shell> cd var/cron
shell> for foo in *.dist; do cp $foo `basename $foo .dist`; done
```

Please check the copied files and re-apply any customizations that you might have made.

To schedule these cronjobs on your system, you can use the script Cron.sh. Make sure to execute it as the OTRS system user!

```
shell> /opt/otrs/bin/Cron.sh start
```

### 17 Gut gemacht!

## 5. Upgrade mit dem Windows-Installer

If you installed OTRS on Windows, it is possible to upgrade seamlessly by downloading the new Windows Installer and running it. The installer will automatically detect the OTRS installation and perform an upgrade on it. The installer will stop the OTRS services and start them after the installation is complete, so your users will experience downtime. Make sure you plan some time for the upgrade. Always make sure you have a backup of your server before you start the upgrade procedure!

## 5.1. Performing patch level upgrades on Windows

If you need to install a 'patch level' upgrade (i.e. from OTRS 3.3.1 to OTRS 3.3.2) on Windows all you need to do is to download and run the new installer. Of course you should make sure you have a backup in place before you start the upgrade!

## 5.2. Performing minor level upgrades on Windows

Minor upgrades (from OTRS 3.2 to OTRS 3.3) take a little more time as there is also a database upgrade step involved. The installer will detect this and will automatically perform the upgrade for you. After installation you should still perform steps 12, 13 and 14 of the 'regular' upgrading section.

Please note that if you have any additional packages such as Feature Add-Ons installed on your OTRS system, you'll need to upgrade these as well. Make sure you obtain these before you start the upgrade. After upgrade is complete you can upgrade these packages via the Package Installer Web GUI. Packages from the 'standard' repositories such as Survey, FAQ and ITSM can be upgraded from the Package Manager after the framework upgrade is complete.

# 6. Zusätzliche Applikationen

Zusätzlich zum OTRS-Framework haben Sie die Möglichkeit, weitere Applikationen aus einem Online-Verzeichnis über das Admin-Interface (Paketmanager) zu installieren. Dieser lädt Applikationen von einem Online-Verzeichnis herunter und löst die Paketabhängigkeiten auf. Es ist zudem möglich, Pakete in Form lokaler Dateien zu installieren, z. B. für den Fall, dass Ihr OTRS keine Internetverbindung hat.

## 6.1. FAQ

The FAQ is the Knowledge Base component. It supports editing and viewing of FAQ articles. Articles can be viewed and restricted to agents, customer users, or anonymous users. These can also be structured into groups, and be read in different languages.

# Kapitel 3. Erste Schritte

Dieser Abschnitt soll einen ersten Überblick über die Funktionsweise von OTRS und den Aufbau der Weboberfläche des Systems geben. Es werden die Unterschiede zwischen den Mitarbeitern 'agents', den Kunden 'Customer' und Administratoren 'administrators' erklärt. Anschließend wird die erste Anmeldung als OTRS-Administrator durchgeführt und erläutert, was mit Hilfe der Benutzereinstellungen für jeden Account innerhalb des Systems festgelegt werden kann.

## 1. Agenten-Weboberfläche

Die Mitarbeiter bearbeiten über die Weboberfläche des Systems die Anfragen der Kunden, erstellen neue Tickets für andere Mitarbeiter oder Kunden, legen Tickets über Telefongespräche mit Kunden an, schreiben FAQ-Einträge, bearbeiten Kundendaten usw.

Supposing your OTRS host is reachable via the URL <http://www.example.com>, then the OTRS login screen can be reached by using the address <http://www.example.com/otrs/index.pl> in a web browser (see Figure below).

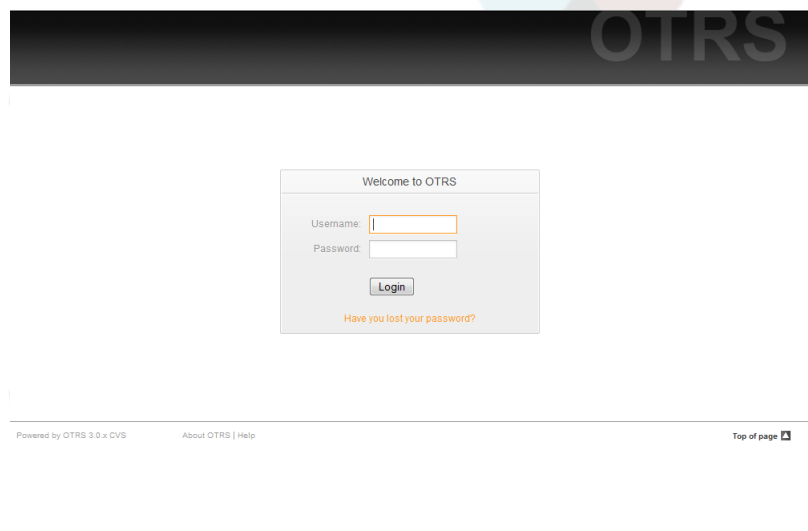


Abb.: Login-Bildschirm der Agenten-Weboberfläche.

## 2. Kunden-Weboberfläche

Customers have a separate web interface in OTRS through which they can create new accounts, change their account settings, create and edit tickets, get an overview on tickets that they have created, etc.

Das obige Beispiel fortsetzend kann der Kunden-Login-Bildschirm über die URL <http://www.example.com/otrs/customer.pl> mit einem Webbrowser erreicht werden (siehe Abbildung unten).

**Company Support**

Login

[Forgot password?](#)

Not yet registered? [Sign up now.](#)

Powered by OTRS 3.0.x CVS

Abb.: Login-Bildschirm der Kunden-Weboberfläche.

### 3. Öffentliche Weboberfläche

In addition to the web interfaces for agents and customers, OTRS also has a public web interface which is available through the FAQ-Module. This module needs to be installed separately. It provides public access to the FAQ system and lets visitors search through FAQ entries without any special authorization.

In our example, the public web interface can be reached via either of the following URLs: <http://www.example.com/otrs/faq.pl> , <http://www.example.com/otrs/public.pl>

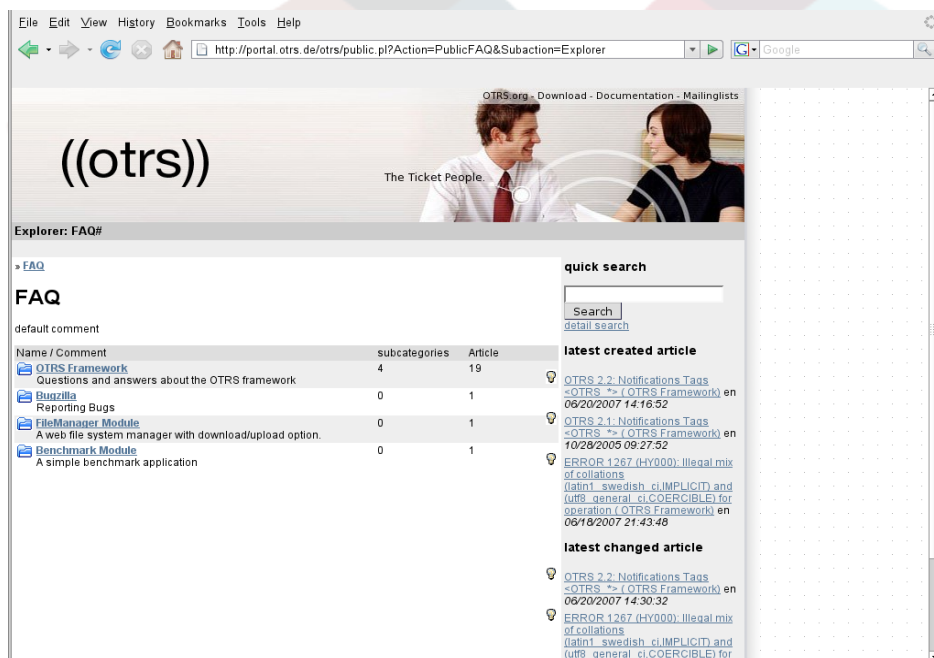


Abb.: Öffentliche Weboberfläche.

### 4. Die erste Anmeldung

Access the login screen as described in the section Agent web interface . Enter a user name and password. Since the system has just been installed and no users have yet been

created, login as OTRS administrator first, using 'root@localhost' for username and 'root' for password.

## Warnung

Diese Zugangsdaten werden bei jeder OTRS-Installation standardmäßig vergeben. Da das Kennwort für den OTRS-Administrator somit öffentlich bekannt ist, sollten Sie es schnellstmöglich ändern! Sie können dies nach der Anmeldung als OTRS-Administrator über die Benutzereinstellungen vornehmen.

Wollen Sie sich nicht als OTRS-Administrator anmelden, geben Sie einfach den Benutzernamen und das Kennwort Ihres normalen OTRS-Accounts in die dafür vorgesehenen Eingabefelder ein.

Falls Sie einmal ihr Kennwort vergessen haben sollten, können Sie sich automatisch vom System ein neues Kennwort an die Mailadresse schicken lassen, die für Ihren OTRS-Account im System hinterlegt ist. Geben Sie dazu im unteren Bereich des Login-Bildschirms den Benutzernamen Ihres Accounts an.

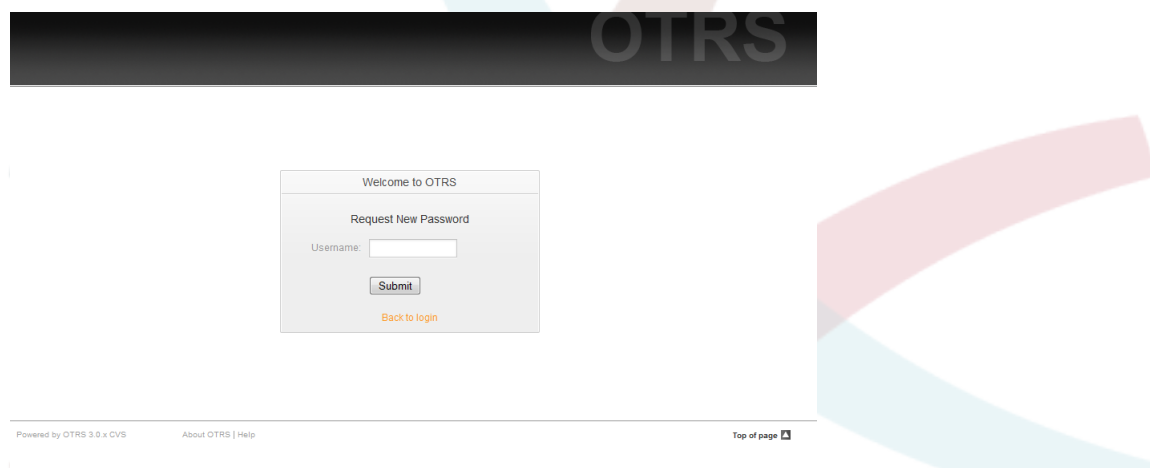


Abb.: Neues Passwort anfordern.

## 5. Agenten-Weboberfläche - ein Überblick

Upon successfully logging into the system, you are presented with the Dashboard page (see Figure below). It shows your locked tickets, allows direct access through menus to the queue, status and escalation views, and also holds options for creation of new phone and e-mail tickets. It also presents a quick summary of the tickets using different criteria.



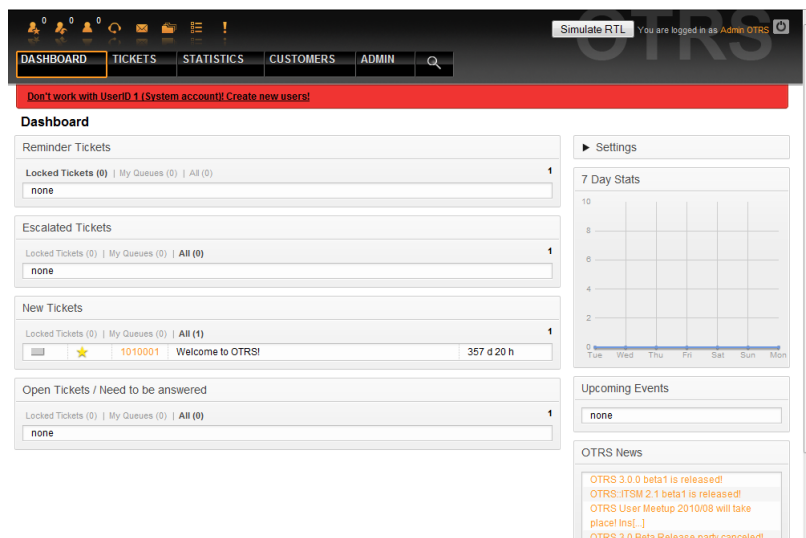


Abb.: Dashboard der Agenten-Weboberfläche.

To improve clarity, the general web interface is separated into different areas. The top row of each page shows some general information such the current username, the logout button, icons listing the number of locked tickets with direct access to them, links to create a new phone/e-mail ticket, etc. There are also icons to go to the queue, status, and escalation views.

Below the icons row is the navigation bar. It shows a menu that enables you to navigate to different areas or modules of the system, letting you execute some global actions. Clicking on the Dashboard button takes you to the dashboard. If you click on the Tickets button, you will get a submenu with options to change the ticket's view, create a new ticket (phone/e-mail) or search for a specific ticket. The Statistics button presents a menu that allows you to choose from an overview of the registered statistics, creating a new one or importing an existing one. The Customers button leads you to the Customer Management screen. By clicking the Admin button, you can access all of the administrator modules, which allows you to create new agents, queues, etc. There is also a Search button to make ticket searches.

If any associated applications are also installed, e.g. the FAQ or the Survey, buttons to reach these applications are also displayed.

Die rote Leiste unterhalb des Navigationsbereiches zeigt verschiedene Systemnachrichten an. Wenn Sie als OTRS-Administrator-Benutzer angemeldet sind, erhalten Sie hier den Hinweis, dass Sie mit diesem Benutzer nicht regulär arbeiten sollten.

Below the title of the section you are currently in, there are several subsections containing relevant information about the screen you are working on, each one in a separate box.

These boxes contains the main part of each screen, usually they are displayed in one or several columns, each box can store relevant information about the current screen like for example instructions, advises, overviews, etc. Also is displayed the form or tool necessary for performing the action associated to each screen, like for example, add, update or delete records, check the log, change configuration settings, etc.

Finally at the bottom of the page, the site footer is displayed (see Figure below). It contains links to directly access the OTRS official web site, or go to the Top of the page.

Normalerweise sehen die "icon row", die "navigation bar" und die Fußzeile überall im gesamten Webinterface gleich aus.

Abb.: Fußzeile.

## 6. Übersicht

The Dashboard is the main page of the system, here you can get an overview about the tickets and other stuff related to the ticket activity. It's thinking to be the starting point for the daily work of an agent, by default it presents a quick summary of the tickets which are pending, escalated, new, and open, among other information.

One of the most important features about Dashboard is that is completely customizable. That means you that can configure each part as you want, showing or hiding elements. It's even possible to relocate this elements within the same column by clicking on and dragging the element's header, and dropping them elsewhere. Each element is named "Widget", the system has some widgets ready to use out of the box, but the modular design of the dashboard screen is prepared to integrate custom widgets easily.

The content of this screen is arranged in two main columns, on the left column you normally can see information about tickets classified by their states like: reminder, escalated, new, and open. On each of this widgets you can filter the results to see all of the tickets that you are allowed to access, tickets you have locked, the ones that are located in agent defiend queues, among other filters. There are also other kind of widgets in this column and they are all described below.

Left column dashboard widgets.

- Ticket List Widgets

Widgets under this category share same overall behavior, look and feel. This widgets shows a list of tickets on a determined state. the amount of tickets display on each list page can be configured in widget options (they appear when you hover the mouse pointer over the top right part of the widget). This widgets support the following filters:

- Meine gesperrten Tickets

The tickets that the logged agent has locked.

- Meine beobachteten Tickets

The tickets that the logged agent has in his/her watched list, requires Ticket::Watcher setting to be turned on to be displayed.

- Meine Verantwortlichkeiten

The tickets that the logged agent is set as responsible, Ticket::Responsible setting is required to be turned on in order to make this filter visible.

- Tickets in meinen Queues

The tickets that are on queues where the agent define as "My Queues".

- Alle Tickets

Alle Tickets auf die der Agent Zugriff hat.

Das sind folgende Widgets:

- Erinnerungstickets

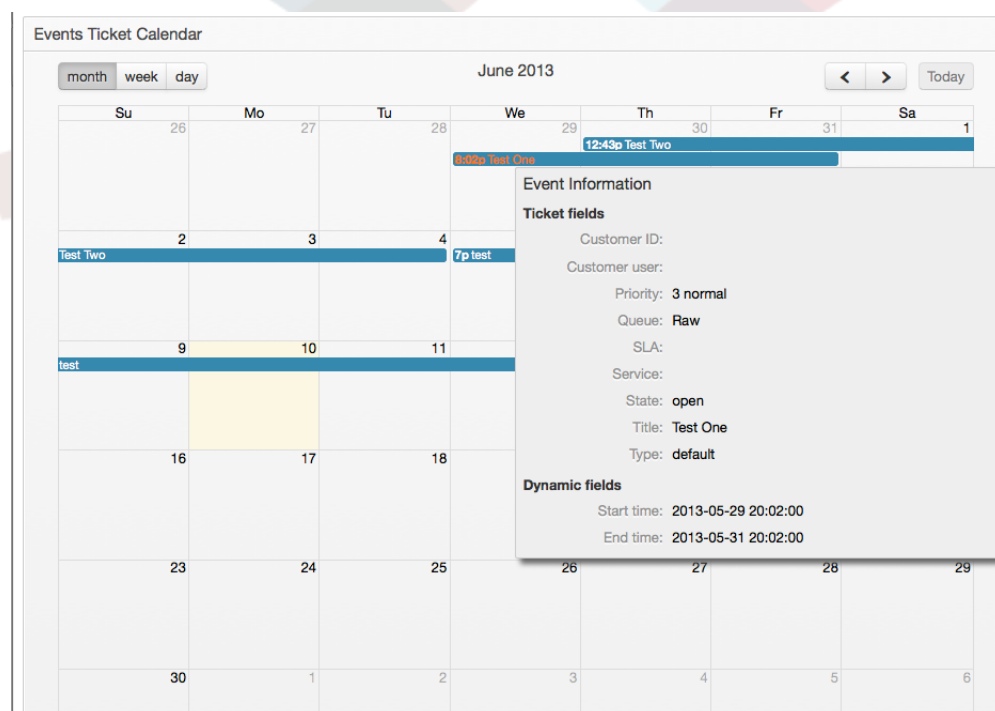
Tickets die auf 'warten' gesetzt sind und deren Erinnerungszeit erreicht ist.

- Eskaliert  
Tickets die eskaliert sind.
- Neue Tickets  
Tickets die den Status "Neu" haben.
- Offene Tickets / Beantwortung erforderlich  
Tickets die den Status "Offen" haben.
- Ticket-Ereigniskalender

A calendar event (for this widget) is defined when a new ticket is created, the Events Ticket Calendar feature has to be enabled, and it requires two new fields to be displayed in ticket creation screens, one for the event start time and the other one for the end time, this times determine the duration of the event.

This widget includes the following views: month, week and day, agents can scroll thru the pages by using the right and left arrows.

As mentioned before just enabling the widget is not enough, a couple of "Date/Time" dynamic fields for tickets should be added into the system (via Dynamic Fields link in "Admin" panel) and set them up in the SysConfig for this widget, both Dynamic Fields should be configured to be displayed on the ticket creation screens, they should be filled during ticket creation or any other ticket action screen (e.g. Free Fields) to describe the time frame for the calendar event (start and end time), the ticket zoom screen might be configured to show this dynamic fields also, in case you consider it necessary.



Further configurations for this widget could be found under the "Frontend::Agent::Dashboard::EventsTicketCalendar" SubGroup in the SysConfig:

- Kalenderbreite  
Definiert die Kalenderbreite in Prozent. Standard ist 95%

- `DynamicFieldStartTime`

Definiert den Namen des dynamischen Feldes für die Startzeit.

- `DynamicFieldEndTime`

Definiert den Namen des dynamischen Feldes für die Endzeit.

- `Queues`

Only the tickets on the queues specified in this setting will be considered in the calendar view.

- `DynamicFieldsForEvents`

Definiert die dynamischen Felder die im Kalender-Overlay angezeigt werden.

- `TicketFieldsForEvents`

Definiert die Ticketattribute die im Kalender-Overlay angezeigt werden.

- Übersicht nach Queues

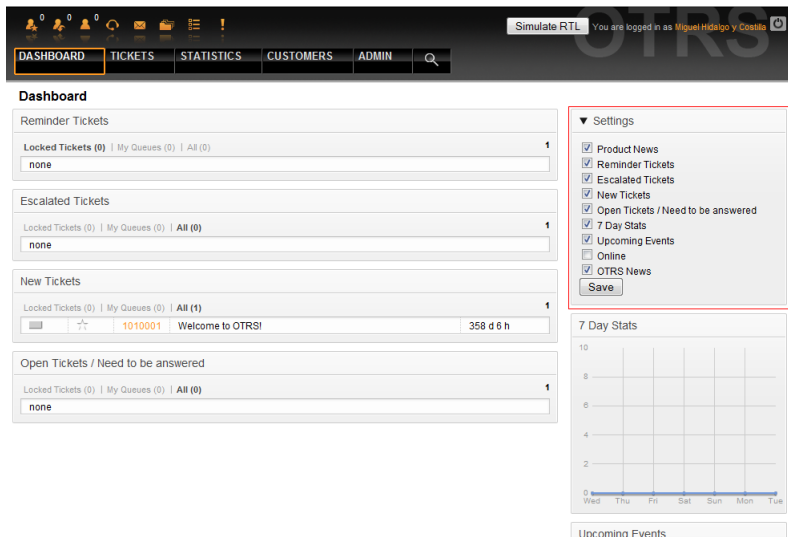
This widget shows in a ticket count matrix where the rows represents queues and the columns represents the ticket states, then on each cell the number of tickets on a defined state that belongs on a particular queue is displayed.

The widget also shows a Totals row and a Totals column, the Totals row shows the sum of the tickets for each state on all presented queues, while the Totals column represent the sum of the tickets for each queue on all presented states.

The queues and states that are presented can be changed via Sysconfig.

By clicking any of the ticket count numbers a ticket search results page will opened letting agents to have a more detailed overview of them.

In the right column is located an special widget that allow you to control the widgets you want to show or hide, This is the Settings widget. Click on it's header to expand the section and see all available widgets, as shown in Figure. Each widget name has a checkbox, Use this checkboxes to define the visibility of the widgets in the dashboard (unchecked widgets will not be shown) after you define the visibility options and click on 'Save' for storing your changes. This section is fixed on the screen, this means you can't drag and drop it, or close it.



The screenshot shows the OTRS Dashboard interface. At the top, there is a navigation bar with tabs for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, and ADMIN. The main content area is divided into several sections:

- Reminder Tickets:** A widget showing 'Locked Tickets (0) | My Queues (0) | All (0)' with a dropdown menu set to 'none'.
- Escalated Tickets:** A widget showing 'Locked Tickets (0) | My Queues (0) | All (0)' with a dropdown menu set to 'none'.
- New Tickets:** A widget showing 'Locked Tickets (0) | My Queues (0) | All (1)' with a dropdown menu set to 'none'. It also displays a 'Welcome to OTRS!' message and a '358 d 6 h' timer.
- Open Tickets / Need to be answered:** A widget showing 'Locked Tickets (0) | My Queues (0) | All (0)' with a dropdown menu set to 'none'.
- Settings:** A red-bordered box highlights a settings menu with the following options:
  - Product News
  - Reminder Tickets
  - Escalated Tickets
  - New Tickets
  - Open Tickets / Need to be answered
  - 7 Day Stats
  - Upcoming Events
  - Online
  - OTRS News
  - Save
- 7 Day Stats:** A line graph showing ticket activity over the past 7 days (Wed, Thu, Fri, Sat, Sun, Mon, Tue). The y-axis ranges from 0 to 10. Two lines are plotted: a blue line representing created tickets and an orange line representing closed tickets.
- Upcoming Events:** A section at the bottom of the dashboard.

Abb.: Dashboard-Einstellungen.

Right column dashboard widgets.

- 7 Tage-Statistik

It shows a graph of ticket activity over the past 7 days that includes 2 lines. One that is usually blue color, represents the amount of created tickets per day and the second one, usually orange and represents the closed tickets per day.

- Anstehende Ereignisse

Tickets on short for escalating or already escalated are listed here, info from this widget is very helpful since you have the chance to know about tickets needs your attention and you can decide in which ones you want to focus your effort on, set priorities or simply check what's coming on.

- OTRS Neuigkeiten

A complete list about OTRS activities and so important information about new product releases or patches.

- Online

Here is showed a summary about the current agents logged the system, it also includes a section for customers on-line, please notice this widget is normally hidden, it can be shown using Settings widget described before.

## 7. Was verbirgt sich hinter dem Begriff Queue?

Normalerweise werden E-Mails in einer INBOX gespeichert und verwaltet. Eine INBOX ist eine große Datei, in der alle E-Mails aneinandergereiht werden. Neue E-Mails werden einfach an das Ende der INBOX angehängt. Das E-Mail-Programm, welches Sie zum Lesen und Bearbeiten Ihrer Nachrichten benutzen, liest die INBOX-Datei aus und bereitet den Inhalt für Sie als Nutzer auf.

Eine Queue in OTRS ist ein Mechanismus, mit dessen Hilfe viele Tickets gespeichert und verwaltet werden können, also auch eine Art INBOX. Als Anwender ist es völlig unwichtig zu wissen, wo oder wie das Ticket gesichert ist. Wichtig ist nur, zu wissen, welcher Queue das Ticket zugeordnet wurde. Anwender, also die sog. Agents (z. B. die Mitarbeiter ihrer

Supportabteilung), können nun Tickets zwischen den Queues verschieben! Warum aber sollten sie das tun?

Gehen wir zur praktischeren Erklärung noch mal von Max Mustermanns Unternehmen aus dem Abschnitt ein Beispiel für ein Trouble Ticket System aus. Max Mustermann hat nach seinem anfänglichen Support-Chaos OTRS installiert, und er und seine Mitarbeiter nutzen das System zur Bearbeitung der Anfragen für die Videorekorder.

One queue holding all requests is enough for this situation. However, after some time Max decides to also sell DVD recorders. Now, the customers have questions not only about the video recorder, but also about the new product. More and more emails get into the single queue of Max's OTRS and it's difficult to have a clear picture of what's happening.

Max decides to restructure his support system, and adds two new queues. So now three queues are being used. New messages arriving at the ticket system are stored into the old queue titled "raw". Of the two new queues, one titled "video recorder" is exclusively for video recorder requests, while the other one titled "dvd recorder" is exclusively for dvd recorder requests.

Max asks Sandra to watch the "raw" queue and sort (dispatch) the messages either into "video recorder" or "dvd recorder" queue, depending on the customer request. John only has access to the "video recorder" queue, while Joe can only answer tickets in the "dvd recorder" queue. Max is able to edit tickets in all queues.

OTRS supports access management for users, groups, and roles, and it is easy to setup queues that are accessible only to some user accounts. Max could also use another way to get his requests into the different queues, with filter rules. Otherwise, if two different mail addresses are used, Sandra only has to dispatch those emails into the two other queues, which can't be dispatched automatically.

Das Sortieren von Mails in verschiedene Queues schafft also Ordnung und mehr Übersicht in der täglichen Mailflut, deshalb sind Queues sehr wichtig für OTRS. Durch die Einteilung der Mitarbeiter (agents) in verschiedene Benutzergruppen mit differenzierten Zugriffsrechten auf die einzelnen Queues, kann die Abarbeitung der Anfragen weiter optimiert werden. Mit Hilfe von Queues können Sie die Struktur Ihres Unternehmens abbilden bzw. einzelne Geschäftsvorgänge abgrenzen. So könnte Max Mustermann neben seinem Support-Queues für die verschiedenen Geräte für Bestellungen eine Queue mit dem Namen "Sales" anlegen und als Unter-Queues "Anfragen", "Angebote", "Bestellungen" usw. definieren, um den Bestellvorgang zu optimieren.

Je besser und strukturierter ein Support- system organisiert ist, desto weniger Zeit und letztlich auch finanzielle Mittel müssen dafür aufgebracht werden. Queues und Unter-Queues helfen bei der Strukturierung bzw. bei der Abbildung von Abläufen.

## 8. Was ist die Queue-Übersicht?

The queue overview offers a view of all queues in which tickets are present, and for which the user has RW permissions.

**QueueView: My Queues**

My Queues (0)	Junk (1)	Postmaster (1)	Raw (1)
All tickets 0	Available tickets 0		
<input type="checkbox"/> Bulk			
No ticket data found.			

The queue overview offers a variety of options for daily work with OTRS. The first of these is the My Queue. In the Agent Preferences, or when administering agents, a set of queue



can be defined for which the agent has been assigned to work within. All the tickets will appear in this default view, when accessing the Ticket -> Queue View menu.

The second option offered by the Queue View is a drill down navigation into individual queues and sub-queues containing tickets to be worked upon.

In both of the view types, the user also has the added ability to see either all unlocked tickets (this is the default filter), or the user can then choose to view all available tickets. Tickets must be in one of the viewable state types to be shown in the queue view. Per default, these are 'open, new, pending reminder, pending auto'.

There are visual alarms, to aid the user.



### visuelle Alarme

- Highlight Age 1: Sets the age in minutes (first level) for highlighting queues that contain untouched tickets. Seen in above in the "Raw" queue.
- Highlight Age 2: Sets the age in minutes (second level) for highlighting queues that contain untouched tickets. Seen in above in the "Postmaster" queue.
- Blink: Activates a blinking mechanism of the queue that contains the oldest ticket. Not supported in all browsers. In that case it will appear red, as seen in above in the "Junk" queue.
- Bold: The current queue will be bolded, as seen above in the "My Queues".

## 9. Benutzereinstellungen

Die Einstellungen eines Accounts lassen sich mit Hilfe der Benutzereinstellungen den eigenen Wünschen entsprechend anpassen. Dabei spielt keine Rolle, ob man als Mitarbeiter, Kunde oder Administrator am System angemeldet ist. Die Benutzereinstellungen sind über den Link auf den Benutzernamen erreichbar, Kunden müssen den "Einstellungen"-Link verwenden.

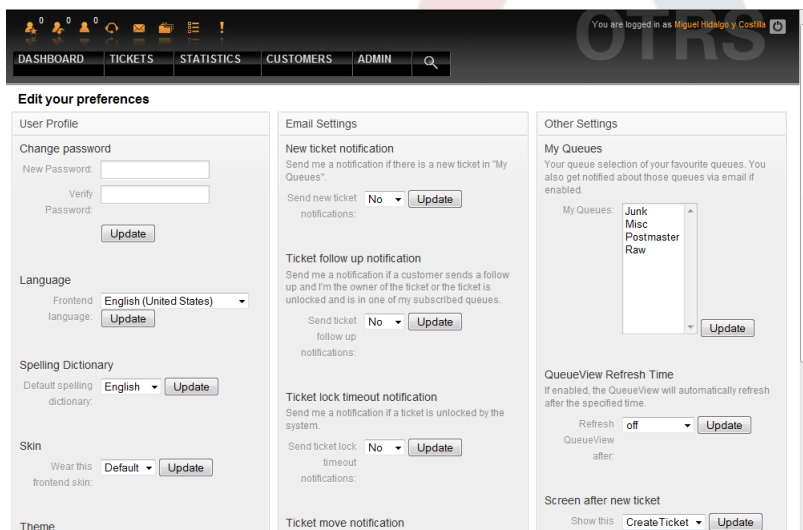




Abb.: Benutzereinstellungen des Agenten.

Ein Agent kann 3 verschiedene Kategorien von Einstellungen vornehmen: Benutzerprofil, E-Mail-Einstellungen und andere Einstellungen. Folgende Einstellungen sind möglich:

## Benutzerprofil

- Aktuelles Passwort ändern.
- Sprache der Benutzeroberfläche wechseln.
- Oberflächen-Skin auswählen.
- Oberflächen-Theme auswählen.
- Abwesenheitszeit aktivieren und konfigurieren.

## E-Mail-Einstellungen

- Ereignisse auswählen, bei denen eine E-Mail-Benachrichtigung durch das System erfolgen soll.

## Andere Einstellungen

- Wählen Sie die Queues aus, die sie in "Meine Queues" überwachen wollen.
- Aktualisierungszeit der Queue-Ansicht einstellen.
- Bildschirm auswählen, der nach Erstellung eines Tickets angezeigt wird.

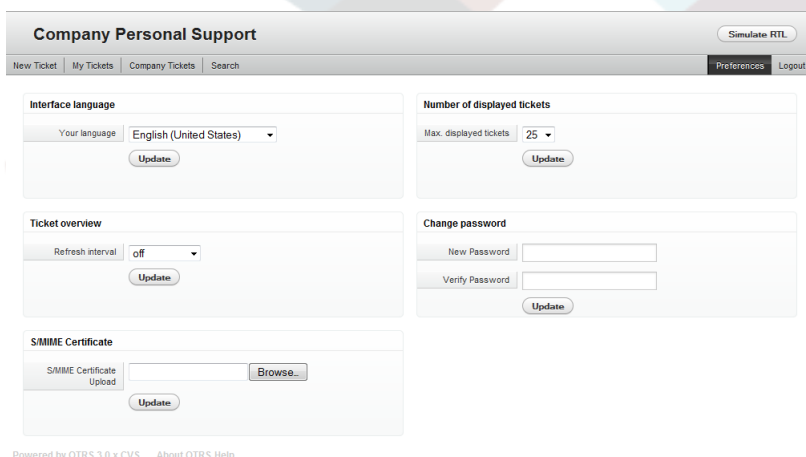


Abb.: Benutzereinstellungen des Kunden.

Ein Kunde kann die Sprache der Benutzeroberfläche wechseln, die Aktualisierungszeit der Ticketübersichten verändern und die max. Anzahl angezeigter Tickets pro Seite einstellen. Zusätzlich kann das Passwort geändert werden.

# Kapitel 4. Administration

## 1. Der Administrationsbereich von OTRS

### 1.1. Grundlagen

The following system configuration settings are available to OTRS administrators by accessing the Admin page of the OTRS web interface - adding agents, customers and queues, ticket and mail settings, installing additional packages such as FAQ and ITSM, and much more.

Agents who are members of the *admin* group can access the Admin area by clicking the *Admin* link in the navigation bar (see Figure below). Agents without sufficiently elevated access rights will not be able to access this link.

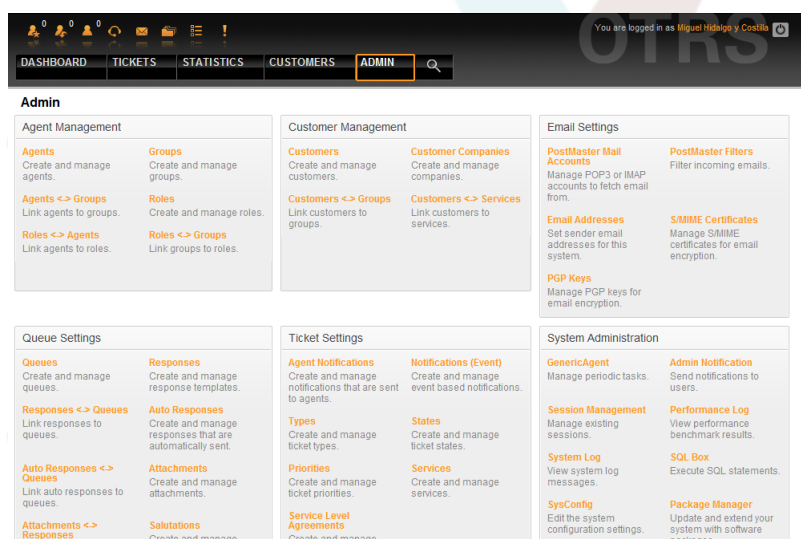


Abb.: OTRS Administrationsbereich.

## 1.2. Benutzer, Gruppen und Rollen

### 1.2.1. Benutzer

By clicking the link *Agents*, you get access to the agent management screen of OTRS (see Figure below). Administrators can add, change or deactivate agent accounts. Furthermore they can also manage agent preferences, including the language and notification settings for the individual agent's interface.

#### Anmerkung

Ein OTRS-Benutzer kann deaktiviert, aber nicht gelöscht werden. Um ein Benutzer zu deaktivieren, setzen Sie die Einstellung für "Gültig" auf "ungültig" oder "ungültig-temporär".

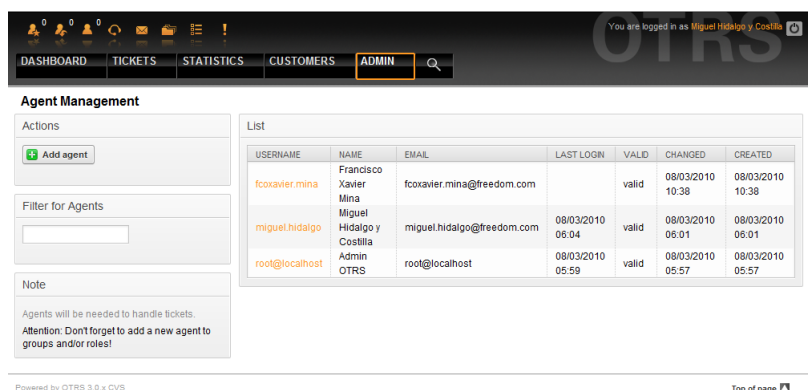


Abb.: Benutzerverwaltung.

To register an agent, click on the "Add agent" button, enter the required data and press the Submit button at the bottom of the screen, as shown in Figure.

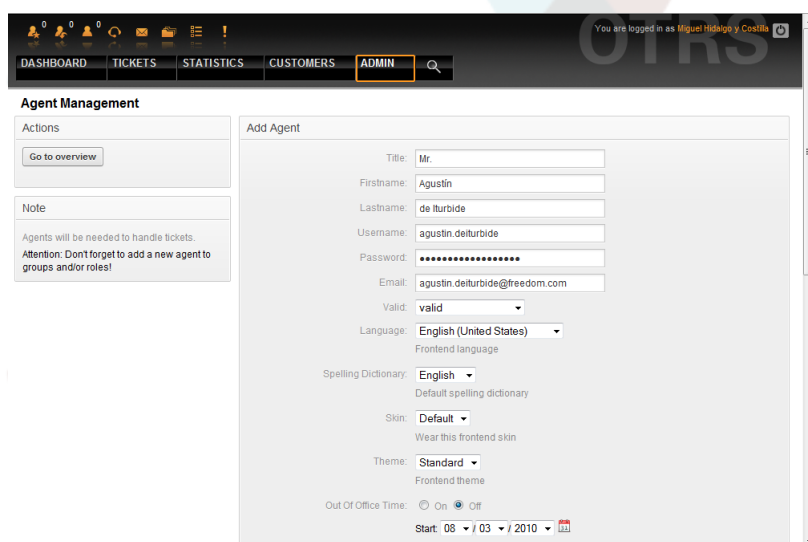


Abb.: Hinzufügen eines Benutzers.

Nachdem Sie einen neuen Benutzer angelegt haben, muss dieser einer Gruppe bzw. einer Rolle zugewiesen werden. Sie werden nach dem Anlegen eines neuen Benutzers automatisch auf die Bildschirmmaske für die Zuweisung eines Benutzers in Gruppen weitergeleitet. Weitere Informationen über Gruppen und Rollen finden Sie in den Abschnitten Gruppen und Rollen dieses Kapitels.

## 1.2.2. Gruppen

Jeder Mitarbeiter mit einem Account im OTRS, sollte mindestens einer Benutzergruppe angehören. In einer Neuinstallation sind drei vordefinierte Gruppen verfügbar.

**Tabelle 4.1. Standardmäßig vorhandene Gruppen in OTRS**

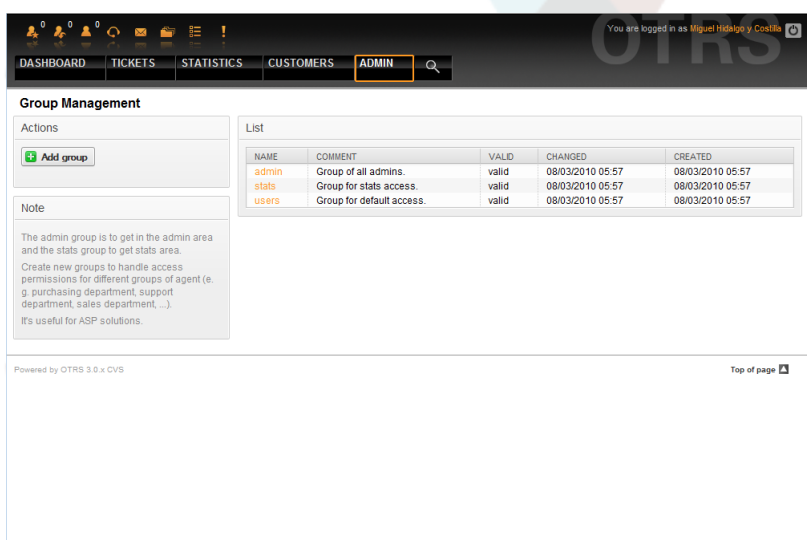
Gruppe	Beschreibung
admin	Gruppe für die Benutzer mit Administrationsrechten.

Gruppe	Beschreibung
stats	Benutzer in dieser Gruppe dürfen lesend (ro) oder schreibend (rw) auf das Statistikmodul von OTRS zugreifen, d.h. sie können Statistiken einsehen oder auch erstellen.
users	Dies ist die Gruppe, in die normale Mitarbeiter aufgenommen und mit den kompletten Rechten ausgestattet werden sollten. Dadurch wird für die Mitarbeiter das normale Arbeiten im System ermöglicht, der Zugriff auf alle Funktionen rund um Tickets ist gegeben.

## Anmerkung

In a brand new OTRS installation, the *users* group initially does not have any members. The agent 'root@localhost' belongs by default to the admin and stats groups.

Sie können durch Klick auf "Gruppen" im Administrationsbereich in die Gruppenverwaltung gelangen.



**Group Management**

Actions

[Add group](#)

Note

The admin group is to get in the admin area and the stats group to get stats area.  
Create new groups to handle access permissions for different groups of agent (e.g. purchasing department, support department, sales department, ...).  
It's useful for ASP solutions.

NAME	COMMENT	VALID	CHANGED	CREATED
admin	Group of all admins.	valid	08/03/2010 05:57	08/03/2010 05:57
stats	Group for stats access.	valid	08/03/2010 05:57	08/03/2010 05:57
users	Group for default access.	valid	08/03/2010 05:57	08/03/2010 05:57

Powered by OTRS 3.0.x CVS Top of page

Abb.: Gruppenverwaltung.

## Anmerkung

In OTRS können Gruppen deaktiviert, aber nicht gelöscht werden. Deaktivieren Sie eine Gruppe, indem Sie für "Gültig" den Wert entweder auf "ungültig" oder auf "ungültig-temporär" setzen.

Um einen Benutzer einer Gruppe zuzuweisen bzw. die Gruppenmitgliedschaft eines Benutzers zu ändern, kann der Link "Benutzer <-> Gruppen" im Administrationsbereich genutzt werden.

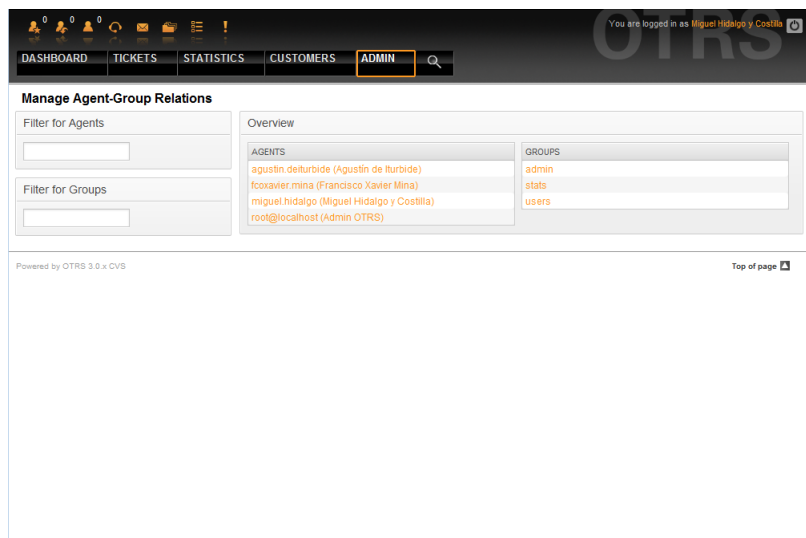


Abb.: Gruppenverwaltung.

An overview of all groups and agents in the system is displayed on this page. You can also use the available filters to find a specific entity. If you want to change the groups that an agent is a member of, just click on the agent's name (see Figure below). To change the agents associated with a group, just click on the group you want to edit (see Figure below).

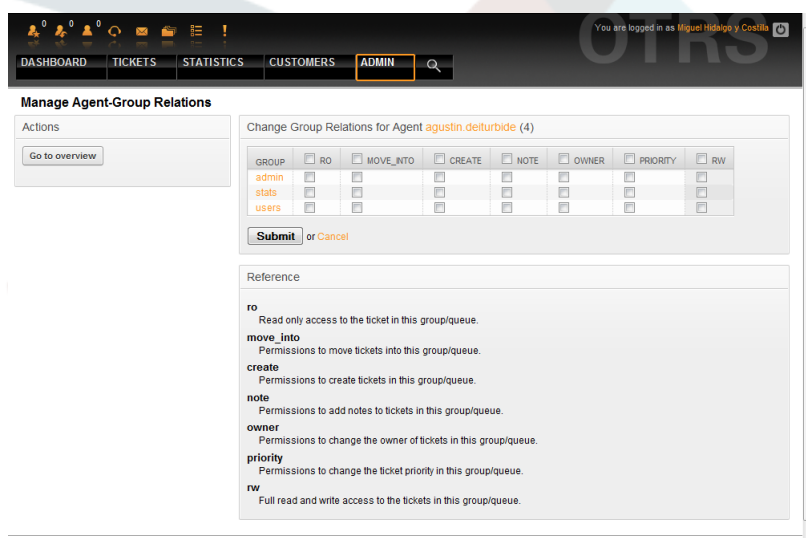


Abb.: Bearbeiten der Gruppenzugehörigkeiten eines Benutzers.

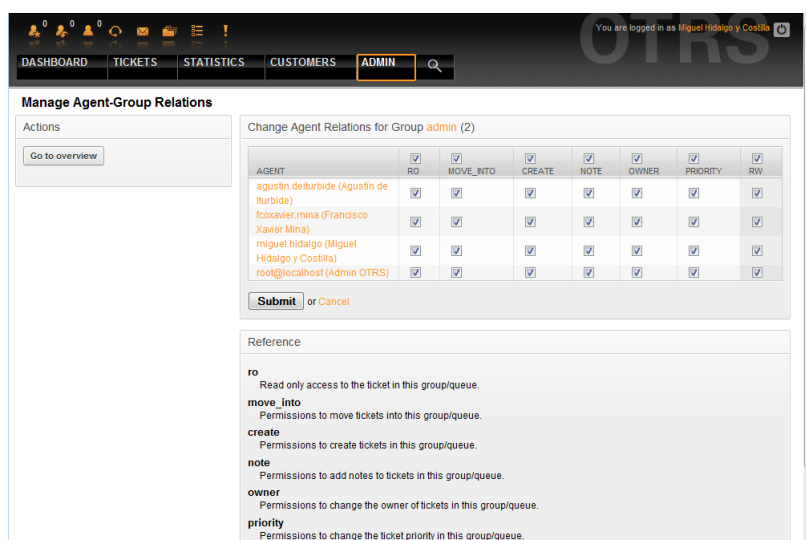


Abb.: Bearbeiten der Benutzerzuordnungen einer Gruppe.

Each group has a set of rights associated with it, and each group member (agent) may have some combination of these rights for themselves. A list of the permissions / rights is shown in Table 5-2.

**Tabelle 4.2. Mit OTRS-Gruppen verknüpfte Rechte**

Berechtigung	Beschreibung
ro	Nur Lesezugriff auf die Tickets bzw. Beiträge dieser Gruppe bzw. der Gruppe zugewiesenen Queues oder Bereiche.
Verschieben in (move into)	Recht zum Verschieben von Tickets oder Beiträgen innerhalb der Queues bzw. Bereiche dieser Gruppe.
erstellen	Recht zum Erstellen von Tickets oder Beiträgen in den Queues, bzw. Bereichen dieser Gruppe.
Besitzer (owner)	Recht zum Ändern des Eigentümers von Tickets, bzw. Beiträgen in den der Gruppe zugewiesenen Queues bzw. Bereiche.
Priorität	Recht zum Ändern der Priorität von Tickets, bzw. Beiträgen in den der Gruppe zugewiesenen Queues bzw. Bereiche.
rw	Voller Lese- und Schreibzugriff auf alle Inhalte der dieser Gruppe zugewiesenen Queues, bzw. Bereiche.

## Anmerkung

By default, the QueueView only lists tickets in queues that an agent has *rw* access to, i.e., the tickets the agent needs to work on. If you want to change this behaviour, you can set `Ticket::Frontend::AgentTicketQueue###ViewAllPossibleTickets` to Yes.

Nicht alle verfügbaren Berechtigungen werden standardmäßig angezeigt. Diese zusätzlichen Berechtigungen können hinzugefügt werden.

**Tabelle 4.3. Weitere Berechtigungsgruppen**

Berechtigung	Beschreibung
stats	Erlaubt den Zugriff auf die Statistikseite
Umleiten	Das Recht eine E-Mail umzuleiten (mit Umleiten-Knopf im TicketZoom)
Verfassen	Das Recht eine Antwort zu einem Ticket zu verfassen.
Kunde	Das Recht den Kunden eines Tickets zu ändern.
Weiterleiten	Das Recht eine Nachricht weiterzuleiten (mit dem Weiterleiten-Knopf)
Warten	Das Recht ein Ticket auf "warten" zu setzen.
Telefon	Das Recht einen Telefonanruf zu einem Ticket hinzuzufügen.
Verantwortlicher	Das Recht den Verantwortlichen Agenten eines Tickets zu ändern.

### Anmerkung

Diese Berechtigungen können durch ändern von System::Permission hinzugefügt werden

## 1.2.3. Rollen

Roles are a powerful feature to manage the access rights of many agents in a very simple and quick manner. They are particularly useful for large, complex support systems with a lot of agents, groups and queues. An example below explains when they should be used.

Suppose that you have a system with 100 agents, 90 of them with access to a single queue called "support" where all support requests are handled. The "support" queue contains multiple sub queues. The other 10 agents have permission to access all queues of the system. These 10 agents dispatch tickets, watch the raw queue and move spam messages into the "junk" queue.

The company now opens a new department that sells some products. Order request and acceptance, order confirmation, bills, etc. must be processed, and some of the company's agents are supposed to do this using OTRS. The different agents have to get access to the new queues that must be created.

Because it would take a long time to change the access rights for the individual agents manually, roles that define the different access levels can be created. The agents can then be added to one or more roles, with their access rights being modified automatically. If a new agent account is created, it is also possible to add this account to one or more roles.

### Anmerkung

Roles are really useful when dealing with complex organizations and when maintaining larger OTRS installations. Proper care is advised though. Mixing Agent to Group with Agent to Role mappings can make for a complex access control scheme, that is difficult to understand and maintain. If you wish to use only roles and disable the Agents <-> Groups option in the Admin area, you can do so by modifying the Frontend::Module###AdminUserGroup in the SysConfig. Be aware that this won't remove already existing Agents to Group assignments!



Sie können die Rollenverwaltung durch Klick auf "Rollen" im Administrationsbereich erreichen.

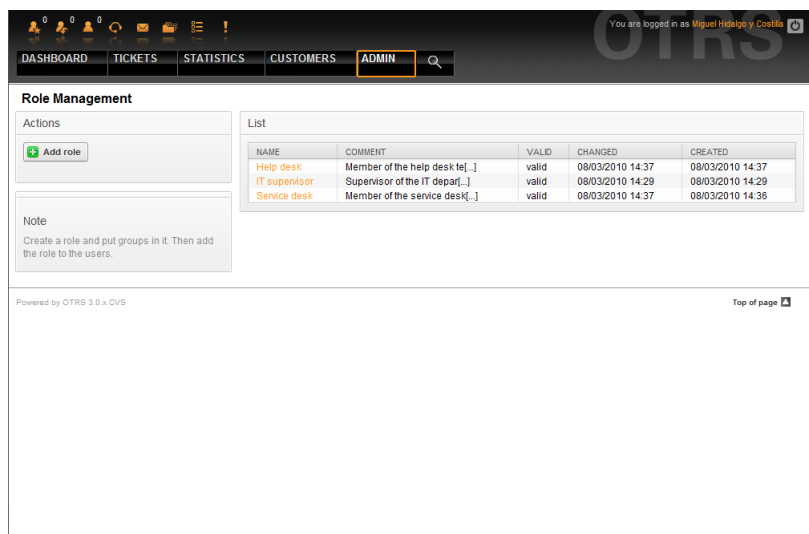


Abb.: Rollenverwaltung.

## Anmerkung

In OTRS können Rollen deaktiviert, aber nicht gelöscht werden. Deaktivieren Sie eine Rolle, indem Sie für "Gültig" den Wert entweder auf "ungültig" bzw. "ungültig-temporär" setzen.

Eine Übersicht aller Rollen im System erscheint, um einen Eintrag zu bearbeiten, klicken Sie einfach auf den Rollennamen. In einer Neuinstallation gibt es keine vordefinierten Rollen. Um eine anzulegen, klicken Sie auf den "Rolle hinzufügen"-Knopf und geben Sie die erforderlichen Daten an.

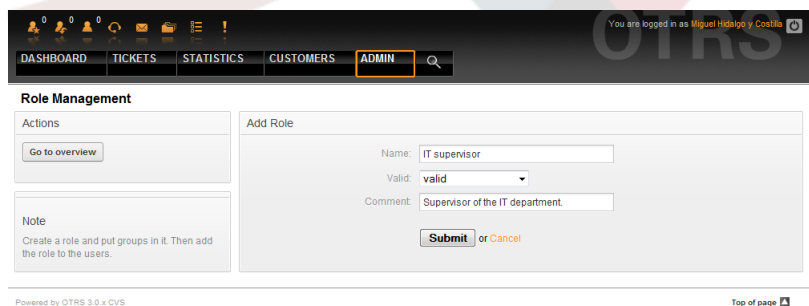
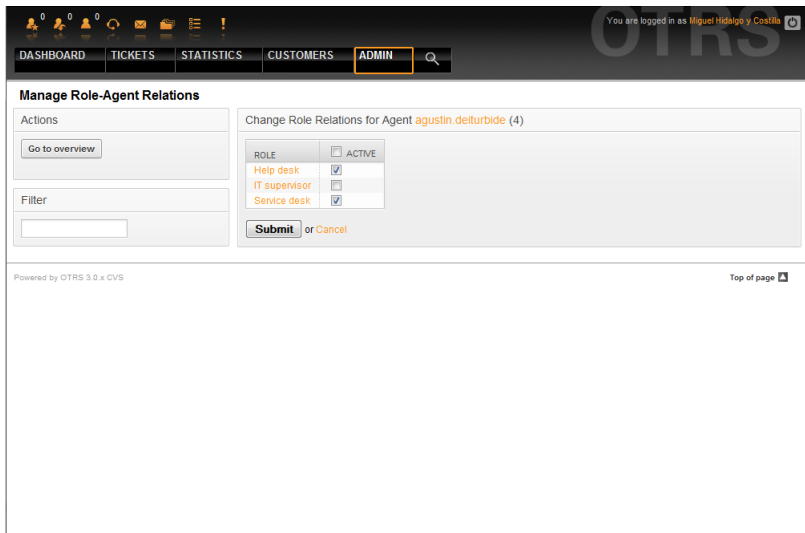


Abb.: Anlegen einer neuen Rolle.

Um einen Überblick über alle Rollen und Agenten im System zu erhalten, klicken Sie auf den Link "Rollen <-> Benutzer" im Administrationsbereich. Sie können die Filter verwenden, um einen bestimmten Eintrag zu finden. Wenn Sie die Rollenzordnungen eines Benutzers ändern wollen, klicken Sie auf den Benutzernamen. Um die Benutzerzuordnungen einer Rolle zu verändern, klicken Sie auf die Rolle.



Dashboard: DASHBOARD | TICKETS | STATISTICS | CUSTOMERS | **ADMIN** | Search

You are logged in as Miguel Hidalgo y Costilla

### Manage Role-Agent Relations

Actions: [Go to overview](#)

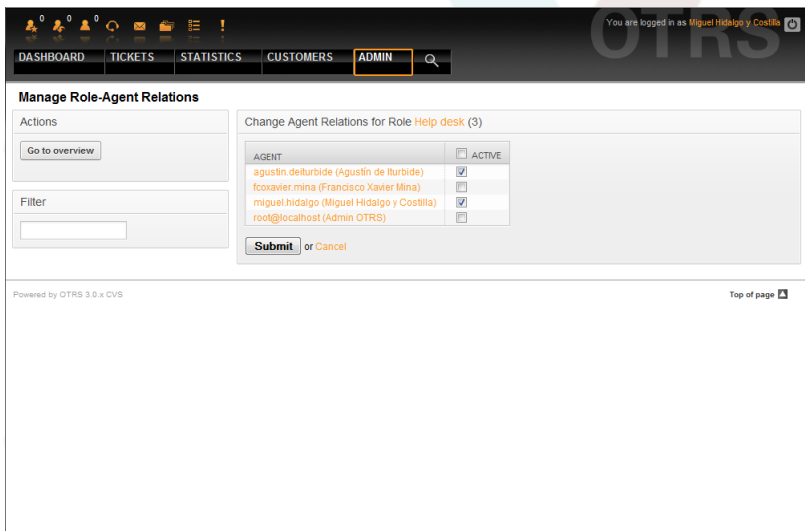
Change Role Relations for Agent **agustin.deiturbide** (4)

ROLE	ACTIVE
Help desk	<input checked="" type="checkbox"/>
IT supervisor	<input checked="" type="checkbox"/>
Service desk	<input checked="" type="checkbox"/>

[Submit](#) or [Cancel](#)

Powered by OTRS 3.8.x CVS Top of page

Abb.: Bearbeiten der Rollenzuordnungen eines Agenten.



Dashboard: DASHBOARD | TICKETS | STATISTICS | CUSTOMERS | **ADMIN** | Search

You are logged in as Miguel Hidalgo y Costilla

### Manage Role-Agent Relations

Actions: [Go to overview](#)

Change Agent Relations for Role **Help desk** (3)

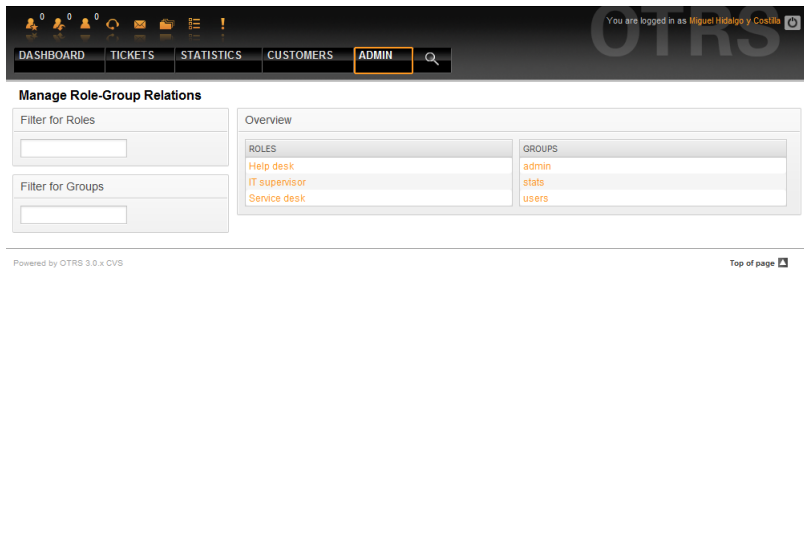
AGENT	ACTIVE
agustin.deiturbide (Agustin de Iturbide)	<input checked="" type="checkbox"/>
fcxavier.mina (Francisco Xavier Mina)	<input checked="" type="checkbox"/>
miguel.hidalgo (Miguel Hidalgo y Costilla)	<input checked="" type="checkbox"/>
root@localhost (Admin OTRS)	<input type="checkbox"/>

[Submit](#) or [Cancel](#)

Powered by OTRS 3.8.x CVS Top of page

Abb.: Bearbeiten der Benutzerzuordnungen einer Rolle.

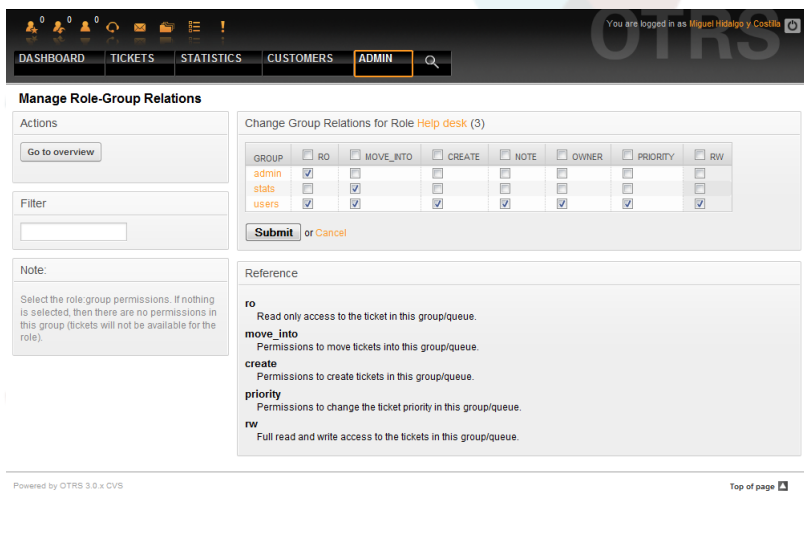
Um eine Übersicht aller Rollen und Gruppen im System zu erhalten, verwenden Sie den Link "Rollen <-> Gruppen" im Administrationsbereich.



The screenshot shows the 'Manage Role-Group Relations' page in the OTRS Admin interface. At the top, there is a navigation bar with 'ADMIN' selected. Below the navigation bar, there are two filter input fields: 'Filter for Roles' and 'Filter for Groups'. The main content area is titled 'Overview' and contains two columns: 'ROLES' and 'GROUPS'. The 'ROLES' column lists 'Help desk', 'IT supervisor', and 'Service desk'. The 'GROUPS' column lists 'admin', 'stats', and 'users'. At the bottom of the page, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

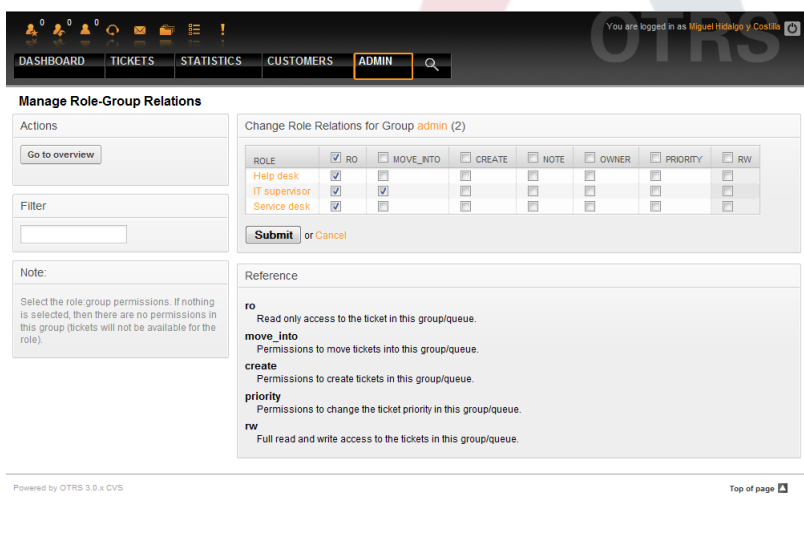
Abb.: Rollen-Gruppen-Zuordnungen verwalten.

Klicken Sie auf eine Gruppe oder Rolle, um die jeweiligen Zuordnungen zu verändern.



The screenshot shows the 'Change Group Relations for Role Help desk (3)' page. It features a table with columns for 'GROUP', 'RO', 'MOVE\_INT0', 'CREATE', 'NOTE', 'OWNER', 'PRIORITY', and 'RW'. The rows are for 'admin', 'stats', and 'users'. Below the table are 'Submit' and 'Cancel' buttons. To the left, there are sections for 'Actions' (with a 'Go to overview' button), 'Filter', and 'Note'. Below the table, there is a 'Reference' section with definitions for 'ro', 'move\_into', 'create', 'priority', and 'rw'. At the bottom, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

Abb.: Gruppenzuordnungen einer Rolle verändern.



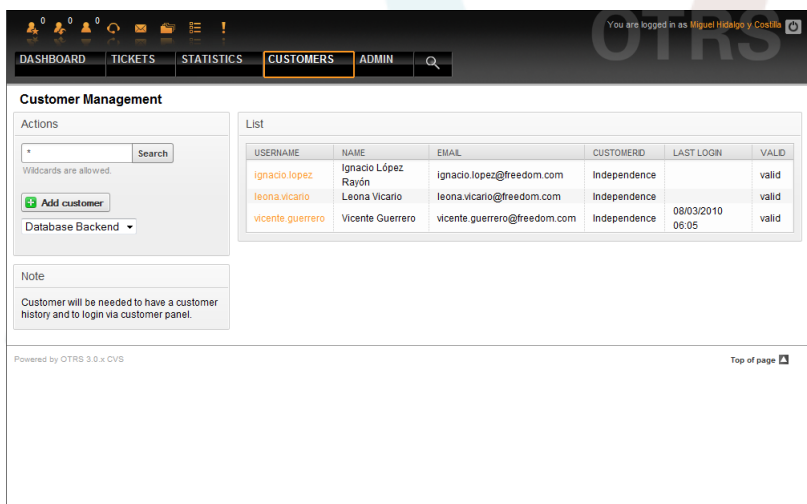
The screenshot shows the 'Change Role Relations for Group admin (2)' page. It features a table with columns for 'ROLE', 'RO', 'MOVE\_INT0', 'CREATE', 'NOTE', 'OWNER', 'PRIORITY', and 'RW'. The rows are for 'Help desk', 'IT supervisor', and 'Service desk'. Below the table are 'Submit' and 'Cancel' buttons. To the left, there are sections for 'Actions' (with a 'Go to overview' button), 'Filter', and 'Note'. Below the table, there is a 'Reference' section with definitions for 'ro', 'move\_into', 'create', 'priority', and 'rw'. At the bottom, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

Abb.: Rollenzuordnungen für eine Gruppe verändern.

## 1.3. Kundenbenutzer und Kundengruppen

### 1.3.1. Kunden

OTRS supports different types of users. Using the link "Customers" (via the navigation bar, or the Admin page), you can manage the accounts of your customers (see Figure below), who can log into the system via the Customers interface (customer.pl). Through this interface, your customers can not only create tickets but also review their past tickets for new updates. It is important to know that a customer is needed for the ticket history in the system.



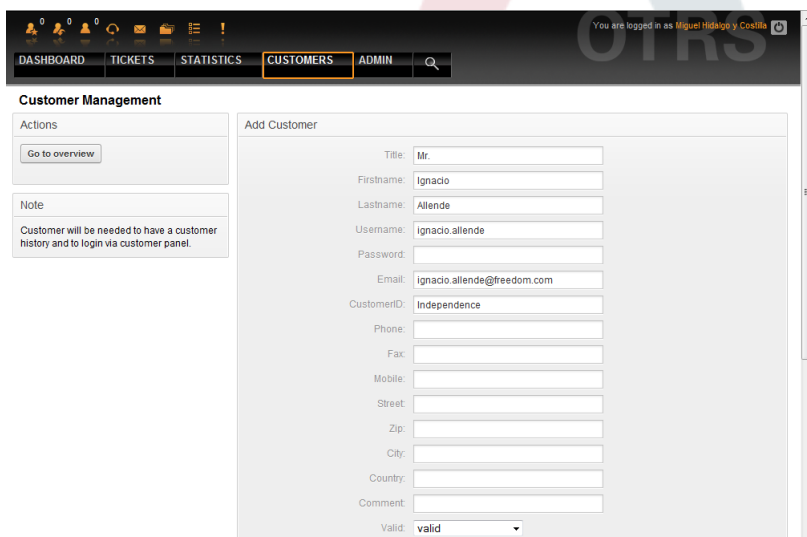
The screenshot shows the OTRS Customer Management interface. At the top, there is a navigation bar with tabs for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS (selected), and ADMIN. Below the navigation bar, the page title is "Customer Management". On the left, there are "Actions" and a search box. Below the search box, there is a "Database Backend" dropdown menu. On the right, there is a "List" table with columns: USERNAME, NAME, EMAIL, CUSTOMERID, LAST LOGIN, and VALID. The table contains three rows of customer data.

USERNAME	NAME	EMAIL	CUSTOMERID	LAST LOGIN	VALID
ignacio.lopez	Ignacio López Rayón	ignacio.lopez@freedom.com	Independence		valid
leona.vicario	Leona Vicario	leona.vicario@freedom.com	Independence		valid
vicente.guerrero	Vicente Guerrero	vicente.guerrero@freedom.com	Independence	09/03/2010 06:05	valid

Abb.: Kundenverwaltung.

Neben der Möglichkeit in der Datenbank nach einem bestimmten Kunden zu suchen, kann das Backend umgestellt werden, über das auf die Kundendaten zugegriffen wird. In OTRS lassen sich mehrere Datenbanken mit Kundendaten einbinden, genauere Informationen hierzu finden Sie im Abschnitt Einbinden externer Backends für Agents und Customer.

Um einen neuen Kunden hinzuzufügen, klicken Sie auf "Kunde hinzufügen". Einige Felder sind Pflichtfelder, müssen also ausgefüllt werden.



The screenshot shows the OTRS Customer Management interface with the "Add Customer" form open. The form contains the following fields: Title (Mr.), Firstname (Ignacio), Lastname (Allende), Username (ignacio.allende), Password, Email (ignacio.allende@freedom.com), CustomerID (Independence), Phone, Fax, Mobile, Street, Zip, City, Country, Comment, and Valid (valid).

Abb.: Hinzufügen eines Kunden.

Der Kunde kann mit Benutzernamen und Passwort auf das System zugreifen. Die Kundennummer wird vom System benötigt, um den Kunden und seine Tickets zu erkennen. Da E-Mail-Adressen eindeutig sind, können sie als ID verwendet werden.

## Anmerkung

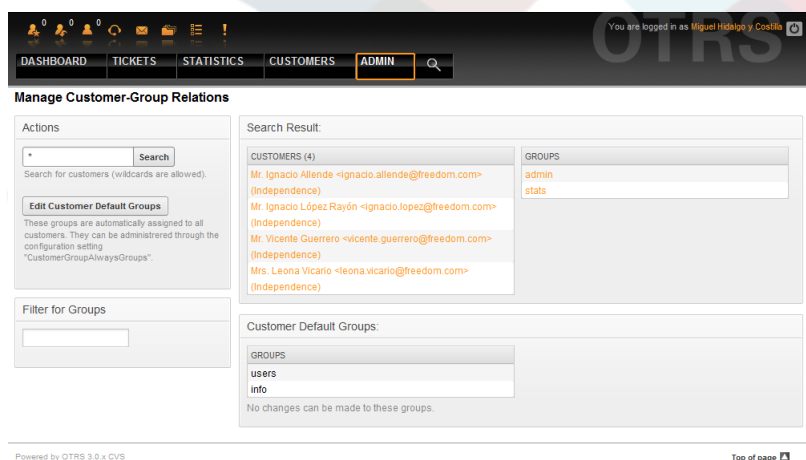
In OTRS können Kunden deaktiviert, aber nicht gelöscht werden. Sie können einen Kunden deaktivieren, indem Sie den Wert für "Gültig" auf "ungültig" oder "ungültig-temporär" setzen.

### 1.3.2. Kundengruppen

Kunden können auch Gruppen zugeordnet werden. Das ist nützlich, wenn Kunden nur auf bestimmte Queues zugreifen können sollen. Legen Sie zuerst die benötigten Gruppen in der Gruppenverwaltung an. Fügen Sie dann die Queues hinzu und ordnen Sie diese der neuen Gruppe zu.

The next step is to activate the customer group support. This can be done with the configuration parameter CustomerGroupSupport, from the Admin SysConfig option. Using the parameter CustomerGroupAlwaysGroups, you can specify the default groups for a newly added customer, so that every new account will be automatically added to these groups.

Über den Link "Kunden <-> Gruppen" können Sie nun die Zuordnung der Kundenbenutzer in die gewünschten Gruppen vornehmen.



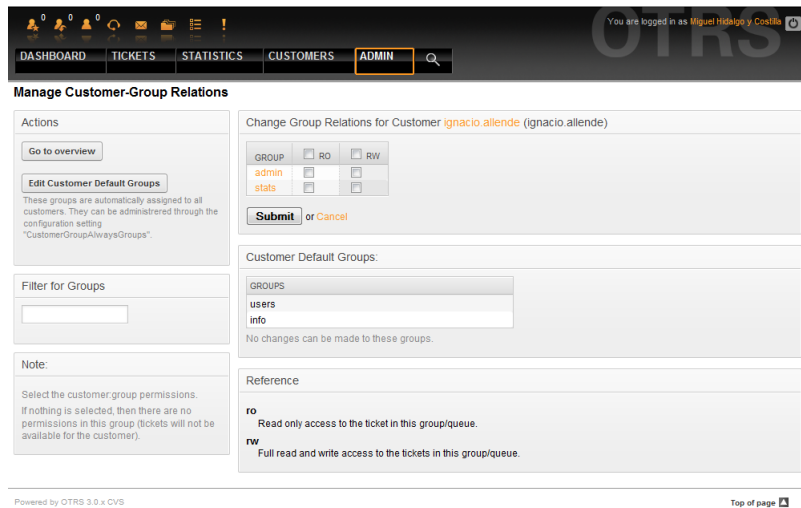
The screenshot shows the OTRS Admin interface for managing customer group relations. The top navigation bar includes Dashboard, Tickets, Statistics, Customers, and Admin. The main content area is titled "Manage Customer-Group Relations" and contains several sections:

- Actions:** A search box for customers and a button to "Edit Customer Default Groups".
- Search Result:** A list of 4 customers with their names and email addresses, such as "Mr. Ignacio Allende <ignacio.allende@freedom.com> (Independence)".
- GROUPS:** A dropdown menu showing "admin" and "stats".
- Filter for Groups:** A text input field.
- Customer Default Groups:** A dropdown menu showing "users" and "Info".

At the bottom, it indicates "Powered by OTRS 3.0.x CVS" and "Top of page".

Abb.: Verwaltung der Kunden-Gruppen-Zuordnungen.

Klicken Sie auf den Kunden- oder Gruppennamen, um die jeweiligen Zuordnungen zu bearbeiten.



**Manage Customer-Group Relations**

Change Group Relations for Customer **ignacio.allende** (ignacio.allende)

GROUP	RO	RW
admin	<input type="checkbox"/>	<input type="checkbox"/>
stats	<input type="checkbox"/>	<input type="checkbox"/>

**Submit** or **Cancel**

**Customer Default Groups:**

GROUPS  
 users  
 info

No changes can be made to these groups.

**Note:**  
 Select the customer.group permissions. If nothing is selected, then there are no permissions in this group (tickets will not be available for the customer).

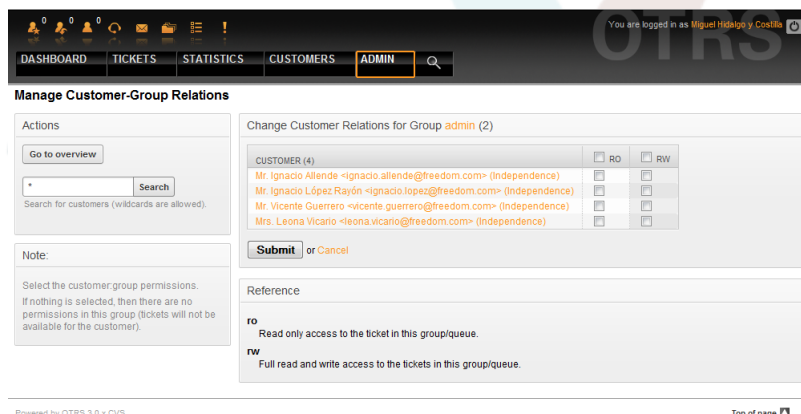
**Reference**

**ro**  
 Read only access to the ticket in this group/queue.

**rw**  
 Full read and write access to the tickets in this group/queue.

Powered by OTRS 3.0.x CVS Top of page

Abb.: Gruppenzuordnungen eines Kunden bearbeiten.



**Manage Customer-Group Relations**

Change Customer Relations for Group **admin** (2)

CUSTOMER (4)	RO	RW
Mr. Ignacio Allende <ignacio.allende@freedom.com> (Independence)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Ignacio López Rayón <ignacio.lopez@freedom.com> (Independence)	<input type="checkbox"/>	<input type="checkbox"/>
Mr. Vicente Guerrero <vicente.guerrero@freedom.com> (Independence)	<input type="checkbox"/>	<input type="checkbox"/>
Mrs. Leona Vicario <leona.vicario@freedom.com> (Independence)	<input type="checkbox"/>	<input type="checkbox"/>

**Submit** or **Cancel**

**Reference**

**ro**  
 Read only access to the ticket in this group/queue.

**rw**  
 Full read and write access to the tickets in this group/queue.

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Abb.: Kundenzuordnungen einer Gruppe bearbeiten.

## 1.4. Queues

Über den Link "Queue" innerhalb des Admin-Bereiches von OTRS können Sie die Queues Ihres Systems verwalten. Nach einer Standard-Installation sind bereits die Queues "Junk", "Misc", "Postmaster" und "Raw" im System angelegt. "Raw" ist die Default-Queue, in ihr landen alle neuen Tickets, so lange kein Filter definiert wurde. "Junk" kann z. B. zum Aus-sortieren von Spam-Mails genutzt werden.

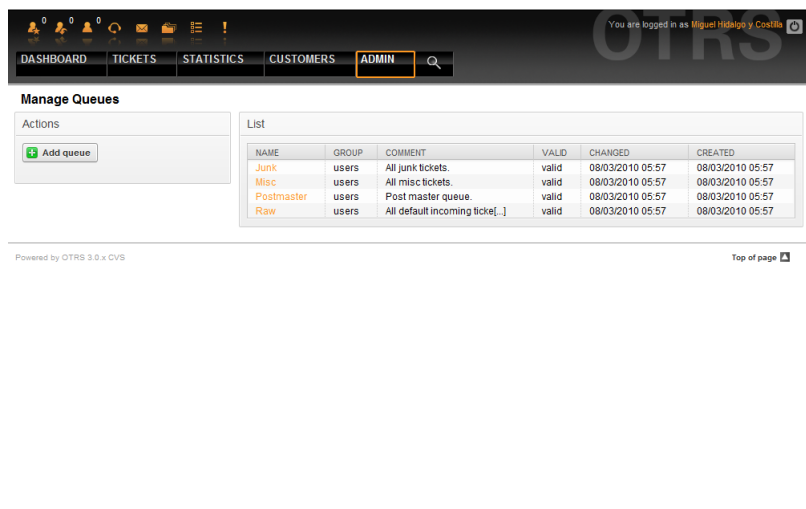


Abb.: Queue-Verwaltung.

Hier können Sie Queues anlegen und verändern. Zusätzlich zum Namen der neuen Queue kann angegeben werden, für welche Benutzergruppe die Queue bereitgestellt werden und ob die neue Queue eine Unter-Queue (sub queue) von einer bereits in Ihrem System vorhandenen Queue sein soll.

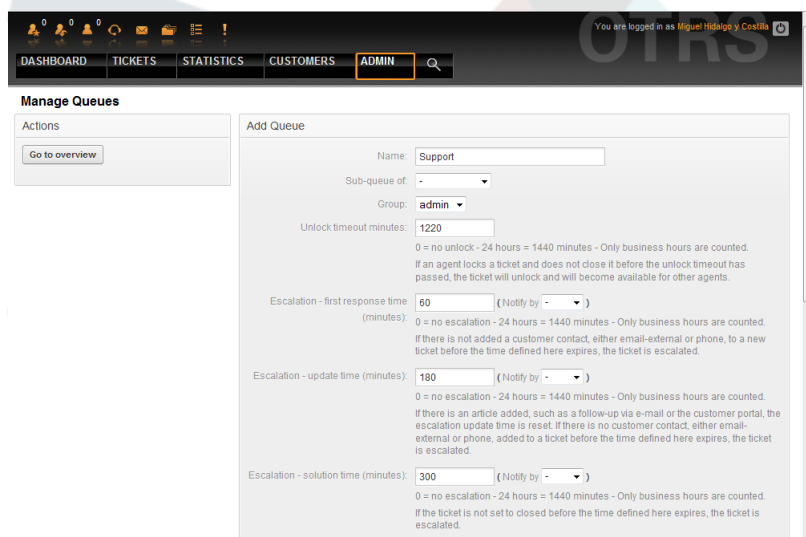


Abb.: Hinzufügen einer Queue.

Wurde ein Ticket von einem Agenten gesperrt, so können Sie mit Hilfe des Freigabezeit-Intervalls festlegen, wann ein Ticket wieder automatisch vom System freigegeben werden soll. So können auch die anderen Mitarbeiter wieder auf dieses Ticket zugreifen und es bearbeiten.

Drei Arten von Eskalationszeiten können pro Queue eingestellt werden:

### **Eskalation - Zeit für die erste Reaktion**

- After creation of the ticket, if the time defined here expires without any communication with the customer, either by email or phone, the ticket is escalated.



## Eskalation - Aktualisierungszeit

- If there is a customer followup either via e-mail or the customer portal, that is recorded in the ticket, the escalation update time is reset. If there is no customer contact before the time defined here expires, the ticket is escalated.

## Eskalation - Lösungszeit

- Wenn das Ticket nicht innerhalb der definierten Zeitdauer geschlossen werden kann, eskaliert es.

Weiterhin können Sie festlegen, dass bei einem Follow-Up auf ein Ticket wieder der Mitarbeiter Eigentümer dieses Tickets wird, der zuletzt als Eigentümer im System für dieses Ticket vermerkt war. Dies stellt sicher, dass die Nachfrage eines Kunden zuerst bei demselben Mitarbeiter landet, der sich zuletzt um dieses Ticket gekümmert hat.

The parameter for the system address specifies the email address that will be used for the outgoing tickets of this queue. There is also the possibility to associate a queue with a salutation and a signature, for the email answers. For more detailed information, please refer to the sections email addresses, salutations and signatures.

## Anmerkung

In OTRS können Queues deaktiviert, aber nicht gelöscht werden. Sie können eine Queue deaktivieren, indem Sie den Wert für "Gültig" auf "ungültig" oder "ungültig-temporär" setzen.

# 1.5. Anreden, Signaturen, Anlagen und Antwortvorlagen

## 1.5.1. Anreden

A salutation is a text module for a template. Salutations can be linked to one or more queues, as described in the section about queues. A salutation is used only if a ticket from a queue the salutation is linked to, is answered. To manage the different salutations of your system, use the "Salutations" link of the admin area (see Figure below).

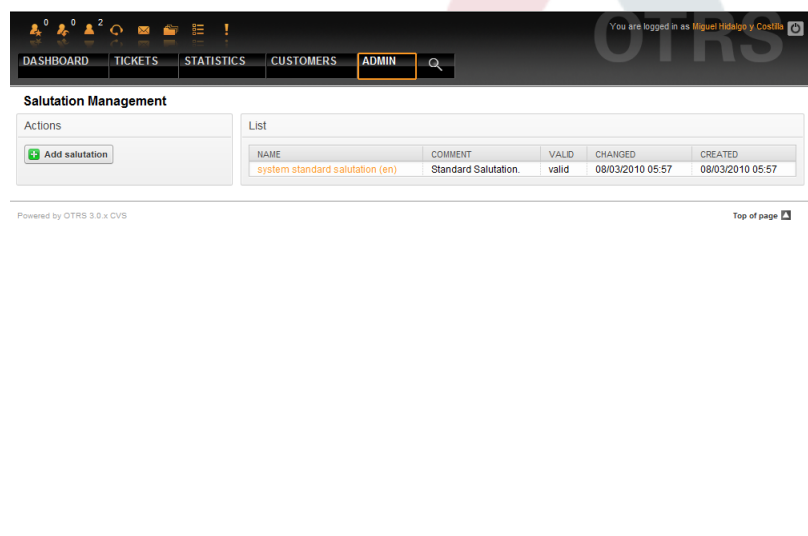


Abb.: Verwaltung der Anreden.

Nach einer Standardinstallation von OTRS sind bereits eine Anrede im System gespeichert, "system standard salutation (en)".

To create a new salutation, press the button "Add salutation", provide the required data and submit it (see Figure below).

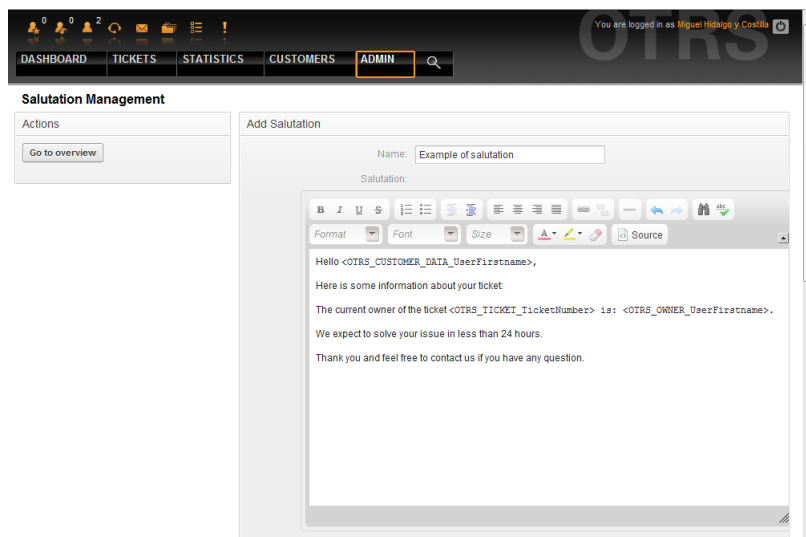


Abb.: Anrede hinzufügen.

In Anreden können Variablen verwendet werden. Wenn Sie auf ein Ticket antworten, werden die Variablennamen durch die zugehörigen Werte ersetzt.

The different variables you can use in templates are listed in the lower part of the salutation screen. If you use, for example, the variable <OTRS\_LAST\_NAME> the last name of the ticket's sender will be included in your reply.

## Anmerkung

In OTRS können Anreden deaktiviert, aber nicht gelöscht werden. Sie können eine Anrede deaktivieren, indem Sie den Wert für "Gültig" auf "ungültig" oder "ungültig-temporär" setzen.

## 1.5.2. Signaturen

Another text module for a template is the signature. Signatures can be linked to a queue, as described in the section about the queues. Please note that a signature will only be appended to a template text, if it has previously been linked to a queue. You can manage the signatures in your system by accessing the "Signatures" link of the Admin page, (see Figure below).

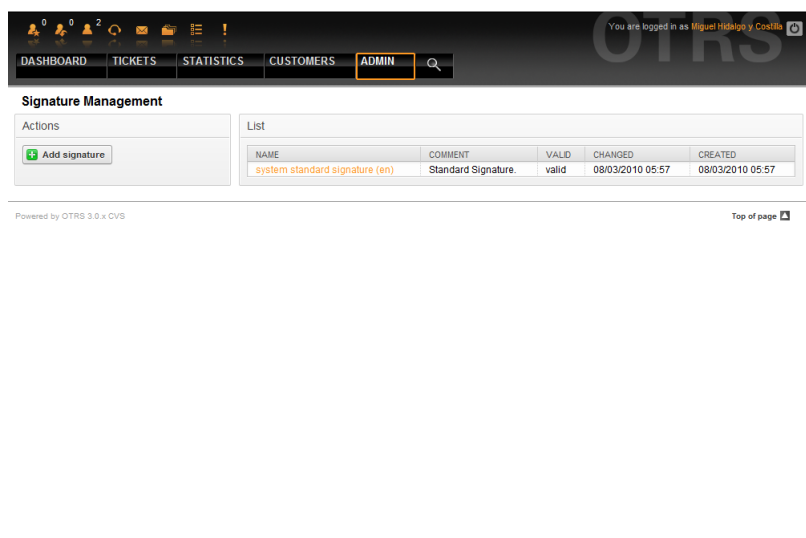


Abb.: Signaturverwaltung.

Nach einer Standardinstallation von OTRS ist bereits eine Signatur im System vorhanden, "system standard signature (en)".

Verwenden Sie den Knopf "Signatur hinzufügen", um eine neue Signatur anzulegen.

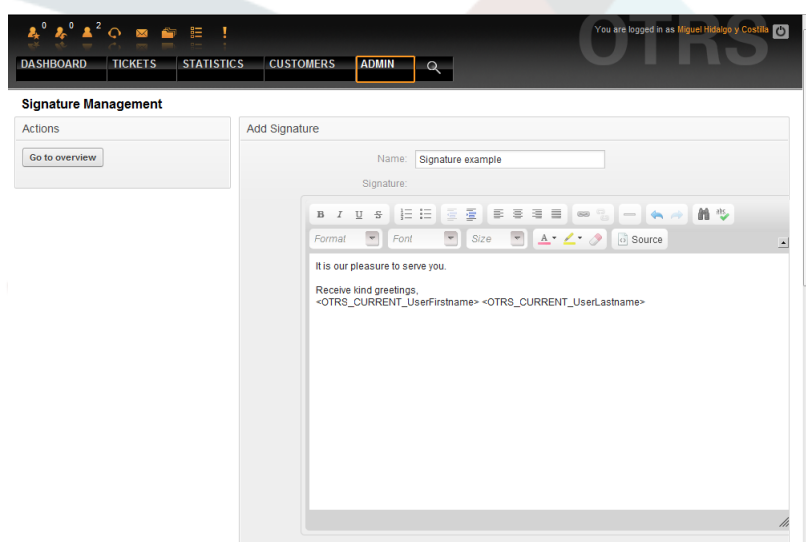


Abb.: Signatur hinzufügen.

Like salutations, signatures can also contain dynamic content, such as the first and last name of the agent who answers the ticket. Here too, variables can be used to replace the content of the signature text for every ticket. See the lower part of the signatures screen for the variables which can be used. If you include the variable `<OTRS_LAST_NAME>` in a signature for example, the last name of the agent who answers the ticket will replace the variable.

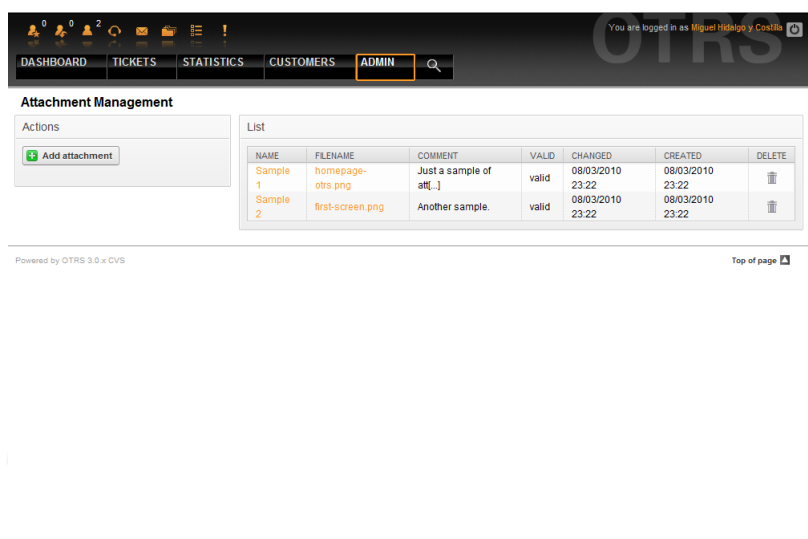
## Anmerkung

In OTRS können Signaturen deaktiviert, aber nicht gelöscht werden. Sie können eine Signatur deaktivieren, indem Sie den Wert für "Gültig" auf "ungültig" oder "ungültig-temporär" setzen.

## 1.5.3. Anlagen

You can also optionally add one or more attachments to a template. If the template is selected, the attachments will be attached to the message composition window. If necessary, the agent can remove the attachment from an individual template before sending it to the customer.

Über den "Anlagen"-Link im Admin-Bereich können Sie neue Anlagen in das System integrieren.



Attachment Management

Actions

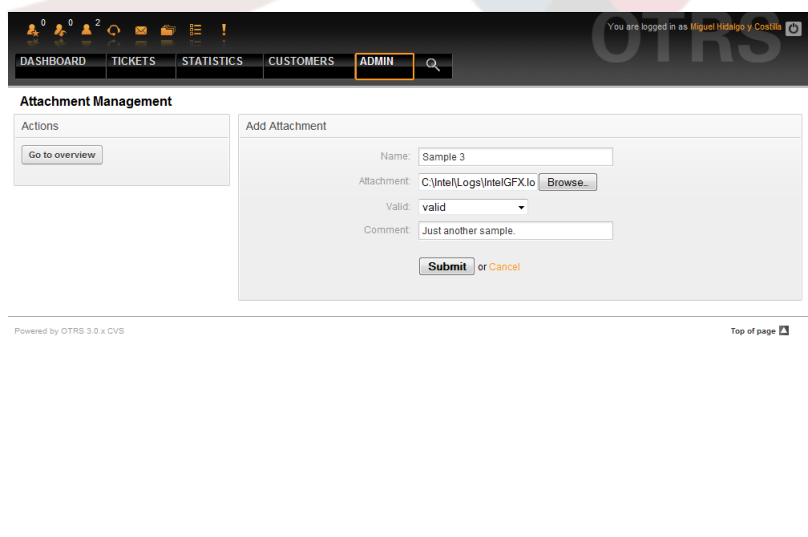
[Add attachment](#)

NAME	FILENAME	COMMENT	VALID	CHANGED	CREATED	DELETE
Sample 1	homepage-otrs.png	Just a sample of att_]	valid	08/03/2010 23:22	08/03/2010 23:22	
Sample 2	first-screen.png	Another sample.	valid	08/03/2010 23:22	08/03/2010 23:22	

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Abb.: Verwaltung der Anlagen.

To create a new attachment, press the button "Add attachment", provide the required data and submit it (see Figure below).



Attachment Management

Actions

[Go to overview](#)

Add Attachment

Name:

Attachment:  [Browse...](#)

Valid:


Comment:

or

Powered by OTRS 3.0.x CVS Top of page

Abb.: Anlage hinzufügen.

If an attachment is stored it can be linked to one or more templates. Click on the "Attachment <-> Templates" link of the Admin page (see Figure below).

You are logged in as **User One** 

**Dashboard** **Customers** **Tickets** **Statistics** **Admin**

### Manage Templates <-> Attachments Relations

Filter for Templates

Filter for Attachments

Overview

TEMPLATES	ATTACHMENTS
Answer - empty answer	Sample 1 ( tree.png )
Answer - test answer	Sample 2 ( tree-yellow.png )
Create - Create New	Sample 3 ( tree-red.png )
Create - Create Sample	
Forward - Forward New	
Forward - Forward Sample	
PhoneCall - PhoneCall New	
PhoneCall - PhoneCall Sample	



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Abbildung.: Zuordnung von Anlagen zu Antworten.

To associate different attachments with a specific template and vice versa, click on the corresponding template name or attachment (see below the Figures 5.27 and 5.28, respectively).

You are logged in as **User One** 

**Dashboard** **Customers** **Tickets** **Statistics** **Admin**

### Manage Templates <-> Attachments Relations

Actions

[Go to overview](#)

Filter

Change Attachment Relations for Template **Answer - empty answer**

ATTACHMENT	ACTIVE
Sample 1 ( tree.png )	<input type="checkbox"/>
Sample 2 ( tree-yellow.png )	<input checked="" type="checkbox"/>
Sample 3 ( tree-red.png )	<input checked="" type="checkbox"/>

or




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Abbildung: Anlagenzuordnungen einer Vorlage verändern.

You are logged in as **User One** 

**Dashboard** **Customers** **Tickets** **Statistics** **Admin** 

---

**Manage Templates <-> Attachments Relations**

Actions

[Go to overview](#)

Filter

Change Template Relations for Attachment **Sample 1**

TEMPLATE	<input type="checkbox"/> ACTIVE
Answer - empty answer	<input checked="" type="checkbox"/>
Answer - test answer	<input checked="" type="checkbox"/>
Create - Create New	<input checked="" type="checkbox"/>
Create - Create Sample	<input checked="" type="checkbox"/>
Forward - Forward New	<input type="checkbox"/>
Forward - Forward Sample	<input checked="" type="checkbox"/>
PhoneCall - PhoneCall New	<input checked="" type="checkbox"/>
PhoneCall - PhoneCall Sample	<input type="checkbox"/>

[Submit](#) or [Cancel](#)

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*Abbildung: Antwortvorlagen-Zuordnungen einer Anlage verändern.*

## 1.5.4. Vorlagen

To speed up ticket processing and to standardize the look of answers, you can define templates in OTRS. A template can be linked to one or more queues and vice versa.

There are different kind of templates that are used in different parts of OTRS and they have its own purpose, the following is the list of possible template types:

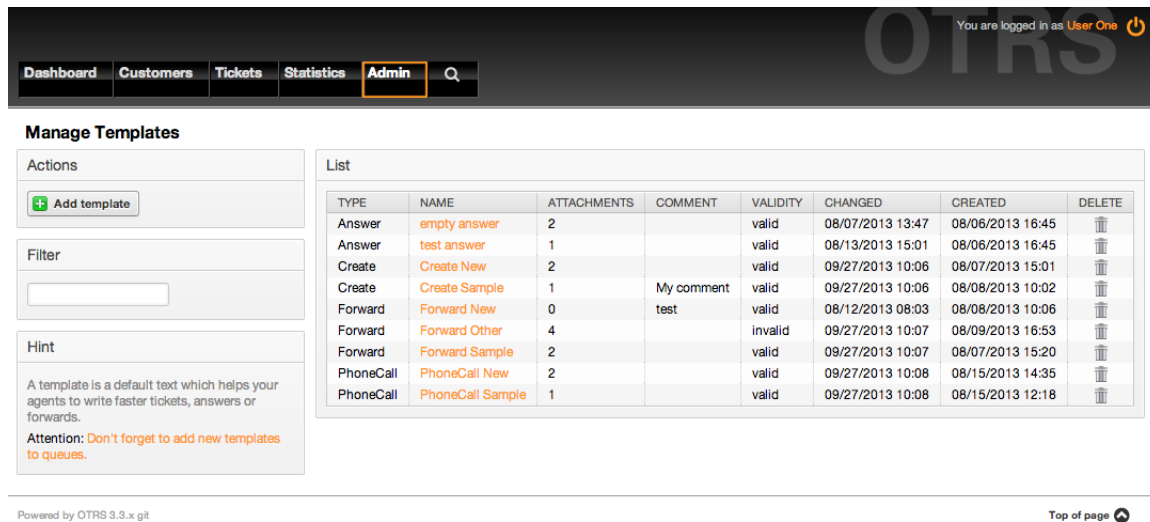
- Antwort: Als Ticketantwort oder Rückantwort verwendet.
- Erstellen: In neuen Telefon- oder E-Mailtickets verwendet.
- Weiterleiten: Verwendet um einen Artikel an jemand Anderen weiterzuleiten.
- Telefonanruf: In Telefonanruf eingehend und ausgehend verwendet.

Answer templates can be accessed in two ways, from the ticket zoom screen in the article menu, or on a quicker way: from any ticket overview large screen such as Status View or Ticket View. For a fresh OTRS installation, the "empty answer" template (Answer) is set as the default for every queue.

As soon as Forward templates are added and assigned to queues, the "Forward" button in ticket zoom (that normally leads to a empty text forward screen) will change into a selection control, the selection is filled with the added Forward templates, by choosing one of the templates, the forward screen will be shown prefilled with the template text and attachments (similar to the reply selection box with the Answer templates).

Creating templates of type Create and PhoneCall will make visible the "Text Template" selection box in their respective screens, choosing a template for the list will populate the "Text" and "Attachment" fields (if available in the template). Notice that any previous change in the Text or attachments will be overwritten by selecting a template.

Clicking the "Templates" link on the Admin page brings you to the Template management screen (see Figure below).

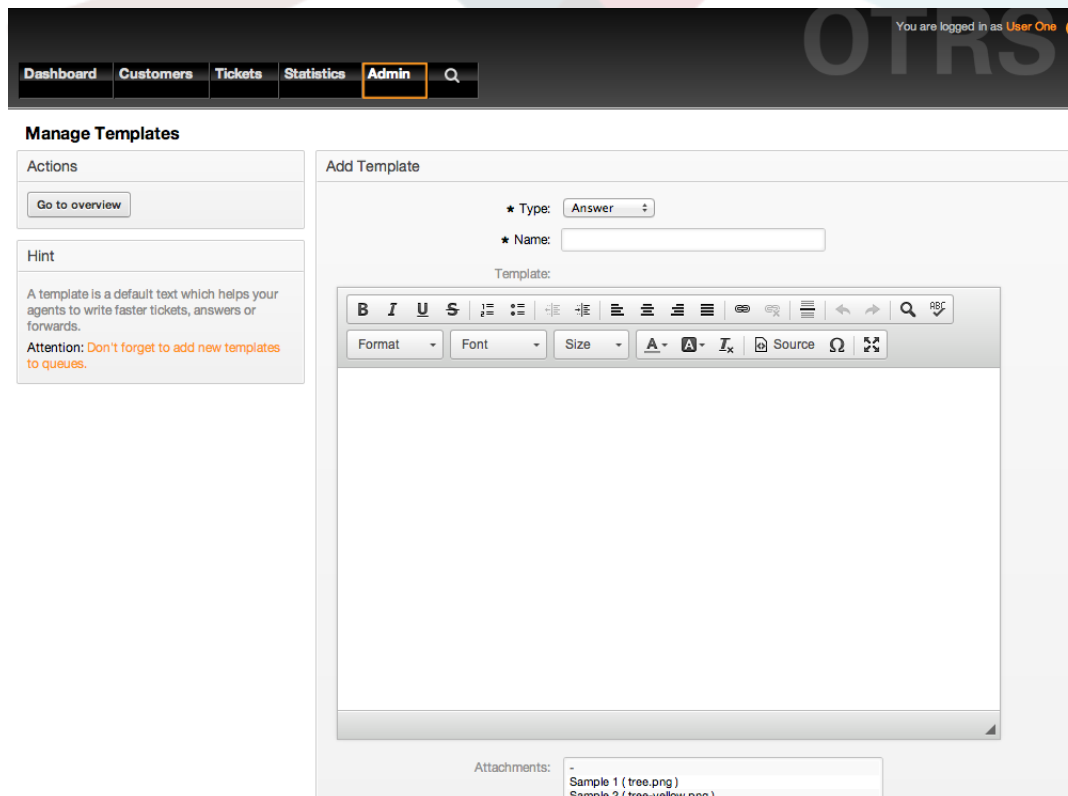


The screenshot shows the OTRS Admin interface. The top navigation bar includes 'Dashboard', 'Customers', 'Tickets', 'Statistics', and 'Admin' (highlighted). The user is logged in as 'User One'. The main content area is titled 'Manage Templates' and contains a sidebar with 'Actions' (Add template), 'Filter', and 'Hint'. The 'Hint' section explains that templates are default text for faster ticket writing and includes an attention note: 'Don't forget to add new templates to queues.' The main area displays a table of templates:

TYPE	NAME	ATTACHMENTS	COMMENT	VALIDITY	CHANGED	CREATED	DELETE
Answer	empty answer	2		valid	08/07/2013 13:47	08/06/2013 16:45	
Answer	test answer	1		valid	08/13/2013 15:01	08/06/2013 16:45	
Create	Create New	2		valid	09/27/2013 10:06	08/07/2013 15:01	
Create	Create Sample	1	My comment	valid	09/27/2013 10:06	08/08/2013 10:02	
Forward	Forward New	0	test	valid	08/12/2013 08:03	08/08/2013 10:06	
Forward	Forward Other	4		invalid	09/27/2013 10:07	08/09/2013 16:53	
Forward	Forward Sample	2		valid	09/27/2013 10:07	08/07/2013 15:20	
PhoneCall	PhoneCall New	2		valid	09/27/2013 10:08	08/15/2013 14:35	
PhoneCall	PhoneCall Sample	1		valid	09/27/2013 10:08	08/15/2013 12:18	

Abbildung.: Vorlagen-Verwaltung.

To create a new template, click on the "Add template" button, provide the required data (make sure to select the appropriate template type) and submit it (see Figure below).



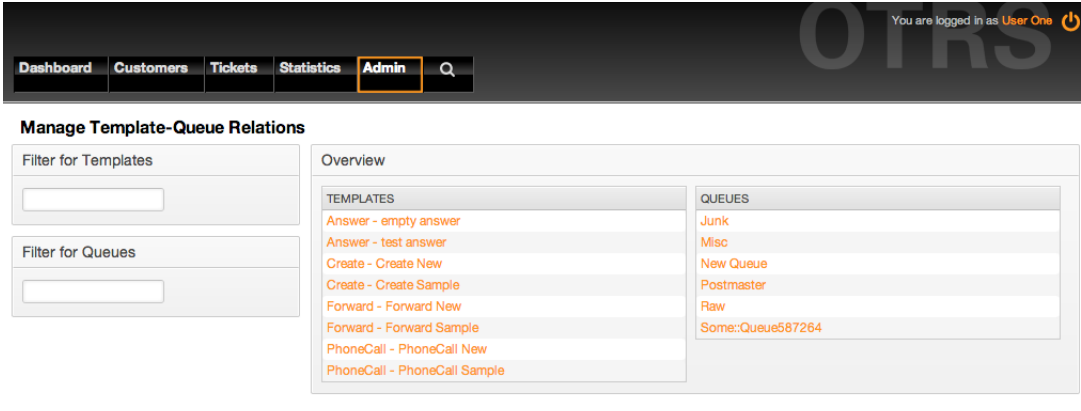
The screenshot shows the 'Add Template' form in the OTRS Admin interface. The top navigation bar is the same as in the previous screenshot. The main content area is titled 'Manage Templates' and contains a sidebar with 'Actions' (Go to overview) and 'Hint'. The main area is the 'Add Template' form, which includes:

- ★ Type: Answer (dropdown menu)
- ★ Name: [text input field]
- Template: [rich text editor with formatting tools like Bold, Italic, Underline, Strikethrough, Bulleted List, Numbered List, Indent, Outdent, Link, Unlink, Undo, Redo, Search, and Help]
- Attachments: [file selection area showing 'Sample 1 (tree.png)' and 'Sample 2 (tree-yellow.png)']



Abbildung.: Anlegen einer Vorlage.

To add/remove templates to one or more queues, click on the "Templates <-> Queues" link on the Admin page (see Figure below). You can also use filters to get information regarding a specific entity.



Manage Template-Queue Relations

Filter for Templates

Filter for Queues

Overview


TEMPLATES	QUEUES
Answer - empty answer	Junk
Answer - test answer	Misc
Create - Create New	New Queue
Create - Create Sample	Postmaster
Forward - Forward New	Raw
Forward - Forward Sample	Some:Queue587264
PhoneCall - PhoneCall New	
PhoneCall - PhoneCall Sample	

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Abbildung.: Queue-Antwort-Zuordnungen verwalten.

To define the different templates that will be available for a queue and vice versa, click on the corresponding template or queue (see below the Figures 5.32 and 5.33, respectively).

You are logged in as **User One** 

**Dashboard** **Customers** **Tickets** **Statistics** **Admin**

### Manage Template-Queue Relations

Actions

[Go to overview](#)

Filter

Change Queue Relations for Template **Answer - empty answer**

QUEUE	ACTIVE
Junk	<input checked="" type="checkbox"/>
Misc	<input checked="" type="checkbox"/>
New Queue	<input type="checkbox"/>
Postmaster	<input checked="" type="checkbox"/>
Raw	<input checked="" type="checkbox"/>
Some:Queue587264	<input type="checkbox"/>

[Submit](#) or [Cancel](#)



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Abbildung.: Ändern der Queue-Zuordnungen einer Vorlage ändern.

You are logged in as **User One** 

**Dashboard** **Customers** **Tickets** **Statistics** **Admin**

### Manage Template-Queue Relations

Actions

[Go to overview](#)

Filter

Change Template Relations for Queue **Junk**

TEMPLATE	ACTIVE
Answer - empty answer	<input checked="" type="checkbox"/>
Answer - test answer	<input type="checkbox"/>
Create - Create New	<input checked="" type="checkbox"/>
Create - Create Sample	<input checked="" type="checkbox"/>
Forward - Forward New	<input type="checkbox"/>
Forward - Forward Sample	<input checked="" type="checkbox"/>
PhoneCall - PhoneCall New	<input checked="" type="checkbox"/>
PhoneCall - PhoneCall Sample	<input checked="" type="checkbox"/>

[Submit](#) or [Cancel](#)


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Abbildung.: Antwort-Zuordnungen einer Queue ändern.

When choosing a template, additional information could be added to the template text, this depends on the template type:

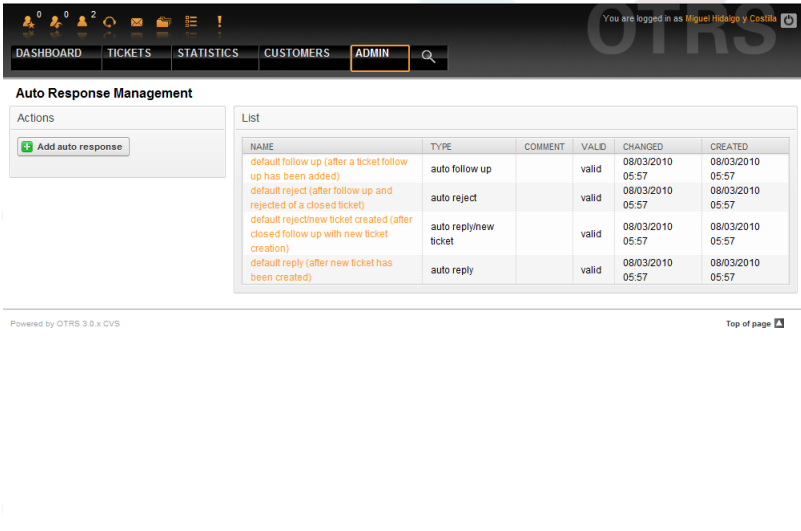
PhoneCall and Create templates does not add any content to the template text, however New Email Ticket screen adds the queue assigned signature to the resulting email body (this screen has a separated box to visualize the signature).

Answer templates text when selected also included the salutation associated with the queue, then the text of the template, then the quoted ticket text, and finally the signature associated with the queue.

Forward templates are similar to Answer templates, but they does not include the salutation part.

## 1.6. Automatische Antworten

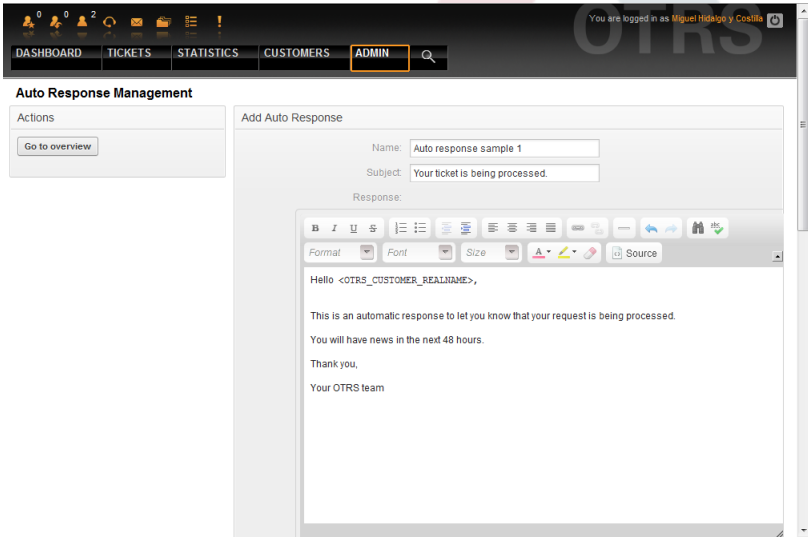
OTRS allows you to send automatic responses to customers based on the occurrence of certain events, such as the creation of a ticket in a specific queue, the receipt of a follow-up message in regards to a ticket, the closure or rejection of a ticket, etc. To manage such responses, click the link "Auto responses" on the Admin page (see Figure below).



NAME	TYPE	COMMENT	VALID	CHANGED	CREATED
default follow up (after a ticket follow up has been added)	auto follow up		valid	08/03/2010 05:57	08/03/2010 05:57
default reject (after follow up and rejected of a closed ticket)	auto reject		valid	08/03/2010 05:57	08/03/2010 05:57
default reject new ticket created (after closed follow up with new ticket creation)	auto reply/new ticket		valid	08/03/2010 05:57	08/03/2010 05:57
default reply (after new ticket has been created)	auto reply		valid	08/03/2010 05:57	08/03/2010 05:57

Abb.: Verwaltung automatischer Antworten.

Verwenden Sie den Knopf "Automatische Antwort hinzufügen", um eine neue anzulegen.



Name:

Subject:

Response:

Hello <OTRS\_CUSTOMER\_REALNAME>,  
 This is an automatic response to let you know that your request is being processed.  
 You will have news in the next 48 hours.  
 Thank you,  
 Your OTRS team

Abb.: Automatische Antwort hinzufügen.

Für die Betreffzeile und den Text von automatischen Antworten kann genauso wie bei Signaturen oder Anreden, der Inhalt mit Hilfe von OTRS-Variablen dynamisch erzeugt werden. So werden über die Variable <OTRS\_CUSTOMER\_EMAIL[5]> die ersten 5 Zeilen der an das System gesendeten E-Mail in die automatische Antwort eingefügt, oder durch <OTRS\_CUSTOMER\_FROM> die From-Zeile. Die Anmerkungen im unterem Bereich der Bildschirmmaske zur Verwaltung der automatischen Antworten listen alle OTRS-Variablen auf, die verwendet werden können.

Für jede automatische Antwort können Sie angeben, durch welches Ereignis sie ausgelöst werden soll. Folgende Ereignisse sind in einer Standardinstallation verfügbar:

**Tabelle 4.4. Ereignisse für automatische Antworten**

Name	Beschreibung
auto reply	Dieses Ereignis tritt ein, wenn ein neues Ticket in einer Queue angelegt wird.
auto reply/new ticket	Dieses Ereignis tritt ein, wenn ein bereits geschlossenes Ticket, z. B. durch die Antwort eines Kunden, mit einer neuen Ticketnummer erneut geöffnet wird.
auto follow up	Dieses Ereignis tritt ein, wenn ein Follow up für ein bereits vorhandenes Ticket eintrifft.
auto reject	Dieses Ereignis tritt ein, wenn ein Ticket vom System zurückgewiesen wird.
auto remove	Dieses Ereignis tritt ein, wenn ein Ticket vom System entfernt wird.

## Anmerkung

As with other OTRS entities, auto responses too cannot be deleted, only deactivated, by setting the Valid option to *invalid* or *invalid-temporarily*.

Um eine automatische Antwort einer oder mehreren Queues zuzuweisen, folgen Sie im Admin-Bereich den Link "Auto Antworten <-> Queues". Dort sind für jede Queue die verschiedenen Ereignistypen aufgelistet und es kann eine Zuordnung einer Auto-Antwort vom gleichen Ereignistyp durchgeführt bzw. entfernt werden.

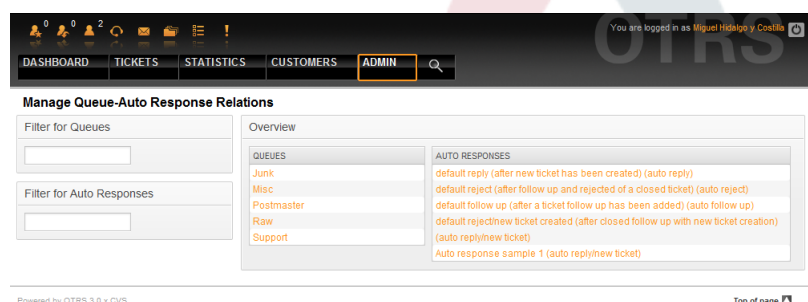


Abb.: Zuordnungen von Queues zu automatischen Antworten verwalten.

To define the different auto responses that will be available for a queue, click on the corresponding queue name (see Figure below). It is also possible to edit an existing auto response - to do so, click on the response and edit in the same manner as editing a new auto response.

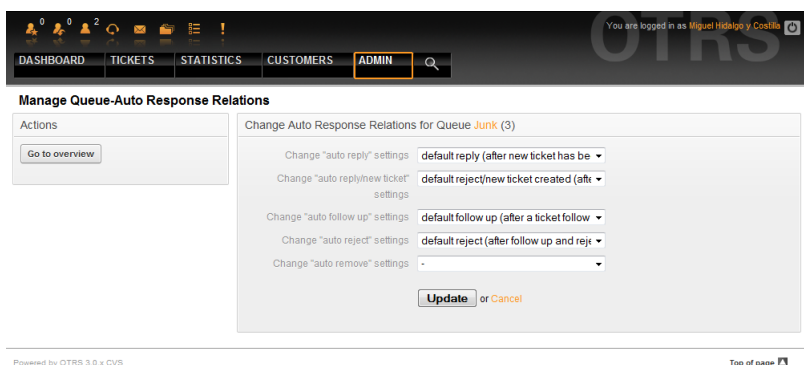


Abb.: Zuordnung von automatischen Antworten zu einer Queue bearbeiten.

## 1.7. E-Mail-Adressen

Um aus OTRS heraus E-Mails verschicken zu können, benötigen Sie mindestens eine gültige Mailadresse. Da in vielen Fällen eine Mailadresse nicht ausreicht, ist OTRS auch in der Lage, mit mehreren Mailadressen zu arbeiten. Eine Queue mit mehreren E-Mail-Adressen verknüpft werden, und umgekehrt. Die Adresse, die für ausgehende Nachrichten einer Queue benutzt werden soll, kann bei Erstellung oder Bearbeitung der Queue ausgewählt werden. Verwenden Sie den Link "E-Mail-Adressen" im Administrationsbereich, um die Adressen des Systems zu verwalten.

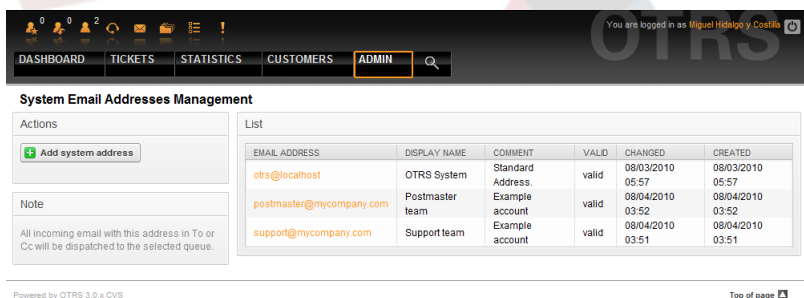
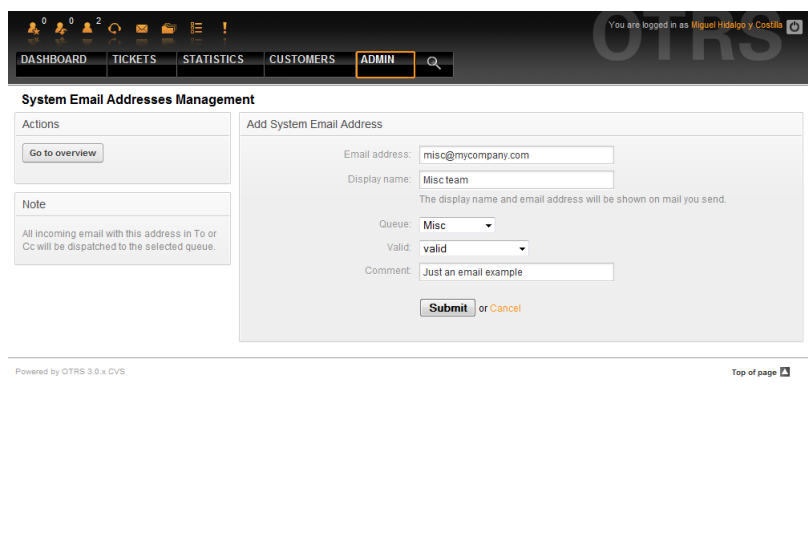


Abb.: Verwaltung der E-Mail-Adressen des Systems.

If you create a new mail address (see Figure below), you can select the queue or sub queue to be linked with it. This link enables the system to sort incoming messages via the address in the To: field of the mail into the right queue.



**System Email Addresses Management**

Actions

Note  
 All incoming email with this address in To or Cc will be dispatched to the selected queue.

Add System Email Address

Email address:

Display name:

The display name and email address will be shown on mail you send.

Queue:

Valid:

Comment:

or

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Abb.: Hinzufügen einer System-E-Mail-Adresse.

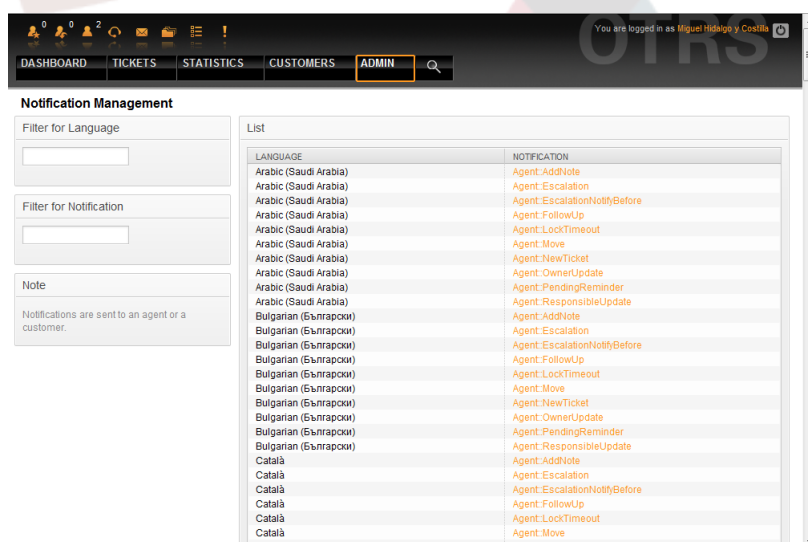
## Anmerkung

In OTRS können E-Mail-Adressen deaktiviert, aber nicht gelöscht werden. Sie können eine Adresse deaktivieren, indem Sie den Wert für "Gültig" auf "ungültig" oder "ungültig-temporär" setzen.

## 1.8. Benachrichtigungen

OTRS allows notifications to be sent to agents and customers, based on the occurrence of certain events. Agents can set the system events for their own notifications via the preferences link.

Über den "Benachrichtigungen"-Link im Admin-Bereich erreichen Sie die Verwaltung der Benachrichtigungen. Mit den Filtern können Sie bestimmte Einträge finden.



**Notification Management**

Filter for Language

Filter for Notification

Note  
 Notifications are sent to an agent or a customer.

LANGUAGE	NOTIFICATION
Arabic (Saudi Arabia)	Agent: AddNote
Arabic (Saudi Arabia)	Agent: Escalation
Arabic (Saudi Arabia)	Agent: EscalationNotfyBefore
Arabic (Saudi Arabia)	Agent: FollowUp
Arabic (Saudi Arabia)	Agent: LockTimeout
Arabic (Saudi Arabia)	Agent: Move
Arabic (Saudi Arabia)	Agent: NewTicket
Arabic (Saudi Arabia)	Agent: OwnerUpdate
Arabic (Saudi Arabia)	Agent: PendingReminder
Arabic (Saudi Arabia)	Agent: ResponsibleUpdate
Bulgarian (Български)	Agent: AddNote
Bulgarian (Български)	Agent: Escalation
Bulgarian (Български)	Agent: EscalationNotfyBefore
Bulgarian (Български)	Agent: FollowUp
Bulgarian (Български)	Agent: LockTimeout
Bulgarian (Български)	Agent: Move
Bulgarian (Български)	Agent: NewTicket
Bulgarian (Български)	Agent: OwnerUpdate
Bulgarian (Български)	Agent: PendingReminder
Bulgarian (Български)	Agent: ResponsibleUpdate
Catala	Agent: AddNote
Catala	Agent: Escalation
Catala	Agent: EscalationNotfyBefore
Catala	Agent: FollowUp
Catala	Agent: LockTimeout
Catala	Agent: Move
Catala	Agent: NewTicket

Abb.: Verwaltung der Benachrichtigungen.

Den Betreff und Text der Benachrichtigungen können Sie anpassen. Wählen Sie die gewünschte Benachrichtigung aus der Liste durch Klick aus. Beachten Sie: in jeder Sprache gibt es eine Benachrichtigung mit demselben Namen.

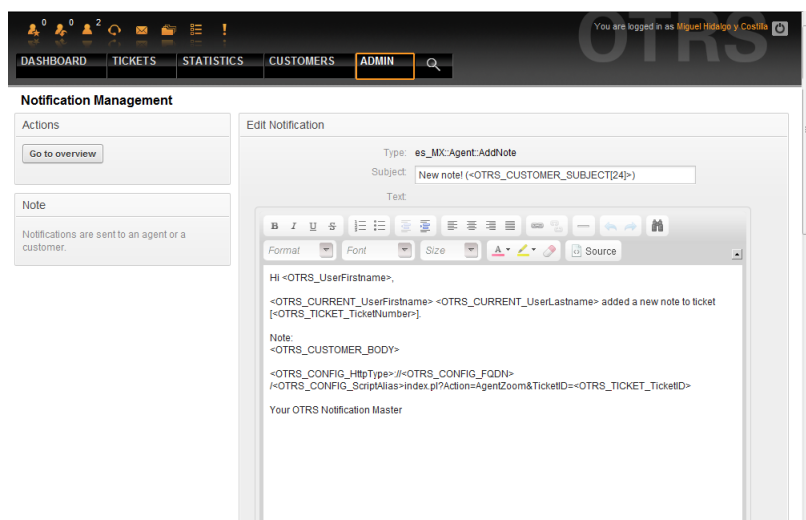


Abb.: Bearbeiten einer Benachrichtigung.

Auch innerhalb der Benachrichtigungen können die Textinhalte mit Hilfe der OTRS-Variablen dynamisch aufbereitet werden. Innerhalb der Anmerkungen im unteren Bereich der Bildschirmmaske zur Benachrichtigungen-Verwaltung werden die verschiedenen zur Verfügung stehenden Variablen und deren Verwendung aufgelistet und näher erklärt.

Ebenso ist es möglich, Benachrichtigungen zu erstellen, die auf Ereignissen basieren. Hier können Sie detailliert einstellen, wann diese Benachrichtigung geschickt werden soll. Zudem kann ein weites Spektrum von Parametern konfiguriert werden, wie: Empfängergruppen(n), Benutzer, Rollen, E-Mail-Adressen; Ereignistyp, der die Benachrichtigung auslöst, Ticket-Typ, Status, Priorität, Sperre, Service, SLA, usw.

Um eine Übersicht aller ereignisbasierten Benachrichtigungen zu erhalten, klicken Sie auf "Benachrichtigungen (Ereignis)" im Administrationsbereich.

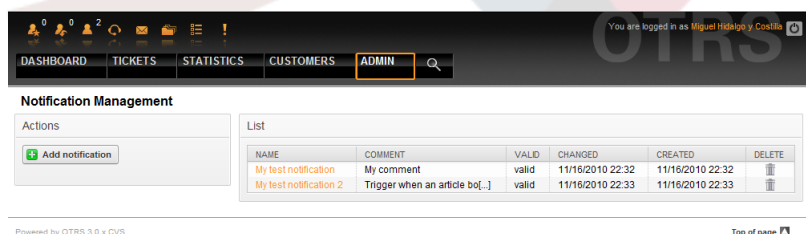


Abb.: Ereignisbasierte Benachrichtigungen verwalten.

Erstellen Sie eine neue Benachrichtigung durch Klick auf den "Hinzufügen"-Knopf.



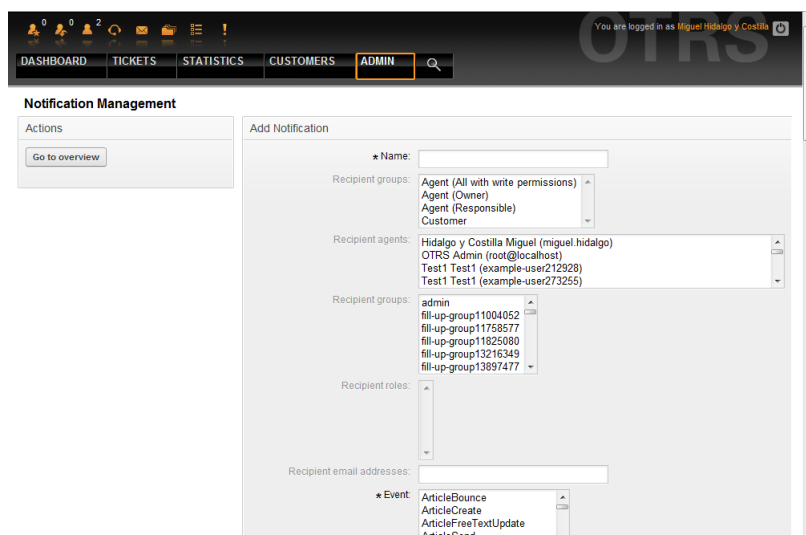


Abb.: Ereignisbasierte Benachrichtigung einrichten.

Auch in den ereignisbasierten Benachrichtigungen können Sie mit den speziellen Variablen dynamische Texte erzeugen. Die Referenz der Variablen sehen Sie im unteren Bildschirmbereich.

## 1.9. S/MIME

OTRS can process incoming S/MIME encoded messages and sign outgoing mails. Before this feature can be used, you need to activate it and change some configuration parameters in the SysConfig.

Über den "SMIME"-Link im Admin-Bereich von OTRS erreichen Sie die Verwaltung der S/MIME-Zertifikate. Es können Zertifikate und private Fingerprints hinzugefügt und entfernt werden und eine Suche in den Zertifikaten ist möglich.

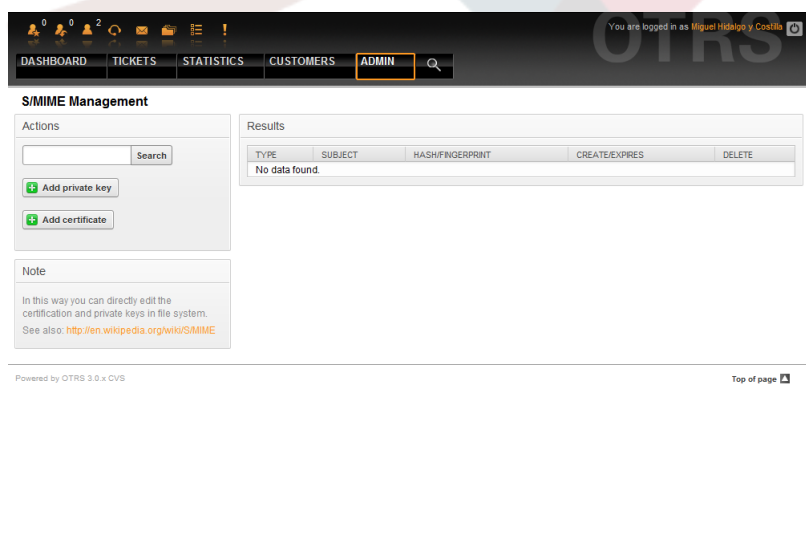


Abb.: S/MIME-Verwaltung.

## 1.10. PGP

OTRS handles PGP keys, which allows you to encrypt/decrypt messages and to sign outgoing messages. Before this feature can be used, you need to activate it and change some configuration parameters in the SysConfig.

Über den "PGP"-Link im Admin-Bereich von OTRS erreichen Sie die Verwaltung des Schlüsselrings Ihres Systems. Es können Schlüssel und Signaturen hinzugefügt und entfernt werden und eine Suche innerhalb des Schlüsselrings ist möglich.

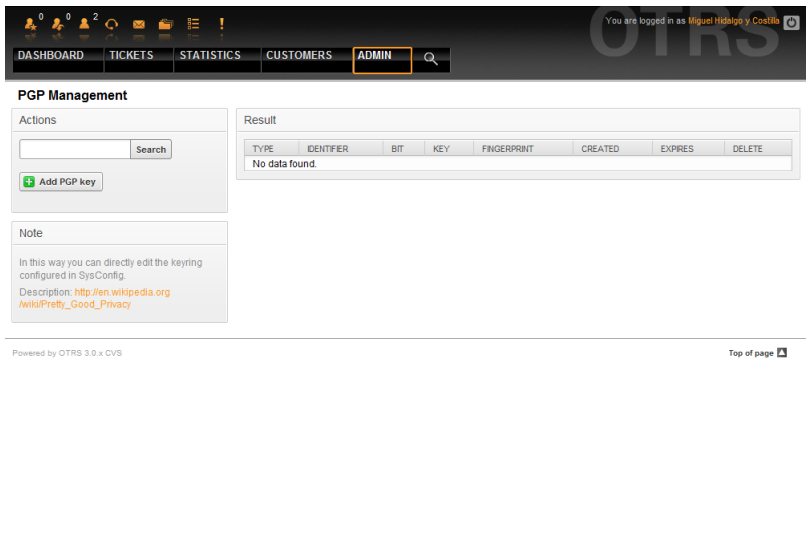
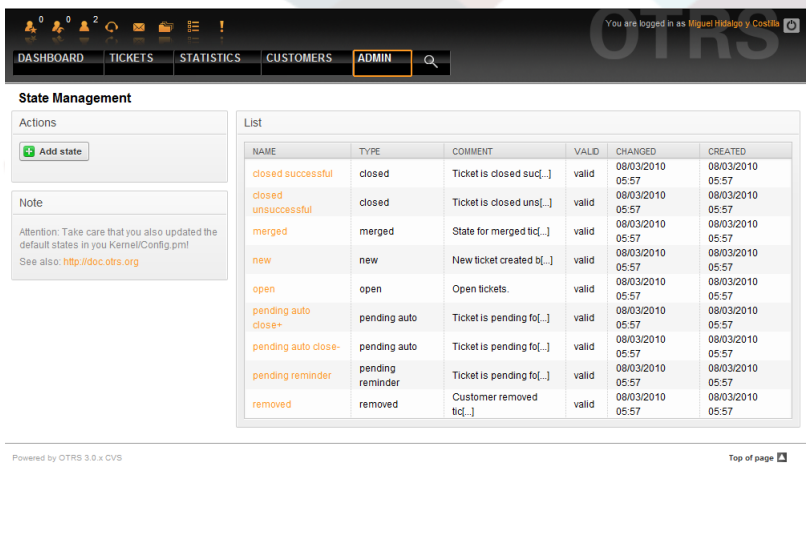


Abb.: PGP-Verwaltung.

## 1.11. Status

Über den Link "Status" können Sie die verschiedenen Ticket-Status bearbeiten, die Sie in OTRS verwenden möchten.



NAME	TYPE	COMMENT	VALID	CHANGED	CREATED
closed successful	closed	Ticket is closed suc[.]	valid	08/03/2010 05:57	08/03/2010 05:57
closed unsuccessful	closed	Ticket is closed uns[.]	valid	08/03/2010 05:57	08/03/2010 05:57
merged	merged	State for merged tic[.]	valid	08/03/2010 05:57	08/03/2010 05:57
new	new	New ticket created b[.]	valid	08/03/2010 05:57	08/03/2010 05:57
open	open	Open tickets.	valid	08/03/2010 05:57	08/03/2010 05:57
pending auto close+	pending auto	Ticket is pending fo[.]	valid	08/03/2010 05:57	08/03/2010 05:57
pending auto close-	pending auto	Ticket is pending fo[.]	valid	08/03/2010 05:57	08/03/2010 05:57
pending reminder	pending reminder	Ticket is pending fo[.]	valid	08/03/2010 05:57	08/03/2010 05:57
removed	removed	Customer removed tic[.]	valid	08/03/2010 05:57	08/03/2010 05:57

Abb.: Status-Verwaltung.

In einer Standardinstallation sind folgende Status definiert:

- erfolgreich geschlossen
- erfolglos geschlossen
- zusammengefasst
- neu
- öffnen

- warten auf erfolgreich schließen
- warten auf erfolglos schließen
- warten zur Erinnerung
- entfernt

Jeder Status ist mit einem Typ verküpft. Auch bei dem Neuanlegen eines Status muss ein Typ angegeben werden. Die standardmäßig verfügbaren Status-Typen sind:

- geschlossen
- zusammengefasst
- neu
- öffnen
- warten auto
- warten zur Erinnerung
- entfernt

## 1.12. Die SysConfig (Verwaltung der Systemkonfiguration)

In der SysConfig werden die meisten Konfigurationseinstellungen von OTRS vorgenommen.

The SysConfig link on the Admin page loads the graphical interface for system configuration (see Figure below). You can upload your own configuration files for the system, as well as backup all your current settings into a file. Almost all configuration parameters of the OTRS framework and installed applications can be viewed and changed through this interface. Since all configuration parameters are sorted into groups and sub groups, it is possible to navigate quickly through the vast number of existing parameters. It is also possible to perform a full-text search through all of the configuration parameters.

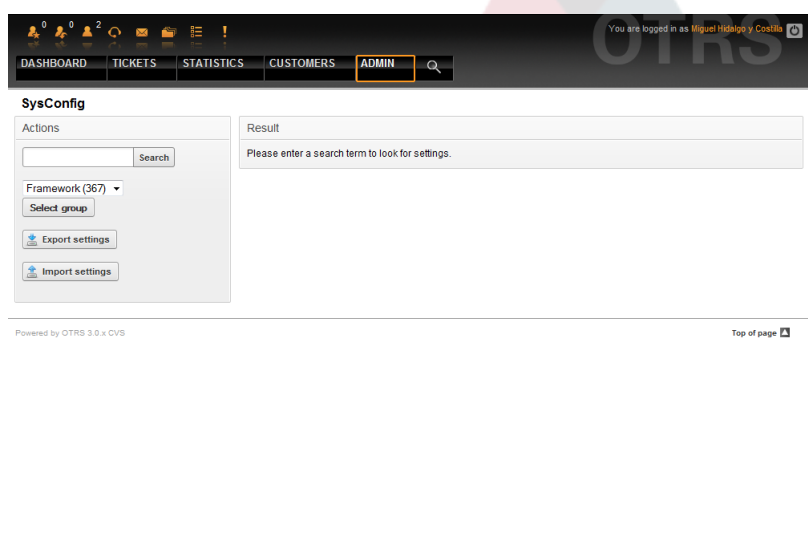
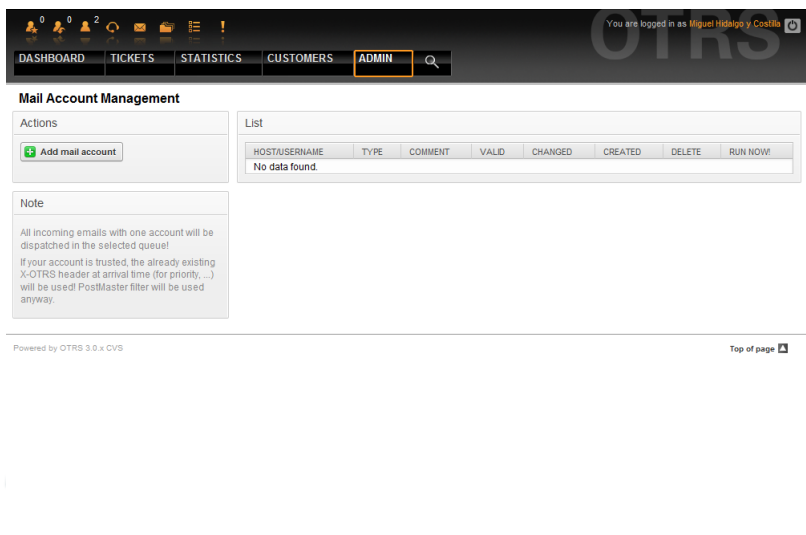


Abb.: Das grafische Konfigurationsfrontend von OTRS (SysConfig).

Das Kapitel Nähere Beschreibung der grafischen Administrationsoberfläche geht ausführlicher auf das grafische Konfigurations-Frontend ein.

## 1.13. Einrichten von Mail-Konten

There are several possibilities to transport new emails into the ticket system. One way is to use a local MTA and the `otrs.PostMaster.pl` script that pipes the mails directly into the system. Another possibility is the use of mail accounts which can be administrated through the web interface. The "PostMaster Mail Accounts" link on the Admin page loads the management console for the mail accounts (see Figure below). OTRS supports the mail protocols: POP3, POP3S, IMAP and IMAPS.



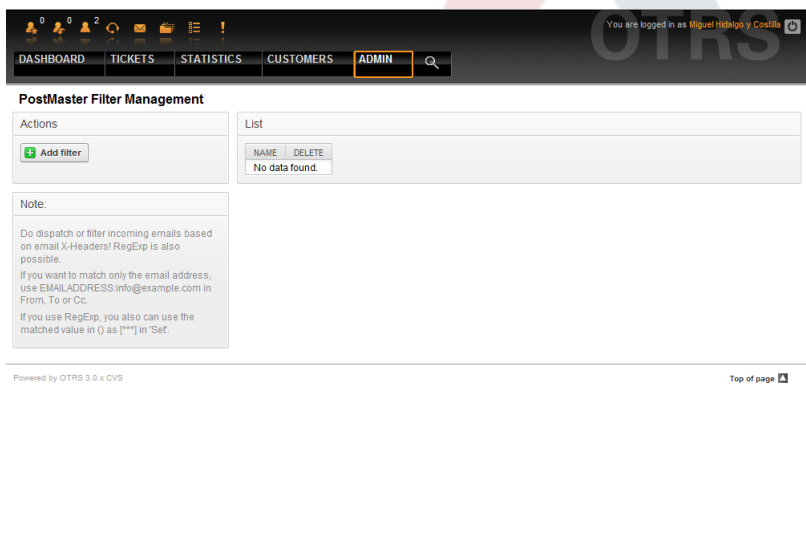
The screenshot shows the OTRS Admin interface. At the top, there is a navigation bar with 'ADMIN' highlighted. Below it, the 'Mail Account Management' section is visible. On the left, there is an 'Actions' panel with a green 'Add mail account' button. Below that is a 'Note' section with text explaining email dispatching rules. On the right, there is a table titled 'List' with columns: HOST/USERNAME, TYPE, COMMENT, VALID, CHANGED, CREATED, DELETE, and RUN NOW!. The table currently shows 'No data found.' At the bottom, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

Abb.: Verwaltung von Mail-Konten.

See the section about PostMaster Mail Accounts for more details.

## 1.14. Einkommende E-Mail-Nachrichten filtern

OTRS has the capability to filter incoming email messages. For example, it is possible to put certain emails automatically into specified queues, or to set a specific state or ticket type for some mails. The filters apply to all incoming mails. You can manage your filters via the link "PostMaster Filter" on the Admin page (see Figure below).



The screenshot shows the OTRS Admin interface. At the top, there is a navigation bar with 'ADMIN' highlighted. Below it, the 'PostMaster Filter Management' section is visible. On the left, there is an 'Actions' panel with a green 'Add filter' button. Below that is a 'Note' section with text explaining filter rules and RegEx usage. On the right, there is a table titled 'List' with columns: NAME and DELETE. The table currently shows 'No data found.' At the bottom, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

Abb 5.49. Verwaltung von Filterregeln für eingehende E-Mails.

A filter consists of one or more criteria that must be met in order for the defined actions to be executed on the email. Filter criteria may be defined for the headers or the body of an email, e.g. search for specific header entries, such as a sender address, or on strings in the body. Even regular expressions can be used for extended pattern matching. If your filter matches, you can set fields using the X-OTRS headers in the GUI. These values will be applied when creating the ticket or follow-up message in OTRS. The Table 5-4 lists the different X-OTRS headers and their meaning.

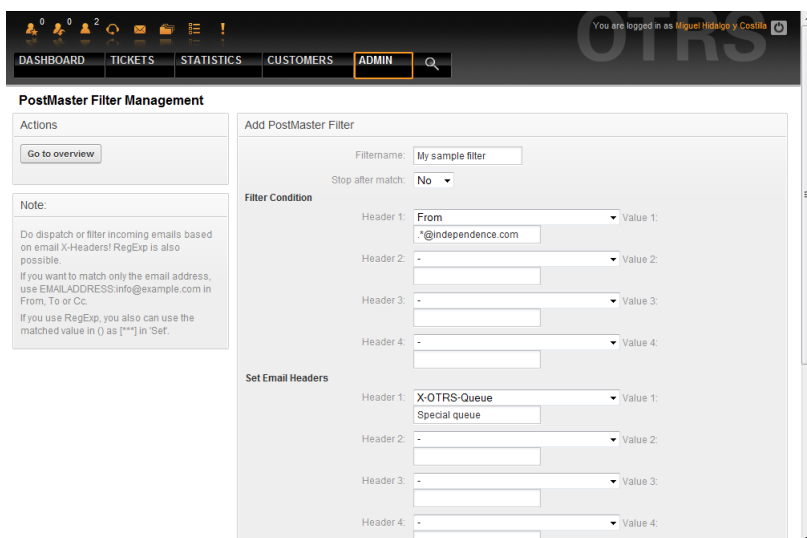
Hinweis: Sie können auch X-OTRS-FollowUp-\* header für Follow-Up-E-Mails verwenden.

**Tabelle 4.5. Funktion der verschiedenen X-OTRS-Header**

Name	Mögliche Werte	Beschreibung
X-OTRS-Priority:	1 very low, 2 low, 3 normal, 4 high, 5 very high	Legt die Priorität eines Tickets fest.
X-OTRS-Queue:	Name einer Queue des Systems.	Sets the queue where the ticket shall be sorted. If set in X-OTRS header, all other filter rules that try to sort a ticket into a specific queue are ignored. If you use a sub-queue, specify it as "Parent::Sub".
X-OTRS-Lock:	lock, unlock	Setzt den "gesperrt"-Status eines Tickets.
X-OTRS-Ignore:	Yes oder True	Wird dieser Header gesetzt, wird die Mail komplett ignoriert und gelangt somit nie als Ticket in das System.
X-OTRS-State:	new, open, closed successful, closed unsuccessful, ...	Setzt den nächsten Status eines Tickets.
X-OTRS-State-PendingTime:	Z. B. 2010-11-20 00:00:00	Sets the pending time of a ticket (you also should sent a pending state via X-OTRS-State). You can specify absolute dates like "2010-11-20 00:00:00" or relative dates, based on the arrival time of the email. Use the form "+ \$Number \$Unit", where \$Unit can be 's' (seconds), 'm' (minutes), 'h' (hours) or 'd' (days). Only one unit can be specified. Examples of valid settings: "+50s" (pending in 50 seconds), "+30m" (30 minutes), "+12d" (12 days). Note that settings like "+1d 12h" are not possible. You can specify "+36h" instead.
X-OTRS-Type:	default (systemabhängig)	Setzt den Ticket-Typ (wenn Ticket::Type aktiviert ist).
X-OTRS-Service:	(systemabhängig)	Sets the service of a ticket (if Ticket::Service is active).

Name	Mögliche Werte	Beschreibung
		If you want to set a sub-service you should specify it as "Parent::Sub".
X-OTRS-SLA:	(systemabhängig)	Setzt das Service-Level-Abkommen eines Tickets (wenn Ticket::Service aktiv ist).
X-OTRS-CustomerUser:	CustomerUser	Legt den Kunden-Benutzer fest, dem das Ticket zugeordnet werden soll.
X-OTRS-CustomerNo:	CustomerNo	Legt die Kunden-ID fest, die dem Ticket zugeordnet werden soll.
X-OTRS-SenderType:	agent, system, customer	Legt die Art des Ticket-Absenders fest.
X-OTRS-ArticleType:	email-external, email-internal, email-notification-ext, email-notification-int, phone, fax, sms, webrequest, note-internal, note-external, note-report	Legt den Typ des Artikles für das eingehende Ticket fest.
X-OTRS-DynamicField-<DynamicField-Name>:	Depends on Dynamic Field configuration (Text: Notebook, Date: 2010-11-20 00:00:00, Integer: 1)	Saves an additional info value for the ticket on <DynamicField-Name> Dynamic Field.
X-OTRS-Loop:	True	Ist dieser X-OTRS-Header gesetzt, wird keine automatische Antwort an den Absender des neuen Tickets geschickt, z. B. um Mail-schleifen zu vermeiden.

You should specify a name for every filter rule. Filter criteria can be specified in the section "Filter Condition". Choose via the listboxes for "Header 1", "Header 2" and so on for the parts of the messages where you would like to search, and specify on the right side the values you wish to filter on. In the section "Set Email Headers", you can choose the actions that are triggered if the filter rules match. You can select for "Header 1", "Header 2" and so on to select the X-OTRS-Header and set the associated values (see Figure below). Filter rules are evaluated in alphabetical order, and are all executed except if the "Stop after match" setting has been set to "Yes" in one of the rule (in this case evaluation of the remaining filters is cancelled).



**PostMaster Filter Management**

Actions

[Go to overview](#)

Note:

Do dispatch or filter incoming emails based on email X-Headers! RegExp is also possible.  
 If you want to match only the email address, use EMAILADDRESS:info@example.com in From, To or Cc.  
 If you use RegExp, you also can use the matched value in () as [""] in 'Set'.

**Add PostMaster Filter**

Filename:

Stop after match:

**Filter Condition**

Header 1:  Value 1:

Header 2:  Value 2:

Header 3:  Value 3:

Header 4:  Value 4:

**Set Email Headers**

Header 1:  Value 1:

Header 2:  Value 2:

Header 3:  Value 3:

Header 4:  Value 4:

Abb.: Filter-Regeln für eingehende Nachrichten anlegen.

## Beispiel 4.1. Aussortierung von Spammails in eine bestimmte Queue

A useful filter rule would be to let OTRS automatically move mails marked for spam, by using a spam detection tool such as SpamAssassin, into the "Junk" queue. SpamAssassin adds the "X-Spam-Flag" header to every checked mail. When the mail is marked as spam, the Header is set to "Yes". So the filter criteria would be "X-Spam-Flag: Yes". To create a filter rule with this criteria you can insert the name as, for example, "spam-mails". In the section for "Filter Condition", choose "X-Spam-Flag:" for "Header 1" from the listbox. Insert "Yes" as value for this header. Now the filter criteria is specified. To make sure that all spam mails are placed into the "Junk" queue, choose in the section for "Set Email Headers", the "X-OTRS-Queue:" entry for "Header 1". Specify "Junk" as value for this header. Finally add the new filter rule to activate it for new messages in the system.

There are additional modules, that can be used to filter incoming messages more specifically. These modules might be useful when dealing with larger, more complex systems.

## 1.15. Ausführen von automatisierten Jobs mit Hilfe des GenericAgents

The GenericAgent is a tool to execute tasks automatically. The GenericAgent, for example, can close or move tickets, send notifications on escalated tickets, etc.

Click the link "GenericAgent" on the Admin page (see Figure below). A table with all automated jobs in the system is displayed. These jobs can then be edited, run manually or removed entirely.



0 0 2  
 DASHBOARD TICKETS STATISTICS CUSTOMERS ADMIN

You are logged in as Miguel Hidalgo y Costas

**Generic Agent**

Actions  
 Add job

List

NAME	LAST RUN	VALID	DELETE	RUN NOW
Sample job 1		valid		Run this task
Sample job 2		valid		Run this task
Sample job 3		valid		Run this task

Powered by OTRS 3.0.x CVS Top of page

### Abb.: Jobliste des GenericAgent.

Click the "Add job" button to create a new job. You first need to supply a name. Then you can specify how the job will be executed: automatic at fixed times (like a cronjob, this mode will operate on all tickets found by the ticket filter) or based on ticket events (right after a single ticket was modified, if it matches the ticket filter). Note that if you manually run event based jobs from the overview screen, they will operate on all tickets found by the ticket filter.

13 24 5  
 DASHBOARD CUSTOMERS TICKETS STATISTICS ADMIN

You are logged in as Admin OTRS

**Generic Agent**

Actions  
 Go to overview

Job Settings

★ Job name:

Validity: Yes

▼ Automatic execution (multiple tickets)

SCHEDULE MINUTES	SCHEDULE HOURS	SCHEDULE DAYS
00	00	Sun
10	01	Mon
20	02	Tue
30	03	Wed
40	04	Thu
50	05	Fri
		Sat

Currently this generic agent job will not run automatically.  
 To enable automatic execution select at least one value from minutes, hours and days!

▼ Event based execution (single ticket)

Event Triggers:

TYPE	EVENT	DELETE

Additionally or alternatively to a periodic execution, you can define ticket events that will trigger this job. If a ticket event is fired, the ticket filter will be applied to check if the ticket matches. Only then the job is run on that ticket.

Add Event Trigger: Ticket EscalationResponseTimeNotifyBefore

To add a new event select the event object and event name and click on the "+" button.

### Abb.: Anlegen eines GenericAgent-Jobs.

For every job, you can specify a ticket filter, for example to only operate on tickets in a certain queue. All filter criteria must be met for a job to be run on a ticket.

Finally, the ticket can be modified by setting various ticket fields like a new queue or state. It is possible to attach a note to the ticket(s) or run a execute a customized module. You also have the option to delete the ticket(s) from the database. This can be useful to purge outdated or invalid data from the system.

## Warnung

If you use the ticket delete function, all affected tickets and their attachments will be removed from the database and cannot be restored!

After editing a job, OTRS will return to the overview screen. There you have the possibility to run any job manually. If you choose to run a job, you will first see all tickets which will be affected when the job actually is run. This list helps you to verify that the job is working as intended. At this point no changes have been made to these tickets yet. Only if you confirm the screen the job will be executed.

## 1.16. Administrator-E-Mail

Um als OTRS-Administrator eine Mail an bestimmte Benutzer (Agenten) oder Benutzergruppen im System zu versenden, folgen Sie dem Link "Admin Notification".

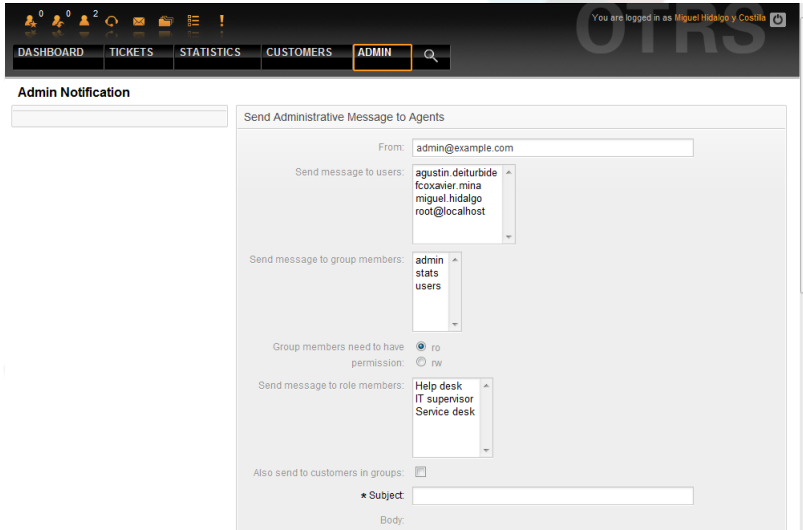
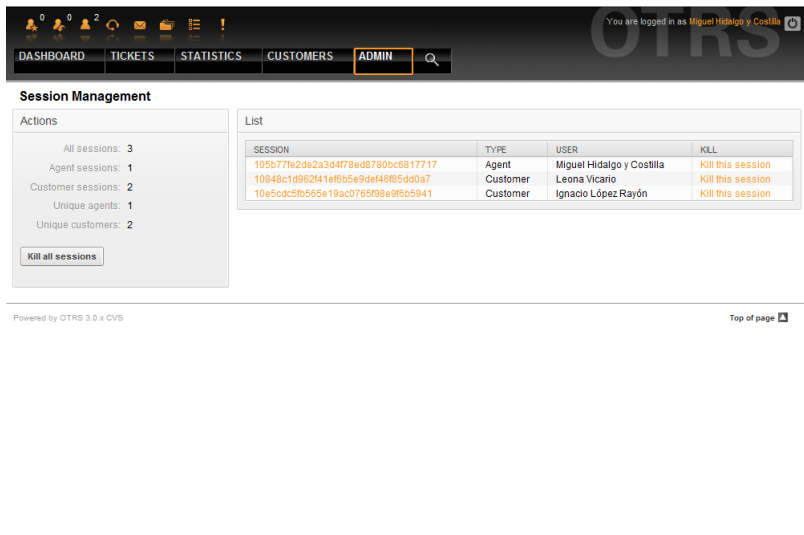


Abb.: Administrator-Benachrichtigung.

Es wird ein Formular geladen, in das Sie die Absenderadresse, den Betreff und den Inhalt der Administratoren-Mitteilung eintragen können. Weiterhin können Sie aus der Tabelle auswählen, an welche Benutzer und / oder Benutzergruppen bzw. Rollen die Mitteilung gesendet werden soll.

## 1.17. Sitzungsverwaltung

Um eine Übersicht über die gerade im System angemeldeten Benutzer und deren Sitzungseigenschaften zu erhalten, folgen Sie dem Link "Sitzungsverwaltung" der Administrationsoberfläche.

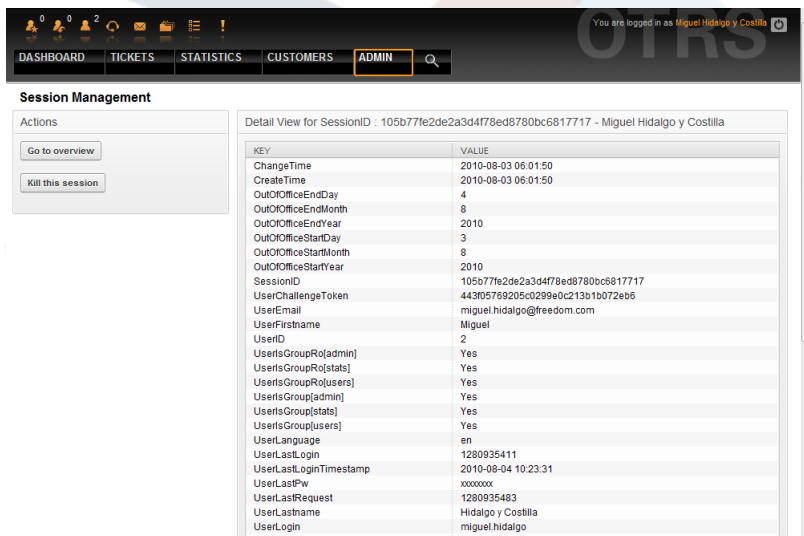


The screenshot shows the OTRS Admin interface for Session Management. At the top, there is a navigation bar with 'ADMIN' selected. Below it, the 'Session Management' section is displayed. On the left, an 'Actions' panel shows statistics: All sessions: 3, Agent sessions: 1, Customer sessions: 2, Unique agents: 1, and Unique customers: 2. A 'Kill all sessions' button is located at the bottom of this panel. On the right, a 'List' table shows active sessions with columns for SESSION, TYPE, USER, and KILL. The table contains three rows of session data.

SESSION	TYPE	USER	KILL
105b77fe2de2a3d4f79ed8780bc6817717	Agent	Miguel Hidalgo y Costilla	Kill this session
10848c1d962f41ef6b5e9de4895d0a7	Customer	Leona Vicario	Kill this session
10e5cdcf5b555e19ac076598e9f6b5941	Customer	Ignacio López Rayón	Kill this session

Abb.: Sitzungsverwaltung.

Some statistics about all active sessions are displayed, e.g. how many agents and customer users are logged in and the number of active sessions. Any individual session can be removed by clicking on the *Kill this session* link on the right-hand side of the list. You also have the option to *Kill all sessions*, which can be useful if you want to take the system offline. Detailed information for every session is available, too (see Figure below).



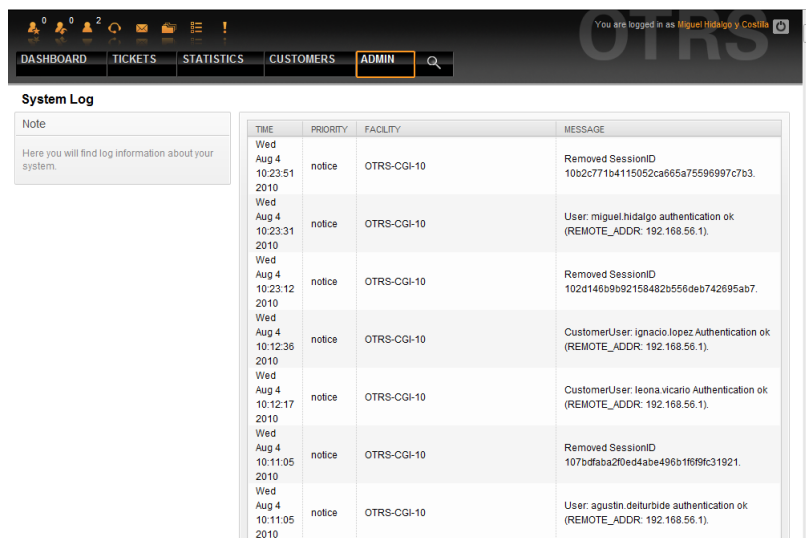
The screenshot shows the OTRS Admin interface for Session Management details. The 'Session Management' section is active, and the 'Detail View for SessionID : 105b77fe2de2a3d4f79ed8780bc6817717 - Miguel Hidalgo y Costilla' is displayed. On the left, there are two buttons: 'Go to overview' and 'Kill this session'. The main area shows a table with session details.

KEY	VALUE
ChangeTime	2010-08-03 06:01:50
CreateTime	2010-08-03 06:01:50
OutOfOfficeEndDay	4
OutOfOfficeEndMonth	8
OutOfOfficeEndYear	2010
OutOfOfficeStartDay	3
OutOfOfficeStartMonth	8
OutOfOfficeStartYear	2010
SessionID	105b77fe2de2a3d4f79ed8780bc6817717
UserChallengeToken	443057f9205c0299e0c213b1b072eb6
UserEmail	miguel.hidalgo@freedom.com
UserFirstname	Miguel
UserID	2
UsersGroupRo(admin)	Yes
UsersGroupRo(stats)	Yes
UsersGroupRo(users)	Yes
UsersGroup(admin)	Yes
UsersGroup(stats)	Yes
UsersGroup(users)	Yes
UserLanguage	en
UserLastLogin	1280935411
UserLastLoginTimestamp	2010-08-04 10:23:31
UserLastPw	xxxxxxx
UserLastRequest	1280935483
UserLastname	Hidalgo y Costilla
UserLogin	miguel.hidalgo
UserPw	xxxxxxx

Abb.: Sitzungsdetails.

## 1.18. System Log

Der Link "System Log" ermöglicht es, die letzten Logeinträge des Ticket-Systems über die Weboberfläche einzusehen.



The screenshot shows the OTRS Admin interface with the 'System Log' tab selected. The log table contains the following entries:

TIME	PRIORITY	FACILITY	MESSAGE
Wed Aug 4 10:23:51 2010	notice	OTRS-CGI-10	Removed SessionID 10b2c771b4115052ca665a75596997c7b3.
Wed Aug 4 10:23:31 2010	notice	OTRS-CGI-10	User: miguel.hidalgo authentication ok (REMOTE_ADDR: 192.168.56.1).
Wed Aug 4 10:23:12 2010	notice	OTRS-CGI-10	Removed SessionID 102d146b9b92158482b556deb742695ab7.
Wed Aug 4 10:12:36 2010	notice	OTRS-CGI-10	CustomerUser: ignacio.lopez Authentication ok (REMOTE_ADDR: 192.168.56.1).
Wed Aug 4 10:12:17 2010	notice	OTRS-CGI-10	CustomerUser: leona.vicario Authentication ok (REMOTE_ADDR: 192.168.56.1).
Wed Aug 4 10:11:05 2010	notice	OTRS-CGI-10	Removed SessionID 107bdfaba2f0ed4abe496b1f8f9c31921.
Wed Aug 4 10:11:05 2010	notice	OTRS-CGI-10	User: agustin.delrubi authentication ok (REMOTE_ADDR: 192.168.56.1).

Abb.: System Log.

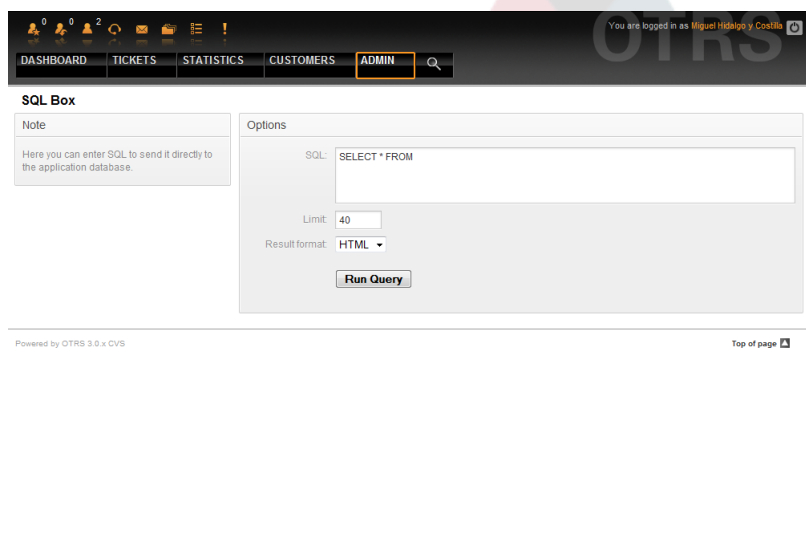
Ein Logeintrag setzt sich aus der Zeit, der Priorität, der betroffenen Systemkomponente und der eigentlichen Meldung zusammen.

## Anmerkung

System logs are available via the web interface only on Linux / Unix systems. On Windows systems, you can see the logs using a text editor by opening the file [install\_dir]otrs\var\log\otrs.log.

## 1.19. SQL-Abfragen mit Hilfe der SQL Box

The "SQL Box" link on the Admin page opens a screen that lets you query the content of the tables in the OTRS database (see Figure below). It is not possible to change the content of the tables, only 'select' queries are allowed.



The screenshot shows the OTRS Admin interface with the 'SQL Box' tab selected. The form contains the following fields and controls:

- Note:** Here you can enter SQL to send it directly to the application database.
- Options:**
  - SQL:** A text input field containing the text "SELECT \* FROM".
  - Limit:** A numeric input field set to "40".
  - Result format:** A dropdown menu set to "HTML".
  - Run Query:** A button to execute the query.

At the bottom of the page, it says "Powered by OTRS 3.0.x CVS" and "Top of page".

Abb.: SQL Box.

## 1.20. Paketverwaltung

Mit der "Paketverwaltung" in der Administrationsoberfläche können Sie Pakete installieren und verwalten, die die Funktionalität von OTRS erweitern. Eine Liste von verfügbaren Erweiterungsmodulen von OTRS finden Sie unter Zusätzliche Applikationen.

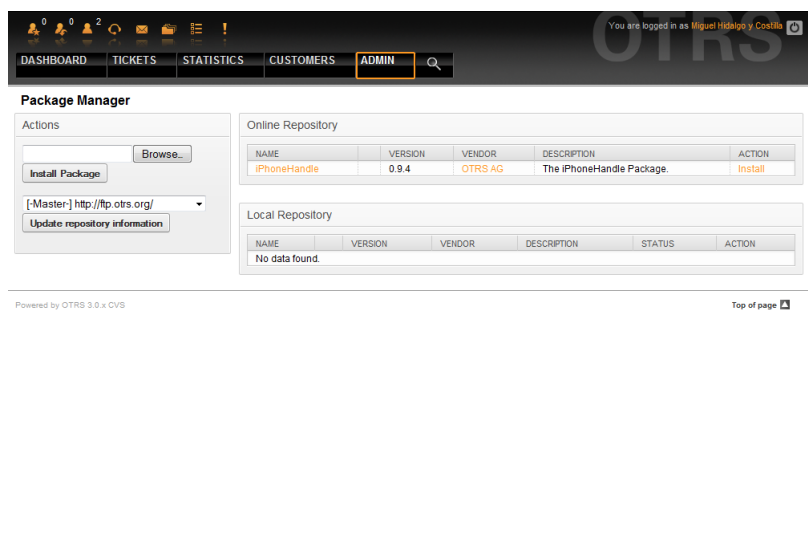


Abb.: Paketverwaltung.

In der Paketverwaltung können Sie die bereits installierten Pakete mit ihrer Versionsinformation einsehen.

Sie können Pakete von einem entfernten Server installieren, indem Sie das Paketverzeichnis im Abschnitt *Online-Paketverzeichnis* auswählen und auf *Verzeichnisinformation aktualisieren* klicken. Die verfügbaren Pakete werden rechts tabellarisch dargestellt. Um eines zu installieren, klicken Sie auf "Installieren". Nach der Installation wird das Paket im Abschnitt *Lokales Verzeichnis* dargestellt.


To upgrade an installed package, the list of available packages in the online repository will show *Upgrade* in the Action column for any package that has a higher version than the one that is installed locally. Just click Upgrade and it will install the new package version on your system.


In some cases, such as when your OTRS system is not connected to the Internet, you can also install those packages that you have downloaded to a local disk. Click the *Browse* button on the Actions side bar, and select the .opm file of the package on your disk. Click *Open* and then *Install Package*. After the installation has been completed, the package is displayed in the *Local Repository* section. You can use the same steps for updating a package that is already installed.

In special cases, you might want to configure the Package Manager, e.g., to use a proxy or to use a local repository. Just take a look at the available options in SysConfig under Framework:Core::Package.

## 1.21. Web-Services

The Web Services link leads to the graphical interface where web services (for the OTRS Generic Interface) are created and maintained (see Figure below).


You are logged in as **Miguel Hidalgo y Costilla** 

**DASHBOARD** **TICKETS** **STATISTICS** **CUSTOMERS** **ADMIN** 

**GenericInterface Web Service Management - Overview**


» **Web Services**

Actions

 **Add web service**

Web Service List

NAME	DESCRIPTION	REMOTE SYSTEM	PROVIDER TRANSPORT	REQUESTER TRANSPORT	VALIDITY
No data found.					

Powered by OTRS 3.0.x CVS Top of page 

*Abbildung.: Die grafische Konfigurationsoberfläche für Webservices.*

The graphical interface for web services configuration is described in more detail in the section "Web Service Graphical Interface".

## 1.22. Dynamische Felder

Dynamic Fields is the place where you setup and manage custom fields for tickets and articles (see figure below).

DASHBOARD
TICKETS
STATISTICS
CUSTOMERS
ADMIN
You are logged in as...

---

### Dynamic Fields Management - Overview

**Actions**

Article  
  
 Add new field for object: Article

Ticket  
  
 Add new field for object: Ticket

**Hint**

To add a new field, select the field type form one of the object's list, the object defines the boundary of the field and it can't be changed after the field creation.

Dynamic Fields List

NAME	LABEL	ORDER	TYPE	OBJECT	VALIDITY
Field1	My Field 1	1	Text	Ticket	valid
Field2	My Field 2	2	Textarea	Ticket	valid
Field3	My Field 3	3	Checkbox	Ticket	valid
Field4	My Field 4	4	Dropdown	Ticket	valid
Field5	My Field 5	5	Multiselect	Ticket	valid
Field6	My Field 6	6	Date	Ticket	valid
Field7	My Field 7	7	Date / Time	Ticket	valid

Powered by OTRS 3.1.x CVS

*Abbildung.:* Die Übersichtsseite der dynamischen Felder mit einigen dynamischen Feldern.

The dynamic fields configuration is described in more detail in the section "Dynamic Fields Configuration".

Each dynamic field type has its own configuration settings and therefore its own configuration screen.

### Anmerkung

In the OTRS framework, dynamic fields can only be linked to tickets and articles by default, but they can be extended to other objects as well.

## 2. Systemkonfiguration

### 2.1. Die Konfigurationsdateien von OTRS

Alle Konfigurationsdateien des OTRS-Frameworks befinden sich innerhalb des Verzeichnisses `Kernel` bzw. in Unterverzeichnissen dieses Directorys. Bis auf die Datei `Kernel/Config.pm` sollten Sie keine Konfigurationsdatei manuell verändern, da alle anderen Dateien beim Updaten des Systems überschrieben werden und so Ihre eigenen Einstellungen verloren gehen. Übertragen Sie lediglich die Parameter aus den anderen Dateien nach `Kernel/Config.pm` und passen Sie die Parameter Ihren Wünschen entsprechend an.

Das Verzeichnis `Kernel/Config/Files` enthält weitere Konfigurationsdateien, die beim Starten von OTRS eingelesen werden. Sind zusätzliche Module wie der Filemanager oder der Webmailer installiert, liegen die Konfigurationsdateien dieser Applikationen ebenfalls in `Kernel/Config/Files`.

If the OTRS web interface is accessed, all `.xml` files in the `Kernel/Config/Files` directory are parsed in alphabetical order, and the settings for the central frame-



work and additional applications will be loaded. Afterwards, the settings in the files `Kernel/Config/Files/ZZZAAuto.pm`, `Kernel/Config/Files/ZZZAuto.pm` and `Kernel/Config/Files/ZZZProcessManagement.pm` (if it exists) will be evaluated. These files are used by the graphical interface for system configuration caching and should never be changed manually. Lastly, the file `Kernel/Config.pm` that contains your individual settings and manually changed configuration parameters, will be parsed. Reading the configuration files in this order makes sure that your specific configuration settings are used by the system.

## 2.2. Konfiguration des Systems mit Hilfe des grafischen Konfigurations-Frontends

Since OTRS 2.0, nearly all configuration parameters of the central framework or additional installed applications, can be changed easily with the graphical interface for system configuration. Log in as OTRS administrator and follow the SysConfig link on the Admin page to execute the new configuration tool (see Figure below).

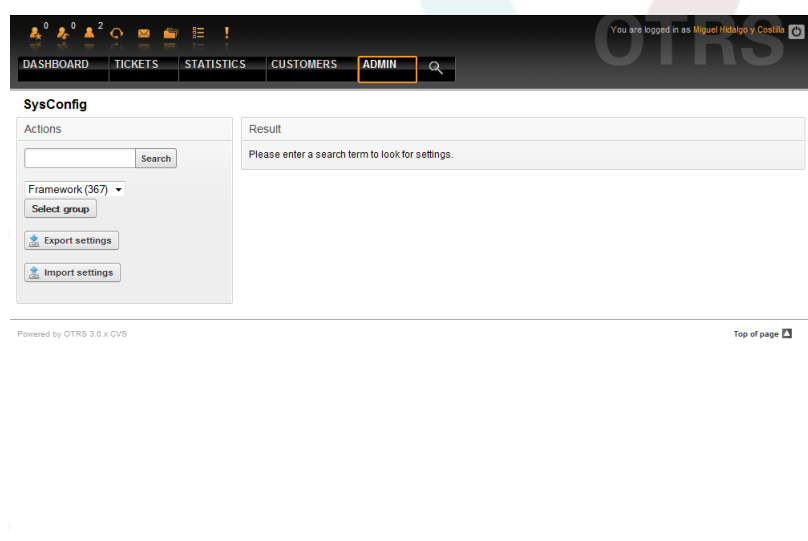


Abb.: Die grafische System-Konfigurationsoberfläche.

Da OTRS mittlerweile über mehr als 600 verschiedene Konfigurationsparameter verfügt, bietet das Konfigurations-Frontend mehrere Möglichkeiten zur schnellen Auffindung der gewünschten Einstellung. Es kann über alle Konfigurationsparameter hinweg nach einem bestimmten Stichwort gesucht werden. Bei der Suche werden neben dem Namen des Konfigurationsparameters auch die Beschreibungen ausgewertet, eine Einstellung kann also auch gefunden werden, wenn ihr Name nicht bekannt ist.

Weiterhin wurden die verschiedenen Konfigurationsparameter in Haupt- und Untergruppen unterteilt. Die Hauptgruppe stellt die Applikation dar, für die der Konfigurationsparameter zuständig ist, also z. B. "Framework" für das OTRS-Framework oder "Ticket" für das Ticketsystem. Die Untergruppen einer Hauptgruppe können eingesehen werden, indem die Gruppe bzw. Applikation aus der dazu vorgesehenen Listbox ausgewählt und der "Zeigen"-Knopf gedrückt wird.

Für jeden einzelnen Konfigurationsparameter kann über eine Checkbox festgelegt werden, ob er vom System beachtet werden soll oder nicht. Wird eine Einstellung verändert, kann die Änderung mit Hilfe des "Aktualisieren"-Buttons übernommen werden. Eine Einstellung kann mit Hilfe des "Rücksetzen"-Schalters auf ihren Default-Wert zurückgesetzt werden.

Für die Sicherung aller von Ihnen vorgenommenen Änderungen, kann eine .pm-Datei heruntergeladen werden, die alle vom Standard abweichenden Konfigurationsparameter

Ihres Systems enthält. Dieselbe Datei können Sie ebenfalls über die Konfigurationsoberfläche eines frisch installierten Systems zurück spielen und so alle Einstellungen wiederherstellen.

## Anmerkung

Die Einstellungen für die Datenbankbindung können aus Sicherheitsgründen nicht über das grafische Konfigurations-Frontend geändert werden und müssen manuell in die Datei `Kernel/Config.pm` eingefügt werden.

# 3. Datensicherung

In diesem Kapitel wird beschrieben, wie alle relevanten Daten der OTRS-Installation gesichert und wieder hergestellt werden können.

## 3.1. Datensicherung

Bei einem Backup gibt es zwei Arten von Datensicherung, die Applikation (z. B. `/opt/otrs/`) und die Datenbank.

Um Backups zu vereinfachen, wird ein `scripts/backup.pl` mitgeliefert, das alle benötigten Komponenten sichert.

```
linux:/opt/otrs# cd scripts/  
linux:/opt/otrs/scripts# ./backup.pl --help  
backup.pl <Revision 1.1> - backup script  
Copyright (c) 2001-2005 Martin Edenhofer <martin@otrs.org>  
usage: backup.pl -d /data_backup/ [-c bzip2|gzip] [-r 30] [-t nofullbackup]  
linux:/opt/otrs/scripts#
```

*Skript: Aufruf der Hilfe des Backup-Mechanismus.*

Ein Backup kann also z. B. mit folgendem Befehl erstellt werden:

```
linux:/opt/otrs/scripts# ./backup.pl -d /backup/  
Backup /backup//2010-09-07_14-28/Config.tar.gz ... done  
Backup /backup//2010-09-07_14-28/Application.tar.gz ... done  
Dump MySQL rdbms ... done  
Compress SQL-file... done  
linux:/opt/otrs/scripts#
```

*Abb.: Erstellen einer Datensicherung.*

Alle Daten wurden in das Verzeichnis `/backup/2010-09-12_14-28/` gesichert und dort, getrennt nach Art der Daten, in einzelne `.tar.gz`-Dateien gespeichert.

```
linux:/opt/otrs/scripts# ls /backup/2010-09-07_14-28/  
Application.tar.gz Config.tar.gz DatabaseBackup.sql.gz  
linux:/opt/otrs/scripts#
```

*Skript: Prüfung der gesicherten Dateien.*

## 3.2. Wiederherstellung der Daten

Um ein Backup wieder einzuspielen, müssen die Applikation (z. B. nach `/opt/otrs/`) und die Datenbank wieder hergestellt werden.

Um Backups einspielen zu können, wird ein `scripts/restore.pl` mitgeliefert, das die benötigten Komponenten wieder zurück sichert. Es unterstützt MySQL und PostgreSQL.

```
linux:/opt/otrs/scripts# ./restore.pl --help
restore.pl <Revision 1.1> - restore script
Copyright (c) 2001-2005 Martin Edenhofer <martin@otrs.org>
usage: restore.pl -b /data_backup/<TIME>/ -d /opt/otrs/
linux:/opt/otrs/scripts#
```

*Skript: Aufruf der Hilfe des Restore-Mechanismus.*

Daten, die im Verzeichnis /backup/2010-09-12\_14-28/ gesichert wurden, können bei einer OTRS-Installation in /opt/otrs folgendermaßen zurückgespielt werden.

```
linux:/opt/otrs/scripts# ./restore.pl -b /backup/2010-09-07_14-28 -d /opt/otrs/
Restore /backup/2010-09-07_14-28//Config.tar.gz ...
Restore /backup/2010-09-07_14-28//Application.tar.gz ...
create MySQL
decompresses SQL-file ...
cat SQL-file into MySQL database
compress SQL-file...
linux:/opt/otrs/scripts#
```

*Skript: Wiederherstellung des Systems.*

## 4. Email-Einstellungen

### 4.1. E-Mails versenden/empfangen

#### 4.1.1. E-Mails versenden

##### 4.1.1.1. Via Sendmail (Standard)

OTRS ist in der Lage, E-Mails via Sendmail (z. B. [Sendmail](#), [Postfix](#), [Qmail](#) oder [Exim](#)) zu versenden. Die Standard-Konfiguration sollte gleich ohne Probleme funktionieren.

Die Konfiguration kann über die grafische Administrationsoberfläche (Framework::Core::Sendmail) vorgenommen werden

##### 4.1.1.2. Via SMTP server/smarthost

Wenn kein sendmail-Binary zur Verfügung steht, kann OTRS E-Mails via SMTP ([Simple Mail Transfer Protocol / RFC 821](#)) oder Secure SMTP versenden. Diese Möglichkeit kann hauptsächlich auf Nicht-Unix-Plattformen (z. B. Win32) genutzt werden.

Die SMTP-Einstellungen können über die SysConfig vorgenommen werden (Framework::Core::Sendmail). Wenn SMTPS nicht als Option auftaucht, fehlen benötigte Perl-Module. Lesen Sie in diesem Fall im Abschnitt "Installation benötigter Perl-Module" nach.

#### 4.1.2. E-Mails empfangen

##### 4.1.2.1. E-Mail-Konten, die über die OTRS-Oberfläche konfiguriert werden

OTRS ist in der Lage, E-Mails von POP3, POP3S, IMAP und IMAPS E-Mail-Konten zu empfangen.

Konfigurieren Sie Ihre Mail-Konten im Admin-Bereich von OTRS im Bereich "PostMaster Mail Account".

If a new mail account is to be created (see Figure below), then its mail server name, login name and password must be specified. Also, you need to select the mail server type, which can be POP3, POP3S, IMAP or IMAPS. If you don't see your server type available

as an option, the required Perl modules are missing on your system. In that case, please refer to "Installation of Perl modules required for OTRS" for instructions.

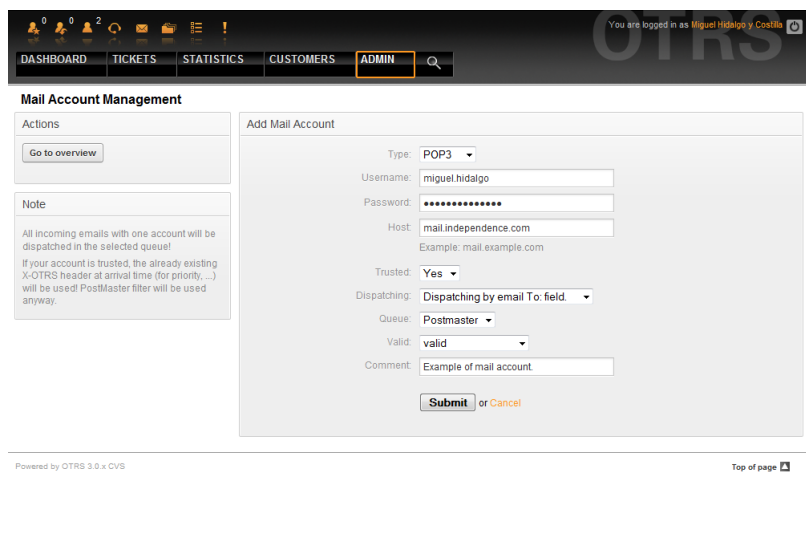


Abb 7.1. Einen E-Mail-Account hinzufügen.

Wählen Sie für "Vertraut" den Wert "Ja" aus, dann werden die sog. X-OTRS-Header-Einträge ausgewertet und angewendet, sofern derartige Header-Einträge in einer abgerufenen Nachricht vorhanden sind. Da mit Hilfe der X-OTRS-Header einige Dinge am System beeinflusst werden können, sollten Sie "Vertraut" nur auf "Ja" setzen, wenn Sie genau wissen, von welchen Absendern die abgerufenen Nachrichten stammen. X-OTRS-Header werden vom Modul für die Nachrichtenfilterung in OTRS benutzt, die X-OTRS-Header werden in dieser Tabelle näher beschrieben. Eventuell eingerichtete Filterregeln werden auf jeden Fall abgearbeitet, egal welcher Wert für "Vertraut" ausgewählt wurde.

The distribution of incoming messages can be controlled if they need to be sorted by queue or by the content of the "To:" field. For the Dispatching field, if "Dispatching by selected queue" is selected, all incoming messages will be sorted into the specified queue. The address where the mail was sent to is disregarded in this case. If "Dispatching by email To: field" is selected, the system checks if a queue is linked with the address in the To: field of the incoming mail. You can link an address to a queue in the E-mail address management section of the Admin page. If the address in the To: field is linked with a queue, the new message will be sorted into the linked queue. If no link is found between the address in the To: field and any queue, then the message flows into the "Raw" queue in the system, which is the PostmasterDefaultQueue after a default installation.

Die Daten zu allen Mail-Konten werden in der Datenbank von OTRS gespeichert. Das Skript `otrs.PostMasterMailbox.pl`, welches sich im Verzeichnis `bin` innerhalb des OTRS-Homeverzeichnisses befindet, fragt die Einstellungen ab und holt die Mails von den einzelnen Mail-Konten. Sie können dieses Skript manuell ausführen, um zu prüfen, ob alle E-Mail-Einstellungen korrekt funktionieren.

Auf einer Standardinstallation holt der Cron-Job `postmaster_mailbox` die E-Mails alle 10 Minuten ab. Das Kapitel "Einrichten der von OTRS benötigten cron-Jobs" beschreibt das Zusammenspiel zwischen OTRS und cron ausführlicher.

## Anmerkung

Beim Abholen löscht OTRS die E-Mails vom POP oder IMAP server. Es besteht keine Möglichkeit, die Mails dort zu erhalten. Wenn Sie dies wünschen, erstellen Sie am Besten Weiterleitungsregeln auf Ihrem Mail-Server. Lesen Sie hierzu bitte in der Dokumentation ihres Mail-Servers nach.

#### 4.1.2.2. Via Kommandozeilen-Programm und z. B. procmail (otrs.PostMaster.pl)

OTRS ist in der Lage, E-Mails über ein Kommandozeilen-Programm (bin/otrs.PostMaster.pl) zu empfangen. Es nimmt die Mails über STDIN entgegen und fügt sie direkt in das OTRS-System ein. Das bedeutet, dass E-Mails im OTRS angezeigt werden, wenn der MDA (mail delivery agent, z. B. procmail) die E-Mails an bin/otrs.PostMaster.pl" weiterleitet.

Um bin/otrs.PostMaster.pl ohne MDA zu testen, führen Sie die Kommandos in Skript: aus.

```
linux:/opt/otrs# cd bin
linux:/opt/otrs/bin# cat ../doc/sample_mails/test-email-1.box | ./otrs.PostMaster.pl
linux:/opt/otrs/bin#
```

*Skript: PostMaster-Test ohne MDA.*

Wird die E-Mail in der Queue-Ansicht angezeigt, sind Ihre Einstellungen in Ordnung.

Procmail ist in der Linux-Umgebung ein sehr bekannter E-Mail-Filter, der höchstwahrscheinlich auf Ihrem System installiert sein wird. Falls nicht, erhalten Sie auf der [procmail Homepage](#) weitere Informationen.

Um procmail einzurichten (benötigt einen für procmail konfigurierten MDA (z. B. sendmail, postfix, exim oder qmail)), kann die Datei .procmailrc.dist aus dem OTRS-Homeverzeichnis verwendet werden. Kopieren Sie .procmailrc.dist nach .procmailrc und nehmen Sie die in Skript: dargestellten Änderungen vor.

```
SYS_HOME=$HOME
PATH=/bin:/usr/bin:/usr/local/bin
# --
# Pipe all email into the PostMaster process.
# --
:0 :
| $SYS_HOME/bin/otrs.PostMaster.pl
```

*Skript: Konfiguration von procmail für OTRS.*

Alle an den lokalen OTRS-Benutzer gesendeten E-Mails werden an bin/otrs.PostMaster.pl weitergeleitet und dadurch im Ticket-System gespeichert.

#### 4.1.2.3. E-Mails via POP3 oder IMAP und fetchmail für otrs.PostMaster.pl empfangen

Um E-Mails von Ihrem Mailserver via POP3 oder IMAP für den OTRS-Rechner/lokalen OTRS-Benutzer und procmail abzuholen, benutzen Sie [fetchmail](#).

##### **Anmerkung**

Voraussetzung ist eine funktionierende SMTP-Konfiguration auf dem OTRS-Rechner.

Eine Beispielkonfiguration finden Sie in der Datei .fetchmailrc.dist im Homeverzeichnis von OTRS. Kopieren Sie diese Datei nach .fetchmailrc und erweitern Sie die Datei um die Daten Ihrer E-Mail-Accounts (siehe Beispiel 7-1).

##### **Beispiel 4.2. .fetchmailrc**

```
#poll (mailserver) protocol POP3 user (user) password (password) is (localuser)
```

```
poll mail.example.com protocol POP3 user joe password mama is otrs
```

Vergessen Sie nicht, die Zugriffsrechte von `.fetchmailrc` auf 710 zu setzen.

Wird das Kommando "**fetchmail -a**" mit dieser Konfiguration ausgeführt, werden alle E-Mails auf das lokale OTRS-Konto weitergeleitet. Richten Sie ggf. einen Cronjob ein, wenn die E-Mails regelmäßig geholt werden sollen.

#### 4.1.2.4. Filterung/Verteilung über PostMaster-Module (für komplexere Verteilungsszenarien)

Falls die `bin/otrs.PostMaster.pl` oder `bin/otrs.PostMasterMailbox.pl` Methoden verwendet werden, können X-OTRS-Header mit Hilfe der PostMaster-Filtermodule in die eingehenden Mails eingefügt bzw. bereits vorhandene X-OTRS-Header verändert werden. Mit Hilfe von X-OTRS-Headern kann das Ticket System bestimmte Aktionen für Mails ausführen, z. B. diese in eine bestimmte Queue einsortieren, sie einem bestimmten Kunden zuordnen, die Priorität ändern usw. Eine nähere Beschreibung der X-OTRS-Header finden Sie im Kapitel zum Einrichten von Mail-Accounts über den Administrations-Bereich von OTRS.

Es gibt verschiedene Standard-Filtermodule:

### Anmerkung

Der Jobname (z. B. `$Self->{"PostMaster::PreFilterModule"}->{"Jobname"}`) muss eindeutig sein!

`Kernel::System::PostMaster::Filter::Match` ist ein Standard-Modul, um einige E-Mail-Header (z. B. From, To, Subject) zu prüfen und dann den neuen E-Mail-Header zu setzen (z. B. X-OTRS-Ignore: yes oder X-OTRS-Queue: spam).

### Beispiel 4.3. Beispiel-Jobs für das Filtermodul `Kernel::System::PostMaster::Filter::Match`

```
# Job Name: 1-Match
# (block/ignore all spam email with From: noreply@)
$Self->{"PostMaster::PreFilterModule"}->{"1-Match"} = {
  Module => 'Kernel::System::PostMaster::Filter::Match',
  Match => {
    From => 'noreply@',
  },
  Set => {
    'X-OTRS-Ignore' => 'yes',
  },
};
# Job Name: 2-Match
# (sort emails with From: sales@example.com and Subject: **ORDER**
# into queue 'Order')
$Self->{"PostMaster::PreFilterModule"}->{"2-Match"} = {
  Module => 'Kernel::System::PostMaster::Filter::Match',
  Match => {
    To => 'sales@example.com',
    Subject => '**ORDER**',
  },
  Set => {
    'X-OTRS-Queue' => 'Order',
  },
};
```

`Kernel::System::PostMaster::Filter::CMD` ist ein Standard-Modul, um die E-Mails an ein externes Kommando zu leiten. Dessen Ergebniss wird an STOUT ausgegeben und, falls das Ergebnis aus STDOUT true ist, wird ein neuer E-Mail-Header gesetzt (z. B. X-OTRS-Ignore: yes oder X-OTRS-Queue: spam).



## Beispiel 4.4. Beispiel-Job für das Filtermodul Kernel::System::PostMaster::Filter::CMD

```
# Job Name: 5-SpamAssassin
# (SpamAssassin example setup, ignore spam emails)
$self->{'PostMaster::PreFilterModule'}->{'5-SpamAssassin'} = {
  Module => 'Kernel::System::PostMaster::Filter::CMD',
  CMD => '/usr/bin/spamassassin | grep -i "X-Spam-Status: yes"',
  Set => {
    'X-OTRS-Ignore' => 'yes',
  },
};
```

Kernel::System::PostMaster::Filter::ExternalTicketNumberRecognition is a default module that adds the possibility to parse external identifiers, in the email subject, the body or both using regular expressions. It then stores this value in a defined dynamic field. When an email comes in, OTRS will first search for an external identifier and when it finds one, query OTRS on the pre-defined dynamic field field. If it finds an existing ticket, it will update this ticket, otherwise it will create a new ticket with the external reference number in the separate field.

OTRS SysConfig already provide 4 different settings to setup different external ticket numbers. If more settings are needed they need to be added manually. The following example can be used in Kernel/Config.pm to extend SysConfig settings.

## Beispiel 4.5. Example job for the filter module Kernel::System::PostMaster::Filter::ExternalTicketNumberRecognition

```
# Job Name: ExternalNumber
# External Ticket Number Recognition, check for Incident-<number> in incoming mails
subject and
# body from the addresses <sender>@externalticket.com, if number is found it will be
stored in
# the dynamic field 'ExternalNumber' (that need to be setup in the Admin Panel).
$self->{'PostMaster::PreFilterModule'}->{'000-ExternalTicketNumberRecognition5'} = {
  'FromAddressRegExp' => '\\s*@externalticket.com',
  'NumberRegExp' => 'Incident-(\\d.*)',
  'SearchInSubject' => '1',
  'SearchInBody' => '1',
  'TicketStateTypes' => 'new;open',
  'DynamicFieldName' => 'ExternalNumber',
  'Module' =>
'Kernel::System::PostMaster::Filter::ExternalTicketNumberRecognition',
  'Name' => 'Test External Ticket Number',
  'SenderType' => 'system',
};
```

### Konfigurationsoptionen

- FromAddressRegExp

This is an optional setting. Only mails matching this "From:" address will be considered for this filter. You can adjust this setting to the sender address your external system uses for outgoing mails. In case this address can differ, you can set this option to empty. OTRS will in that case not check the sender address.

- NumberRegExp

This is a mandatory setting. This setting contains the regular expression OTRS will use to extract the ticket number out of the subject and/or ticket body. The default regular expression will match occurrences of for example 'Incident-12354' and will put the part between parentheses in the dynamic field field, in this case '12354'.



- SearchInSubject

Wenn diese Variable auf '1' gesetzt ist, wird der E-Mailbetreff nach einer Ticketnummer durchsucht.

- SearchInBody

Wenn diese Variable auf '1' gesetzt ist, wird der E-Mailbody nach einer Ticketnummer durchsucht.

- TicketStateTypes

This is an optional setting. If given, it will search OTRS only for open external tickets of given state types. The state types are separated with semicolons.

- DynamicField

This is a required setting. It defines the dynamic field that is used to store the external number (the field name must exist in the system and has to be valid).

- SenderType

This defines the sender type used for the articles created in OTRS.

Natürlich ist es auch möglich, eigene PostMaster-Filtermodule zu entwickeln.

## 4.2. Sichere E-Mail mit PGP

OTRS has the capability to sign or encrypt outgoing messages with PGP. Furthermore, encrypted incoming messages can be decrypted. Encryption and decryption are done with the GPL tool GnuPG. To setup GnuPG for OTRS, the following steps have to be performed:

1. Erste Aufgabe ist es, das entsprechende GnuPG-Software-Paket zu installieren, welches bei den meisten Linux-Distributionen mitgeliefert wird. Dies sollte mit Hilfe des jeweiligen Paketmanagers leicht durchgeführt werden können.
2. Im zweiten Schritt muss das soeben installierte GnuPG zur Benutzung für OTRS konfiguriert werden. Dies geschieht auf der Kommandozeilenebene durch einen Aufruf von GnuPG, der die notwendigen Verzeichnisse anlegt und den privaten Schlüssel erzeugt. Der Aufruf muss als Benutzer 'otrs' durchgeführt werden.

```
linux:~# su otrs
linux:/root$ cd
linux:~$ pwd
/opt/otrs
linux:~$ gpg --gen-key
gpg (GnuPG) 1.4.2; Copyright (C) 2005 Free Software Foundation, Inc.
This program comes with ABSOLUTELY NO WARRANTY.
This is free software, and you are welcome to redistribute it
under certain conditions. See the file COPYING for details.

gpg: directory `/opt/otrs/.gnupg' created
gpg: new configuration file `/opt/otrs/.gnupg/gpg.conf' created
gpg: WARNING: options in `/opt/otrs/.gnupg/gpg.conf' are not yet active during t
his run
gpg: keyring `/opt/otrs/.gnupg/secring.gpg' created
gpg: keyring `/opt/otrs/.gnupg/pubring.gpg' created
Please select what kind of key you want:
  (1) DSA and Elgamal (default)
  (2) DSA (sign only)
  (5) RSA (sign only)
Your selection? 1
DSA keypair will have 1024 bits.
ELG-E keys may be between 1024 and 4096 bits long.
```

```

What keysize do you want? (2048)
Requested keysize is 2048 bits
Please specify how long the key should be valid.
  0 = key does not expire
  <n> = key expires in n days
  <n>w = key expires in n weeks
  <n>m = key expires in n months
  <n>y = key expires in n years
Key is valid for? (0)
Key does not expire at all
Is this correct? (y/N) y

You need a user ID to identify your key; the software constructs the user ID
from the Real Name, Comment and Email Address in this form:
    "Heinrich Heine (Der Dichter) <heinrichh@duesseldorf.de>"

Real name: Ticket System
Email address: support@example.com
Comment: Private PGP Key for the ticket system with address support@example.com
You selected this USER-ID:
"Ticket System (Private PGP Key for the ticket system with address support@examp
le.com) <support@example.com>"

Change (N)ame, (C)omment, (E)mail or (O)kay/(Q)uit? 0
You need a Passphrase to protect your secret key.

Passphrase: secret
Repeat passphrase: secret

We need to generate a lot of random bytes. It is a good idea to perform
some other action (type on the keyboard, move the mouse, utilize the
disks) during the prime generation; this gives the random number
generator a better chance to gain enough entropy.
+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....
+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....
.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....

Not enough random bytes available. Please do some other work to give
the OS a chance to collect more entropy! (Need 280 more bytes)

+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....
+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....+++++.....
..+++++>.....>+++++>.....>+++++>.....>+++++>.....>+++++>.....>+++++>.....>+++++>.....>+++++>.....>+++++>.....
.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....>+++++<+++++.....
.....>+++++^^^

gpg: /opt/otrs/.gnupg/trustdb.gpg: trustdb created
gpg: key 7245A970 marked as ultimately trusted
public and secret key created and signed.

gpg: checking the trustdb
gpg: 3 marginal(s) needed, 1 complete(s) needed, PGP trust model
gpg: depth: 0 valid: 1 signed: 0 trust: 0-, 0q, 0n, 0m, 0f, 1u
pub 1024D/7245A970 2006-02-03
    Key fingerprint = 2ED5 BC36 D2B6 B055 7EE1  5833 1D7B F967 7245 A970
uid           Ticket System (Private gpg key for ticket system with addre
ss support@example.com) <support@example.com>
sub 2048g/52B97069 2006-02-03

linux:~$
  
```

*Skript: Konfiguration von GnuPG.*

Wie man sehen kann, genügt es bei den meisten Fragen die Vorgabe mit <EINGABE> zu bestätigen. Lediglich die Angabe zur Person des Schlüsselbesitzers ist zu vervollständigen bzw. zum Ende hin ist an der mit (passphrase) gekennzeichneten Stelle die Passphrase für den zu generierenden Schlüssel einzugeben.

3. In the screen for the PGP settings, PGP should be activated for OTRS (first option). Also, the path to the gpg program should be set and checked.

Die nächste Einstellung (PGP::Options) muss ggf. modifiziert werden. Es handelt sich um die Parameter, mit denen OTRS das Programm gpg aufruft. Hier ist insbesondere die Option für die Lage des GnuPG-Konfigurationsverzeichnis des OTRS-Benutzers otrs wichtig. Im Beispiel ist dies: /opt/otrs/.gnupg). Dieses Verzeichnis wurde im Schritt 1 automatisch von GnuPG angelegt.

Über die letzte Option können die Schlüssel-Werte-Paare für die ID(s) und Passphrase(n) der eigenen PGP-Schlüssel dem Ticket System bekannt gemacht werden. Noch einmal genauer: da andere Kommunikationspartner an das Ticket-System (oder besser: an den Mail-Eingang des Systems) E-Mails mit dessen öffentlichen Schlüssel verschlüsselt schicken, kann OTRS mit dem/n in dieser Option angegebenen privaten Schlüssel(n) solchermaßen verschlüsselte Mails entschlüsseln.

Woher bekommt man die ID des eigenen Schlüssels? Die ID steckt schon in der Ausgabe der Schlüsselgenerierung (siehe Schritt 1). Man kann die ID aber auch als Benutzer 'otrs' jederzeit über die Kommandozeile ermitteln:

```
linux:~# su otrs
linux:/root$ cd
linux:~$ pwd
/opt/otrs
linux:~$ gpg --list-keys
/opt/otrs/.gnupg/pubring.gpg
-----
pub   1024D/7245A970 2006-02-03
uid           Ticket System (Private gpg key for ticket system with
address support@example.com) <support@example.com>
sub   2048g/52B97069 2006-02-03

linux:~$
```

*Skript: Die ID des eigenen privaten Schlüssels ermitteln.*

Die ID des Schlüssels befindet sich in der Zeile, die mit sub beginnt und ist eine 8-stellige hexadezimale Kennung (im Beispiel lautet sie "52B97069". Die für die Option geforderte Passphrase ist dieselbe, die beim Schlüsselgenerieren in Schritt 1 verwendet wurde.

Nach Eingabe all dieser Angaben können sie mit dem Aktualisieren-Button gespeichert werden. OTRS ist jetzt für das Empfangen mit PGP verschlüsselter E-Mails konfiguriert.

4. Der letzte Schritt ist der Import des öffentlichen PGP-Schlüssels eines Kunden. Dadurch wird sicher gestellt, dass aus OTRS heraus verschlüsselte Mails an den jeweiligen Kunden gesendet werden können. Es bestehen zwei Möglichkeiten für den Import.

Zum einem können über das Modul zur Verwaltung der Kunden die öffentlichen PGP-Schlüssel beim Anlegen/Bearbeiten des jeweiligen Kunden im System hinterlegt werden.

Die zweite Möglichkeit bietet das System in den PGP-Einstellungen innerhalb des Admin-Bereiches. In dieser Konfigurationsmaske ist im rechten Teil eine Liste der bereits dem System zur Verfügung stehenden öffentlichen Schlüssel zu sehen. Im Regelfall sollte nach der obigen Einrichtung hier schon der öffentliche Schlüssel des Ticket-Systems selbst zu sehen sein. Im linken Teil besteht neben der Suche die Möglichkeit, neue Schlüssel als Schlüsseldatei ins System zu laden.

Sowohl für das Hinzufügen eines Schlüssels über die Kunden- als auch über die PGP-Verwaltung gilt, dass die Dateien mit den Schlüsseln PGP/GnuPG-konforme Schlüssel sein müssen. Normalerweise wird der Schlüssel als "ASCII armored key"-Datei vorliegen, welches problemlos von OTRS verarbeitet werden kann.

## 4.3. Sichere E-Mail mit S/MIME

At first glance, encryption with S/MIME seems a little more complicated than with PGP. First, you have to establish a Certification Authority (CA) for the OTRS system. The subsequent steps are very much like those needed with PGP: configure OTRS, install your own certificate, import other public certificates as needed, etc.

Die S/MIME-Konfiguration geschieht zu einem großen Teil außerhalb der OTRS-Web-Oberfläche und sollte als otrs-Benutzer (bzw. als der Benutzer mit dessen Rechten OTRS läuft) in einer Shell durchgeführt werden. Da die MIME-Konfiguration unter Linux im wesentlichen auf SSL (openssl basiert, sollte zuerst sichergestellt werden, dass das openssl-Paket installiert ist. Mit dem openssl-Paket kommt ein Skript, CA.pl, mit welchem die wichtigsten Schritte zur Zertifikatserstellung bewältigt werden können. Damit dieser Vorgang einfacher wird, sollte zuerst herausgefunden werden, wo sich das Skript CA.pl im Dateisystem befindet. Danach sollte diese Stelle der Einfachheit halber temporär in den Suchpfad der Shell übernommen werden.

```
otrs@linux:~> rpm -ql openssl | grep CA
/usr/share/ssl/misc/CA.pl
otrs@linux:~> export PATH=$PATH:/usr/share/ssl/misc
otrs@linux:~> which CA.pl
/usr/share/ssl/misc/CA.pl
otrs@linux:~> mkdir tmp; cd tmp
otrs@linux:~/tmp>
```

*Skript: Konfiguration von S/MIME.*

Im Beispiel sieht man auch, dass ein temporäres Verzeichnis ~/tmp angelegt wurde, in welchem die Zertifikatserzeugung durchgeführt wird.

Im einzelnen sind zur Zertifikatserzeugung folgende Schritte durchzuführen, die einzelnen Schritte sind in der Kommandozeile auszuführen. Sollte ein beglaubigtes SSL-Zertifikat für die Verschlüsselung bereits vorhanden sein, so sollte natürlich dieses verwendet werden. Dann können die nun folgenden Schritte übersprungen werden. Der beschriebene Ablauf geht davon aus, dass der OTRS-Administrator sich das SSL-Zertifikat zu Test- und Lernzwecken selbst anlegen muss.

1. Anlegen einer eigenen Certification Authority für SSL. Diese wird benötigt, um die Anfrage für ein eigenes SSL-Zertifikat zu beglaubigen.

```
otrs@linux:~/tmp> CA.pl -newca
CA certificate filename (or enter to create)

Making CA certificate ...
Generating a 1024 bit RSA private key
...+++++
.....+++++
writing new private key to './demoCA/private/cakey.pem'
Enter PEM pass phrase:
Verifying - Enter PEM pass phrase:
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:DE
State or Province Name (full name) [Some-State]:OTRS-state
Locality Name (eg, city) []:OTRS-town
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Your company
Organizational Unit Name (eg, section) []:
```

```
Common Name (eg, YOUR name) []:OTRS Admin
Email Address []:otrs@your-domain.tld
otrs@linux:~/tmp> ls -la demoCA/
total 8
-rw-r--r--  1 otrs otrs 1330 2006-01-08 17:54 cacert.pem
drwxr-xr-x  2 otrs otrs   48 2006-01-08 17:53 certs
drwxr-xr-x  2 otrs otrs   48 2006-01-08 17:53 crl
-rw-r--r--  1 otrs otrs    0 2006-01-08 17:53 index.txt
drwxr-xr-x  2 otrs otrs   48 2006-01-08 17:53 newcerts
drwxr-xr-x  2 otrs otrs   80 2006-01-08 17:54 private
-rw-r--r--  1 otrs otrs   17 2006-01-08 17:54 serial
otrs@linux:~/tmp>
```

*Skript: Anlegen einer Certification Authority für SSL.*

## 2. Erzeugen der Zertifikatsanfrage.

```
otrs@linux:~/tmp> CA.pl -newreq
Generating a 1024 bit RSA private key
.....+++++
....+++++
writing new private key to 'newreq.pem'
Enter PEM pass phrase:
Verifying - Enter PEM pass phrase:
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:DE\keyreturn
State or Province Name (full name) [Some-State]:OTRS-state
Locality Name (eg, city) []:OTRS-town
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Your company
Organizational Unit Name (eg, section) []:
Common Name (eg, YOUR name) []:OTRS admin
Email Address []:otrs@your-domain.tld

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:
Request (and private key) is in newreq.pem
otrs@linux:~/tmp> ls -la
total 4
drwxr-xr-x  6 otrs otrs  232 2006-01-08 17:54 demoCA
-rw-r--r--  1 otrs otrs 1708 2006-01-08 18:04 newreq.pem
otrs@linux:~/tmp>
```

*Skript: Erstellen einer Zertifikatsanfrage.*

- Die Zertifikatsanfrage durch die CA signieren lassen. Die Zertifikatsanfrage kann entweder durch die selbst angelegte CA signiert (= beglaubigt) werden. Allerdings ist es natürlich seriöser, wenn das eigene SSL-Zertifikat von einer fremden, externen und ihrerseits beglaubigten CA beglaubigt wird.

```
otrs@linux:~/tmp> CA.pl -signreq
Using configuration from /etc/ssl/openssl.cnf
Enter pass phrase for ./demoCA/private/cakey.pem:
Check that the request matches the signature
Signature ok
Certificate Details:
  Serial Number:
    fd:85:f6:9f:14:07:16:c8
```

```

Validity
  Not Before: Jan  8 17:04:37 2006 GMT
  Not After : Jan  8 17:04:37 2007 GMT
Subject:
  countryName           = DE
  stateOrProvinceName  = OTRS-state
  localityName         = OTRS-town
  organizationName     = Your Company
  commonName           = OTRS administrator
  emailAddress         = otrs@your-domain.tld
X509v3 extensions:
  X509v3 Basic Constraints:
    CA:FALSE
  Netscape Comment:
    OpenSSL Generated Certificate
  X509v3 Subject Key Identifier:
    01:D9:1E:58:C0:6D:BF:27:ED:37:34:14:D6:04:AC:C4:64:98:7A:22
  X509v3 Authority Key Identifier:
    keyid:10:4D:8D:4C:93:FD:2C:AA:9A:B3:26:80:6B:F5:D5:31:E2:8E:DB:A8
    DirName:/C=DE/ST=OTRS-state/L=OTRS-town/O=Your Company/
    CN=OTRS admin/emailAddress=otrs@your-domain.tld
    serial:FD:85:F6:9F:14:07:16:C7

Certificate is to be certified until Jan  8 17:04:37 2007 GMT (365 days)
Sign the certificate? [y/n]:y

1 out of 1 certificate requests certified, commit? [y/n]y
Write out database with 1 new entries
Data Base Updated
Signed certificate is in newcert.pem
otrs@linux:~/tmp>

```

*Skript: Signieren der Zertifikatsanfrage.*

4. Mit der signierten Zertifikatsanfrage das eigene Zertifikat und alle dazugehörigen Dateien erzeugen.

```

otrs@linux:~/tmp> CA.pl -pkcs12 "OTRS Certificate"
Enter pass phrase for newreq.pem:
Enter Export Password:
Verifying - Enter Export Password:
otrs@linux:~/tmp> ls -la
total 12
drwxr-xr-x  6 otrs otrs  328 2006-01-08 18:04 demoCA
-rw-r--r--  1 otrs otrs 3090 2006-01-08 18:13 newcert.p12
-rw-r--r--  1 otrs otrs  3791 2006-01-08 18:04 newcert.pem
-rw-r--r--  1 otrs otrs  1708 2006-01-08 18:04 newreq.pem
otrs@linux:~/tmp>

```

*Skript: Neues Zertifikat erstellen.*

Nach der Durchführung dieser Schritte ist es notwendig die Einrichtung von S/MIME in OTRS abzuschließen.

Die OTRS-seitige Einrichtung erfolgt aus dem Admin-Bereich, Block System über den Punkt SMIME. Falls die generelle S/MIME-Unterstützung in OTRS noch nicht aktiviert wurde, weist die Maske den OTRS-Administrator beim Aufruf darauf hin und bietet einen bequemen Link zur Einrichtung.

With the SysConfig group "Crypt::SMIME", you can also enable and configure the general S/MIME support.

Hier können sie S/MIME-Unterstützung aktivieren, und die Pfade zum OpenSSL-Kommando und zu den Zertifikaten angeben. Die vorhin erzeugte Schlüsseldatei muss in diesem Verzeichnis gespeichert werden, sonst kann OpenSSL sie nicht verwenden.

Im nächsten Schritt geht es (zurück) zur S/MIME-Konfiguration im Administrationsbereich. Dort können nun sowohl der private Schlüssel(Key) bzw. die privaten Schlüssel des OTRS-Systems, als auch die öffentlichen Schlüssel anderer Kommunikationspartner ins System importiert werden. Tragen Sie hier den öffentlichen Schlüssel ein, der zu Beginn dieses Abschnitts erzeugt und dann in OTRS hinzugefügt wurde.

Selbstverständlich können aber auch alle öffentlichen S/MIME-Schlüssel der Kommunikationspartner über das Modul zur Kundenverwaltung beim Anlegen/Bearbeiten des jeweiligen Kunden in das System importiert werden.

## 5. Einbinden externer Backends

### 5.1. Kundenbenutzerdaten

OTRS ist in der Lage, mit verschiedenen Kundendaten (insbesondere Login, E-Mail, Telefon) umzugehen. Diese Informationen können im Agenten-Interface angezeigt und für das Kunden-Interface verwendet werden. Weiterhin werden die Daten für die Authentifizierung der Kunden am System benötigt.

Die benutzten/angezeigten Kundendaten sind frei konfigurierbar, es gibt jedoch folgende benötigte Optionen die unbedingt vorhanden sein müssen, damit OTRS ordnungsgemäß funktioniert:

- Benutzer-Login
- E-Mail-Adresse
- Benutzer-Kunden-ID

Verwenden Sie die folgenden SysConfig-Parameter, wenn Sie die Kundeninformationen im Agenten-Interface anzeigen wollen.

```
# Ticket::Frontend::CustomerInfo*
# (show customer info on Compose (Phone and Email), Zoom and
# Queue view)
$self->{'Ticket::Frontend::CustomerInfoCompose'} = 1;
$self->{'Ticket::Frontend::CustomerInfoZoom'} = 1;
```

*Skript: SysConfig Konfigurationsparameter.*

### 5.2. Kundenbenutzer Backend

Es existieren zwei Kundenbenutzer Back-ends, DB und LDAP. Falls Sie bereits ein Kundenverzeichnis (z. B. SAP, ...) haben, ist es natürlich möglich, dafür ein eigenes Back-end zu schreiben.

#### 5.2.1. Datenbank (Standard)

Beispiel 11-1 zeigt die Konfiguration eines Kundenbenutzer-Backends, welches die Kundendaten in der OTRS-Datenbank speichert.

#### Beispiel 4.6. Konfiguration eines Datenbank-Kunden-Backends

```
# CustomerUser (customer database backend and settings)
$self->{CustomerUser} = {
    Name => 'Database Datasource',
    Module => 'Kernel::System::CustomerUser::DB',
    Params => {
        # if you want to use an external database, add the required settings
    }
}
# DSN => 'DBI:odbc:yourdsn',
# Type => 'mssql', # only for ODBC connections
```



```

#         DSN => 'DBI:mysql:database=customerdb;host=customerdbhost',
#         User => '',
#         Password => '',
#         Table => 'customer_user',
#         # if your frontend is unicode and the charset of your
#         # customer database server is iso-8859-1, use these options.
#         SourceCharset => 'iso-8859-1',
#         DestCharset => 'utf-8',

#         # CaseSensitive will control if the SQL statements need LOWER()
#         # function calls to work case insensitively. Setting this to
#         # 1 will improve performance dramatically on large databases.
#         CaseSensitive => 0,
    },
# customer unique id
CustomerKey => 'login',

# customer #
CustomerID => 'customer_id',
CustomerValid => 'valid_id',
    CustomerUserListFields => ['first_name', 'last_name', 'email'],
    CustomerUserSearchFields => ['login', 'last_name', 'customer_id'],
    CustomerUserSearchPrefix => '',
    CustomerUserSearchSuffix => '*',
    CustomerUserSearchListLimit => 250,
    CustomerUserPostMasterSearchFields => ['email'],
    CustomerUserNameFields => ['title', 'first_name', 'last_name'],
    CustomerUserEmailUniqCheck => 1,
# # show not own tickets in customer panel, CompanyTickets
# CustomerUserExcludePrimaryCustomerID => 0,
# # generate auto logins
# AutoLoginCreation => 0,
# AutoLoginCreationPrefix => 'auto',
# # admin can change customer preferences
# AdminSetPreferences => 1,
# # cache time to live in sec. - cache any database queries
# CacheTTL => 0,
# # just a read only source
# ReadOnly => 1,
    Map => [
        # note: Login, Email and CustomerID needed!
        # var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-
link, readonly, http-link-target
        [ 'UserTitle',      'Title',      'title',      1, 0, 'var', '', 0 ],
        [ 'UserFirstname', 'Firstname',  'first_name', 1, 1, 'var', '', 0 ],
        [ 'UserLastname',  'Lastname',  'last_name',  1, 1, 'var', '', 0 ],
        [ 'UserLogin',     'Username',  'login',      1, 1, 'var', '', 0 ],
        [ 'UserPassword',  'Password',  'pw',         0, 0, 'var', '', 0 ],
        [ 'UserEmail',     'Email',     'email',      1, 1, 'var', '', 0 ],

#         [ 'UserEmail',      'Email', 'email',      1, 1, 'var', '$Env{"CGIHandle"}?
Action=AgentTicketCompose&ResponseID=1&TicketID=$Data{"TicketID"}&ArticleID=
$Data{"ArticleID"}', 0 ],
        [ 'UserCustomerID', 'CustomerID', 'customer_id', 0, 1, 'var', '', 0 ],

#         [ 'UserCustomerIDs', 'CustomerIDs', 'customer_ids', 1, 0, 'var', '', 0 ],
        [ 'UserPhone',      'Phone',     'phone',      1, 0, 'var', '', 0 ],
        [ 'UserFax',        'Fax',      'fax',        1, 0, 'var', '', 0 ],
        [ 'UserMobile',     'Mobile',   'mobile',     1, 0, 'var', '', 0 ],
        [ 'UserStreet',     'Street',   'street',     1, 0, 'var', '', 0 ],
        [ 'UserZip',        'Zip',      'zip',        1, 0, 'var', '', 0 ],
        [ 'UserCity',       'City',     'city',       1, 0, 'var', '', 0 ],
        [ 'UserCountry',    'Country',  'country',    1, 0, 'var', '', 0 ],
        [ 'UserComment',    'Comment',  'comments',   1, 0, 'var', '', 0 ],
        [ 'ValidID',       'Valid',    'valid_id',   0, 1, 'int', '', 0 ],
    ],
# default selections
    Selections => {
        UserTitle => {
            'Mr.' => 'Mr.',
            'Mrs.' => 'Mrs.',
        },
    },

```

```
},  
};
```

Falls Sie die Kundendaten anpassen möchten, ändern Sie in der Datenbank die Tabellenspalten oder fügen Sie weitere hinzu (im folgenden Beispiel wird ein Feld für die Raumnummer hinzugefügt).

```
linux:~# mysql -p  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 116 to server version: 5.0.18-Debian_7-log  
  
Type 'help;' or '\h' for help. Type '\c' to clear the buffer.  
  
mysql> use otrs;  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed  
mysql> ALTER TABLE customer_user ADD room VARCHAR (250);  
Query OK, 1 rows affected (0.01 sec)  
Records: 1 Duplicates: 0 Warnings: 0  
  
mysql> quit  
Bye  
linux:~#
```

*Skript: Ein Feld zur Tabelle customer\_user hinzufügen.*

Danach fügen Sie Ihre eigenen Spalten dem MAP Array in der Datei Kernel/Config.pm hinzu:

```
# var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-link,  
readonly  
[...]  
[ 'UserRoom',      'Room',      'room',      0, 1, 'var', '', 0 ],
```

*Skript: Hinzufügen eines Feldes in Kernel/Config.pm file.*

Es ist auch möglich, diese Kundeninformationen über den Kundenlink im Agent-Interface zu bearbeiten.

### 5.2.1.1. Kunden mit multiplen IDs (Firmen-Tickets)

Es ist möglich, einem Kunden mehr als nur eine Kundennummer zuzuweisen. Dies kann z. B. dann sinnvoll sein, wenn ein Kunde auf Tickets anderer Kunden zugreifen muss, z. B. der Abteilungsleiter auf die Tickets der Mitarbeiter seiner Abteilung. Hat ein Kunde Zugriff auf Tickets anderer Kunden, verwendet man in OTRS das sog. Firmen Ticket Feature. Im Kunden-Interface können diese Tickets über den "Firmen-Ticket" Link eingesehen werden.

Um Firmen-Tickets zu verwenden, muss die customer\_user Tabelle in der OTRS Datenbank um eine Spalte erweitert werden, in die später die Kundennummern eingetragen werden, auf die ein Kunde zusätzlich zu den eigenen Tickets Zugriff haben soll.

```
linux:~# mysql -p  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 124 to server version: 5.0.18-Debian_7-log  
  
Type 'help;' or '\h' for help. Type '\c' to clear the buffer.  
  
mysql> use otrs;  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed
```

```
mysql> ALTER TABLE customer_user ADD customer_ids VARCHAR (250);
Query OK, 1 rows affected (0.02 sec)
Records: 1 Duplicates: 0 Warnings: 0

mysql> quit
Bye
linux:~#
```

*Skript: Hinzufügen eines Feldes customer\_ids zur Tabelle customer\_user.*

Danach fügen Sie die neue Spalte dem MAP Array in der Datei Kernel/Config.pm hinzu.

```
# var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-link,
readonly
[...]
[ 'UserCustomerIDs', 'CustomerIDs', 'customer_ids', 1, 0, 'var', '', 0 ],
```

*Skript: Hinzufügen des Feldes UserCustomerIDs zu Kernel/Config.pm.*

Die Spalte für die Multi-Kundennummern kann ab nun über das Admin-Interface bzw. über die Kundenverwaltung gepflegt werden.

Um nun den Zugriff für einen Kunden auf die Tickets anderer Kunden zu ermöglichen, tragen Sie in die neue Spalte die IDs der Kunden ein, auf deren Tickets der Zugriff ermöglicht werden soll. Die einzelnen IDs trennen Sie durch ein Semikolon.

### Beispiel 4.7. Firmen-Tickets mit einem Datenbank-Backend

Angenommen es sind die Kunden A, B und C im System angelegt. A soll mit Hilfe von Firmen Tickets über das Kunden-Interface Zugriff auf die Tickets von B und C haben, B und C sollen jedoch jeweils nur ihre eigenen Tickets einsehen und bearbeiten können.

Um dieses Setup zu realisieren, ändern Sie wie oben beschrieben die customer\_user Tabelle in der OTRS Datenbank und das Mapping in Kernel/Config.pm. Anschließend laden Sie über die Kundenverwaltung die Einstellungen des Kunden A und tragen bei "Kundennummern" die Werte "B;C;" ein.

## 5.2.2. LDAP

Falls Sie ein existierendes LDAP Verzeichnis mit Ihren Kundenbenutzern haben, können Sie dieses auch mit OTRS nutzen.

### Beispiel 4.8. Konfiguration eines LDAP Kunden-Backends

```
# CustomerUser
# (customer ldap backend and settings)
$self->{CustomerUser} = {
  Name => 'LDAP Data Source',
  Module => 'Kernel::System::CustomerUser::LDAP',
  Params => {
    # ldap host
    Host => 'bay.csuhayward.edu',
    # ldap base dn
    BaseDN => 'ou=seas,o=csuh',
    # search scope (one|sub)
    SSCOPE => 'sub',
    # The following is valid but would only be necessary if the
    # anonymous user does NOT have permission to read from the LDAP tree
    UserDN => '',
    UserPw => '',
    # in case you want to add always one filter to each ldap query, use
    # this option. e. g. AlwaysFilter => '(mail=*)' or AlwaysFilter =>
    '(objectclass=user)'
    AlwaysFilter => '',
    # if both your frontend and your LDAP are unicode, use this:
```

```

SourceCharset => 'utf-8',
DestCharset   => 'utf-8',
# if your frontend is unicode and the charset of your
# ldap server is iso-8859-1, use these options.
# SourceCharset => 'iso-8859-1',
# DestCharset => 'utf-8',
# Net::LDAP new params (if needed - for more info see perldoc Net::LDAP)
Params => {
    port => 389,
    timeout => 120,
    async => 0,
    version => 3,
},
},
# customer unique id
CustomerKey => 'uid',
# customer #
CustomerID => 'mail',
CustomerUserListFields => ['cn', 'mail'],
CustomerUserSearchFields => ['uid', 'cn', 'mail'],
CustomerUserSearchPrefix => '',
CustomerUserSearchSuffix => '*',
CustomerUserSearchListLimit => 250,
CustomerUserPostMasterSearchFields => ['mail'],
CustomerUserNameFields => ['givenname', 'sn'],
# show not own tickets in customer panel, CompanyTickets
CustomerUserExcludePrimaryCustomerID => 0,
# add an ldap filter for valid users (expert setting)
# CustomerUserValidFilter => '!(description=locked)',
# administrator can't change customer preferences
AdminSetPreferences => 0,
# # cache time to live in sec. - cache any database queries
# CacheTTL => 0,
Map => [
    # note: Login, Email and CustomerID are mandatory!
    # var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-
link, readonly
    [ 'UserTitle',      'Title',      'title',          1, 0, 'var', '', 0 ],
    [ 'UserFirstname', 'Firstname', 'givenname',     1, 1, 'var', '', 0 ],
    [ 'UserLastname',  'Lastname',  'sn',            1, 1, 'var', '', 0 ],
    [ 'UserLogin',     'Username',  'uid',           1, 1, 'var', '', 0 ],
    [ 'UserEmail',     'Email',     'mail',          1, 1, 'var', '', 0 ],
    [ 'UserCustomerID', 'CustomerID', 'mail',          0, 1, 'var', '', 0 ],
#    [ 'UserCustomerIDs', 'CustomerIDs', 'second_customer_ids', 1, 0, 'var', '', 0 ],
    [ 'UserPhone',     'Phone',     'telephonenumber', 1, 0, 'var', '', 0 ],
    [ 'UserAddress',   'Address',   'postaladdress',  1, 0, 'var', '', 0 ],
    [ 'UserComment',   'Comment',   'description',    1, 0, 'var', '', 0 ],
],
};

```

Falls Sie in Ihrem LDAP Verzeichnis weitere Informationen zu Ihren Kunden gespeichert haben und mit OTRS darauf zugreifen möchten, erweitern Sie das MAP Array in Kernel/Config.pm bzw. entfernen nicht gewünschte Einträge.

```

# var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-link,
readonly
[... ]
[ 'UserPhone',      'Phone',      'telephonenumber', 1, 0, 'var', '', 0 ],

```

Skript: *Hinzufügen neuer Felder zu Kernel/Config.pm.*

### 5.2.2.1. Kunden mit multiplen IDs (Firmen-Tickets)

Um Firmentickets mit einem LDAP zu nutzen, muss ein Feld zum LDAP-Verzeichnis hinzugefügt werden, welches die IDs enthält, die für einen Kunden zugänglich sein sollen.

Wenn das neue Feld erstellt wurde, muss es zum MAP Array in Kernel/Config.pm hinzugefügt werden.

```
# var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-link,
readonly
[...]
[ 'UserCustomerIDs', 'CustomerIDs', 'customer_ids', 1, 0, 'var', '', 0 ],
```

*Skript: Hinzufügen eines neuen Feldes in Kernel/Config.pm.*

Das Feld muss direkt im LDAP-Verzeichnis bearbeitet werden, weil OTRS von LDAP nur lesen kann, nicht jedoch darauf schreiben.

Um nun den Zugriff für einen Kunden auf die Tickets anderer Kunden zu ermöglichen, tragen Sie in das neue LDAP-Feld die IDs der Kunden ein, auf deren Tickets der Zugriff ermöglicht werden soll. Die einzelnen IDs trennen Sie durch ein Semikolon.

### Beispiel 4.9. Verwendung von Firmentickets mit einem LDAP-Backend

Angenommen es sind die Kunden A, B und C im System angelegt. A soll mit Hilfe von Firmen Tickets über das Kunden-Interface Zugriff auf die Tickets von B und C haben, B und C sollen jedoch jeweils nur ihre eigenen Tickets einsehen und bearbeiten können.

Um dieses Setup zu realisieren, ändern Sie wie oben beschrieben das LDAP Verzeichnis und das Mapping in Kernel/Config.pm. Anschließend tragen Sie im LDAP Verzeichnis innerhalb der Einstellungen für den Kunden A für CustomerIDs die Werte "B;C;" ein.

## 5.2.3. Gleichzeitige Einbindung mehrerer verschiedener Kunden Backends

Soll mehr als nur ein Back-end mit verschiedenen Kundendaten verwendet werden (z. B. gleichzeitig DB und LDAP), so ist dies ebenfalls mit OTRS möglich. In einem solchen Fall muss der CustomerUser Parameter für jedes Back-end um eine Nummer erweitert werden, z. B. "CustomerUser1", "CustomerUser2", usw.

### Beispiel 4.10. Gleichzeitige Einbindung mehrerer verschiedener Kunden Backends

In der folgenden Konfiguration verwendet OTRS gleichzeitig ein Datenbank- und ein LDAP-Kunden-Backend.

```
# 1. Customer user backend: DB
# (Kundendatenbank-Backend und Einstellungen)
$self->{CustomerUser1} = {
  Name => 'Customer Database',
  Module => 'Kernel::System::CustomerUser::DB',
  Params => {
    # if you want to use an external database, add the
    # required settings
    # DSN => 'DBI:odbc:yourdsn',
    # Type => 'mssql', # only for ODBC connections
    # DSN => 'DBI:mysql:database=customerdb;host=customerdbhost',
    # User => '',
    # Password => '',
    Table => 'customer_user',
  },
  # customer unique id
  CustomerKey => 'login',
  # customer #
  CustomerID => 'customer_id',
  CustomerValid => 'valid_id',
  CustomerUserListFields => ['first_name', 'last_name', 'email'],
  CustomerUserSearchFields => ['login', 'last_name', 'customer_id'],
  CustomerUserSearchPrefix => '',
  CustomerUserSearchSuffix => '*',
  CustomerUserSearchListLimit => 250,
```

```

CustomerUserPostMasterSearchFields => ['email'],
CustomerUserNameFields => ['title','first_name','last_name'],
CustomerUserEmailUniqCheck => 1,
# # show not own tickets in customer panel, CompanyTickets
# CustomerUserExcludePrimaryCustomerID => 0,
# # generate auto logins
# AutoLoginCreation => 0,
# AutoLoginCreationPrefix => 'auto',
# # admin can change customer preferences
# AdminSetPreferences => 1,
# # cache time to live in sec. - cache any database queries
# CacheTTL => 0,
# # just a read only source
# ReadOnly => 1,
Map => [

# note: Login, Email und CustomerID werden benötigt!
# var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-link,
# readonly, http-link-target
[ 'UserTitle', 'Title', 'title', 1, 0, 'var', '', 0 ],
[ 'UserFirstname', 'Firstname', 'first_name', 1, 1, 'var', '', 0 ],
[ 'UserLastname', 'Lastname', 'last_name', 1, 1, 'var', '', 0 ],
[ 'UserLogin', 'Username', 'login', 1, 1, 'var', '', 0 ],
[ 'UserPassword', 'Password', 'pw', 0, 0, 'var', '', 0 ],
[ 'UserEmail', 'Email', 'email', 1, 1, 'var', '', 0 ],
[ 'UserCustomerID', 'CustomerID', 'customer_id', 0, 1, 'var', '', 0 ],
[ 'UserPhone', 'Phone', 'phone', 1, 0, 'var', '', 0 ],
[ 'UserFax', 'Fax', 'fax', 1, 0, 'var', '', 0 ],
[ 'UserMobile', 'Mobile', 'mobile', 1, 0, 'var', '', 0 ],
[ 'UserStreet', 'Street', 'street', 1, 0, 'var', '', 0 ],
[ 'UserZip', 'Zip', 'zip', 1, 0, 'var', '', 0 ],
[ 'UserCity', 'City', 'city', 1, 0, 'var', '', 0 ],
[ 'UserCountry', 'Country', 'country', 1, 0, 'var', '', 0 ],
[ 'UserComment', 'Comment', 'comments', 1, 0, 'var', '', 0 ],
[ 'ValidID', 'Valid', 'valid_id', 0, 1, 'int', '', 0 ],
],
# Standard-Auswahl
Selections => {
UserTitle => {
'Mr.' => 'Mr.',
'Mrs.' => 'Mrs.',
},
},
};

# 2. Kundenbenutzer-Backend: LDAP
# (Kundenbackend LDAP und die Einstellungen)
$self->{CustomerUser2} = {
Name => 'LDAP Datasource',
Module => 'Kernel::System::CustomerUser::LDAP',
Params => {
# ldap host
Host => 'bay.csuhayward.edu',
# ldap base dn
BaseDN => 'ou=seas,o=csuh',
# search scope (one|sub)
SSCOPE => 'sub',
# # Die folgenden 2 Zeilen sind gültig aber werden nur benötigt wenn
# # der anonyme Benutzer keinen Lesezugriff auf den LDAP-Tree hat
UserDN => '',
UserPw => '',
# Falls Sie einen Filter für die LDAP-Abfrage verwenden möchten benutzen Sie
# die Option. z.B.: AlwaysFilter => '(mail=*)' or AlwaysFilter => '(objectclass=user)'
AlwaysFilter => '',
# if both your frontend and your LDAP are unicode, use this:
# SourceCharset => 'utf-8',
# DestCharset => 'utf-8',
# if your frontend is e. g. iso-8859-1 and the character set of your
# ldap server is utf-8, use these options:
# SourceCharset => 'utf-8',
# DestCharset => 'iso-8859-1',

```

```
# Net::LDAP Parameter (Mehr Informationen unter perldoc Net::LDAP)
Params => {
  port => 389,
  timeout => 120,
  async => 0,
  version => 3,
},
},
# customer unique id
CustomerKey => 'uid',
# customer #
CustomerID => 'mail',
CustomerUserListFields => ['cn', 'mail'],
CustomerUserSearchFields => ['uid', 'cn', 'mail'],
CustomerUserSearchPrefix => '',
CustomerUserSearchSuffix => '*',
CustomerUserSearchListLimit => 250,
CustomerUserPostMasterSearchFields => ['mail'],
CustomerUserNameFields => ['givenname', 'sn'],
# show not own tickets in customer panel, CompanyTickets
CustomerUserExcludePrimaryCustomerID => 0,
# add a ldap filter for valid users (expert setting)
# CustomerValidFilter => '!(description=locked)',
# admin can't change customer preferences
AdminSetPreferences => 0,
Map => [
# note: Login, Email und CustomerID werden benötigt!
# var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-link,
# readonly
[ 'UserTitle', 'Title', 'title', 1, 0, 'var', '', 0 ],
[ 'UserFirstname', 'Firstname', 'givenname', 1, 1, 'var', '', 0 ],
[ 'UserLastname', 'Lastname', 'sn', 1, 1, 'var', '', 0 ],
[ 'UserLogin', 'Username', 'uid', 1, 1, 'var', '', 0 ],
[ 'UserEmail', 'Email', 'mail', 1, 1, 'var', '', 0 ],
[ 'UserCustomerID', 'CustomerID', 'mail', 0, 1, 'var', '', 0 ],
# [ 'UserCustomerIDs', 'CustomerIDs', 'second_customer_ids', 1, 0, 'var', '', 0 ],
[ 'UserPhone', 'Phone', 'telephonenumber', 1, 0, 'var', '', 0 ],
[ 'UserAddress', 'Address', 'postaladdress', 1, 0, 'var', '', 0 ],
[ 'UserComment', 'Comment', 'description', 1, 0, 'var', '', 0 ],
],
};
```

Es können bis zu 10 Kunden Back-ends gleichzeitig eingebunden werden. Über die Kundenverwaltung in OTRS ist der Zugriff auf die verschiedenen Back-ends möglich.

## 5.2.4. Speichern der Kundenbenutzerdaten in dynamischen Feldern.

Sometimes it can be useful to also store CustomerUser data directly in dynamic fields of a ticket, for example to create special statistics on this data.

The dynamic field values are set when a ticket is created or when the customer of a ticket is changed. The values of the dynamic fields are taken from the customer data. This works for all backends, but is especially useful for LDAP-backends.

To activate this optional feature of OTRS, please activate the settings "Ticket::EventModulePost###930-DynamicFieldFromCustomerUser" and "DynamicFieldFromCustomerUser::Mapping". The latter setting contains the configuration of which CustomerUser field entry should be stored in which ticket dynamic field. The fields must be present in the system and should be enabled for AgentTicketFreeText, so that they can be set manually. They mustn't be enabled for AgentTicketPhone, AgentTicketEmail and AgentTicketCustomer. If they were, they would have precedence over the automatically set values.



## 5.3. Backends für die Authentifizierung von Agenten und Kunden

OTRS bietet die Möglichkeit Agenten und Kunden über verschiedene Back-ends zu authentifizieren.

### 5.3.1. Authentifizierungs-Backends für Agenten

#### 5.3.1.1. Datenbank (Standard)

Das Backend für die Authentifizierung von Agenten, welches OTRS standardmäßig verwendet, ist die OTRS-Datenbank. Die Agenten können innerhalb des Admin-Bereiches in der Benutzerverwaltung angelegt und bearbeitet werden.

#### Beispiel 4.11. Agentenauthentifizierung gegen ein Datenbank-Backend

```
$Self->{'AuthModule'} = 'Kernel::System::Auth::DB';
```

#### 5.3.1.2. LDAP

Falls ein LDAP Verzeichnis mit Ihren Agenten-Benutzerdaten verfügbar ist, können Sie das LDAP Modul für die Authentifizierung Ihrer Agenten nutzen. Dieses Modul greift nur lesend auf die Daten im LDAP Verzeichnis zu, d.h. die Daten können nicht mit OTRS bearbeitet werden, es können also keine Agenten mit Hilfe der Benutzerverwaltung von OTRS angelegt oder bearbeitet werden.

#### Beispiel 4.12. Agentenauthentifizierung gegen ein LDAP Backend

```
# This is an example configuration for an LDAP auth. backend.
# (Make sure Net::LDAP is installed!)
$Self->{'AuthModule'} = 'Kernel::System::Auth::LDAP';
$Self->{'AuthModule::LDAP::Host'} = 'ldap.example.com';
$Self->{'AuthModule::LDAP::BaseDN'} = 'dc=example,dc=com';
$Self->{'AuthModule::LDAP::UID'} = 'uid';

# Check if the user is allowed to auth in a posixGroup
# (e. g. user needs to be in a group xyz to use otrs)
$Self->{'AuthModule::LDAP::GroupDN'} = 'cn=otrsallow,ou=posixGroups,dc=example,dc=com';
$Self->{'AuthModule::LDAP::AccessAttr'} = 'memberUid';
# for ldap posixGroups objectclass (just uid)
# $Self->{'AuthModule::LDAP::UserAttr'} = 'UID';
# for non ldap posixGroups objectclass (with full user dn)
# $Self->{'AuthModule::LDAP::UserAttr'} = 'DN';

# The following is valid but would only be necessary if the
# anonymous user do NOT have permission to read from the LDAP tree
$Self->{'AuthModule::LDAP::SearchUserDN'} = '';
$Self->{'AuthModule::LDAP::SearchUserPw'} = '';

# in case you want to add always one filter to each ldap query, use
# this option. e. g. AlwaysFilter => '(mail=*)' or AlwaysFilter => '(objectclass=user)'
$Self->{'AuthModule::LDAP::AlwaysFilter'} = '';

# in case you want to add a suffix to each login name, then
# you can use this option. e. g. user just want to use user but
# in your ldap directory exists user@domain.
# $Self->{'AuthModule::LDAP::UserSuffix'} = '@domain.com';

# Net::LDAP new params (if needed - for more info see perldoc Net::LDAP)
$Self->{'AuthModule::LDAP::Params'} = {
```

```
port => 389,
timeout => 120,
async => 0,
version => 3,
};
```

Mit den folgenden Konfigurationsparametern können die Benutzerdaten der Agenten aus dem LDAP in die lokale OTRS Datenbank synchronisiert werden. Dies reduziert die Zugriffe auf ihr LDAP Verzeichnis, entlastet den Server mit den LDAP Daten und beschleunigt die Anmeldung an OTRS. Die Synchronisierung der Daten findet bei der ersten Anmeldung des Agenten statt, trotz der synchronisierten Daten bleibt ihr LDAP Verzeichnis die letzte Instanz bei der Anmeldung. D.h. wird ein User im LDAP Verzeichnis gelöscht oder deaktiviert, klappt die Anmeldung an OTRS nicht. Ebenfalls müssen die Daten für einen Agenten weiterhin direkt im LDAP Verzeichnis gepflegt werden.

```
# defines AuthSyncBackend (AuthSyncModule) for AuthModule
# if this key exists and is empty, there won't be a sync.
# example values: AuthSyncBackend, AuthSyncBackend2
$Self->{'AuthModule::UseSyncBackend'} = 'AuthSyncBackend';

# agent data sync against ldap
$Self->{'AuthSyncModule'} = 'Kernel::System::Auth::Sync::LDAP';
$Self->{'AuthSyncModule::LDAP::Host'} = 'ldap://ldap.example.com/';
$Self->{'AuthSyncModule::LDAP::BaseDN'} = 'dc=otrs, dc=org';
$Self->{'AuthSyncModule::LDAP::UID'} = 'uid';
$Self->{'AuthSyncModule::LDAP::SearchUserDN'} = 'uid=sys, ou=user, dc=otrs, dc=org';
$Self->{'AuthSyncModule::LDAP::SearchUserPw'} = 'some_pass';
$Self->{'AuthSyncModule::LDAP::UserSyncMap'} = {
    # DB -> LDAP
    UserFirstname => 'givenName',
    UserLastname  => 'sn',
    UserEmail     => 'mail',
};
[...]

# AuthSyncModule::LDAP::UserSyncInitialGroups
# (sync following group with rw permission after initial create of first agent
# login)
$Self->{'AuthSyncModule::LDAP::UserSyncInitialGroups'} = [
    'users',
];
```

*Skript: Synchronisation der Benutzerdaten aus dem LDAP-Verzeichnis in die OTRS-Datenbank.*

### 5.3.1.3. HTTPBasicAuth für Agenten

Falls Sie eine "single sign on"-Lösung für Ihre Agenten implementieren möchten, benutzen Sie http basic authentication (für alle Ihre Systeme) und aktivieren Sie das HTTPBasicAuth Modul.

#### Beispiel 4.13. Agentenauthentifizierung über HTTPBasic

```
# This is an example configuration for an apache ($ENV{REMOTE_USER})
# auth. backend. Use it if you want to have a single login through
# apache http-basic-auth
$Self->{'AuthModule'} = 'Kernel::System::Auth::HTTPBasicAuth';

# Note:
#
# If you use this module, you should use as fallback
# the following configuration settings if the user is not authorized
# apache ($ENV{REMOTE_USER})
$Self->{'LoginURL'} = 'http://host.example.com/not-authorized-for-otrs.html';
$Self->{'LogoutURL'} = 'http://host.example.com/thanks-for-using-otrs.html';
```

### 5.3.1.4. Radius

Mit den folgenden Einstellungen kann die Authentifizierung von Agenten gegen einen Radius-Server realisiert werden.

#### Beispiel 4.14. Agentenauthentifizierung gegen ein Radius-Backend

```
# This is example configuration to auth. agents against a radius server
$self->{'AuthModule'} = 'Kernel::System::Auth::Radius';
$self->{'AuthModule::Radius::Host'} = 'radiushost';
$self->{'AuthModule::Radius::Password'} = 'radiussecret';
```

## 5.3.2. Authentifizierungs-Backends für Kunden

### 5.3.2.1. Datenbank (Standard)

Das Backend für die Authentifizierung von Kunden, welches OTRS standardmäßig verwendet, ist die OTRS-Datenbank. Die Kundendaten können über das Interface zur Verwaltung von Kunden angelegt und bearbeitet werden.

#### Beispiel 4.15. Kundenauthentifizierung gegen ein Datenbank-Backend

```
# This is the auth. module against the otrs db
$self->{'Customer::AuthModule'} = 'Kernel::System::CustomerAuth::DB';
$self->{'Customer::AuthModule::DB::Table'} = 'customer_user';
$self->{'Customer::AuthModule::DB::CustomerKey'} = 'login';
$self->{'Customer::AuthModule::DB::CustomerPassword'} = 'pw';
$self->{'Customer::AuthModule::DB::DSN'} =
  "DBI:mysql:database=customerdb;host=customerdbhost";
$self->{'Customer::AuthModule::DB::User'} = "some_user";
$self->{'Customer::AuthModule::DB::Password'} = "some_password";
```

### 5.3.2.2. LDAP

Falls ein LDAP Verzeichnis mit Ihren Kundenbenutzern verfügbar ist, können Sie das LDAP Modul für die Authentifizierung Ihrer Kunden nutzen. Dieses Modul greift nur lesend auf die Daten im LDAP Verzeichnis zu, d.h. die Daten können nicht mit OTRS bearbeitet werden, es können also keine Kunden mit Hilfe der Kundenverwaltung von OTRS angelegt oder bearbeitet werden.

#### Beispiel 4.16. Kundenauthentifizierung gegen ein LDAP Backend

```
# This is an example configuration for an LDAP auth. backend.
# (make sure Net::LDAP is installed!)
$self->{'Customer::AuthModule'} = 'Kernel::System::CustomerAuth::LDAP';
$self->{'Customer::AuthModule::LDAP::Host'} = 'ldap.example.com';
$self->{'Customer::AuthModule::LDAP::BaseDN'} = 'dc=example,dc=com';
$self->{'Customer::AuthModule::LDAP::UID'} = 'uid';

# Check if the user is allowed to auth in a posixGroup
# (e. g. user needs to be in a group xyz to use otrs)
$self->{'Customer::AuthModule::LDAP::GroupDN'} =
  'cn=otrsallow,ou=posixGroups,dc=example,dc=com';
$self->{'Customer::AuthModule::LDAP::AccessAttr'} = 'memberUid';
# for ldap posixGroups objectclass (just uid)
$self->{'Customer::AuthModule::LDAP::UserAttr'} = 'UID';
# for non ldap posixGroups objectclass (full user dn)
$self->{'Customer::AuthModule::LDAP::UserAttr'} = 'DN';

# The following is valid but would only be necessary if the
# anonymous user does NOT have permission to read from the LDAP tree
```

```

$Self->{'Customer::AuthModule::LDAP::SearchUserDN'} = '';
$Self->{'Customer::AuthModule::LDAP::SearchUserPw'} = '';

# in case you want to add always one filter to each ldap query, use
# this option. e. g. AlwaysFilter => '(mail=*)' or AlwaysFilter => '(objectclass=user)'
$Self->{'Customer::AuthModule::LDAP::AlwaysFilter'} = '';

# in case you want to add a suffix to each customer login name, then
# you can use this option. e. g. user just want to use user but
# in your ldap directory exists user@domain.
#$Self->{'Customer::AuthModule::LDAP::UserSuffix'} = '@domain.com';

# Net::LDAP new params (if needed - for more info see perldoc Net::LDAP)
$Self->{'Customer::AuthModule::LDAP::Params'} = {
    port => 389,
    timeout => 120,
    async => 0,
    version => 3,
};

```

### 5.3.2.3. HTTPBasicAuth für Kunden

Falls Sie eine "single sign on"-Lösung für Ihre Kunden implementieren möchten, benutzen Sie HTTPBasic Authentication (für alle Ihre Systeme) und aktivieren Sie das HTTPBasicAuth Modul (kein OTRS-Login mehr benötigt).

#### Beispiel 4.17. Kundenauthentifizierung über HTTPBasic

```

# This is an example configuration for an apache ($ENV{REMOTE_USER})
# auth. backend. Use it if you want to have a single login through
# apache http-basic-auth
$Self->{'Customer::AuthModule'} = 'Kernel::System::CustomerAuth::HTTPBasicAuth';

# Note:
# If you use this module, you should use the following
# config settings as fallback, if user isn't login through
# apache ($ENV{REMOTE_USER})
$Self->{'CustomerPanelLoginURL'} = 'http://host.example.com/not-authorized-for-otrs.html';
$Self->{'CustomerPanelLogoutURL'} = 'http://host.example.com/thanks-for-using-otrs.html';

```

### 5.3.2.4. Radius

Mit den folgenden Einstellungen kann die Authentifizierung von Kunden gegen einen Radius-Server realisiert werden.

#### Beispiel 4.18. Kundenauthentifizierung gegen ein Radius-Backend

```

# This is a example configuration to auth. customer against a radius server
$Self->{'Customer::AuthModule'} = 'Kernel::System::Auth::Radius';
$Self->{'Customer::AuthModule::Radius::Host'} = 'radiushost';
$Self->{'Customer::AuthModule::Radius::Password'} = 'radiussecret';

```

## 5.4. Kunden-Selbstregistrierung anpassen

Es ist möglich, die Kunden-Selbstregistrierung für neue Kunden über "customer.pl" anzupassen. Somit können Sie mehr optionale oder benötigte Felder (z. B. Adresse, Ort, Telefonnummer) hinzufügen.

In folgenden Beispiel wird ein benötigtes Feld für die Raumnummer hinzugefügt.

### 5.4.1. Anpassen der Weboberfläche

Damit im Webinterface das zusätzliche Feld für die Raumnummer angezeigt wird, muss die zuständige dtl-Datei angepasst werden. Editieren Sie Kernel/Output/HTML/Standard/CustomerLogin.dtl und fügen Sie das gewünschte Feld hinzu.

```
[...]
<div class="NewLine">
  <label for="Room">${Text{"Room{CustomerUser}}}</label>
  <input title="${Text{"Room Number"}}" name="Room" type="text" id="UserRoom"
  maxLength="50" />
</div>
[...]
```

Skript: Anzeigen eines neuen Feldes in der Weboberfläche.

## 5.4.2. Kunden-Mapping

Zusätzlich muss das Kunden-Mapping um den Eintrag für die Raumnummer erweitert werden. Dazu werden zuerst die Einstellungen für "CustomerUser" aus der Datei Kernel/Config/Defaults.pm in die Datei Kernel/Config.pm übertragen. Anschließend wird das Kunden-Mapping um das Raumnummer-Feld erweitert.

```
# CustomerUser
# (customer database backend and settings)
$self->{CustomerUser} = {
  Name => 'Database Backend',
  Module => 'Kernel::System::CustomerUser::DB',
  Params => {
    # if you want to use an external database, add the
    # required settings
    # DSN => 'DBI:odbc:yourdsn',
    # Type => 'mssql', # only for ODBC connections
    # DSN => 'DBI:mysql:database=customerdb;host=customerdbhost',
    # User => '',
    # Password => '',
    # Table => 'customer_user',
  },
  # customer unique id
  CustomerKey => 'login',
  # customer #
  CustomerID => 'customer_id',
  CustomerValid => 'valid_id',
  CustomerUserListFields => ['first_name', 'last_name', 'email'],
  # CustomerUserListFields => ['login', 'first_name', 'last_name', 'customer_id', 'email'],
  CustomerUserSearchFields => ['login', 'last_name', 'customer_id'],
  CustomerUserSearchPrefix => '',
  CustomerUserSearchSuffix => '*',
  CustomerUserSearchListLimit => 250,
  CustomerUserPostMasterSearchFields => ['email'],
  CustomerUserNameFields => ['title', 'first_name', 'last_name'],
  CustomerUserEmailUniqCheck => 1,
  # show not own tickets in customer panel, CompanyTickets
  # CustomerUserExcludePrimaryCustomerID => 0,
  # generate auto logins
  # AutoLoginCreation => 0,
  # AutoLoginCreationPrefix => 'auto',
  # admin can change customer preferences
  # AdminSetPreferences => 1,
  # cache time to live in sec. - cache database queries
  # CacheTTL => 0,
  # just a read only source
  # ReadOnly => 1,
  Map => [
    # note: Login, Email and CustomerID needed!
    # var, frontend, storage, shown (1=always,2=lite), required, storage-type, http-
    link, readonly, http-link-target
    [ 'UserTitle',      'Title',      'title',      1, 0, 'var', '', 0 ],
    [ 'UserFirstname', 'Firstname',  'first_name', 1, 1, 'var', '', 0 ],
    [ 'UserLastname',  'Lastname',  'last_name',  1, 1, 'var', '', 0 ],
    [ 'UserLogin',     'Username',  'login',      1, 1, 'var', '', 0 ],
    [ 'UserPassword',  'Password',  'pw',         0, 0, 'var', '', 0 ],
    [ 'UserEmail',     'Email',     'email',      1, 1, 'var', '', 0 ],
  ],
};
```

```

    [ 'UserCustomerID', 'CustomerID', 'customer_id', 0, 1, 'var', '', 0 ],
    [ 'UserPhone',      'Phone',      'phone',      1, 0, 'var', '', 0 ],
    [ 'UserFax',        'Fax',        'fax',        1, 0, 'var', '', 0 ],
    [ 'UserMobile',     'Mobile',     'mobile',     1, 0, 'var', '', 0 ],
    [ 'UserRoom',       'Room',       'room',       1, 0, 'var', '', 0 ],
    [ 'UserStreet',     'Street',     'street',     1, 0, 'var', '', 0 ],
    [ 'UserZip',        'Zip',        'zip',        1, 0, 'var', '', 0 ],
    [ 'UserCity',       'City',       'city',       1, 0, 'var', '', 0 ],
    [ 'UserCountry',    'Country',    'country',    1, 0, 'var', '', 0 ],
    [ 'UserComment',    'Comment',    'comments',   1, 0, 'var', '', 0 ],
    [ 'ValidID',        'Valid',      'valid_id',   0, 1, 'int', '', 0 ],
  ],
  # default selections
  Selections => {
    UserTitle => {
      'Mr.' => 'Mr.',
      'Mrs.' => 'Mrs.',
    },
  },
};

```

*Skript: Anpassung des MAP-Arrays.*

### 5.4.3. Anpassen der Kunden-Tabelle in der OTRS-Datenbank

Abschließend muss eine neue Spalte zur "customer\_user" Tabelle in der OTRS Datenbank hinzugefügt werden, in der die Raumnummer gespeichert werden kann.

```

linux:~# mysql -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 6 to server version: 5.0.18-Debian_7-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> use otrs;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> ALTER TABLE customer_user ADD room VARCHAR (200);
Query OK, 3 rows affected (0.01 sec)
Records: 3 Duplicates: 0 Warnings: 0

mysql> quit
Bye
linux:~#

```

*Skript: Hinzufügen einer neuen Spalte zur Tabelle customer\_user.*

Now the new field for the room should be displayed in the Customer Information panel if filled, and in the Customer User administration screens. Also, new customers should have to insert their room number if they register a new account. If you use OTRS on Microsoft IIS, you should restart the web server to activate the changes made in Config.pm.

## 6. Ticket-Einstellungen

### 6.1. Ticket Status

#### 6.1.1. Vordefinierte Ticket-Status

OTRS erlaubt es Ihnen, die Ticket-Status zu verändern oder neue Status hinzuzufügen. Hierbei gibt es zwei wichtige Optionen: den Namen des Status und Typ des Status.

Die standardmäßig voreingestellten Status lauten: 'neu', 'offen', 'erfolgreich geschlossen', 'erfolglos geschlossen', 'merged', 'entfernt', 'warten auf erfolgreich schließen', 'warten auf erfolglos schließen' und 'warten zur Erinnerung'.

#### **6.1.1.1. Neu**

Tickets sind normalerweise nur in diesem Status, wenn sie von eingehenden E-Mails neu erzeugt werden.

#### **6.1.1.2. Öffnen**

Der Standardstatus für Tickets, die Queues und Agents zugeordnet sind.

#### **6.1.1.3. Warten zur Erinnerung**

Nachdem die Wartezeit abgelaufen ist, erhält der Ticketbesitzer eine E-Mail zu dem Ticket. Wenn es nicht gesperrt ist, wird die Erinnerung an alle Agenten der Queue verschickt. Erinnerungs-Benachrichtigungen werden nur innerhalb der Arbeitszeiten versendet, und werden alle 24 Stunden wiederholt, bis der Status des Tickets vom Agenten verändert wird. Die Zeit, die dieses Ticket in diesem Status verbringt, wird dennoch bei der Berechnung der Eskalationszeiten einbezogen.

#### **6.1.1.4. Warten auf erfolglos schließen**

Wenn die Wartezeit abgelaufen ist, wird das Ticket auf "erfolglos geschlossen" gesetzt. Die Zeit, die dieses Ticket in diesem Status verbringt, wird dennoch bei der Berechnung der Eskalationszeiten einbezogen.

#### **6.1.1.5. Warten auf erfolgreich schließen**

Wenn die Wartezeit abgelaufen ist, wird das Ticket auf "erfolgreich geschlossen" gesetzt. Die Zeit, die dieses Ticket in diesem Status verbringt, wird dennoch bei der Berechnung der Eskalationszeiten einbezogen.

#### **6.1.1.6. Zusammengefügt**

Status von Tickets, die mit anderen Tickets zusammengefügt wurden.

#### **6.1.1.7. Erfolgreich geschlossen**

Endstatus für Tickets, die erfolgreich gelöst werden konnten. Je nach Konfiguration kann es unmöglich sein, geschlossene Tickets wieder zu eröffnen.

#### **6.1.1.8. Erfolglos geschlossen**

Endstatus für Tickets, die NICHT erfolgreich gelöst werden konnten. Je nach Konfiguration kann es unmöglich sein, geschlossene Tickets wieder zu eröffnen.

### **6.1.2. Anpassen von Ticket-Status**

Jeder Status besteht aus einem Namen ("state-name") und einem Typen ("state-type"). Der Name ist frei wählbar und kann über das Admin-Interface von OTRS angepasst werden, die Statustypen müssen direkt in der Datenbank geändert werden. Letzteres wird jedoch nicht empfohlen und kann zu unerwarteten Ergebnissen führen. Z. B. hängen die Berechnung der Eskalationszeiten und auch die Funktion zum automatischen Entsperrern von Tickets von bestimmten Statustypen ab.

Im Admin-Interface können Sie innerhalb der Einstellungen für "Status" neue Status für die vorhandenen Statustypen hinzufügen oder ändern. Beachten Sie, dass Sie bei Änderungen am Status "neu - new" auch die entsprechenden Änderungen in der Konfigura-



tionsdateiKernel/Config.pm bzw. mit Hilfe des grafischen Konfigurations-Front-End vornehmen müssen. Folgende Änderungen müssen für einen geänderten "neu"-Status vorgenommen werden:

```
[...]
# PostmasterDefaultState
# (The default state of new tickets.) [default: new]
$self->{PostmasterDefaultState} = 'new';

# CustomerDefaultState
# (default state of new customer tickets)
$self->{CustomerDefaultState} = 'new';
[...]
```

*Skript: Anpassung der Einstellungen von Kernel/Config.pm.*

Möchten Sie einen neuen Statustyp hinzufügen, müssen Sie zuerst die ticket\_status-type-Tabelle in der OTRS Datenbank mit Hilfe eines entsprechenden Datenbankclient anpassen.

```
linux:~# mysql -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 23 to server version: 5.0.16-Debian_1-log

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> use otrs;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> insert into ticket_state_type (name,comments) values ('own','Own
state type');
Query OK, 1 row affected (0.00 sec)

mysql> quit
Bye
linux:~#
```

*Skript: Anpassung der Statustypen.*

Nun können Sie den neuen Statustyp verwenden. Nachdem ein Status mit diesem Statustyp verknüpft wurde, muss auch die OTRS-Konfiguration angepasst werden, damit der neue Status korrekt verwendet werden kann. Passen Sie die Folgenden Optionen in der SysConfig an:

Ticket -> Frontend::Agent::Ticket::ViewPhoneNew > AgentTicketPhone###StateDefault - um den vorgegebenen nächsten Status für neue Telefon-Tickets zu definieren.

Ticket -> Frontend::Agent::Ticket::ViewPhoneNew > AgentTicketPhone###StateType - um die verfügbaren nächsten Status für neue Telefon-Tickets zu definieren.

Ticket -> Frontend::Agent::Ticket::ViewEmailNew > AgentTicketEmail###StateDefault - um den standardmäßigen 'Nächsten Status des Tickets' für E-Mailtickets zu definieren.

Ticket -> Frontend::Agent::Ticket::ViewEmailNew > AgentTicketEmail###StateType - um die verfügbaren 'Nächsten Status' für neue E-Mailtickets zu definieren.

Ticket -> Frontend::Agent::Ticket::ViewPhoneOutbound > AgentTicketPhoneOutbound###State - um den standardmäßigen 'Nächsten Status des Tickets' für neue Artikel in Telefontickets zu definieren.

Ticket -> Frontend::Agent::Ticket::ViewEmailNew > AgentTicketEmail###StateType - um die verfügbaren 'Nächsten Status' für neue Artikel in Telefontickets zu definieren.

Ticket -> Frontend::Agent::Ticket::ViewMove > AgentTicketMove###State - um den Standard-Status für Tickets zu definieren, wenn ein Ticket verschoben wird.

Ticket -> Frontend::Agent::Ticket::ViewMove > AgentTicketMove###StateType - um die verfügbaren nächsten Status eines Tickets zu definieren, wenn ein Ticket verschoben wird.

Ticket -> Frontend::Agent::Ticket::ViewBounce > StateDefault - um den Standard-Status für Tickets zu definieren, wenn ein Ticket weitergeleitet wird.

Ticket -> Frontend::Agent::Ticket::ViewBounce > StateType - um die verfügbaren nächsten Status eines Tickets zu definieren, wenn ein Ticket weitergeleitet wird.

Ticket -> Frontend::Agent::Ticket::ViewBulk > StateDefault - um den Standard-Status für Tickets zu definieren, wenn eine Sammelaktion durchgeführt wird.

Ticket -> Frontend::Agent::Ticket::ViewBulk > StateType - um die verfügbaren nächsten Status eines Tickets zu definieren, wenn eine Sammelaktion durchgeführt wird.

Ticket -> Frontend::Agent::Ticket::ViewClose > StateDefault - um den Standard-Status für Tickets zu definieren, wenn ein Ticket geschlossen werden soll.

Ticket -> Frontend::Agent::Ticket::ViewClose > StateType - um die verfügbaren nächsten Status eines Tickets zu definieren, wenn ein Ticket geschlossen werden soll.

Ticket -> Frontend::Agent::Ticket::ViewCompose > StateDefault - um den Standard-Status für Tickets zu definieren, wenn auf ein Ticket geantwortet (AgentTicketCompose) werden soll.

Ticket -> Frontend::Agent::Ticket::ViewCompose > StateType - um die verfügbaren nächsten Status eines Tickets zu definieren, wenn auf ein Ticket geantwortet (AgentTicketCompose) werden soll.

Ticket -> Frontend::Agent::Ticket::ViewForward > StateDefault - um den Standard-Status für Tickets zu definieren, wenn ein Ticket weitergeleitet werden soll.

Ticket -> Frontend::Agent::Ticket::ViewForward > StateType - um die verfügbaren nächsten Status eines Tickets zu definieren, wenn ein Ticket weitergeleitet werden soll.

Ticket -> Frontend::Agent::Ticket::ViewForward > StateDefault - um den Standard-Status für Tickets in der Oberfläche 'Freie Felder' zu definieren,

Ticket -> Frontend::Agent::Ticket::ViewForward > StateType - um die verfügbaren nächsten Status eines Tickets in der Oberfläche 'Freie Felder' zu definieren.

Ticket -> Core::PostMaster > PostmasterDefaultState - um den Status von Tickets zu definieren, die aus E-Mails erstellt wurden.

Ticket -> Core::PostMaster > PostmasterFollowUpState - um den Status von Tickets festzulegen, nachdem ein Follow-Up eingegangen ist.

Ticket -> Core::PostMaster > PostmasterFollowUpStateClosed - um den Status von bereits geschlossenen Tickets festzulegen, nachdem ein Follow-Up eingegangen ist.

Ticket -> Core::Ticket > ViewableStateType - um die Statustypen festzulegen, die in verschiedenen Bereichen des Systems angezeigt werden, z. B. in der Queue-Ansicht.

Ticket -> Core::Ticket > UnlockStateType - um die verfügbaren Statustypen für entspernte Tickets zu definieren.

Ticket -> Core::Ticket > PendingReminderStateType - um den Statustyp für Erinnerungstickets festzulegen.

Ticket -> Core::Ticket > PendingAutoStateType - um den Statustyp für Tickets mit "Warten Auto" festzulegen.

Ticket -> Core::Ticket > StateAfterPending - um den Status zu definieren, auf welchen Tickets, deren "Warten Auto"-Timer des eingestellten Status abgelaufen ist, gesetzt werden.

## 6.2. Ticket Prioritäten

OTRS enthält 5 vordefinierte Ticketprioritäten, die mit dem "Prioritäten"-Modul im Administrationsbereich verwaltet werden können. Wenn Sie eine angepasste Prioritätenliste erstellen, bedenken Sie bitte, dass diese in der Prioritätsauswahl-Liste alphabetisch sortiert dargestellt werden. In der Queue-Ansicht ordnet OTRS die Prioritäten nach internen Datenbank-IDs.

### Anmerkung

In OTRS können Prioritäten deaktiviert, aber nicht gelöscht werden. Wenn Sie eine Priorität deaktivieren wollen, setzen Sie den Wert für "Gültig" auf "ungültig" oder "ungültig-temporär".

### Wichtig

Wenn eine Priorität hinzugefügt oder geändert wurde, müssen Sie ggf. einige Werte in der SysConfig anpassen:

- Ticket:Core::Postmaster::PostmasterDefaultPriority - definiert die Standard-Priorität für alle eingehenden E-Mails.
- Ticket:Frontend::Agent:Ticket::ViewPhoneNew:Priority - definiert die Standard-Priorität in der Oberfläche 'Neues Telefonticket' für Agenten.
- Ticket:Frontend::Agent:Ticket::ViewEmailNew:Priority - definiert die Standard-Priorität in der Oberfläche 'Neues E-Mailticket' für Agenten.
- Ticket:Frontend::Customer:Ticket::ViewNew:PriorityDefault - definiert die Standard-Priorität in der Oberfläche 'Neues Ticket' im Kunden-Interface.

## 6.3. Ticket-Verantwortlicher und Beobachten von Tickets

Seit OTRS 2.1 kann zusätzlich zum Besitzer ein Verantwortlicher für das Ticket festgelegt werden. Zudem können alle Aktivitäten rund um das Ticket auch von jemand anderem als dem Besitzer beobachtet werden. Diese beiden Funktionalitäten sind mit den TicketResponsible- und dem TicketWatcher-Funktionen implementiert, und erleichtern das Zuweisen von Aufgaben und die Arbeit in hierarchischen Teamstrukturen.

### 6.3.1. Ticket-Verantwortlicher

Die Funktion "Verantwortlicher" eines Tickets macht es möglich, das Ticket einem anderen als dem aktuellen Besitzer zur Bearbeitung zu übergeben. Ein Benutzer, der ein Ticket gesperrt hat, kann es einem anderen Agenten, der nicht der Ticketbesitzer ist, zur Beantwortung übergeben. Nach der Bearbeitung kann der erste Benutzer die Ticketverantwortung vom zweiten wieder entfernen.

Mit dem Konfigurationsparameter Ticket::Responsible kann die Funktion TicketResponsible aktiviert werden. Dadurch werden 3 neue Icons in ihrer Toolbar erscheinen.

Die Ticketverantwortung kann übergeben werden, indem das Ticket aufgerufen und die Funktion "Verantwortlicher" in der Aktionsleiste genutzt wird.

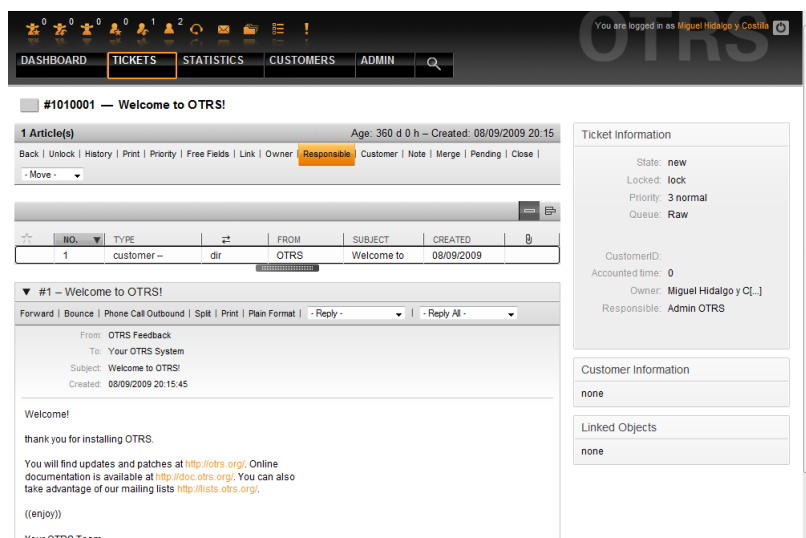


Abb.: Verantwortlichen eines Tickets ändern.

Nach dem Klick auf "Verantwortlicher" öffnet sich ein Popup-Fenster, in dem die Änderung durchgeführt werden kann. Damit kann auch dem neuen verantwortlichen Benutzer eine Nachricht geschickt werden.

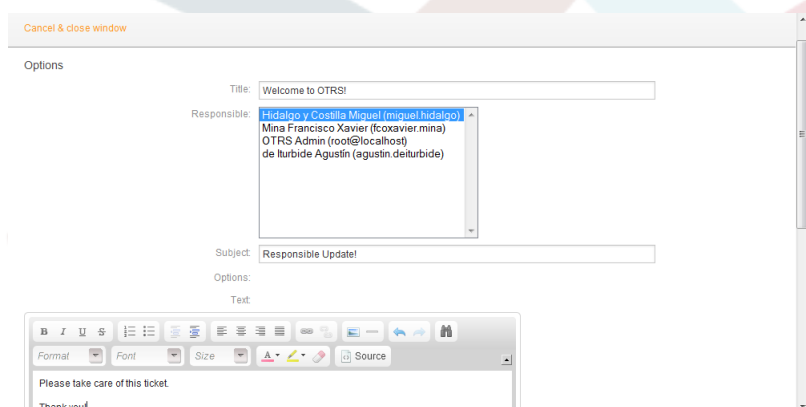


Abb.: Popup-Dialog zum Ändern des Ticket-Verantwortlichen.

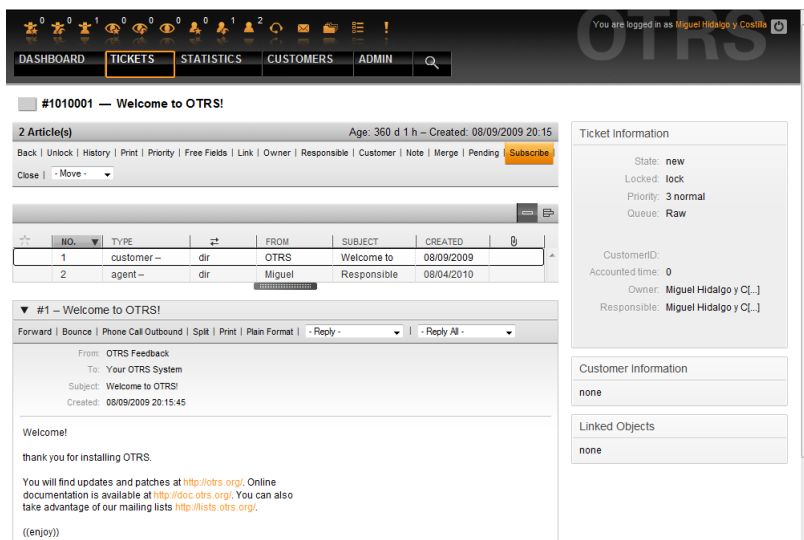
Die Liste aller Tickets, für die ein Benutzer verantwortlich ist, kann durch die Ansicht "Verantwortliche Tickets" eingesehen werden. Diese kann über 3 Icons in der Toolbar aufgerufen werden, sobald das TicketResponsible-Feature aktiviert wird.

## 6.3.2. Tickets beobachten

Sollen innerhalb des Ticket-Systems lediglich bestimmte Tickets z. B. von einem Abteilungsleiter beobachtet und nicht selbst bearbeitet werden, so kann dies seit OTRS 2.1 mit Hilfe des TicketWatcher-Features realisiert werden.

The TicketWatcher feature can be activated with the configuration parameter Ticket::Watcher which adds new links to your actions toolbar. Using Ticket::WatcherGroup, one or more user groups with permission to watch tickets can also be defined.

Um ein Ticket zu beobachten, muss der Inhalt des Tickets aufgerufen und im Menü für die verschiedenen Aktionen für das Ticket der "Beobachten"-Schalter betätigt werden.



OTRS Dashboard: TICKETS, STATISTICS, CUSTOMERS, ADMIN

#1010001 — Welcome to OTRS!

2 Article(s) Age: 360 d 1 h — Created: 08/09/2009 20:15

Back | Unlock | History | Print | Priority | Free Fields | Link | Owner | Responsible | Customer | Note | Merge | Pending | **Subscribe**

NO.	TYPE	FROM	SUBJECT	CREATED
1	customer--	dir	OTRS	Welcome to 08/09/2009
2	agent--	dir	Miguel	Responsible 08/04/2010

Ticket Information

State: new  
 Locked: lock  
 Priority: 3 normal  
 Queue: Raw

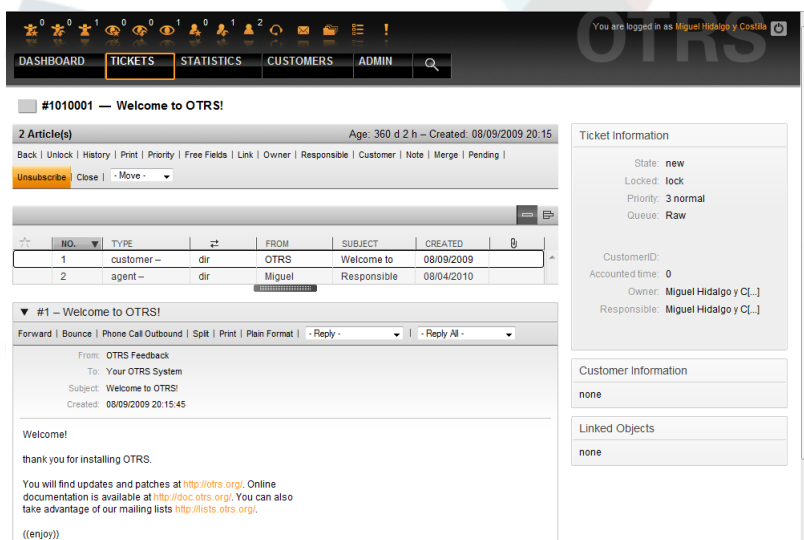
CustomerID: Accounted time: 0  
 Owner: Miguel Hidalgo y C[...]  
 Responsible: Miguel Hidalgo y C[...]

Customer Information: none

Linked Objects: none

Abb.: Ticket beobachten.

Die Beobachtung eines Tickets wird aufgehoben, indem in der Inhaltsanzeige eines Tickets im Menü für die möglichen Aktionen der "Nicht beobachten"-Schalter gedrückt wird.



OTRS Dashboard: TICKETS, STATISTICS, CUSTOMERS, ADMIN

#1010001 — Welcome to OTRS!

2 Article(s) Age: 360 d 2 h — Created: 08/09/2009 20:15

Back | Unlock | History | Print | Priority | Free Fields | Link | Owner | Responsible | Customer | Note | Merge | Pending | **Unsubscribe**

NO.	TYPE	FROM	SUBJECT	CREATED
1	customer--	dir	OTRS	Welcome to 08/09/2009
2	agent--	dir	Miguel	Responsible 08/04/2010

Ticket Information

State: new  
 Locked: lock  
 Priority: 3 normal  
 Queue: Raw

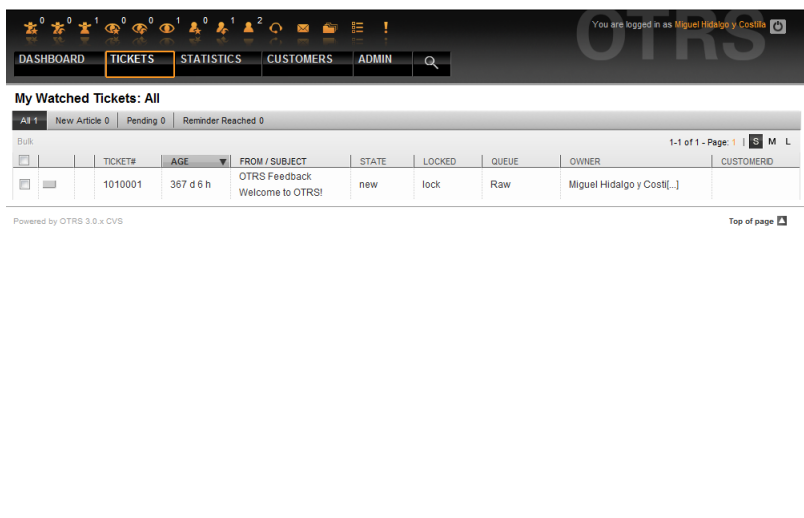
CustomerID: Accounted time: 0  
 Owner: Miguel Hidalgo y C[...]  
 Responsible: Miguel Hidalgo y C[...]

Customer Information: none

Linked Objects: none

Abb.: Ticket nicht mehr beobachten.

Die Liste aller zur Beobachtung ausgewählten Tickets wird über die Ansicht "Beobachtete Tickets" erreicht. Diese kann über 3 Icons in der Toolbar aufgerufen werden, sobald das TicketWatcher-Feature aktiviert wird.



TICKET#	AGE	FROM / SUBJECT	STATE	LOCKED	QUEUE	OWNER	CUSTOMERID
1010001	367 d 6 h	OTRS Feedback Welcome to OTRS!	new	lock	Raw	Miguel Hidalgo y Costi[...]	

Abb.: Ansicht "Beobachtete Tickets".

## 7. Zeitabhängige Funktionen in OTRS

### 7.1. Arbeitszeiten, Feiertage und Zeitzonen für das System festlegen

Some functions in OTRS, like escalations and automatic unlocking of tickets, depend on a proper configuration of business hours, time zones and holidays. You can define these via the SysConfig interface, in Framework > Core::Time. You can also specify different sets of business hours, holidays and time zones as separate 'Calendars' in Framework > Core::Time::Calendar1 through Framework > Core::Time::Calendar9. Calendars can be defined by queue settings, or on SLA levels. This means that, for example, you can specify a calendar with 5 x 8 business hours for your 'standard' SLA, but create a separate calendar with 7 x 24 support for your 'gold' SLA; as well as set a calendar for your 'Support-USA' queue with a different time window than your 'Support-Japan' queue. OTRS can handle up to 99 different calendars.

#### 7.1.1. Arbeitszeiten

Set up the working hours for your system in SysConfig Framework > Core::Time::TimeWorkingHours, or for your specific calendar in the calendar's configuration. OTRS can handle a granularity of one hour. Checking the marks in the boxes 8, 9, 10 ... 17 corresponds with business hours of 8 AM - 6 PM.

Nur während dieser Stunden können Tickets eskalieren, Benachrichtigungen zu Erinnerungs-Tickets versendet oder Tickets automatisch freigegeben werden. Weiterhin werden auch nur diese Stunden in die Berechnung der Eskalationszeit und der Zeit für die automatische Freigabe mit einbezogen.

#### 7.1.2. Feiertage mit festem Datum

Holidays that are on a fixed date every year, such as New Year's Day or the Fourth of July, can be specified in TimeVacationDays, or in the corresponding section for the calendars 1-9.

Während der hier festgelegten Tage werden keine zeitabhängigen Aktionen oder Berechnungen auf Tickets im System ausgeführt.



## Anmerkung

In OTRS sind die *deutschen* Feiertage voreingestellt.

### 7.1.3. TimeVacationDaysOneTime

Holidays such as Easter that do not have a yearly fixed date but instead vary each year, can be specified in TimeVacationDaysOneTime.

Während der hier festgelegten Tage werden keine zeitabhängigen Aktionen oder Berechnungen auf Tickets im System ausgeführt.

## Anmerkung

OTRS hat für diese Feiertage keine Voreinstellung. Sie müssen diese, wie z. B. Ostern, dem System also selbst bekannt machen.

## 7.2. Automatische Ticket-"Freigabe" (unlock)

Gesperrte Tickets können automatisch vom System freigegeben werden. Diese Funktion kann z. B. dann nützlich sein, wenn sich ein Agent im Urlaub befindet und noch Tickets gesperrt hat, die bearbeitet werden sollen / müssen. Dieses Feature entsperrt Tickets nach einer bestimmten Zeit, um sicherzustellen, dass gesperrte Tickets nicht vergessen werden und andere Agenten darauf zugreifen können.

Die Zeit, nach der gesperrte Tickets automatisch freigegeben werden, kann in den Einstellungen jeder Queue festgelegt werden. Mit Hilfe des Moduls `bin/otrs.UnlockTickets.pl`, das als cron-Job regelmäßig ausgeführt werden sollte, wird die automatische Freigabe von Tickets umgesetzt.

Benachrichtigungen für entsperrte Tickets werden nur zu den Benutzern versendet, die die jeweilige Queue in "Meine Queues" eingetragen und die Benachrichtigung für entsperrte Tickets in ihren persönlichen Einstellungen aktiviert haben.

Tickets werden entsperrt wenn folgende Bedingungen zutreffen:

- In der Queue des Tickets ist ein *Freigabe-Zeitintervall* definiert.
- Das Ticket ist *gesperrt*.
- Der Status des Tickets ist *offen*.

Die Freigabezeit wird zurückgesetzt, wenn ein Agent einen neuen externen Artikel zum Ticket hinzufügt. Das kann einer der folgenden Artikeltypen sein: *email-external*, *phone*, *fax*, *sms*, or *note-external*.

Die Freigabezeit wird auch zurückgesetzt, wenn der letzte Artikel von einem Agent stammt und dann der Kunde einen hinzufügt, per E-Mail oder Weboberfläche.

Zuletzt wird die Freigabezeit auch dann zurückgesetzt, wenn das Ticket einem anderen Agenten zugewiesen wird.

## 8. Anpassen der PDF-Ausgabe

Dieser Abschnitt behandelt die Einstellungen für die PDF-Druckausgabe von OTRS.

If you use the Print action from anywhere within the OTRS interface, it will generate a formatted PDF file. You can deactivate this by modifying the configuration parameter PDF to create HTML output instead.



You can adjust the look of the files generated by OTRS by creating your own logo and adding it to PDF::LogoFile. You can use PDF::PageSize to define the standard page size of the generated pdf file (DIN-A4 or Letter), and also PDF::MaxPage to specify the maximum number of pages for a pdf file, which is useful if a user generates a huge output file by mistake.

Für die Generierung von PDF-Dateien müssen die CPAN-Module PDF::API2 und Compress::Zlib installiert werden. Bei vielen Distributionen sind diese als Paket verfügbar und können bequem über den jeweiligen Paketmanager installiert werden, falls dies jedoch nicht möglich ist muss der direkte Weg über CPAN gewählt werden. Das Kapitel Installation der für OTRS benötigten Perl-Module beschreibt, wie die Installation der Perl-Module durchzuführen ist.

## 9. Statistikmodul

The OTRS stats module holds features to track operational statistics and generates customer reports associated with OTRS usage. The OTRS system uses the term "stat" generically to refer to a report presenting various indicators.

Eine sinnvolle Konfiguration des OTRS-Statistikmoduls ist verbunden mit einer Vielzahl von Anforderungen und Überlegungen. Darin eingeschlossen sind die auszuwertenden Module von OTRS, Benutzerrechte, zu berechnende Indikatoren und ihre Komplexitätsgrade, eine einfache Konfiguration des Statistikmoduls, Geschwindigkeit und Effizienz der Berechnungen, und die Unterstützung verschiedener Ausgabevarianten.

Um komplexe Statistiken abzubilden, besteht ferner die Möglichkeit statische Elemente zu integrieren (Dateien, die die Funktionalität des Statistik-Moduls um ganz spezifische Anforderungen ergänzen).

### 9.1. Bedienung des Moduls durch den Agent

When signed on as an agent, the navigation bar displays the link "Statistics", with various submenu options, as shown in Figure.

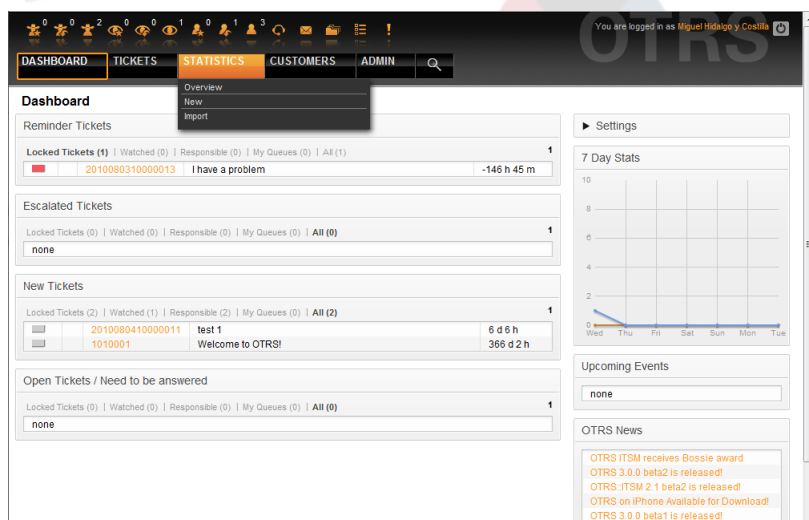


Abb.: Statistikmenü.

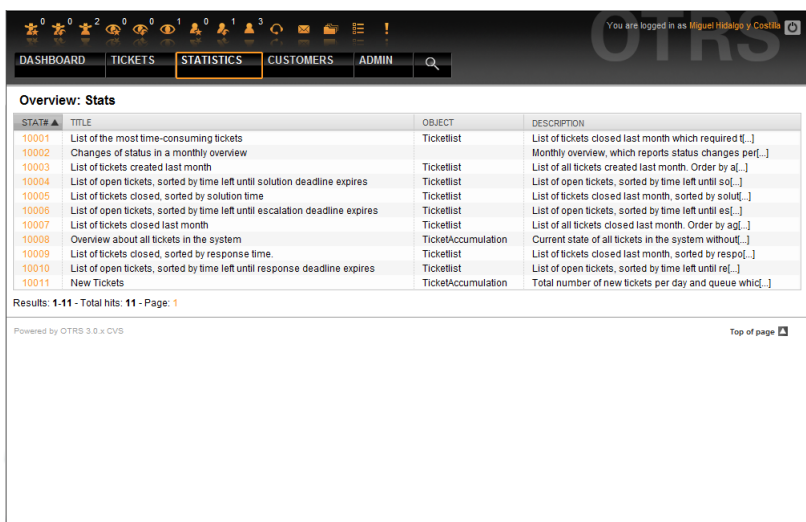
Folgende Optionen sind im Statistikmenü verfügbar:

- **Übersicht.** Zeigt eine Liste vorkonfigurierter Reports an.

- *Neu.* Benötigt "rw"-Rechte.
- *Importieren.* Benötigt "rw"-Rechte.

## 9.1.1. Übersicht

Die Auswahl von "Statistik" und des Unterpunktes "Übersicht" ruft den Übersichtsbildschirm auf. Hier wird dem Agenten eine Liste von vorkonfigurierten Reports präsentiert, die er verwenden kann.



STAT#	TITLE	OBJECT	DESCRIPTION
10001	List of the most time-consuming tickets	Ticketlist	List of tickets closed last month which required t...
10002	Changes of status in a monthly overview		Monthly overview, which reports status changes per...
10003	List of tickets created last month	Ticketlist	List of all tickets created last month. Order by a...
10004	List of open tickets, sorted by time left until solution deadline expires	Ticketlist	List of open tickets, sorted by time left until so...
10005	List of tickets closed, sorted by solution time	Ticketlist	List of tickets closed last month, sorted by solu...
10006	List of open tickets, sorted by time left until escalation deadline expires	Ticketlist	List of open tickets, sorted by time left until es...
10007	List of tickets closed last month	Ticketlist	List of all tickets closed last month. Order by ag...
10008	Overview about all tickets in the system	TicketAccumulation	Current state of all tickets in the system without...
10009	List of tickets closed, sorted by response time	Ticketlist	List of tickets closed last month, sorted by respo...
10010	List of open tickets, sorted by time left until response deadline expires	Ticketlist	List of open tickets, sorted by time left until res...
10011	New Tickets	TicketAccumulation	Total number of new tickets per day and queue whic...

Abb.: Übersicht der Standardstatistiken.

Folgende Informationen sind den in der Übersicht aufgelisteten Statistiken zu entnehmen:

- *Stat#.* Eindeutige Statistiknummer.
- *Titel.* Titel der Statistik.
- *Objekt.* Objekt, das für die Generierung der Statistik verwendet wird. Wenn es sich um eine statische Statistik handelt, wird kein Objekt angezeigt, da kein dynamisches Objekt zur Generierung verwendet wird.
- *Beschreibung.* Ein Auszug aus der Beschreibung der Statistik.

Wenn das Statistikmodul installiert ist, enthält es einige vorkonfigurierte Reports. Diese können in der Übersicht aufgerufen werden. Wenn die Liste zu lang für eine Seite wird, kann der Agent durch die verschiedenen Seiten blättern. Die Liste kann durch klick auf den Spaltenkopf wie gewünscht geordnet werden. Um einen bestimmten Report zu erzeugen, klicken Sie auf die Statistiknummer des Reports in der Übersicht. Dadurch gelangen Sie in die Ansichtsseite des Reports.

## 9.1.2. Ansehen und Generieren von Statistiken

Aufgabe der "Ansehen"-Oberfläche ist es, dem Agent einen Überblick über die Vorkonfiguration der Statistik zu ermöglichen.

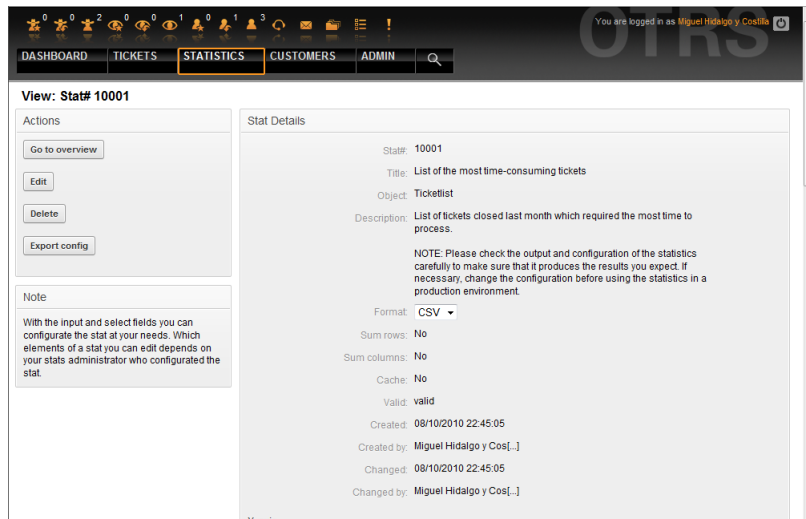


Abb.: Ansicht einer Statistik.

Konfigurationseinstellungen für einen Report können in den Optionen der Ansichtseite eingestellt werden. Der Ersteller des Reports und jeder Agent mit den benötigten Rechten kann diese Einstellungen vornehmen.

Konkret wird auf dieser Seite folgendes angezeigt:

- **Verfügbare Aktionen:**
  - *Zurück zur Übersicht.* Zurück zur Übersichtsliste der Reports.
  - *Bearbeiten.* Die aktuelle Statistik bearbeiten (benötigt "rw"-Rechte).
  - *Löschen.* Die aktuelle Statistik löschen (benötigt "rw"-Rechte).
  - *Konfiguration exportieren.* Exportieren einer Statistikkonfiguration mittels Dateidownload ("rw"-Rechte erforderlich).

Verwendung: Mittels der Export- und Importfunktionen können Statistiken bequem auf Testsystemen entworfen und getestet werden, um dann anschließend einfach in das Produktivsystem integriert zu werden.

- **Report-Details:**
  - *Statistik-Nr.* Die Nummer der Statistik.
  - *Titel.* Titel der Statistik.
  - *Objekt.* Objekt, das für die Generierung der Statistik verwendet wird.
  - *Beschreibung.* Ein Auszug aus der Beschreibung der Statistik.
  - *Format.* Ausgabeformat der Statistik. Hierbei stehen je nach Konfiguration folgende Ausgabeformate zur Verfügung:
    - CSV.
    - Drucken.
    - Liniendiagramm.
    - Balkendiagramm.

- Balkendiagramm (horizontal).
- Punktdiagramm
- Linienpunktdiagramm.
- Flächendiagramm.
- Tortendiagramm.
- *Grafikgröße*. Mögliche Größe der Grafik bzw. des Diagramms. Diese Auswahl bzw. Anzeige erscheint nur, wenn die Statistikvorkonfiguration ein Diagramm vorsieht bzw. ermöglicht. Alle generell verwendbaren Grafikgrößen werden durch den otrs-Admin in der SysConfig definiert. Beim Konfigurieren der Statistiken kann dann der Ersteller alle relevanten Formate vorselektieren.
- *Zeilensummierung*. Gibt an, ob die Statistik durch eine Spalte ergänzt wird, deren Zellen die Summe der jeweiligen Zeile darstellt.
- *Spaltensummierung*. Angabe, ob die Statistik durch eine Zeile ergänzt wird, deren Zellen die Summe der jeweiligen Spalte beinhaltet.
- *Cache*. Gibt an, ob die errechneten Statistiken im Dateisystem gecacht werden.
- *Gültig*. Ist eine vorkonfigurierte Statistik erst im Entstehen oder darf sie aus bestimmten Gründen temporär nicht mehr ausgeführt werden so wird das Element "Gültig" auf "ungültig" gesetzt. Ferner wird dadurch die Schaltfläche "Start" rechts unten am Ende des Block ausgeblendet. Ein Generieren der Statistik ist somit nicht möglich.
- *Erstellt*. Erstellungszeit der Statistik.
- *Erstellt von*. Agent, der die Statistik erstellt hat.
- *Geändert*. Letzte Änderungszeit der Statistik.
- *Geändert von*. Agent, der die Statistik zuletzt geändert hat.
- *X-Achse*. Diese Option erlaubt es dem Agenten, die X- und Y-Achsen zu vertauschen (Diese Funktion muss vom OTRS-Administrator freigeschaltet werden).
- Nach den allgemeinen Angaben sieht der Agent die Angaben zur eigentlichen Statistik. Hierbei kommen grundsätzlich zwei verschiedene Anzeigen zum Einsatz:
  - *Anzeige statischer Statistiken*. Statische Report-Generatoren können in die Statistik integriert werden (siehe unten).

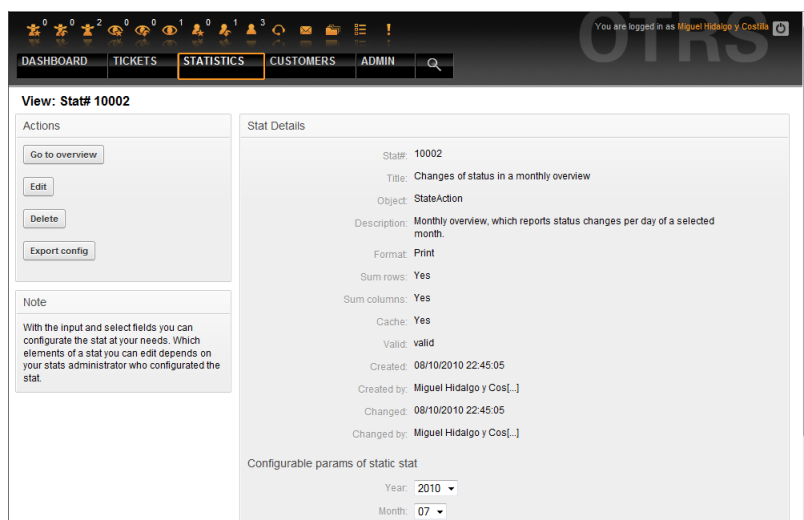


Abb.: Ansicht der statischen Statistik.

- **Anzeige dynamischer Statistiken** Dynamische Statistiken können auf zweierlei Weise angezeigt werden:
  - **Unveränderbare Einstellungen.** In diesem Fall hat der Ersteller der Statistik dem Agent, der eine Statistik generieren will, keinen Freiraum für Veränderungen gelassen.
  - **Veränderbare Einstellungen.** Bei derartigen Statistiken ist es dem Agent noch erlaubt die vorkonfigurierte Statistik zu verändern.

Um eine Statistik zu generieren, muss abschließend lediglich der "Start"-Button am rechten unteren Ende des Blocks gedrückt werden. Sollte einmal der "Start"-Button nicht sichtbar sein, kann dies zwei Ursachen haben:

1. die Statistik wurde auf ungültig gesetzt und damit deaktiviert.
2. die Statistik wurde nicht sauber konfiguriert und ist noch nicht lauffähig. Ist dies der Fall, findet man die nötigen Informationen im Notification-Bereich von OTRS (unterhalb der Navigationsleiste).

Bei falschen Einstellungen auf der Ansichtseite wird nach Drücken des "Start"-Button wieder die Ansichtseite gezeigt und im Notificationbereich darauf hingewiesen, welche Eingaben falsch waren.

### 9.1.3. Bearbeiten / Neu

Agenten mit Schreibrechten können existierende Report-Konfigurationen bearbeiten, indem sie die Bearbeitungsmaske des Statistikmoduls aufrufen. Alternativ können sie einen neuen Report erstellen. Die zugehörigen Masken können folgendermaßen aufgerufen werden:

1. Durch den Knopf "Bearbeiten" in der Statistikansicht.
2. Durch den "Neu"-Link im Statistikmenü der Navigationsleiste, oder durch den Knopf "Hinzufügen" in der Übersichtsseite.

Das Bearbeiten der Statistiken erfolgt in vier Schritten mit Hilfe eines Assistenten bzw. Wizards:

1. Allgemeine Angaben zur Statistik.

2. Festlegen des Elements für die X-Achse.
3. Festlegen der Wertereihen.
4. Festlegen der Einschränkungen des Reports.

Die Punkte 2-4 werden nur für dynamisch zusammengestellte Statistiken benötigt. Benutzt man eine statische Statistik ist man mit dem Einfügen der allgemeinen Angaben in Punkt 1. bereits fertig.

Für alle Eingabeoberflächen des Statistik-Moduls gilt: Im Anschluss an das jeweilige Eingabeformular findet der Benutzer Informationen zur Bedienung der Seite.

Sollte es dennoch zu fehlerhaften Eingaben kommen, wird die zuvor bearbeitete Oberfläche wieder geladen. Dabei wird die Seite um Informationen zur fehlerhaften Eingabe ergänzt. Diese Informationen findet man im Notificationbereich von OTRS. Erst nachdem ein Formular korrekt ausgefüllt wurde, gelangt man zur nächsten Eingabeoberfläche.

1. *Allgemeine Angaben.* Dies ist die erste Seite des Assistenten.

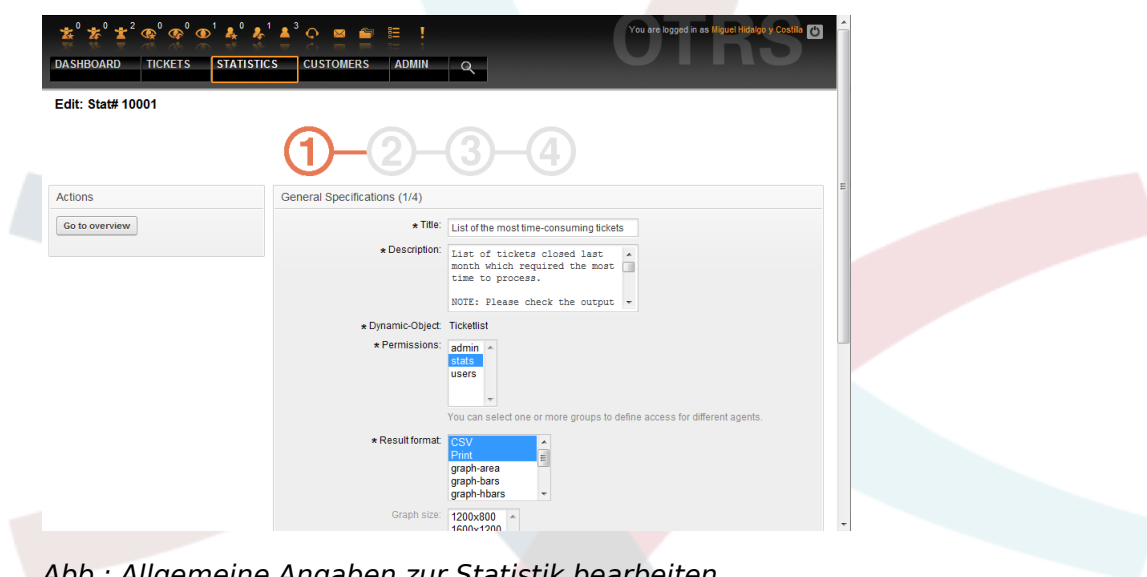


Abb.: Allgemeine Angaben zur Statistik bearbeiten.

Folgende allgemeine Angaben und Einstellungen der Statistik können geändert werden:

- **Titel.** Er sollte kurz und prägnant die Aufgabe der Statistik wiedergeben.
- **Beschreibung.** Hier werden Informationen eingetragen, die einen tieferen Einblick in die Aufgabenstellung, Art der Konfigurationsparameter, usw. erlauben.
- **Dynamisches Objekt.** Sollte die OTRS-Installation über mehrere dynamische Objekte verfügen, kann hier das gewünschte Objekt ausgewählt werden. Die Objekte sind jeweils auf die Anforderungen des entsprechenden Moduls ausgelegt.
- **Statische Datei.** An dieser Stelle kann eine gewünschte statische Datei ausgewählt werden. Diese Auswahl wird für gewöhnlich nicht erscheinen, da nur die statischen Dateien angezeigt werden, die noch keiner Statistik zugeordnet wurden! Wenn der Punkt "Statische Datei" angezeigt wird, ist es wichtig im Formular durch die Auswahl des Optionsfelds die gewünschte Generierungsart auszuwählen (Dynamisch durch ein dynamisches Objekt oder statisch durch eine Datei). Wird eine statische Datei ausgewählt entfallen die Eingabeoberflächen 2-4, da die statische Datei die nötigen Konfigurationen bereits mitbringt.
- **Rechtevergabe.** Durch die Rechtevergabe kann man regeln, welche Gruppen (und dadurch welche Agents) die vorkonfigurierten Statistiken später ansehen und gene-

rieren können. So können die verschiedenen Statistiken auf die verschiedenen Abteilungen und Arbeitsgruppen aufgeteilt werden, die diese benötigen. Eine Mehrfachauswahl ist dabei möglich.

Beispiel 1: Die Gruppe "stats" wurde ausgewählt. Der Report kann von allen Nutzern verwendet werden, die mindestens "ro"-Rechte für die Gruppe "stats" haben. Diese Berechtigung ist die Voreinstellung.

Beispiel 2: Es wurde eine Gruppe namens "sales" selektiert. Alle Benutzer die ro-Rechte in der Gruppe "sales" haben können nun diese Statistik im Ansichtsmodus sehen und generieren. Anderen Benutzern, die in der Lage sind Statistiken zu generieren wird dann diese Statistik nicht angeboten.

- **Format.** Ausgabeformat der Statistik. Hierbei stehen je nach Konfiguration folgende Ausgabeformate zur Verfügung:
  - CSV.
  - Drucken.
  - Liniendiagramm.
  - Balkendiagramm.
  - Balkendiagramm (horizontal).
  - Punktdiagramm.
  - Linienpunktdiagramm.
  - Flächendiagramm.
  - Tortendiagramm.
- **Grafikgröße.** Hier kann ausgewählt werden, in welchen Größen (Pixel) die Diagramme ausgegeben werden dürfen. Diese Auswahl ist nur sinnvoll, wenn unter dem Punkt "Format" ein grafisches Ausgabeformat ausgewählt wurde. Alle generell verwendbaren Grafikgrößen werden durch den OTRS-Admin in der SysConfig definiert. Bei der Konfiguration der Statistiken kann der Ersteller alle relevanten Formate vorselektieren.
- **Zeilensummierung.** Wird im "Ja" ausgewählt, wird die Statistik durch eine Spalte ergänzt, deren Zellen die Summe der jeweiligen Zeile darstellt.
- **Spaltensummierung.** Angabe, ob die Statistik durch eine Zeile ergänzt wird, deren Zellen die Summe der jeweiligen Spalte beinhaltet.
- **Cache.** Wird im "Ja" ausgewählt, werden die errechneten Statistiken im Dateisystem gecacht. Dies spart Rechenleistung und Zeit, sollte genau diese Statistik wieder aufgerufen werden. Diese Funktion ist jedoch nur sinnvoll, wenn sichergestellt ist, dass sich der Inhalt der Statistik nicht mehr ändert. Dies ist genau zu prüfen, bevor man die Cachingfunktion nutzt.

Caching wird automatisch verhindert, wenn die Statistik keinerlei Zeitangaben enthält (es kommen laufend neue Daten hinzu) oder wenn eine Zeitangabe in der Zukunft liegt.

Sollte eine Statistik zwischenzeitlich wieder bearbeitet werden, werden alle gecachten Daten wieder gelöscht.



- **Gültig.** Ist eine vorkonfigurierte Statistik erst im Entstehen oder darf sie aus bestimmten Gründen temporär nicht mehr ausgeführt werden so wird das Element "Gültig" auf "ungültig" gesetzt. Ferner wird dadurch die Schaltfläche "Start" rechts unten am Ende des Block ausgeblendet. Ein Generieren der Statistik ist somit nicht möglich.

2. **Definition des Elements für die X-Achse.** Hier wird eingestellt welches Element für die Darstellung der X-Achse verwendet wird, bzw. bei Tabellen, welche Spaltenbezeichnung die Statistik bekommt.

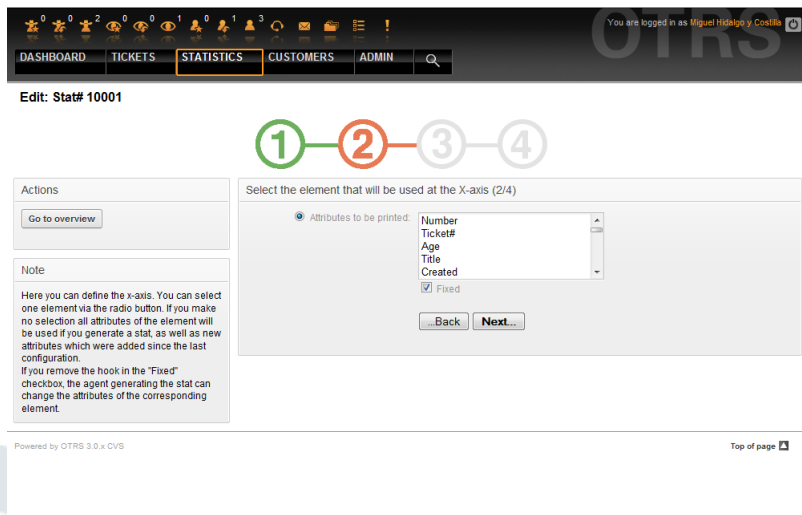


Abb.: Definition des Elements für die X-Achse.

Als erstes wählt man ein Element per Optionsfeld aus. Anschließend müssen zwei oder mehr Attribute des Elements selektiert werden. Werden keine Attribute des Elements ausgewählt, werden alle Attribute verwendet, auch solche die nach der Konfiguration der Statistik hinzukommen.

Entfernt man den Haken "Fixiert" in der Checkbox, kann der Agent, der die Statistik erstellt, die Attribute des entsprechenden Elements in der "Ansehen"-Oberfläche verändern.

Eine Besonderheit stellen Zeitelemente dar, hier ist die Zeitspanne und die Skalierung anzugeben. Die Art und Anzahl der Elemente ergibt sich durch das verwendete dynamische Objekt und ist von Objekt zu Objekt verschieden.

Wurden alle Eingaben richtig getätigt, gelangt man nach der Auswahl des "Weiter" Schalters zu dem Formular "Wertereihen". Ebenfalls gibt es die Möglichkeit, einen Bearbeitungsschritt zurück zu gehen und nochmals die Oberfläche "Allgemeine Angaben" zu bearbeiten.

3. **Wertereihen.**

Im dritten Schritt der Vorkonfiguration einer Statistik werden die Wertereihen der Statistik festgelegt. Sie bilden später die einzelnen Grafen des Diagramms (grafische Darstellung) oder die einzelnen Reihen (tabellarische Darstellung).

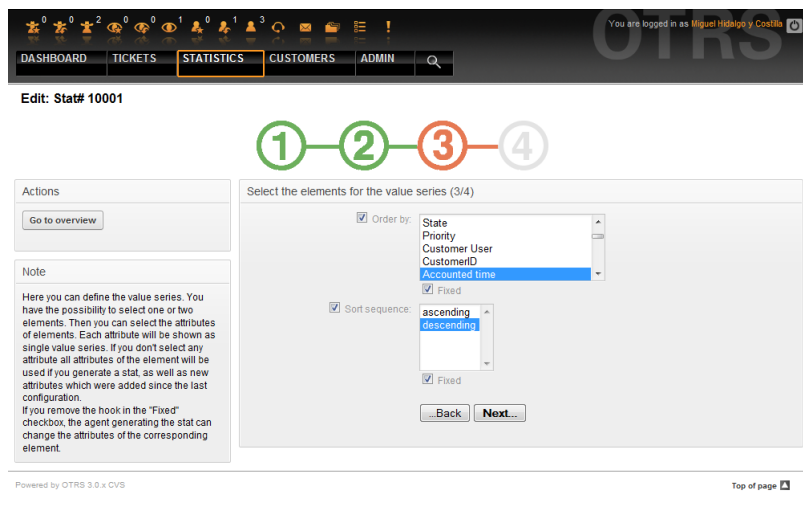


Abb.: Festlegen der Wertereihen.

Wird ein Element selektiert, entspricht jedes ausgewählte Attribut einer Wertereihe.

### Beispiel 4.19. Festlegen einer Wertereihe bei einem Element

Element Queue:

- Wertereihe 1 = Raw
- Wertereihe 2 = Junk
- ....

Werden zwei Elemente selektiert, wird jedes ausgewählte Attribut des ersten Elements kombiniert mit einem Attribut des zweiten Elements zu einer Wertereihe.

### Beispiel 4.20. Festlegen einer Wertereihe bei zwei Elementen

Element 1 Queue, Element 2 Status:

- Wertereihe 1 = Raw - offen
- Wertereihe 2 = Raw - erfolgreich geschlossen
- Wertereihe 3 = Junk - offen
- Wertereihe 4 = Junk - erfolgreich geschlossen

Die Auswahl von drei oder mehr Elementen ist nicht sinnvoll und wird deshalb durch eine Fehlermeldung verhindert.

Ferner gelten noch die gleichen Bedingungen zur Auswahl der Attribute und zur "Fixiert" Checkbox wie bei der "X-Achsen" Auswahl.

- Werden keine Attribute des Elements ausgewählt, werden alle Attribute verwendet, auch solche die nach der Konfiguration der Statistik hinzukommen.
- Entfernt man den Haken "Fixiert" in der Checkbox, kann der Agent der die Statistik erstellt, die Attribute des entsprechenden Elements verändern.

4. *Festlegen der Einschränkungen.* Vierter und letzter Schritt bei der Vorkonfiguration ist das Festlegen der Einschränkungen. Hier ist es möglich die Ergebnisse einer Statistik durch die Angabe von Bedingungen einzuschränken. Vergleichbar ist dies mit Eingaben in eine Such-Oberfläche.

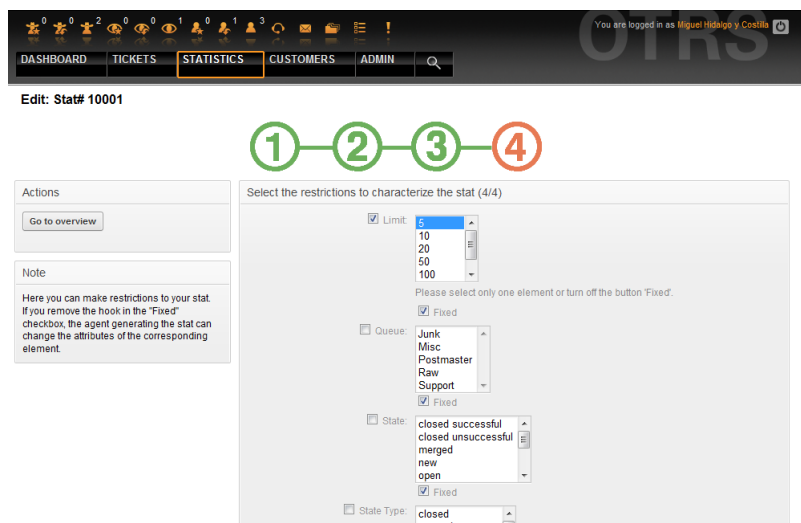


Abb.: Festlegen der Einschränkungen.

Nachdem man alle Einschränkungen getätigt hat, drückt man den Button "Abschließen". Dadurch beendet man die Vorkonfiguration der Statistik und gelangt in die "Ansehen" Oberfläche.

## 9.1.4. Importieren

Durch die Auswahl des "Import"-Menüpunkts im Statistikmenü der Navigationsleiste oder durch den "Import"-Knopf in der Übersichtsmaske gelangt man in die Importoberfläche ("rw"-Rechte erforderlich).

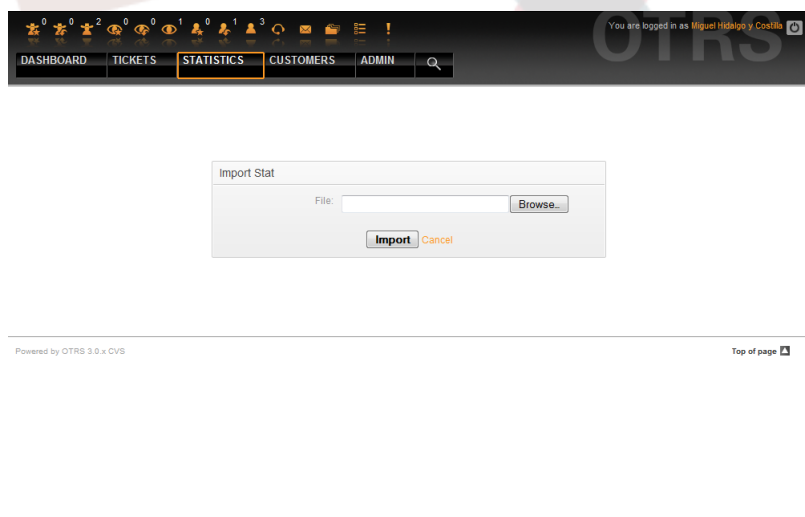


Abb.: Die Import-Oberfläche.

Durch sie können Statistiken importiert werden. Dies ist im Zusammenhang mit der Exportfunktion des Moduls eine sehr hilfreiche Funktionalität. So können Statistiken bequem auf Testsystemen entworfen und getestet werden, um sie später auf dem Produktivsystem zu importieren.

Der Import geschieht dabei ganz einfach durch einen Dateiupload. Anschließend gelangt man automatisch in die Detailansicht der importierten Statistik.

## 9.2. Verwaltung des Statistik-Moduls durch den OTRS-Administrator

In diesem Abschnitt werden die Aufgaben und Möglichkeiten des OTRS-Administrators in Bezug auf das Statistikmodul angesprochen.

### 9.2.1. Rechte, Gruppen und Queues

Durch die Installation des Statistikmoduls werden keine neuen Queues oder/und Gruppen angelegt.

Durch die Standardkonfiguration der Modulregistrierung haben alle Agenten, die Rechte in der "stats"-Gruppe haben, Zugriff auf das Statistikmodul.

Zugangsmöglichkeiten aufgrund der Rechte:

- *rw*. Darf Statistiken konfigurieren.
- *ro*. Darf vorkonfigurierte Statistiken generieren.

Ob nun dem jeweiligen Agenten, der später vorkonfigurierte Statistiken generieren darf, *ro*-Rechte in der "stats" Gruppe zugewiesen werden oder in der Modulregistrierung der SysConfig die dem Agent entsprechenden Gruppen ergänzt werden, bleibt dem OTRS-Administrator und dessen Anforderungen überlassen.

### 9.2.2. Die SysConfig (Verwaltung der Systemkonfiguration)

The SysConfig groups Framework:Core::Stats, Framework:Core::Stats::Graph and Framework:Frontend::Agent::Stats contain all configuration parameters for the basic set-up of the statistics module. Moreover, the configuration parameter `$Self->{'Frontend::Module'}->{'AgentStats'}` controls the arrangement and registration of the modules and icons within the statistics module.

## 9.3. Verwaltung des Statistik-Moduls durch den System-Administrator

Grundsätzlich ist bei der Bedienung, Konfiguration und Wartung des Statistikmoduls kein System-Administrator notwendig. An dieser Stelle sollen nur einige Hintergrundinformationen für den System-Administrator gegeben werden.

### Anmerkung

Pfadangaben beziehen sich auf Unterverzeichnisse des OTRS-Homeverzeichnisses (meist `/opt/otrs`).

### 9.3.1. Datenbanktabelle

Alle Statistikkonfigurationen werden in XML umgesetzt und verwaltet. Dies bedeutet unter anderem, dass alle Statistikkonfigurationen in der Datenbanktabelle "xml\_storage" gespeichert werden. Diese Tabelle wird auch von anderen Modulen benutzt, deren Inhalte im XML-Format dargestellt werden.

## 9.3.2. Auflistung aller Dateien

Folgende Dateien sind für die fehlerfreie Funktion des Statistikmoduls notwendig.

- Kernel/System/Stats.pm
- Kernel/Modules/AgentStats.pm
- Kernel/System/CSV.pm
- Kernel/Output/HTML/Standard/AgentStatsOverview.dtl
- Kernel/Output/HTML/Standard/AgentStatsDelete.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditSpecification.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditRestrictions.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditXaxis.dtl
- Kernel/Output/HTML/Standard/AgentStatsEditValueSeries.dtl
- Kernel/Output/HTML/Standard/AgentStatsImport.dtl
- Kernel/Output/HTML/Standard/AgentStatsPrint.dtl
- Kernel/Output/HTML/Standard/AgentStatsView.dtl
- Kernel/System/Stats/Dynamic/Ticket.pm
- bin/otrs.GenerateStats.pl

## 9.3.3. Caching

Bei der Vorkonfiguration von Statistiken kann eingestellt werden, ob die Ergebnisse einer Statistik gecached werden oder nicht. Statistikergebnisse, die in den Cache geschrieben werden sollen, werden als Datei im Verzeichnis `var/tmp` der OTRS-Installation gespeichert (meist `/opt/otrs/var/tmp`).

Alle gecachten Statistiken sind dabei durch das Präfix "Stats" zu erkennen.

Sollten diese Dateien verloren gehen, ist dies nicht weiter schlimm. Beim nächsten Aufruf dieser Statistik kann das Statistikmodul diese Datei nicht mehr finden und muss deshalb die Statistik neu errechnen, was etwas Zeit beanspruchen kann.

## 9.3.4. otrs.GenerateStats.pl

Diese Datei befindet sich im Verzeichnis `bin/`. Durch sie ist es möglich, Statistiken auf der Kommandozeile zu generieren.

Exemplarisch soll hierzu folgender Kommandozeilenaufruf angegeben werden:

```
bin> perl otrs.GenerateStats.pl -n 10004 -o /output/dir
```

*Skript: Generieren einer Statistik auf der Kommandozeile.*

Dabei wird eine Statistik aus der Statistikkonfiguration "Stat# 10004" generiert und als csv in das Verzeichnis `/output/dir` gespeichert.

Ferner kann die generierte Statistik auch per Email versandt werden. Mehr Informationen erhält man wie im Skript geschildert.

```
bin> perl otrs.GenerateStats.pl --help
```

*Skript: Aufruf der Hilfe von otrs.GenerateStats.pl.*

### 9.3.5. Automatisiertes Generieren von Statistiken - Cron

Sinnvoll ist das Generieren von Statistiken per Hand über die Kommandozeile natürlich nicht unbedingt, da das Statistikmodul eine geeignete grafische Oberfläche bietet. Interessant wird die Generierung von Statistiken per Kommandozeile aber in Kombination mit einem Cronjob.

Folgendes Szenario ist denkbar: Ein Abteilungsleiter wünscht pünktlich zum ersten eines Monats eine Statistik zum abgelaufenen Monat. Durch die Kombination Cronjob und Kommandozeilenaufruf ist man in der Lage automatisiert zu Beginn eines Monats dem Abteilungsleiter die gewünschte Statistik per Email zukommen zu lassen.

### 9.3.6. Statische Statistiken

Das Statistikmodul bietet die Möglichkeit statische Statistiken zu generieren. Für jede statische Statistik gibt es eine Datei, in der die Inhalte der Statistik genau definiert sind.

Vorteil dieser Art von Statistik ist, dass dadurch sehr komplexe Statistiken erzeugt werden können. Der Nachteil ist wiederum die mangelnde Flexibilität dieser Statistiken.

Gespeichert werden diese Dateien unter folgendem Pfad: `Kernel/System/Stats/Static/`.

### 9.3.7. Wiederverwerten alter statischer Statistiken

Bereits OTRS 1.3 und 2.0 boten die Möglichkeit Statistiken zu generieren. Eine Vielzahl der Statistiken, die für OTRS-Versionen 1.3 und 2.0 speziell auf Kundenwunsch entwickelt wurden, können wiederverwendet werden.

Diese Dateien müssen hierzu lediglich aus dem Pfad `Kernel/System/Stats/` in den Pfad `Kernel/System/Stats/Static/` verschoben werden. Ferner muss die Paketangabe des jeweiligen Skripts um `::Static` ergänzt werden.

Das folgende Beispiel zeigt die Erweiterung des Paketnamens.

```
package Kernel::System::Stats::AccountedTime;
```

```
package Kernel::System::Stats::Static::AccountedTime;
```

### 9.3.8. Standardstatistiken

"Man muss das Rad nicht immer neu erfinden."

Deshalb liefert das Statistikmodul automatisch Standardstatistiken mit. Statistiken, die für alle OTRS-Benutzer interessant sind, werden zukünftig als Defaultstatistik im Statistik-Modul-Paket ergänzt. Gespeichert werden die Defaultstatistiken im XML-Format des Statistikmoduls im Verzeichnis `scripts/test/sample/`.

# 10. Dynamische Felder

## 10.1. Einführung

Ein dynamisches Feld ist ein ein spezielles Feld in OTRS um die am Ticket oder Artikel gespeicherten Informationen zu erweitern. Diese Felder werden nicht fix im System festgelegt und sind nur in bestimmten Oberflächen sichtbar, sie können verpflichtend sein oder nicht und ihre Darstellung in Oberflächen ist abhängig vom Feldtyp, der während der Erstellung gewählt wurde. Zum Beispiel gibt es Felder, um einen Text, ein Datum, usw. eine Auswahl zu erfassen.

Dynamische Felder sind eine Weiterentwicklung der Felder TicketFreeText, TicketFreeKey, TicketFreeTime, ArticleFreeText und ArticleFreeKey welche in OTRS 3.0 und früher genutzt wurden. Die Limitierung dieser "FreeFields" war, dass lediglich bis 16 (Text oder Einfachauswahl) Felder definiert werden konnten und 6 Zeitfelder für ein Ticket und 3 (Text oder Dropdown) Felder für einen Artikel, nicht mehr.

Now with dynamic fields the limitation in the number of fields per ticket or article is removed, you can create as many dynamic fields you like either for ticket or articles. And beyond that, the framework behind the dynamic fields is prepared to handle custom fields for other objects rather than just ticket and articles.

This new framework that handles the dynamic fields is build using a modular approach, where each kind of dynamic field can be seen as a plug-in module for the framework. This means that the variety of dynamic fields can be easily extended by public OTRS modules, OTRS Feature Add-ons, OTRS custom developments, and other custom developments.

Die folgenden dynamischen Feldtypen sind in diesem Release inbegriffen:

- Text (eine Zeile)
- Textfeld (mehrere Zeilen Text)
- Kontrollkästchen
- Einfachauswahl (eine Auswahl, mehrere Auswahlmöglichkeiten)
- Mehrfachauswahl (mehrere Auswahlmöglichkeiten)
- Datum
- Datum / Zeit

## 10.2. Konfiguration

Standardmäßig enthält eine Neu-Installation von OTRS keine dynamische Felder. Wenn Sie solche Felder in Tickets oder Artikel verwenden möchten, müssen Sie dynamische Felder erstellen.

Die Konfiguration dynamischer Felder teilt sich in zwei Bereiche auf. Um ein dynamisches Feld hinzuzufügen oder ein bereits existierendes zu editieren navigieren Sie im Admin-Interface auf den Link "Dynamische Felder". Um ein dynamisches Feld als verpflichtend zu setzen oder um es in den Oberflächen zu verstecken, müssen Sie die benötigten Einstellungen in der "Sysconfig" vornehmen.

### 10.2.1. Hinzufügen eines dynamischen Feldes

Klicken Sie auf die Schaltfläche "Admin" in der Navigationsleiste, dann auf den Link "Dynamische Felder" im Bereich "Ticketeinstellungen". Die Übersicht der dynamischen Felder sieht wie folgt aus:



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### Dynamic Fields Management - Overview

**Actions**

Article  
  
 Add new field for object: Article

Ticket  
  
 Add new field for object: Ticket

**Hint**

To add a new field, select the field type form one of the object's list, the object defines the boundary of the field and it can't be changed after the field creation.

Dynamic Fields List

NAME	LABEL	ORDER	TYPE	OBJECT	VALIDITY
No data found.					

Powered by OTRS 3.1.x CVS

*Abbildung.: Leere Übersichtsseite der dynamischen Felder.*

Beachten Sie das sich diese Übersicht ändern wird, wenn Sie dynamische Felder hinzufügen. Diese Übersicht könnte bereits einige dynamische Felder anzeigen, wenn die Installation von einer älteren OTRS Version geupdatet wurde.

Die Aktionen in der linken Seitenleiste zeigt zwei Möglichkeiten an: Artikel und Ticket, jede Möglichkeit hat seine eigene Dropdown-Auswahl für dynamische Felder.

## Anmerkung

Die Installation eines OTRS-Paketes kann mehrere Objekte zur SideBar hinzufügen.

Der allgemeine Ablauf um dynamische Felder zu erstellen ist:

- Klicken Sie auf den gewünschten Typ des dynamischen Feldes in der Aktionen-SideBar.
- Klicken Sie auf den Typ des dynamischen Feldes, den Sie aus der Liste hinzufügen wollen.
- füllen der Konfiguration.
- Speichern.

Der Konfigurationsdialoge für die dynamischen Felder sind in zwei Bereiche unterteilt. Der obere Teil ist für alle Felder gleich und der untere Teil ist für jeden Feldtyp unterschiedlich.

Allgemeine Einstellungen für dynamische Felder:

- Name: verpflichtend, einmalig, es sind nur Buchstaben und Zahlen erlaubt.

Das ist der interne Name des Feldes um zum Beispiel ein Feld in einer Oberfläche anzeigen oder verstecken zu lassen. Jede Veränderung eines Feldnamens (nicht empfohlen)

benötigt ebenfalls einen manuellen Eingriff in den "Sysconfig"-Einstellungen, in denen das Feld referenziert wird.

- Bezeichnung: verpflichtend.

Dieser Name wird auf den Bildschirmen angezeigt, auf denen dieses Feld aktiv ist, es werden Übersetzungen unterstützt.

### Anmerkung

Übersetzungen der Beschriftungen müssen Sie manuell zu den Übersetzungsdateien hinzufügen.

- Feldreihenfolge: verpflichtend.

Definiert die relative Reihenfolge, in der das Feld in Oberflächen angezeigt wird. Standardmäßig werden neue Felder an der letzten Position angezeigt. Wird diese Einstellung geändert, betrifft das ebenfalls die Reihenfolge anderer dynamischen Felder.

- Gültigkeit: verpflichtend.

Ein ungültiges dynamisches Feld wird in keiner Oberfläche angezeigt, gan egal ob es als sichtbar konfiguriert ist.

- Feldtyp: verpflichtet, nur lesend.

Zeigt den aktuell ausgewählten Feldtyp an.

- Objekttyp: verpflichtend, nur lesend.

Zeigt den Geltungsbereich des Feldes.

### Anmerkung

Um die spezifischen Feldeinstellungen zu verdeutlichen, werden einige dynamische Felder in unserem Beispiel hinzugefügt. Diese neuen dynamischen Felder werden in späteren Abschnitten referenziert.

Für das folgende Beispiel werden alle dynamischen Felder für das Ticketobjekt hinzugefügt. Möchten Sie dynamische Felder für das Artikelobjekt hinzufügen, wählen Sie die Felder einfach im Artikel-Dropdownliste aus.

**Tabelle 4.6. Die folgenden Felder werden zu dem System hinzugefügt:**

Name	Beschriftung	Typ
Feld1	Mein Feld 1	Text
Feld2	Mein Feld 2	Textfeld
Feld3	Mein Feld 3	Kontrollkästchen
Feld4	Mein Feld 4	Einfachauswahl
Feld5	Mein Feld 5	Mehrfachauswahl
Feld6	Mein Feld 5	Datum
Feld7	Mein Feld 6	Datum / Zeit

## 10.2.2. Konfiguration der Textzeilen in dynamischen Feldern

dynamische Felder vom Typ Text wird benutzt und Einfachzeilen zu speichern.

Einstellungen für Texte in dynamischen Feldern:

- Standardwert: Optional

Dieser Wert wird standardmäßig in den Editieroberflächen angezeigt (wie Neues Telefenticket oder Verfassen).

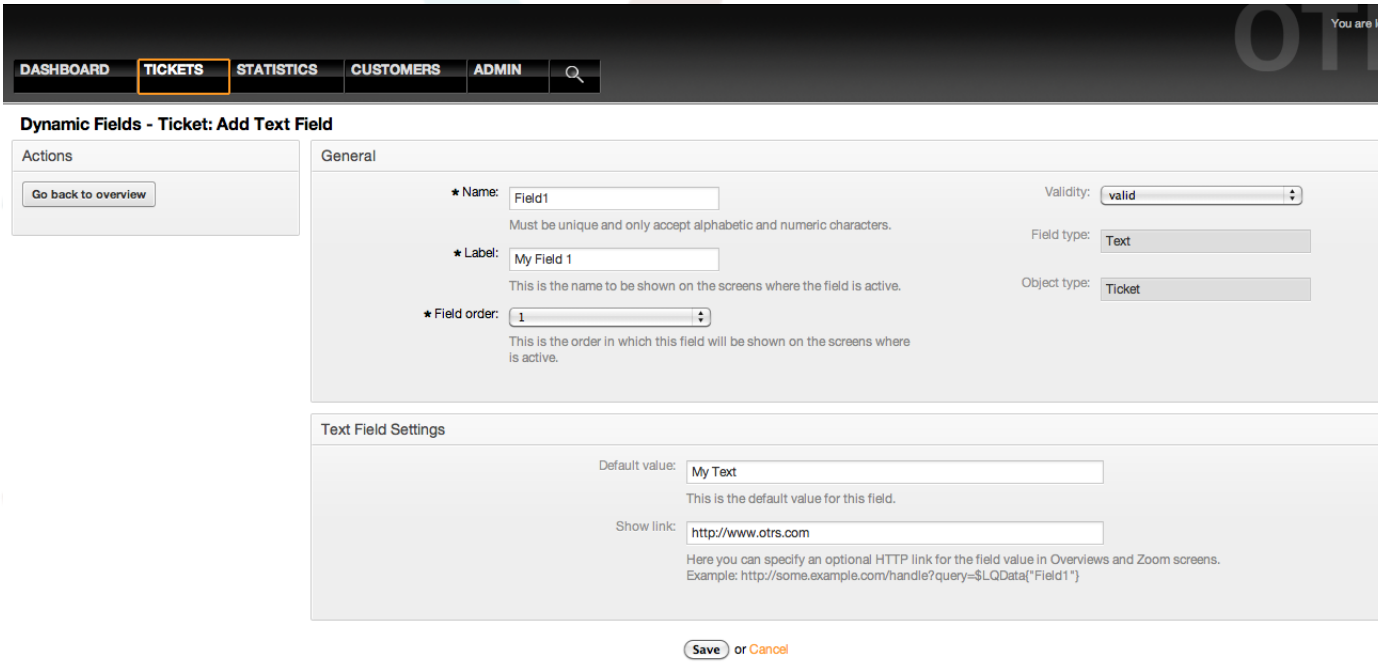
- Link anzeigen: Optional.

Wenn gesetzt, wird der Feldwert in einen klickbaren Link in den Oberflächen konvertiert (wie TicketZoom oder Übersichten).

Zum Beispiel, wenn "Show link" auf "http://www.otrs.com" gesetzt ist, wird ein Klick auf diesen Wert die OTRS-Webseite in Ihrem Browser aufrufen.

## Anmerkung

Das Verwenden von `$LQData{"NameX"}` im Wert, wobei NameX der Name des Feldes ist, wird den Feldwert als Teil des Links hinzufügen.



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Abbildung: Konfigurationsdialog für Textfelder in dynamischen Feldern.

### 10.2.3. Konfiguration von Textfeldern in dynamischen Feldern

dynamische Felder vom Typ Textbereich werden verwendet um Mehrfachzeilen zu speichern.

Einstellungen für Textfelder in dynamischen Feldern:

- Anzahl der Zeilen: Optional, Zahl.

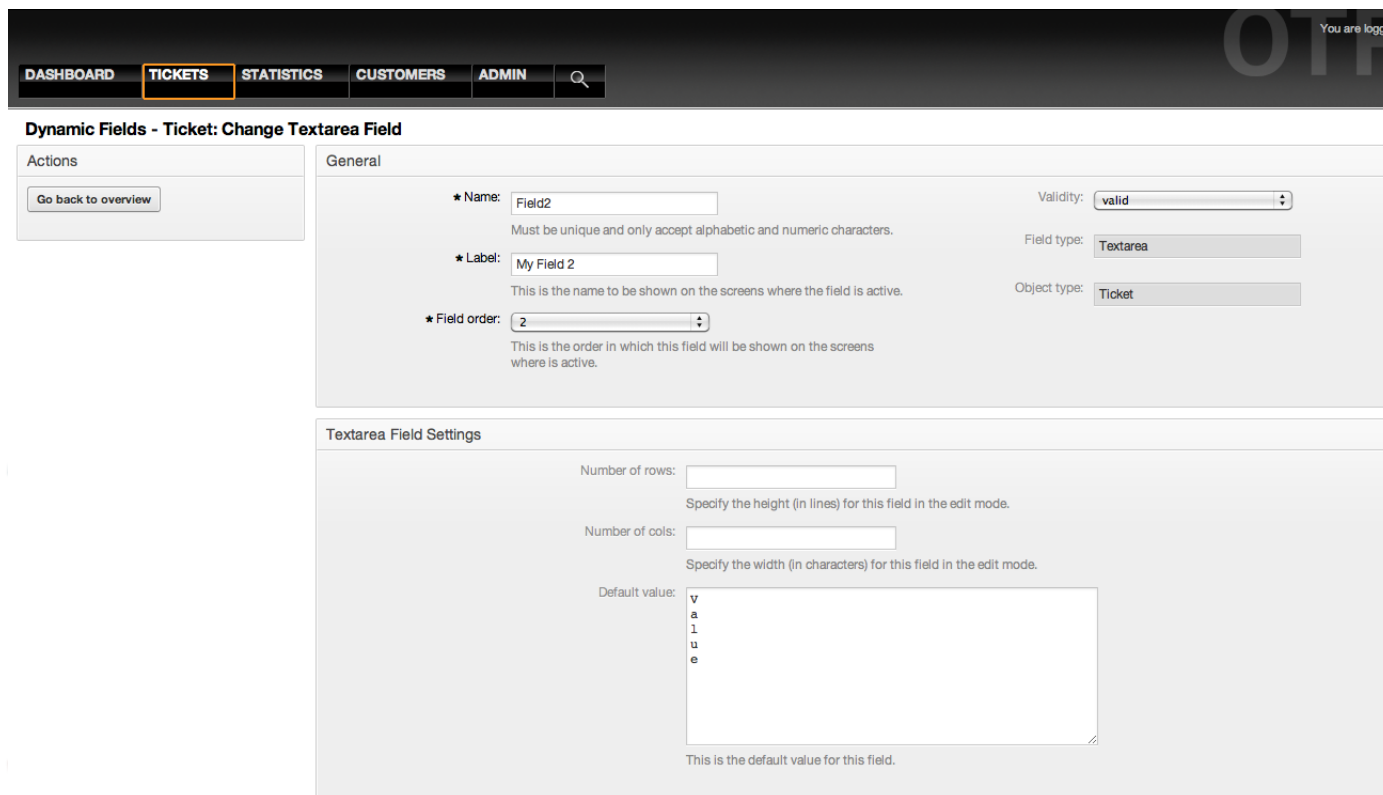
Verwendet, um die Höhe des Feldes in den Editier-Oberflächen (wie Neues Telefenticket oder TicketCompose) zu definieren.

- Anzahl der Spalten: Optional, Integer.

Dieser Wert wird verwendet, um die Breite des Feldes in den Editier-Oberflächen zu definieren.

- Standardwert: Optional

Dies ist der Wert, der standardmäßig in den Editier-Oberflächen angezeigt wird (kann ein mehrzeiliges Textfeld sein).



**Dynamic Fields - Ticket: Change Textarea Field**

Actions

[Go back to overview](#)

**General**

★ Name:  Validity:

Must be unique and only accept alphabetic and numeric characters.

★ Label:  Field type:

This is the name to be shown on the screens where the field is active.

★ Field order:  Object type:

This is the order in which this field will be shown on the screens where is active.

**Textarea Field Settings**

Number of rows:

Specify the height (in lines) for this field in the edit mode.

Number of cols:

Specify the width (in characters) for this field in the edit mode.

Default value:

This is the default value for this field.

Abbildung: Konfigurationsdialog für Textfelder in dynamischen Feldern.

## 10.2.4. Konfiguration von Checkboxen in dynamischen Feldern

Checkbox in dynamischen Feldern werden verwendet, um wahre oder falsche Werte, dargestellt durch ein aktiviertes oder deaktiviertes Kontrollkästchen, zu speichern.

Einstellungen für Checkboxen in dynamischen Feldern:

- Standardwert: Verpflichtend.

Dies ist der Wert, der standardmäßig in den Editier-Oberflächen angezeigt wird (kann ein mehrzeiliges Textfeld sein), der Standard-Wert für dieses Feld kann 'Aktiviert' oder 'Deaktiviert' sein.

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**Dynamic Fields - Ticket: Add Checkbox Field**

Actions

Go back to overview

**General**

★ Name:  Validity:

Must be unique and only accept alphabetic and numeric characters.

★ Label:  Field type:

This is the name to be shown on the screens where the field is active.

★ Field order:  Object type:

This is the order in which this field will be shown on the screens where is active.

**Checkbox Field Settings**

Default value:

This is the default value for this field.

or

Powered by OTRS 3.1.x CVS

Abbildung: Konfigurationsdialog für Checkboxen in dynamischen Feldern.

## 10.2.5. Konfiguration von Einfachauswahlen in dynamischen Feldern

Dynamische Felder vom Typ Einfachauswahl werden verwendet um einen einfachen Wert, aus einer Liste, zu speichern.

Einstellungen für Einfachauswahl in dynamischen Feldern:

- Mögliche Werte: Verbindlich.

Liste aus Werten, die ausgewählt werden können. Soll ein zusätzliches Listen-Item hinzugefügt werden, ist es nötig den Key (interner Wert) und den Wert (angezeigter Wert) anzugeben.

- Standardwert: Optional

Dies ist der Wert, der standardmäßig in den Editier-Oberflächen angezeigt wird (wie Neues Telefonticket oder Verfassen), der Standard-Wert für dieses Feld kann aus den definierten Werten vorgegeben werden.

- Hinzufügen eines leeren Wertes: Verpflichtend, (Ja / Nein).

Wenn diese Option aktiviert ist, wird ein extra Wert hinzugefügt, der als "-" in der Liste der möglichen Werte angezeigt wird. Dieser spezielle Wert ist intern als leer gekennzeichnet.

- Wertübersetzung: Verpflichtend, (Ja / Nein).

Diese Einstellung wird verwendet um die möglichen Werte dieses Feldes zu übersetzen. Es werden jedoch nur die angezeigten Werte übersetzt, die internen Werte sind nicht davon betroffen. Die Übersetzung der Werte müssen manuell in den Übersetzungsdateien hinzugefügt werden.

- Link anzeigen: Optional.

Wenn gesetzt, wird der Feldwert in einen klickbaren Link in den Oberflächen konvertiert (wie TicketZoom oder Übersichten).

Zum Beispiel, wenn "Show link" auf "http://www.otrs.com" gesetzt ist, wird ein Klick auf diesen Wert die OTRS-Webseite in Ihrem Browser aufrufen.

## Anmerkung

Das Verwenden von `$LQData{"NameX"}` im Wert, wobei NameX der Name des Feldes ist, wird den Feldwert als Teil des Links hinzufügen.

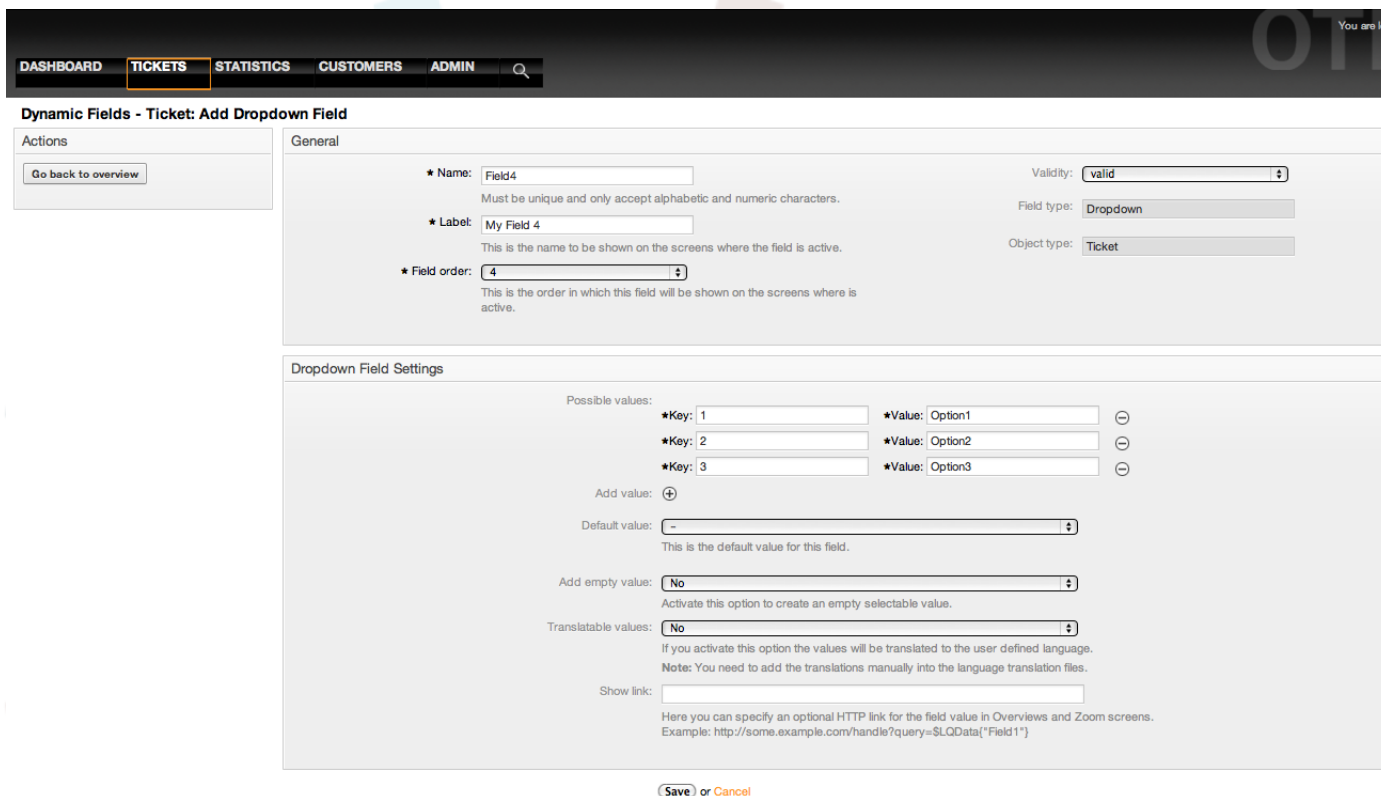


Abbildung: Konfigurationsdialog für Einfachauswahl in dynamischen Feldern.

## 10.2.6. Konfiguration der Mehrfachauswahl in dynamischen Feldern

Dynamische Felder vom Typ Mehrfachauswahl werden verwendet um mehrere Werte aus einer definierten Liste zu speichern.

Einstellungen für dynamische Felder vom Typ Mehrfachauswahl:

- Mögliche Werte: Verbindlich.

Liste aus Werten, die ausgewählt werden können. Soll ein zusätzliches Listen-Item hinzugefügt werden, ist es nötig den Key (interner Wert) und den Wert (angezeigter Wert) anzugeben.

- Standardwert: Optional

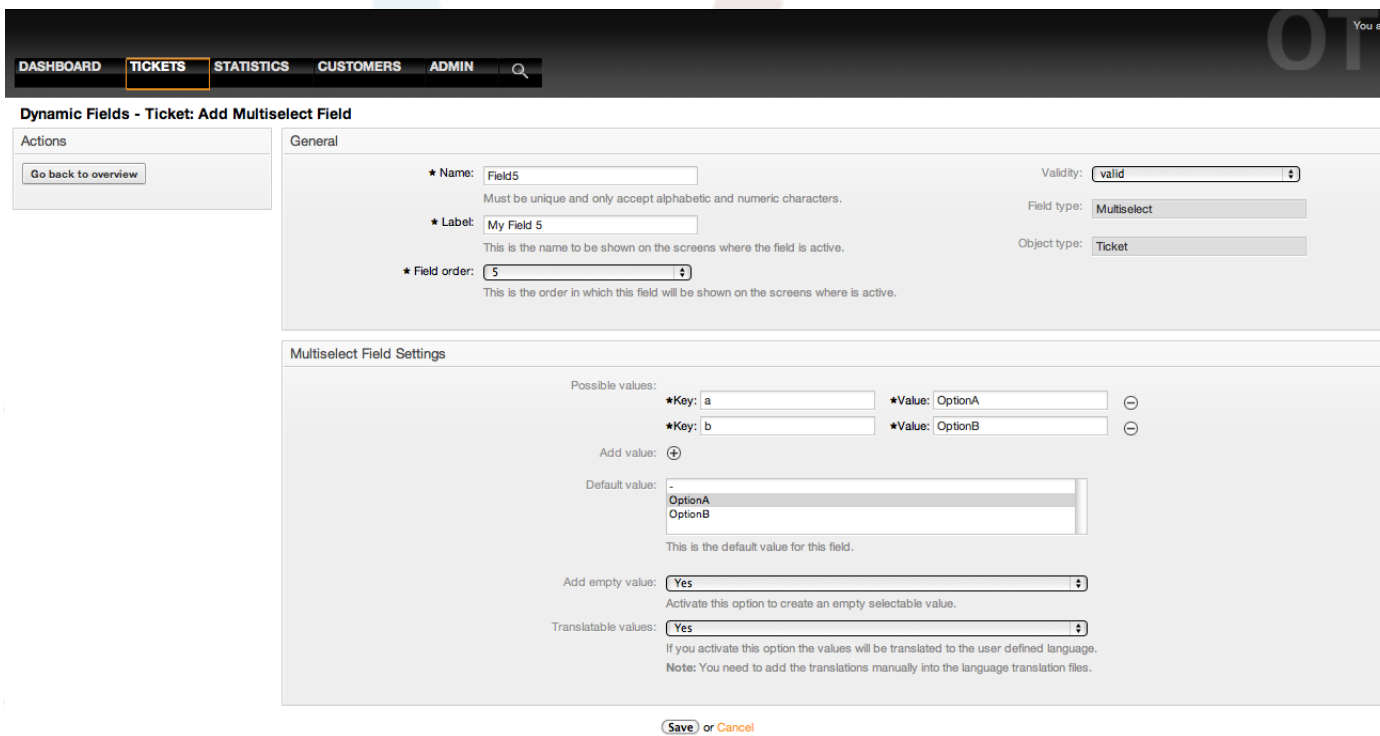
Dies ist der Wert, der standardmäßig in den Editier-Oberflächen angezeigt wird (wie Neues Telefonticket oder Verfassen), der Standard-Wert für dieses Feld kann aus den definierten Werten vorgegeben werden.

- Hinzufügen eines leeren Wertes: Verpflichtend, (Ja / Nein).

Wenn diese Option aktiviert ist, wird ein extra Wert hinzugefügt, der als "-" in der Liste der möglichen Werte angezeigt wird. Dieser spezielle Wert ist intern als leer gekennzeichnet.

- Wertübersetzung: Verpflichtend, (Ja / Nein).

Diese Einstellung wird verwendet um die möglichen Werte dieses Feldes zu übersetzen. Es werden jedoch nur die angezeigten Werte übersetzt, die internen Werte sind nicht davon betroffen. Die Übersetzung der Werte müssen manuell in den Übersetzungsdateien hinzugefügt werden.



Powered by OTRS 3.1.x CMS

Abbildung: Konfigurationsdialog für Mehrfachauswahlen in dynamischen Feldern.

## 10.2.7. Konfiguration von Datumsfeldern in dynamischen Feldern

Dynamische Felder vom Typ Datum werden verwendet um ein Datum zu speichern. (Tag, Monat und Jahr).

Einstellungen für Datumsfelder in dynamischen Feldern:

- Standard-Datumsunterschied: Optional, Integer.

Sekunden (positiv oder negativ) zwischen dem aktuellen Datum und dem gewählten Datum, dass standardmäßig in Editieroberflächen gewählt sein soll (wie Neues Telefongespräch oder Verfassen).

- Definiert den Jahresbereich: Verpflichtend (Ja / Nein).

Wird verwendet, um eine bestimmte Anzahl von Jahren in der Vergangenheit und in der Zukunft, basierend auf dem aktuellen Datum zu wählen, der für dieses Feld gesetzt wird, wenn es auf Ja gesetzt ist, sind folgende Optionen verfügbar:



- Jahre in der Vergangenheit: Optional, positive Zahlen.

Definiert die Anzahl der Jahre in der Vergangenheit die angezeigt werden sollen, ausgehend vom aktuellen Datum.

- Jahre in der Zukunft: Optional, positive Zahlen

Definiert die Anzahl der Jahre in der Zukunft die angezeigt werden sollen, ausgehend vom aktuellen Datum.

- Link anzeigen: Optional.

Wenn gesetzt, wird der Feldwert in einen klickbaren Link in den Oberflächen konvertiert (wie TicketZoom oder Übersichten).

Zum Beispiel, wenn "Show link" auf "http://www.otrs.com" gesetzt ist, wird ein Klick auf diesen Wert die OTRS-Webseite in Ihrem Browser aufrufen.

## Anmerkung

Das Verwenden von `$LQData{"NameX"}` im Wert, wobei NameX der Name des Feldes ist, wird den Feldwert als Teil des Links hinzufügen.

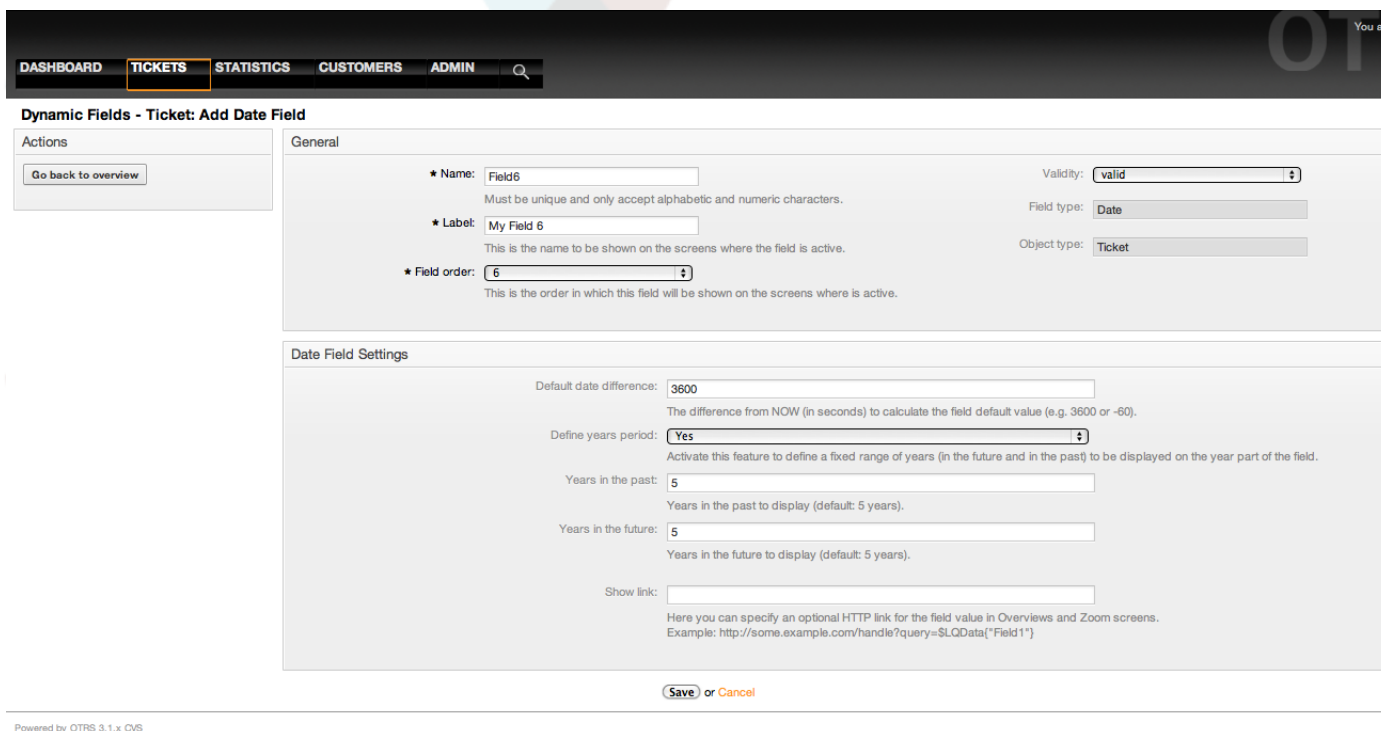


Abbildung: Konfigurationsdialog für Datumsfelder in dynamischen Feldern.

## 10.2.8. Konfiguration von Datum / Zeit in dynamischen Feldern

Dynamische Felder vom Typ Datum / Zeit werden verwendet um ein Datum und eine Zeit zu speichern. (Minute, Stunde, Tag, Monat und Jahr).

Einstellung für Datum- / Zeitfelder in dynamischen Feldern:

- Standard-Datumsunterschied: Optional, Integer.

Sekunden (positiv oder negativ) zwischen dem aktuellen Datum und dem gewählten Datum, dass standardmäßig in Editieroberflächen gewählt sein soll (wie Neues Telefonticket oder Verfassen).

- Definiert den Jahresbereich: Verpflichtend (Ja / Nein).

Wird verwendet, um eine bestimmte Anzahl von Jahren in der Vergangenheit und in der Zukunft, basierend auf dem aktuellen Datum zu wählen, der für dieses Feld gesetzt wird, wenn es auf Ja gesetzt ist, sind folgende Optionen verfügbar:

- Jahre in der Vergangenheit: Optional, positive Zahlen.

Definiert die Anzahl der Jahre in der Vergangenheit die angezeigt werden sollen, ausgehend vom aktuellen Datum.

- Jahre in der Zukunft: Optional, positive Zahlen

Definiert die Anzahl der Jahre in der Zukunft die angezeigt werden sollen, ausgehend vom aktuellen Datum.

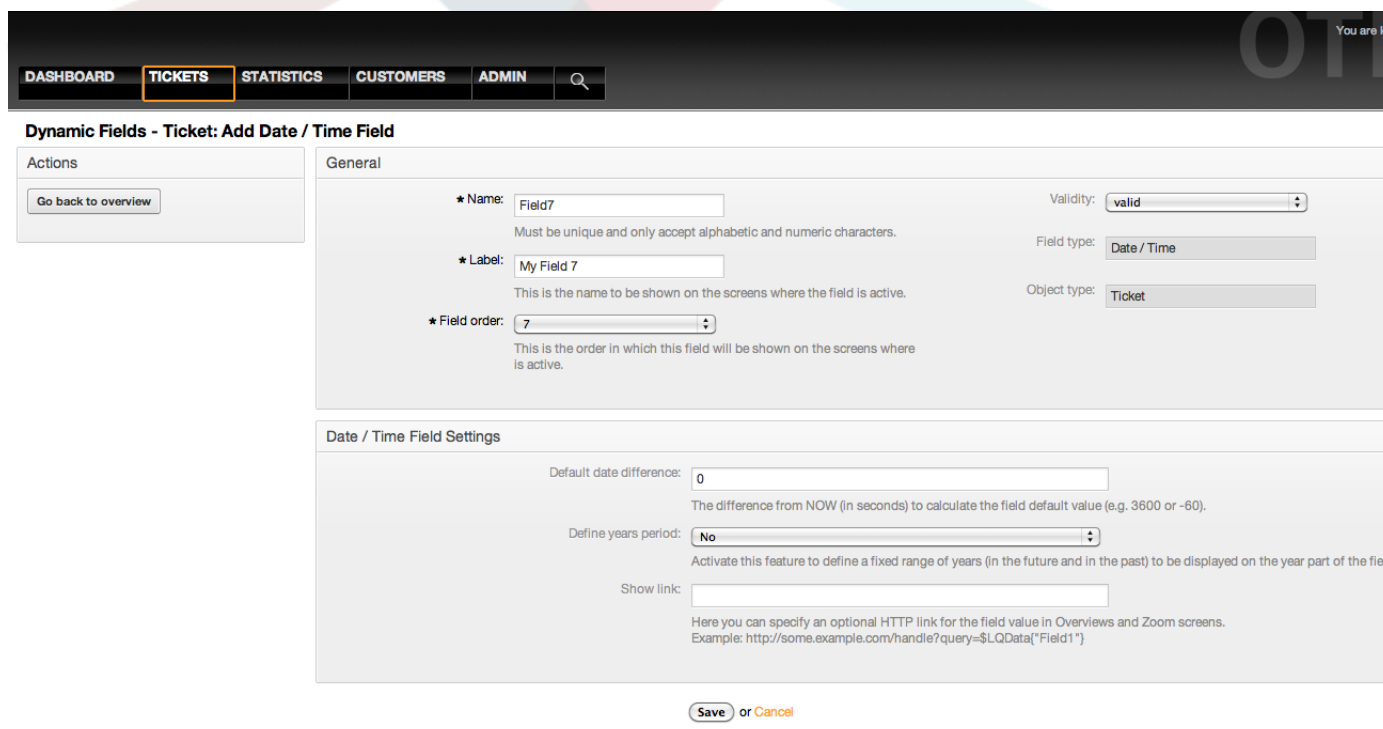
- Link anzeigen: Optional.

Wenn gesetzt, wird der Feldwert in einen klickbaren Link in den Oberflächen konvertiert (wie TicketZoom oder Übersichten).

Zum Beispiel, wenn "Show link" auf "http://www.otrs.com" gesetzt ist, wird ein klick auf diesen Wert die OTRS-Webseite in Ihrem Browser aufrufen.

## Anmerkung

Das Verwenden von `$LQData{"NameX"}` im Wert, wobei NameX der Name des Feldes ist, wird den Feldwert als Teil des Links hinzufügen.



**Dynamic Fields - Ticket: Add Date / Time Field**

Actions

[Go back to overview](#)

General

\* Name:  Validity:

Must be unique and only accept alphabetic and numeric characters.

\* Label:  Field type:

This is the name to be shown on the screens where the field is active.

\* Field order:  Object type:

This is the order in which this field will be shown on the screens where is active.

Date / Time Field Settings

Default date difference:

The difference from NOW (in seconds) to calculate the field default value (e.g. 3600 or -60).

Define years period:

Activate this feature to define a fixed range of years (in the future and in the past) to be displayed on the year part of the field.

Show link:

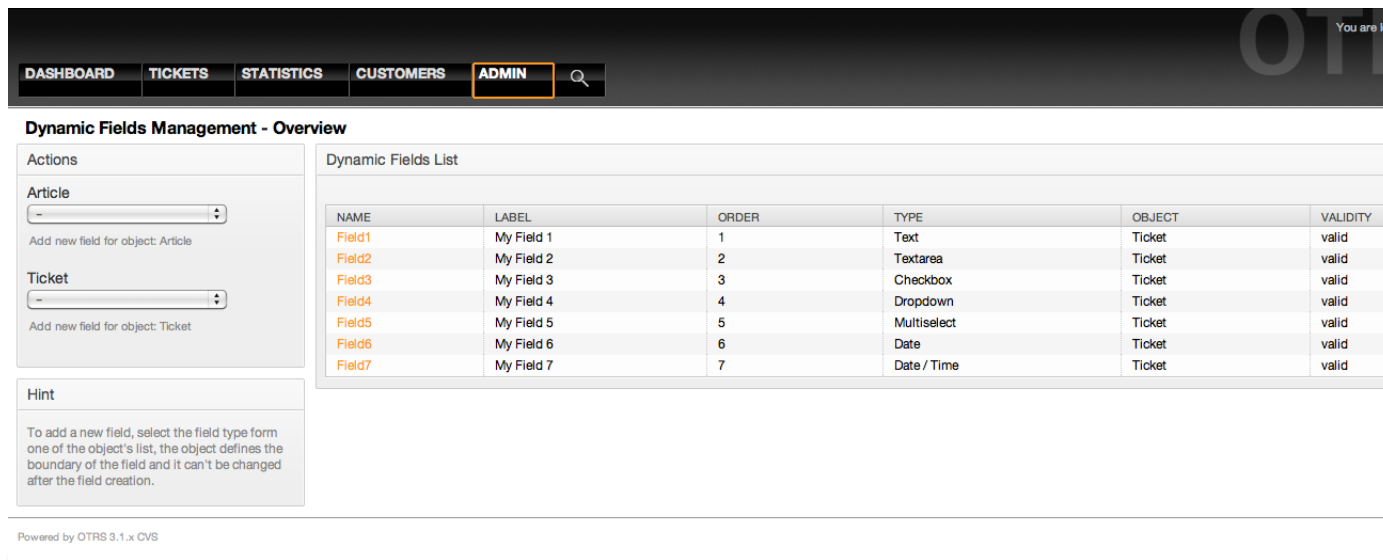
Here you can specify an optional HTTP link for the field value in Overviews and Zoom screens.  
Example: `http://some.example.com/handle?query=$LQData{"Field1"}`

[Save](#) or [Cancel](#)

Abbildung: Konfigurationsdialog für Datum / Zeit in dynamischen Feldern.

## 10.2.9. Editieren eines dynamischen Feldes

Eine gefüllte Übersichtsseite der dynamischen Feldern (mit den vorherigen Beispielen) sollte so aussehen:



NAME	LABEL	ORDER	TYPE	OBJECT	VALIDITY
Field1	My Field 1	1	Text	Ticket	valid
Field2	My Field 2	2	Textarea	Ticket	valid
Field3	My Field 3	3	Checkbox	Ticket	valid
Field4	My Field 4	4	Dropdown	Ticket	valid
Field5	My Field 5	5	Multiselect	Ticket	valid
Field6	My Field 6	6	Date	Ticket	valid
Field7	My Field 7	7	Date / Time	Ticket	valid

Abbildung.: Übersichtsseite der dynamischen Felder gefüllt mit Beispieldaten.

Um ein dynamisches Feld zu ändern oder zu editieren, muss mindestens ein dynamisches Feld definiert sein. Wählen Sie ein bereits bestehendes Feld aus der Übersichtsseite aus und aktualisieren Sie die Einstellungen.

### Anmerkung

Nicht alle Einstellungen von dynamischen Feldern können geändert werden. Der Feld- und Objekttyp können nicht verändert werden.

Es wird nicht empfohlen, den internen Feldnamen zu ändern, aber die Beschriftung kann jederzeit geändert werden. Wenn der interne Feldname geändert wird, müssen alle Einstellungen in der "SysConfig", die auf dieses Feld verweisen ebenfalls aktualisiert werden, genauso wie die Benutzereinstellungen (falls definiert).

## 10.2.10. Anzeigen eines dynamischen Feldern

Um ein dynamisches Feld auf einer Oberfläche anzuzeigen, sind zwei zwingende Voraussetzungen nötig:

1. Das dynamische Feld muss gültig sein.
2. Das dynamische Feld muss in der Konfiguration der Oberfläche auf 1 oder 2 gesetzt sein.

Folgen Sie diesen Schritten um ein dynamisches Feld in einer Oberfläche anzuzeigen

- Vergewissern Sie sich, dass das dynamische Wert auf gültig gesetzt ist. Sie sehen die Gültigkeit in der Übersichtsseite der dynamischen Felder. Setzen Sie, wenn nötig, das dynamische Feld auf gültig.
- Öffnen Sie die "Sysconfig" und wählen Sie in der Dropdownliste in der linken Aktionen-Sidebar "Ticket".

## Anmerkung

Ebenfalls können Sie nach "DynamicField" oder nach dem Sysconfig-Schlüssel direkt suchen.

- Suchen Sie nach der Untergruppe für die Oberfläche, die Sie editieren wollen und klicken Sie darauf. Zum Beispiel: "Frontend::Agent::Ticket::ViewPhoneNew".
- Suchen Sie nach der Einstellung, die mit "###DynamicField" endet. Zum Beispiel: "Ticket::Frontend::AgentTicketPhone###DynamicField".
- Wenn die Einstellung leer ist oder nicht den benötigten Feldnamen besitzt, klicken Sie auf "+" um einen neuen Eintrag hinzuzufügen. Zum Beispiel: Field1, Content: 1.

Wenn diese Einstellung bereits das dynamische Feld anzeigt, vergewissern Sie sich das es auf "1" gesetzt ist, damit es angezeigt wird oder das es auf "2" gesetzt ist, damit es verpflichtend ist.

- Speichern Sie die Konfiguration durch klicken auf "Aktualisieren" am Ende der Oberfläche und navigieren Sie anschließend zu der Oberfläche, wo das dynamische Feld angezeigt werden soll.

### 10.2.10.1. Beispiele

Die folgenden "SysConfig" Konfigurationen sind Beispiele um zu zeigen, wie dynamische Felder angezeigt oder versteckt werden können.

#### Beispiel 4.21. Feld1 im Dialog NewPhoneTicket anzeigen

- *Gruppe:* Ticket
- *Untergruppe:* Frontend::Agent::Ticket::ViewPhoneNew
- *Einstellung:* Ticket::Frontend::AgentTicketPhone###DynamicField
- *Wert:*

Schlüssel	Inhalt
Feld1	1

★ Subject:

Options: [Customer]

★ Text:

Rich text editor toolbar with options: Bold, Italic, Underline, Strikethrough, Bulleted List, Numbered List, Indent, Outdent, Link, Unlink, Home, Undo, Redo, Source.

Format: Format Font: Font Size: Size A A Source

Attachment:  No file chosen

CustomerID:

Next ticket state: open

Pending Date (for pending\* states): 02 / 16 / 2012 23 - 22 : 01

Priority: 3 normal

My Field 1:

Powered by OTRS 3.1.x CVS

Abbildung: Feld1 in NewPhoneTicket Dialog.

**Beispiel 4.22. Activate Field1 in New Phone Ticket Screen as mandatory. Feld1 als verpflichtend in Dialog NewPhoneTicket setzen.**

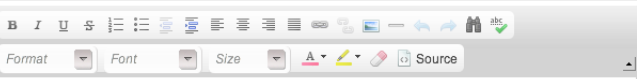
- Gruppe: Ticket
- Untergruppe: Frontend::Agent::Ticket::ViewPhoneNew
- Einstellung: Ticket::Frontend::AgentTicketPhone###DynamicField
- Wert:

Schlüssel	Inhalt
Feld1	2

★ Subject:

Options: [Customer]

★ Text: 

B I U 

Attachment:  No file chosen

CustomerID:

Next ticket state:

Pending Date (for pending\* states):  /  /   -  :

Priority:

★ My Field 1:

Powered by OTRS 3.1.x CVS

Abbildung: Feld1 in der Oberfläche 'Neues Telefonticket' als verpflichtendes Feld.

### Beispiel 4.23. Aktivieren von verschiedenen Feldern in der Oberfläche 'Neues Telefonticket'.

- Gruppe: Ticket
- Untergruppe: Frontend::Agent::Ticket::ViewPhoneNew
- Einstellung: Ticket::Frontend::AgentTicketPhone###DynamicField
- Wert:

Schlüssel	Inhalt
Feld1	1
Feld2	1
Feld3	1
Feld4	1
Feld5	1
Feld6	1
Feld7	1

Attachment:  No file chosen

CustomerID:

Next ticket state:

Pending Date (for pending\* states):  /  /   :

Priority:

My Field 1:

My Field 2:

My Field 3:

My Field 4:

My Field 5:

My Field 6:   /  /   :

My Field 7:   /  /   :

Powered by OTRS 3.1.x CVS

Abbildung: Verschiedene Felder in der Oberfläche 'Neues Telefonticket' als verpflichtende Felder.

### Beispiel 4.24. Deaktivieren von Feldern in der Oberfläche 'Neues Telefonticket'.

- Gruppe: Ticket
- Untergruppe: Frontend::Agent::Ticket::ViewPhoneNew
- Einstellung: Ticket::Frontend::AgentTicketPhone###DynamicField
- Wert:

Schlüssel	Inhalt
Feld1	1
Feld2	0
Feld3	1
Feld4	0
Feld5	1
Feld6	0
Feld7	1



Attachment:  No file chosen

CustomerID:

Next ticket state:

Pending Date (for pending\* states):  /  /   -  :

Priority:

My Field 1:

My Field 3:

My Field 5:

My Field 7:   /  /   -  :

Powered by OTRS 3.1.x CVS

Abbildung: Einige deaktivierte Felder in der Oberfläche 'Neues Telefonticket' als verpflichtendes Feld.

### Beispiel 4.25. Aktiviert Feld1 in der TicketZoom-Oberfläche.

- Gruppe: Ticket
- Untergruppe: Frontend::Agent::Ticket::ViewZoom
- Einstellung: Ticket::Frontend::AgentTicketZoom###DynamicField
- Wert:

Schlüssel	Inhalt
Feld1	1

1

**DASHBOARD** **TICKETS** STATISTICS CUSTOMERS ADMIN

Ticket#201202151000016 – Testing Ticket

1 Article(s) Age: 4 m – Created: 02/15/2012 22:30 by My User

Back | Lock | History | Print | Priority | Free Fields | Link | Owner | Responsible | Customer | Note | Merge | Pending | Watch | Close | Change Queue

NO.	TYPE	FROM	SUBJECT	CREATED
1	customer – phone	test@test.com	Testing Ticket	02/15/2012 22:30

▼ #1 – Testing Ticket Created: 02/15/2012 22:30 by My User

Forward | Phone Call Outbound | Phone Call Inbound | Split | Print | Reply

From: test@test.com  
 To: Junk  
 Subject: Testing Ticket

This is a test

Powered by OTRS 3.1.x CVS

**Ticket Information**

State: open  
 Locked: unlocked  
 Priority: 3 normal  
 Queue: Junk

CustomerID:  
 Owner: My User  
 Responsible: My User

My Field 1: My User

**Customer Information**

none

**Linked Objects**

none

Abbildung: Feld1 in der TicketZoom-Oberfläche.

### Beispiel 4.26. Aktiviert Feld1 in der kleinen Ticketübersicht.

- *Gruppe:* Ticket
- *Untergruppe:* Frontend::Agent::TicketOverview
- *Einstellung:* Ticket::Frontend::OverviewSmall###DynamicField
- *Wert:*

Schlüssel	Inhalt
Feld1	1

OTRS
You are logged in as...

1
DASHBOARD
TICKETS
STATISTICS
CUSTOMERS
ADMIN
🔍

**QueueView: Junk**

My Queues (0) Junk (1) Raw (1)

---

All tickets 1 Available tickets 1

Bulk

	TICKET#	AGE	FROM / SUBJECT	STATE	LOCKED	QUEUE	OWNER	CUSTOMERID
<input type="checkbox"/>	2012021510000016	10 m	test@test.com Testing Ticket	open	unlock	Junk	My User	

Powered by OTRS 3.1.x CVS

Abbildung: Feld1 in der kleinen Ticketübersicht.

Diese Einstellung betrifft: Eskalationsübersichten, Übersicht über gesperrte Tickets, Queue-Übersichten, Übersicht über Verantwortlichkeiten, Status-Übersichten und Beobachten-Übersichten.

## 10.2.11. Setzen eines Standard-Wertes durch ein TicketEvent-Module

Ein Ticket-Event (z.B.: TicketCreate) kann einen Wert für ein bestimmtes Feld triggern, wenn das Feld noch keinen Wert besitzt.

### Anmerkung

Bei Verwendung dieser Methode ist der Standard-Wert nicht sichtbar in der Editieroberfläche (z.B.: Neues Telefonticket), weil der Wert nach der Erstellung des Tickets gesetzt wird.

Um diese Funktion zu aktivieren ist es notwendig die folgende Einstellung zu aktivieren: "Ticket::EventModulePost###TicketDynamicFieldDefault".

### Beispiel 4.27. Aktiviert Feld1 im Event TicketCreate.

- *Gruppe:* Ticket
- *Untergruppe:* Core::TicketDynamicFieldDefault
- *Einstellung:* Ticket::TicketDynamicFieldDefault###Element1

### Anmerkung

Diese Konfiguration kann in jeder der 16 Ticket::TicketDynamicFieldDefault###Element Einstellungen getätigt werden.

Werden mehr als 16 Felder benötigt, müssen Sie sich eine eigene XML erstellen und diese im Verzeichnis \$OTRS\_HOME/Kernel/Config/files ablegen, um dieses Feature zu erweitern.

- Wert:

Schlüssel	Inhalt
Ereignis	TicketCreate
Name	Feld1
Wert	Ein neuer Wert

## 10.2.12. Setzt die Standard-Einstellung abhängig von den Benutzereinstellungen

Der Standardwert der dynamischen Felder kann mit einem benutzerspezifischen Wert, der in den Benutzereinstellungen definiert ist, überschrieben werden

Bei Verwendung, wird der Standardwert des Feldes in jeder Oberfläche angezeigt, in der das Feld aktiviert ist (solange das Feld nicht bereits einen unterschiedlichen Wert besitzt).

Die "Sysconfig"-Einstellung "PreferencesGroups###DynamicField" ist in der Untergruppe "Frontend::Agent::Preferences" zu finden. Diese Einstellung ist ein Beispiel, wie man einen Eintrag in den Benutzereinstellungen erstellt, um einen exklusiven Standardwert des dynamischen Feldes für den ausgewählten Benutzer zu setzen. Die Einschränkung dieser Einstellung ist, dass nur die Verwendung ein dynamischen Feldes erlaubt ist. Wenn zwei oder mehr Felder dieses Feature verwenden, ist es notwendig eine benutzerdefinierte XML-Konfigurationsdatei zu erstellen, um weitere ähnliche Einstellungen wie diese hinzu zufügen.

### Anmerkung

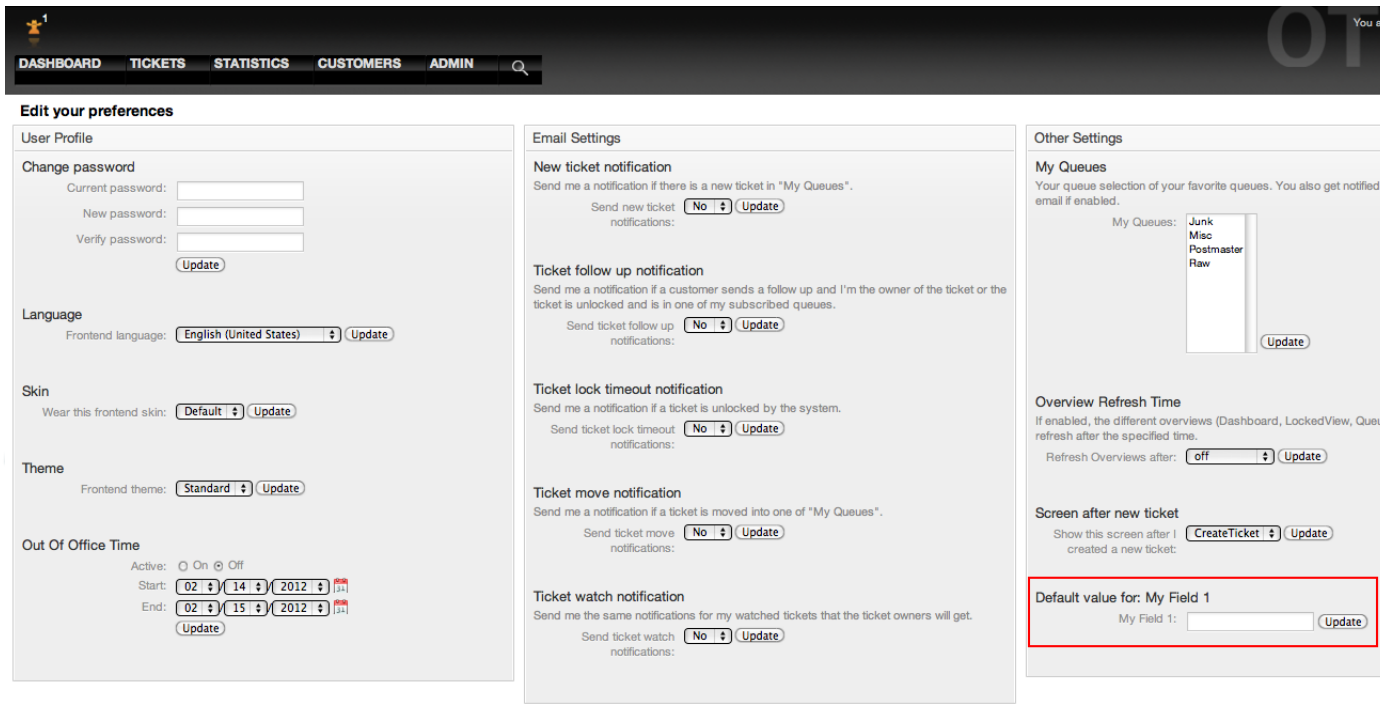
Beachten Sie, wenn mehrere Einstellungen in einer neuen XML-Datei hinzugefügt werden, muss jeder Feldname eindeutig und ein anderer als in "PreferencesGroups###DynamicField" sein. Zum Beispiel: PreferencesGroups###101-DynamicField-Field1, PreferencesGroups###102-DynamicField-Field2, PreferencesGroups###My-Field1, PreferencesGroups###My-Field2, etc.

### Beispiel 4.28. Aktiviert Field1 in den Benutzereinstellungen

- Gruppe: Ticket
- Untergruppe: Frontend::Agent::Preferences
- Einstellung: PreferencesGroups###101-DynamicField-Field1
- Wert:

Schlüssel	Inhalt
Ereignis	TicketCreate
Aktiv	1
Block	Eingabe
Spalte	Andere Einstellungen

Schlüssel	Inhalt
Daten:	<code>\$Env{"UserDynamicField_Field1"}</code>
Schlüssel:	Mein Feld 1
Beschriftung:	Standardwert für: Mein Feld 1
Modul:	Kernel::Output::HTML::PreferencesGeneric
PrefKey:	UserDynamicField_Field1
Priorität:	7000



The screenshot shows the 'Edit your preferences' page in OTRS. The 'Other Settings' section is highlighted with a red box. It contains a configuration for 'Default value for: My Field 1' with a text input field and an 'Update' button.

Powered by OTRS 3.1.x OVS

Abbildung: Feld1 in Benutzereinstellungen.

## 11. Generic Interface

The OTRS Generic Interface consists of a multiple layer framework that lets OTRS communicate with other systems via a web service. This communication could be bi-directional:

- *OTRS as Provider:* OTRS acts as a server listening to requests from the External System, processing the information, performing the requested action, and answering the request.
- *OTRS as Requester:* OTRS acts as a client collecting information, sending the request to the Remote System, and waiting for the response.

### 11.1. Generische Schnittstellenebenen

Generic Interface is build based on a layer model, to be flexible and easy to customize.

A layer is a set of files, which control how the Generic Interface performs different parts of a web service. Using the right configuration, one can build different web services for different External Systems without creating new modules.

## Anmerkung

If the Remote System does not support the current bundled modules of the Generic Interface, special modules need to be developed for that specific web service.

The list of provided Generic Interface modules shipped with OTRS will be updated and increased over time.

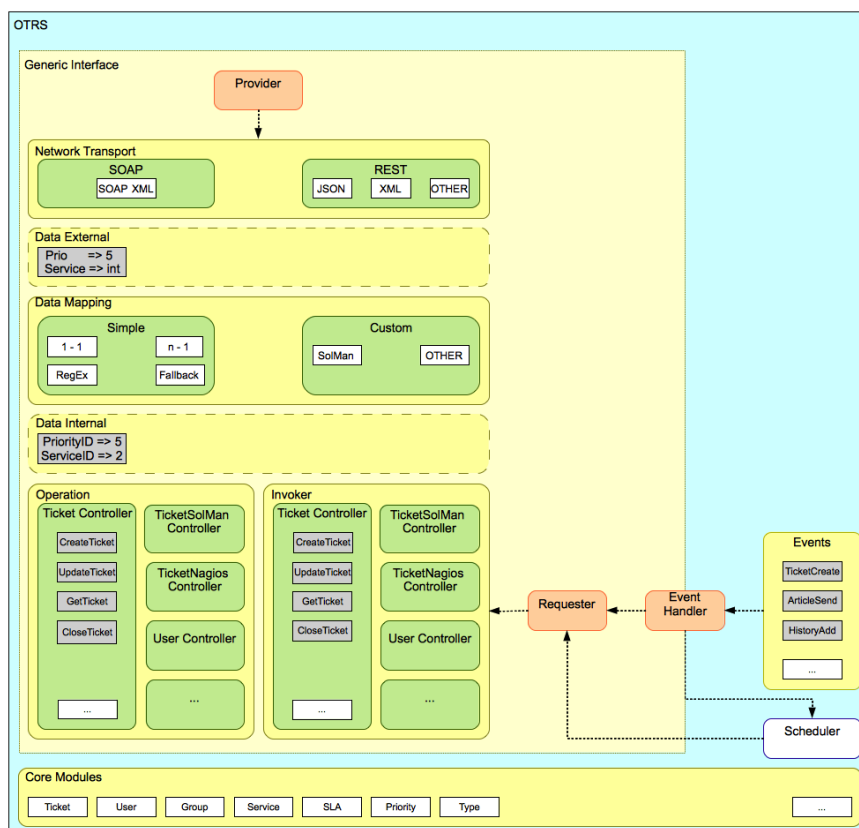


Abbildung: Die grafischen Interface Schichten.

### 11.1.1. Netzwerk-Transport

This layer is responsible for the correct communication with the Remote System. It receives requests and generates responses when acting as provider, and generates requests and receives responses when acting as requester.

Provider communication is handled by a new web server handle called "nph-genericinterface.pl".

Requester communication could be initiated during an event triggered by a Generic Interface module or any other OTRS module. This event is caught by the event handler and depending on the configuration the event will be processed directly by the requester object or delegated to the Scheduler (a separated daemon designed to process tasks asynchronously).

### 11.1.2. Daten-Mapping

This layer is responsible for translating data structures between OTRS and the Remote System (data internal and data external layers). Usually Remote Systems have different data structures than OTRS (including different values and names for those values), and

here resides the importance of the layer to change the received information into something that OTRS can understand and on the opposite way send the information to each Remote System using their data dictionaries.

*Example:* "Priority" (OTRS) might be called "Prio" in a remote system and it could be that value "1 Low" (OTRS) should be mapped to "Information" on the remote system.

### **11.1.3. Controller**

Controllers are collections of similar Operations or Invokers. For example, a Ticket controller might contain several standard ticket operations. Custom controllers can be implemented, for example a "TicketExternalCompany" controller which may contain similar functions as the standard Ticket controller, but with a different data interface, or function names (to adapt to the Remote System function names) or complete different code.

One application for Generic Interface could be to synchronize information with one Remote System that only can talk with another Remote System of the same kind. In this case new controllers needs to be developed and the Operations and Invokers has to emulate the Remote System behavior in such way that the interface that OTRS exposes is similar to the Remote System's interface.

### **11.1.4. Operation (OTRS als Provider)**

An Operation is a single action that can be performed within OTRS. All operations have the same programming interface, they receive the data into one specific parameter, and return a data structure with a success status, potential error message and returning data.

Normally operations uses the already mapped data (internal) to call core modules and perform actions in OTRS like: Create a Ticket, Update a User, Invalidate a Queue, Send a Notification, etc. An operation has full access to the OTRS API to perform the action.

### **11.1.5. Invoker (OTRS als Requester)**

An Invoker is an action that OTRS performs against a Remote System. Invokers use the OTRS Core modules to process and collect the needed information to create the request. When the information is ready it has to be mapped to the Remote System format in order to be sent to the Remote System, that will process the information execute the action and send the response back, to either process the success or handle errors.

## **11.2. Generic Interface Kommunikationsfluss**

Das Generic Interface hat einen definierten Fluss um Aktionen als Provider und Requester auszuführen.

Diese Flüsse sind wie folgt beschrieben:

### **11.2.1. OTRS als Provider**

#### **11.2.1.1. Entfernte Anfrage:**

1. HTTP-Anfrage

- OTRS empfängt HTTP-Anfragen und leitet sie durch die verschiedenen Schichten weiter.
- Die Provider-Modul ist für die Ausführung und Kontrolle dieser Maßnahmen vorhanden.

2. Netzwerk-Transport



- Das Netzwerktransportmodul dekodiert den Daten-Payload und trennt den Operationsnamen aus dem Rest der Daten.
- Der Operationsname und die Betriebsdaten werden an den Provider zurückgegeben

### 3. *externe Daten*

- Daten die vom Remote-System gesendet wurden (Das ist kein Modulbasierter Layer).

### 4. Mapping

- Die Daten wird aus dem Fremdsystem-Format in das interne OTRS Format, wie in der Mapping-Konfiguration für diesen Vorgang (Mapping für eingehende Anforderungsdaten) spezifiziert, umgewandelt.
- Die bereits transformierten Daten werden an den Provider zurückgegeben.

### 5. *interne Daten*

- Sobald die Daten, transformiert und aufbereitet wurden, werden diese an die Operation weitergeleitet. (Das ist kein Modulbasierter Layer).

### 6. Operation

- Empfängt und prüft Daten
- Führt eine Benutzerzugangskontrolle durch.
- Führt die Aktion aus.

## **11.2.1.2. OTRS-Antwort:**

### 1. Operation

- Liefert das Ergebnis an den Provider.

### 2. *interne Daten*

- Von der Operation zurückgegebene Daten.

### 3. Mapping

- The data is transformed back to the Remote system format as specified in the mapping configuration (Mapping for outgoing response data).
- Die bereits transformierten Daten werden an den Provider zurückgegeben.

### 4. *externe Daten*

- Data as transformed and prepared to be passed to Network Transport as response.

### 5. Netzwerk-Transport

- Empfängt die Daten im Format des Remote-Systems.
- Constructs a valid response for this network transport type.

### 6. HTTP-Antwort

- The response is sent back to the web service client.
- In the case of an error, an error response is sent to the remote system (e.g. SOAP fault, HTTP error, etc).

## 11.2.2. OTRS als Requester

### 11.2.2.1. OTRS Anfrage:

#### 1. Event-Trigger-Steuerungsprogramm

- Basierend auf der Konfiguration des Webservices wird entschieden ob der Request synchron oder asynchron ist.
  - synchron
    - A direct call to the Requester is made in order to create a new request and to pass it through the layers.
  - asynchron
    - Create a new Generic Interface (Requester) task for the OTRS Scheduler (by delegating the request execution to the Scheduler, the user experience could be highly improved, otherwise all the time needed to prepare the request and the remote execution will be added to the OTRS Events that trigger those requests).
    - In its next cycle the Scheduler process reads the new task and creates a call to the Requester that will create a new request and then passes it through the layers.

#### 2. Invoker

- Empfängt Daten von dem Event.
- Überprüft empfangene Daten (wenn benötigt).
- Call core modules to complement the data (if needed).
- Return the request data structure or send a Stop Communication signal to the requester, to gracefully cancel the request.

#### 3. *interne Daten*

- Data as passed from the invoker (This is not a module based layer).

#### 4. Mapping

- The data is transformed to the Remote system format as specified in the mapping configuration (Mapping for outgoing response data).
- The already transformed data is returned to the requester.

#### 5. *externe Daten*

- Data as transformed and prepared for sending to the remote system.

#### 6. Netzwerk-Transport

- Receives the remote operation name and the data already transformed to the Remote System format from the requester.
- Konstruiert eine gültige Anfrage für die Netzwerkübertragung.
- Sendet die Anfrage zum Remote-System und wartet auf eine Antwort

### 11.2.2.2. Remote Antwort:

#### 1. Netzwerkübertragung

- Empfängt die Antwort und dekodiert den Daten-Payload.
- Sendet die Daten zurück zu dem Requester.

#### 2. externe Daten

- Daten, die vom Remote-System empfangen wurden

#### 3. Mapping

- Die Daten wird aus dem Fremdsystem-Format in das interne OTRS Format, wie in der Mapping-Konfiguration für diesen Vorgang (Mapping für eingehende Anforderungsdaten) spezifiziert, umgewandelt.
- The already transformed data is returned to the requester.

#### 4. interne Daten

- Sobald die Daten, transformiert und aufbereitet wurden, werden diese an die Requester zurückgeschickt.

#### 5. Invoker

- Empfängt die zurückgegebenen Daten.
- Verarbeitet die Daten als speziell von jedem Invoker benötigt werden (inklusive Fehlerbehandlung falls vorhanden).
- Gibt das Ergebnis und die Daten des Invokers an den Requester.

#### 6. Event-Steuerungsprogramm oder Scheduler

- Empfängt die Daten vom Requester, im Falle des Schedulers beinhalten die Daten Informationen darüber ob der Task sofort oder in der Zukunft wieder ausgeführt werden soll.

## 11.3. Web-Services

A Web Service is a communication method between two systems, in our case OTRS and a Remote System.

The heart of the Web Service is its configuration, where it is defined what actions the web service can perform internally (Operation), what actions the OTRS request can perform Remote System (Invokers), how data is converted from one system to the other (Mapping), and over which protocol the communication will take place (Transport)

The Generic Interface is the framework that makes it possible to create Web Services for OTRS in a pre-defined way, using already made building blocks that are independent from each other and interchangeable.

## 11.4. Web Service - Grafische Oberfläche

Die grafische Benutzeroberfläche (GUI) des Webservice ist ein Werkzeug, dass es erlaubt komplexe Webservice-Konfigurationen mit einer benutzerfreundlichen und komfortablen Oberfläche zu erstellen. Es erlaubt folgendes:

- Erstellen und Löschen von Webservices
- Importieren und Exportieren von Konfigurationen (im YAML Dateiformat) für existierende Webservices.

- Zeige, exportiere und setze alte Konfigurationen für existierende Webservices in der Web Service History - Anzeige zurück.
- Verfolge alle Kommunikations-Protokolle für alle Webservices in der Debugger-Anzeige.

### 11.4.1. Webservice-Übersicht

Der "Web-Services"-Link im Hauptbildschirm der Admin-Oberfläche (in der "System Administration"-Box) führt zum Webservices-Überblick-Bildschirm, wo alle Webservice-Konfigurationen verwaltet werden können. Neue Webservices können hinzugefügt oder schon vorhandene Konfigurationen geändert werden.

Jede Webservice-Konfigurationsanzeige hat im oberen Teil des Bildschirms einen Navigationspfad im "Brotkrumen"-Stil. Dieser Navigationspfad ist nützlich um genau zu wissen, in welchem Teil der Webservice-Konfiguration man sich befindet und erlaubt dem Nutzer jederzeit zu irgendeinem Teil des Konfigurationsprozesses zurückzuspringen (jegliche Änderungen werden nicht gespeichert).

#### Anmerkung

Drücken Sie den Knopf "Webservice hinzufügen" um einen neuen Webservice zu erstellen, und geben Sie die erforderlichen Informationen an.

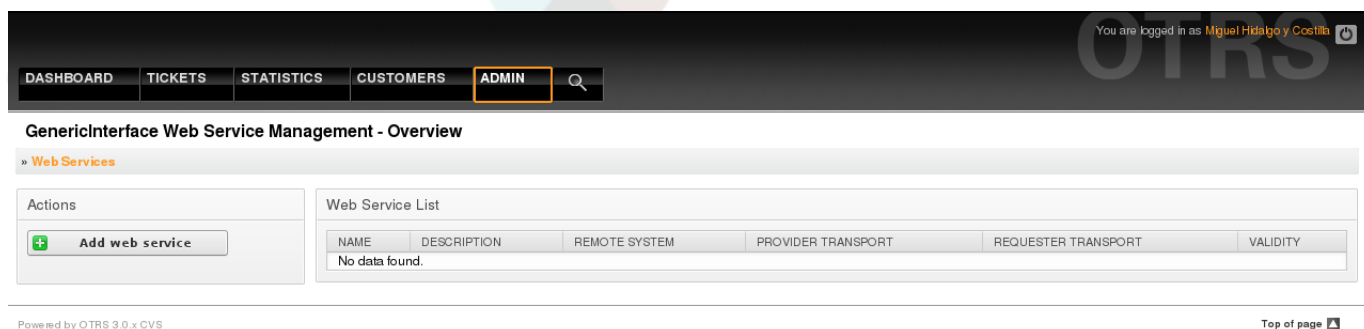


Abbildung: Überblick Webservices

### 11.4.2. Webservice hinzufügen

The only required field in this part is the web service "Name" that needs to be unique in the system and can not be left empty. Other fields are also necessary for the configuration like the "Debug Threshold" and "Validity" but these fields are already populated with the default value for each list.

The default value for "Debug Threshold" is "debug". When configured in this manner all communication logs are registered in the database. Each subsequent Debug Threshold value is more restrictive and discards communication logs of lower order than the one set in the system.

## Schwellenwerte der Fehlersuche (von niedrig nach hoch)

- Fehlersuche
- Info
- Notiz
- Error

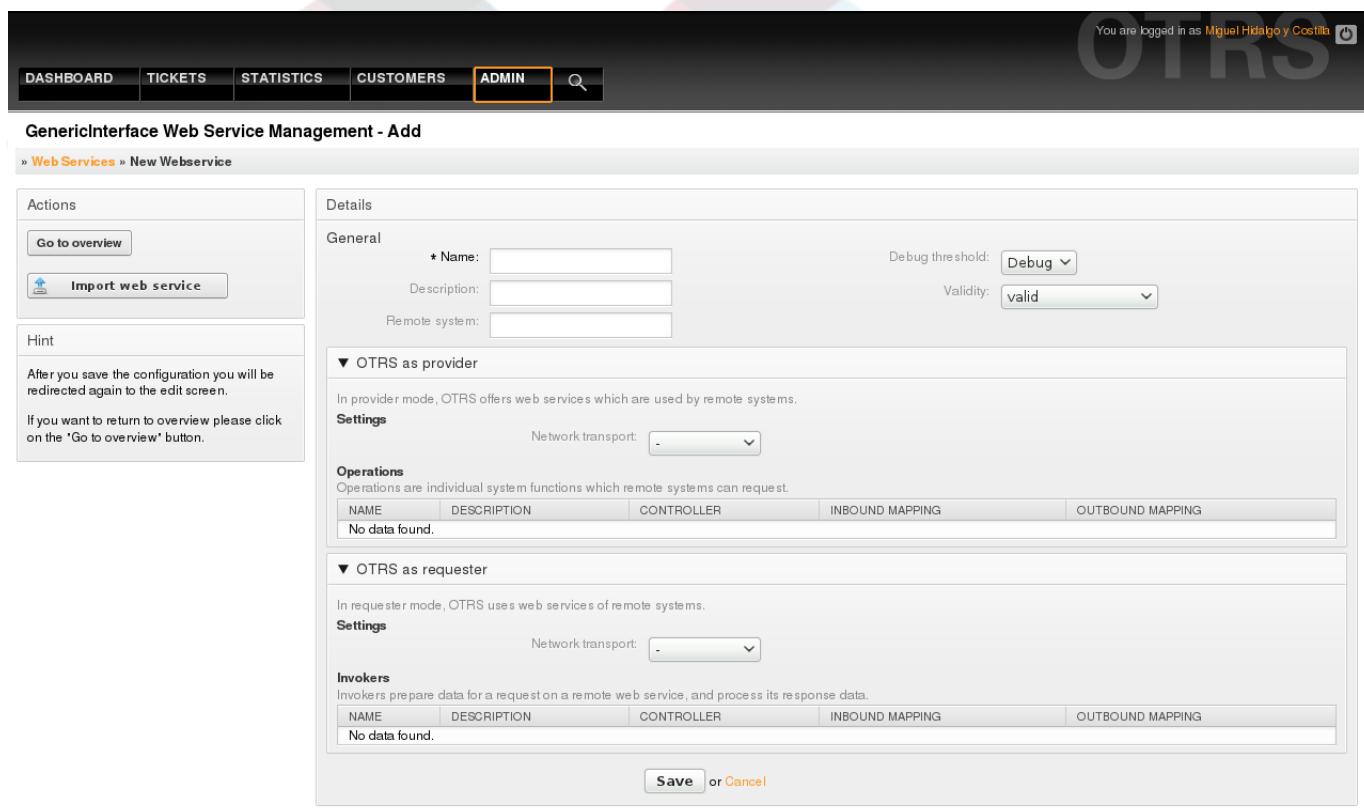
Es ist ebenfalls möglich das Netzwerkübertragungsprotokoll für "OTRS als Provider" und "OTRS als Requester" zu definieren.

Klicken Sie auf "Speichern" um den neuen Webservice in der Datenbank zu registrieren oder klicken Sie auf "Abbrechen" um die Änderungen zu verwerfen. Anschließend werden Sie auf die Übersichtsseite der Webservices weitergeleitet.

Wenn Sie bereits eine Webservice Konfigurationsdatei im YAML Format haben, können sie auf der linken Seite den "Webservice importieren"-Button klicken. Weitere Informationen über das importieren von Webservices finden Sie im nächsten Abschnitt "Webservice ändern".

## Anmerkung

To change or add more details to a web service, click on the web service name in the web service overview screen.



GenericInterface Web Service Management - Add

» Web Services » New Webservice

**Actions**

Go to overview

Import web service

**Hint**

After you save the configuration you will be redirected again to the edit screen.

If you want to return to overview please click on the 'Go to overview' button.

**Details**

**General**

\* Name:

Description:

Remote system:

Debug threshold: Debug

Validity: valid

**OTRS as provider**

In provider mode, OTRS offers web services which are used by remote systems.

**Settings**

Network transport: -

**Operations**

Operations are individual system functions which remote systems can request.

NAME	DESCRIPTION	CONTROLLER	INBOUND MAPPING	OUTBOUND MAPPING
No data found.				

**OTRS as requester**

In requester mode, OTRS uses web services of remote systems.

**Settings**

Network transport: -

**Invokers**

Invokers prepare data for a request on a remote web service, and process its response data.

NAME	DESCRIPTION	CONTROLLER	INBOUND MAPPING	OUTBOUND MAPPING
No data found.				

Save or Cancel

Abbildung: Webservice hinzufügen.

## 11.4.3. Webservice ändern

On this screen you have a complete set of functions to handle every part of a web service. On the left side in the action column you can find some buttons that allows you to perform all possible actions on a web service:

- Webservice kopieren
- Webservice exportieren
- Webservice importieren.
- Konfigurationschronik.
- Webservice löschen
- Debugger.

### Anmerkung

"Configuration history" and "Debugger" will lead you to different screens.

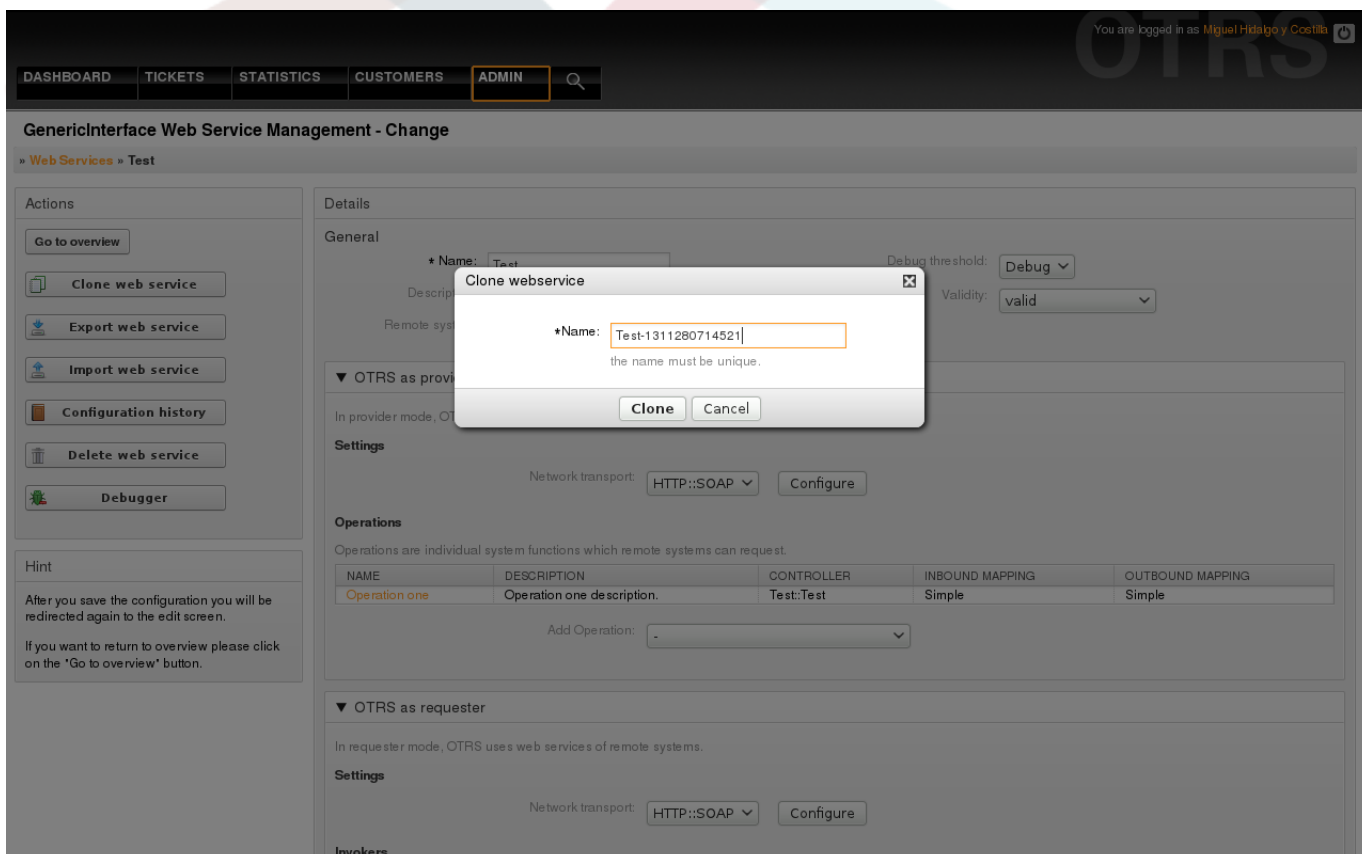
### 11.4.3.1. Webservice kopieren

To clone a web service, you need to click on the "Clone web service" button. A dialog will be shown where you can use the default name or set a new name for the (cloned) web service.

### Anmerkung

*Remember* that the name of the web service must be unique within the system.

Click on "Clone" button to create the web service clone or "Cancel" to close the dialog.



The screenshot displays the OTRS administration interface for managing web services. A modal dialog titled "Clone web service" is open, showing a text input field for a new name containing "Test-1311280714521". Below the input, a message states "the name must be unique." and there are "Clone" and "Cancel" buttons. The background interface includes a navigation menu (Dashboard, Tickets, Statistics, Customers, Admin), a breadcrumb trail "Web Services » Test", and a "Details" section for a web service. The "General" section has fields for Name, Description, and Remote system. The "Settings" section includes "Network transport" (HTTP::SOAP) and "Configure" buttons. The "Operations" section contains a table of operations and an "Add Operation" dropdown.

NAME	DESCRIPTION	CONTROLLER	INBOUND MAPPING	OUTBOUND MAPPING
Operation one	Operation one description.	Test::Test	Simple	Simple

Abbildung: Webservice kopieren.

### 11.4.3.2. Webservice exportieren

The "Export web service" button gives you the opportunity to dump the configuration of the current web service into a YAML file, to download it and to store it on your file system. This can be specially useful if you want to migrate the web service system from one server to another, for example from a testing environment to a production system.

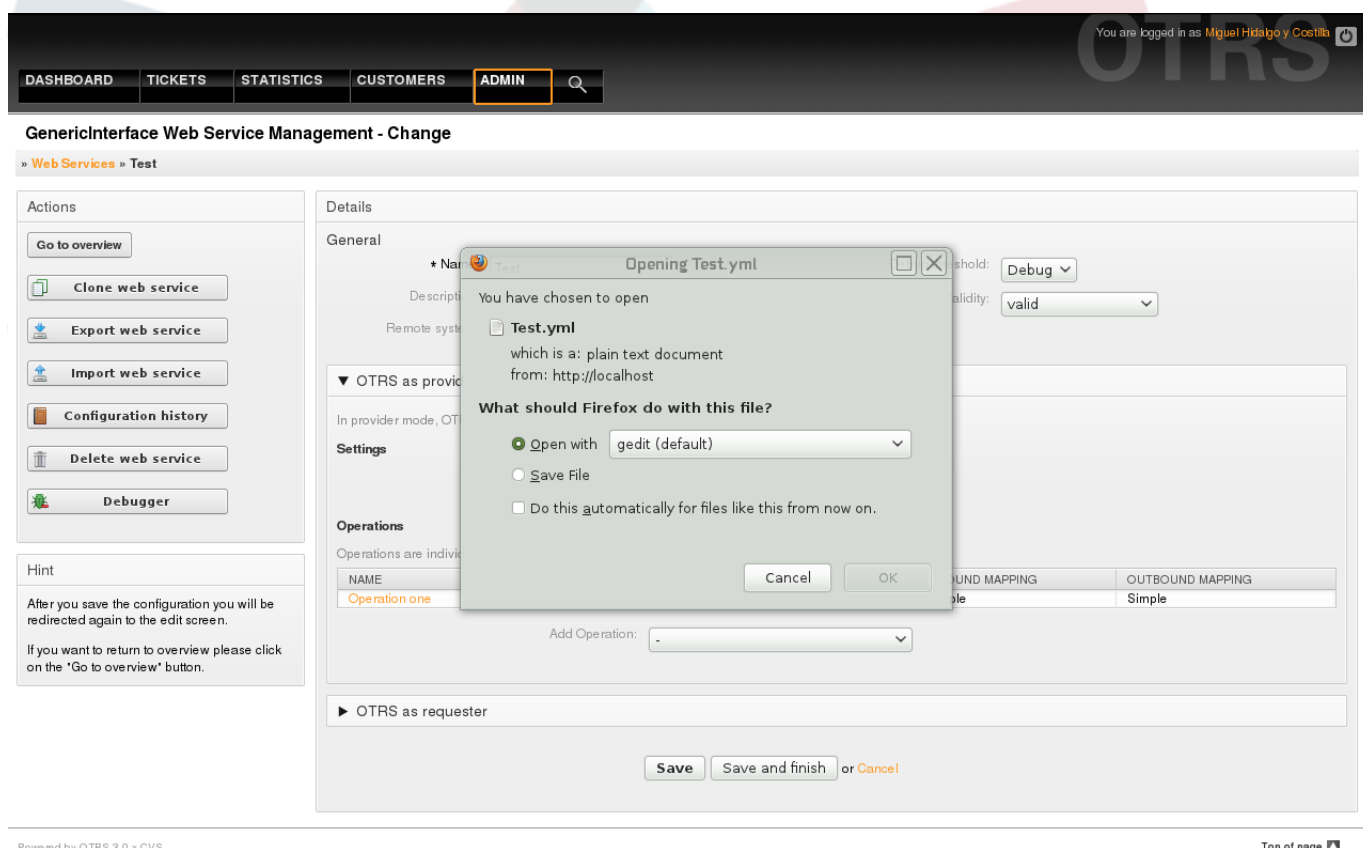
#### Warnung

Alle in der Webservice-Konfiguration gespeicherten Passwörter werden im Klartext exportiert.

Right after clicking the "Export web service" button a save dialog of your browser will appear, just like when you click on a file download link on a web page.

#### Anmerkung

Jeder Browser auf den verschiedenen Betriebssystemen hat seinen eigenen Speicher-Dialog und -Stil. Je nachdem welcher Browser mit welcher Konfiguration vorhanden ist, kann es sein, dass überhaupt kein Dialog angezeigt wird und die Datei direkt im Standard-Verzeichnis auf Ihrem Dateisystem gespeichert wird. Bitte überprüfen Sie Ihre Browser-Anleitung wenn Sie genauere Anweisungen benötigen.



The screenshot shows the OTRS Admin interface for managing web services. The 'ADMIN' menu is active. The page title is 'GenericInterface Web Service Management - Change'. The breadcrumb is 'Web Services » Test'. On the left, there are several action buttons: 'Go to overview', 'Clone web service', 'Export web service', 'Import web service', 'Configuration history', 'Delete web service', and 'Debugger'. A hint box below these buttons states: 'After you save the configuration you will be redirected again to the edit screen. If you want to return to overview please click on the "Go to overview" button.' The main content area shows details for a web service named 'Test'. A modal dialog titled 'Opening Test.yml' is open, asking 'What should Firefox do with this file?'. The dialog shows 'Test.yml' is a plain text document from 'http://localhost'. The 'Open with' option is set to 'gedit (default)'. There are 'Cancel' and 'OK' buttons. At the bottom of the page, it says 'Powered by OTRS 3.0.x CVS' and 'Top of page'.

Abbildung: Webservice exportieren.

### 11.4.3.3. Webservice importieren

A valid web service configuration YAML file is required to use the import web service feature. Click on the "Import web service" button, browse for the configuration file or provide the complete path in the input box.



Click "Import" button to create a new web service from a file or "Cancel" to close the dialog.

## Anmerkung

The web service name will be taken from the configuration file name (e.g. if the file name is MyWebservice.yml the resulting web service will be named MyWebservice). If a web service is registered in the system with the same name as the web service that you want to import, the system will lead you to the web service change screen to let you change the name of the imported web service.

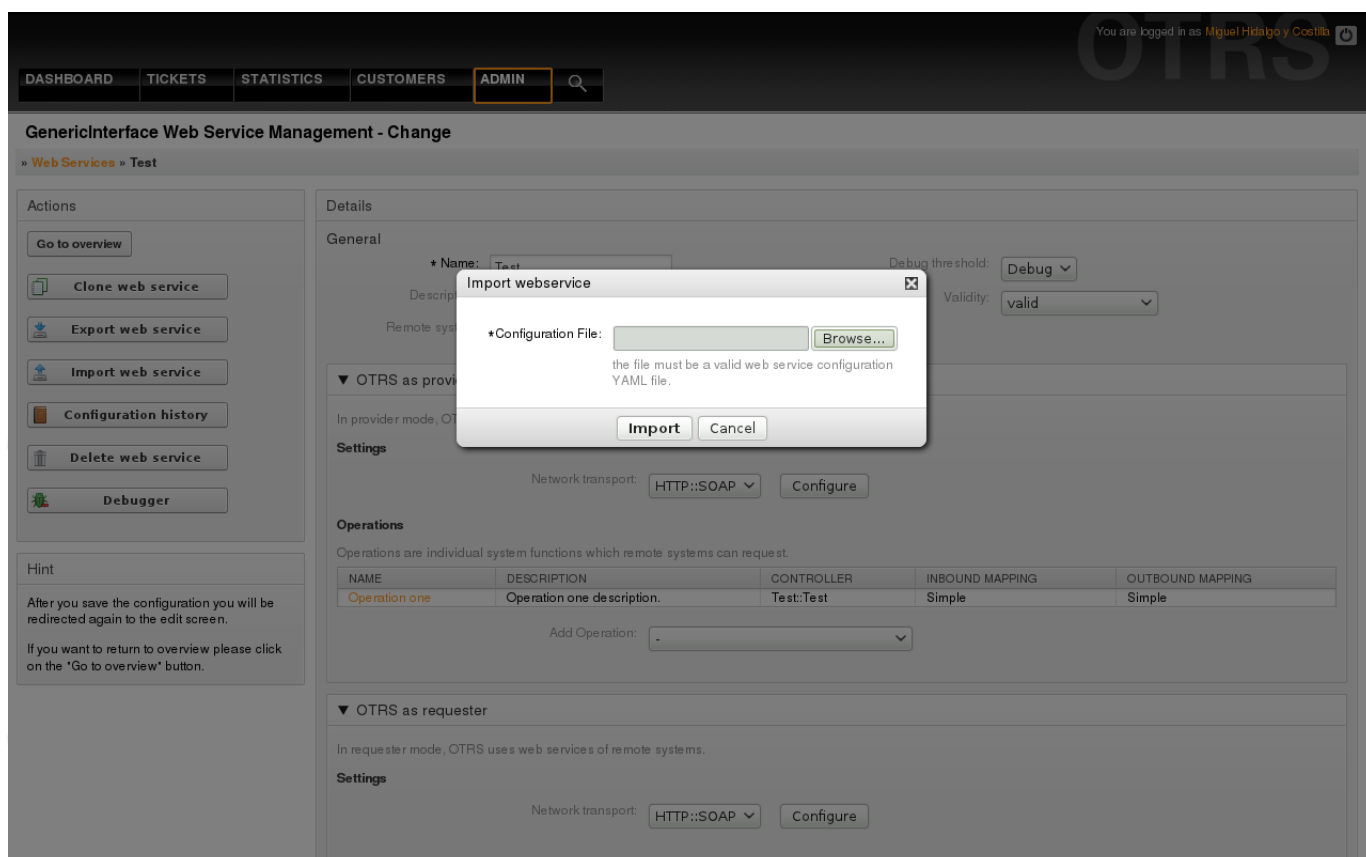


Abbildung: Webservice importieren.

### 11.4.3.4. Webservice Historie

Every change to the web service configuration creates a new entry in the web service history (as a journal). The web service history screen displays a list of all configuration versions for a web service. Each row (version) in the "Configuration History List" represents a single revision in the web service history.

Click on one of the rows to show the whole configuration as it was on that particular date / time. The configuration will be shown in the "History details" section of this screen. Here you are also able to export the selected web service configuration version or to restore that version into the current web service configuration.

The "Export web service configuration" behaves exactly as the "Export web service" feature in the web service change screen. For more information refer to that section.

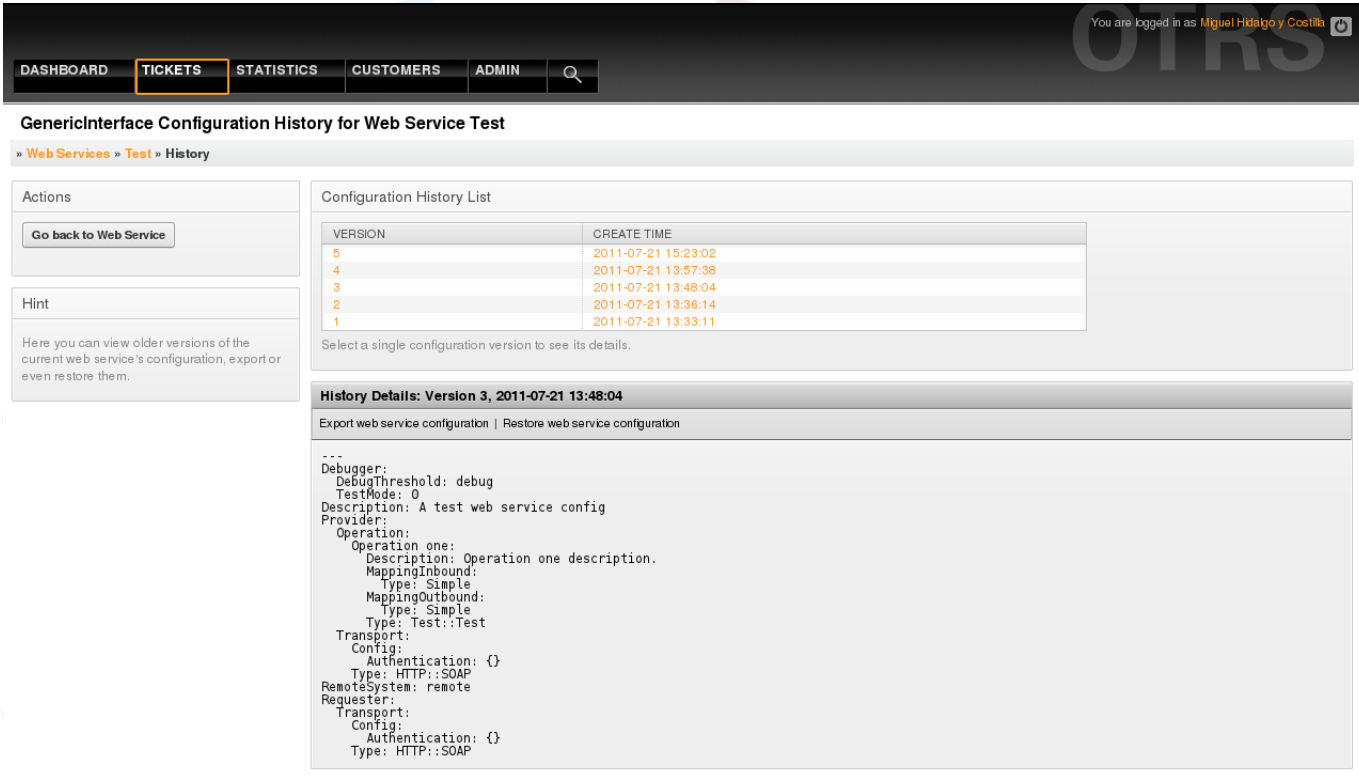
If changes to the current web service configuration do not work as expected and it is not easy to revert the changes manually, you can click on the "Revert web service configuration" button. This will open a dialog to ask you if you are sure to revert the web service

configuration. Click "Revert web service configuration" in this dialog to replace the current configuration with the selected version, or click "Cancel" to close the dialog.

## Warnung

Remember that any passwords stored in the web service configuration will be exported in plain text format.

Bitte seien Sie vorsichtig, wenn Sie eine Konfiguration wiederherstellen, dieser Prozess ist unumkehrbar.



The screenshot shows the OTRS web interface. At the top, there is a navigation bar with tabs for DASHBOARD, TICKETS, STATISTICS, CUSTOMERS, and ADMIN. The user is logged in as Miguel Hidalgo y Costilla. The main content area is titled "GenericInterface Configuration History for Web Service Test". It includes a breadcrumb trail: » Web Services » Test » History. On the left, there are sections for "Actions" (with a "Go back to Web Service" button) and "Hint" (explaining that users can view older versions, export, or restore them). The main part is a "Configuration History List" table:

VERSION	CREATE TIME
5	2011-07-21 15:23:02
4	2011-07-21 13:57:38
3	2011-07-21 13:48:04
2	2011-07-21 13:36:14
1	2011-07-21 13:33:11

Below the table, there is a "History Details" section for "Version 3, 2011-07-21 13:48:04". It includes options to "Export web service configuration" and "Restore web service configuration". The details are as follows:

```

---
Debugger:
  DebugThreshold: debug
  TestMode: 0
Description: A test web service config
Provider:
  Operation:
    Operation one:
      Description: Operation one description.
      MappingInbound:
        Type: Simple
      MappingOutbound:
        Type: Simple
        Type: Test::Test
      Transport:
        Config:
          Authentication: {}
          Type: HTTP::SOAP
        RemoteSystem: remote
      Requester:
        Transport:
          Config:
            Authentication: {}
            Type: HTTP::SOAP
  
```

At the bottom of the page, it says "Powered by OTRS 3.0.x CVS" and "Top of page".

Abbildung: Webservice Historie.

### 11.4.3.5. Webservice löschen

Sometimes it is necessary to delete a web service completely. To do this you can press on the "Delete web service" button and a new dialog will appear asking for confirmation.

Click on "Delete" to confirm the removal of the web service or on "Cancel" to close the dialog.

## Warnung

Deleting a web service can't be undone, please be careful when deleting a web service.

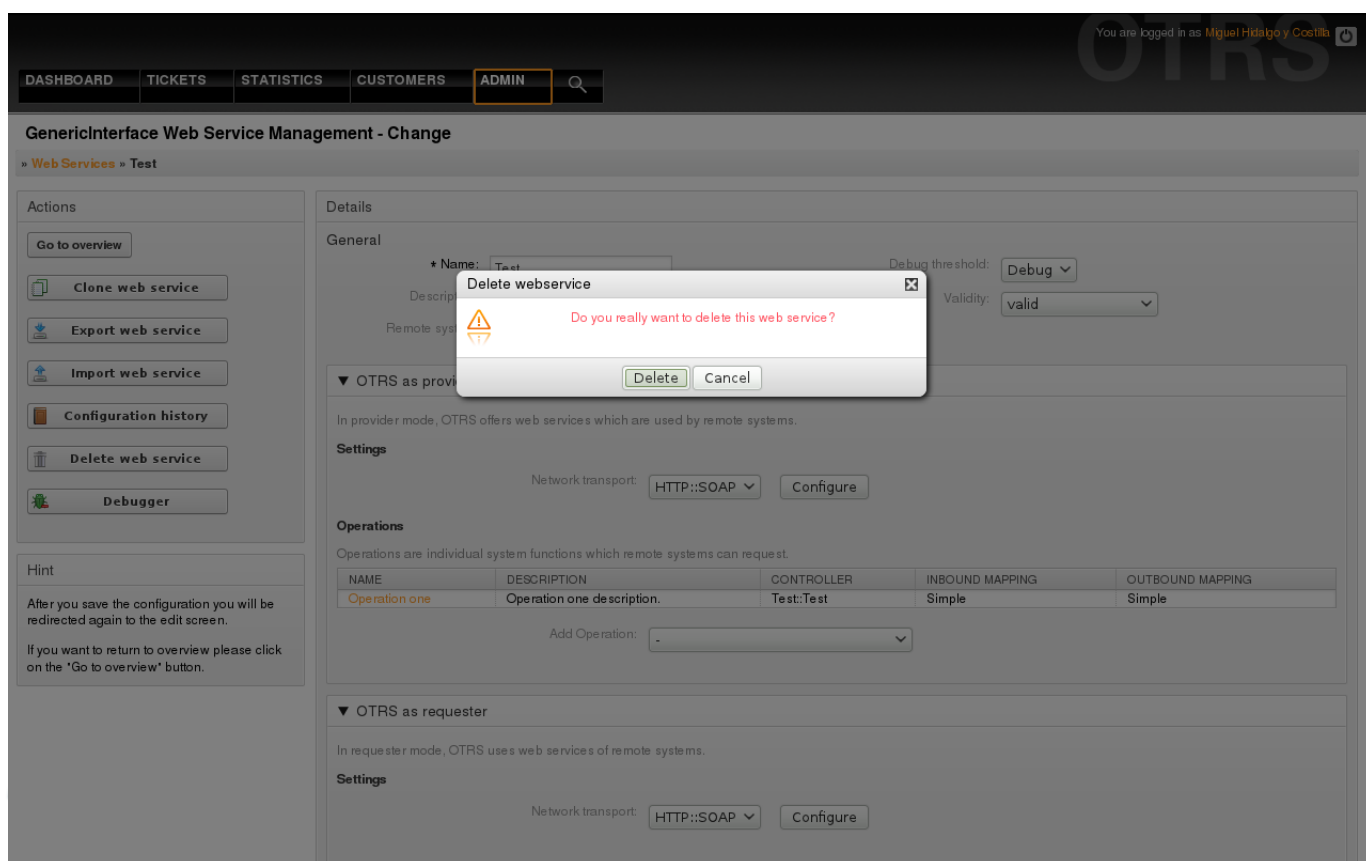


Abbildung: Webservice löschen.

### 11.4.3.6. Webservice Debugger

The Debugger stores the log of a web service. In the debugger screen you can track all the web service communications for either provider or requester types.

When this screen is shown the request list starts to load. After the list is fully filled you can choose one of the rows (that means a communication sequence) to check its details. This details will appear in a box below.

You can narrow the communication list using the filter on the right part of the screen. You can filter by:

- Kommunikationstyp (Provider oder Requester)
- Date: before and / or after a particular date
- Die Remote-IP-Adresse
- Eine Kombination von allem.

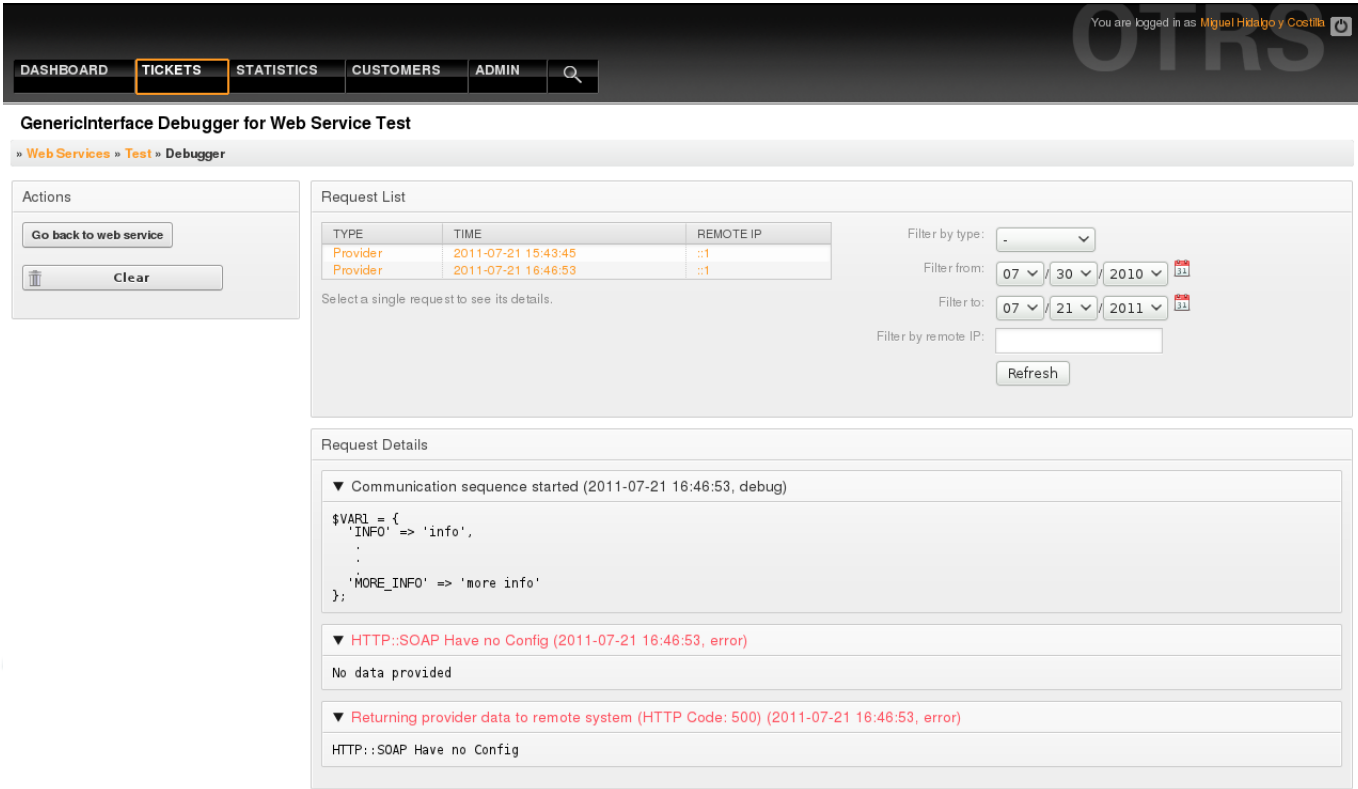
After filter settings are set, push the "Refresh" button and a new list will be displayed meeting your search criteria.

### Anmerkung

Depending on the search criteria for the filters the new list could return no results.

On the left part of the screen under the action column you can select "Go back to the web service" or clear the debugger log by pushing the "Clear" button. This will open a dialog that ask you to confirm erasing of the log. Click "Clear" in the dialog button to perform the action or click on "Cancel" to close this dialog.

In the "Request details" section you can see all the details for the selected communication. Here you can track the complete flow and check for possible errors or confirm success responses.



Powered by OTRS 3.0.x CVS

Top of page

Abbildung: Webservice Debugger.

### 11.4.3.7. Ändern der Webservice Konfiguration

Returning to the web service change screen, now we are going to review the right side of it. Here we have the possibility to modify all the general data for a web service such as name, description, debug threshold, etc. Also there are two more sections below that allows us to modify specific parameters for communication types "OTRS as Provider" and "OTRS as Requester".

The web service configuration needs to be saved on each level. This means that if a setting is changed, links to other, deeper parts of the configuration will be disabled forcing you to save the current configuration level. After saving the disabled links will be re-enabled again allowing you to continue with the configuration.

On the "OTRS as provider" section it is possible to set or configure the network transport protocol. Only network transport back-ends that are registered are shown on the list. To configure the network transport click on the "Configure" button. It is also possible to add new operations in this box. To do this select one of the available operations from the "Add Operation" list. This will lead you to the operation configuration screen. After saving the new operation it will be listed in the table above.

"OTRS as requester" is very similar to the previous one, but instead of "operations" you can add invokers here.

Click the "Save" button to save and continue configuring the web service, "Save and finish" to save and return to the web service overview screen, or "Cancel" to discard current configuration level changes and return to web service overview screen.

## GenericInterface Web Service Management - Change

» Web Services » Test

Actions

[Go to overview](#)

[Clone web service](#)

[Export web service](#)

[Import web service](#)

[Configuration history](#)

[Delete web service](#)

[Debugger](#)

---

Hint

After you save the configuration you will be redirected again to the edit screen.

If you want to return to overview please click on the "Go to overview" button.

Details

General

\* Name:  Debug threshold:

Description:  Validity:

Remote system:

---

▼ OTRS as provider

In provider mode, OTRS offers web services which are used by remote systems.

**Settings**

Network transport:  [Configure](#)

**Operations**

Operations are individual system functions which remote systems can request.

NAME	DESCRIPTION	CONTROLLER	INBOUND MAPPING	OUTBOUND MAPPING
Operation one	Operation one description.	Test:Test	Simple	Simple

Add Operation:

---

▼ OTRS as requester

In requester mode, OTRS uses web services of remote systems.

**Settings**

Network transport:  [Configure](#)

**Invokers**

Invokers prepare data for a request on a remote web service, and process its response data.

NAME	DESCRIPTION	CONTROLLER	INBOUND MAPPING	OUTBOUND MAPPING
Invoker one	Invoker one description	Test:Test	Simple	Simple

Add Invoker:

[Save](#) [Save and finish](#) or [Cancel](#)

Abbildung: Webservice ändern.

## Anmerkung

Like the other Generic Interface configuration screens such as Network Transport, Operation, Invoker and Mapping, the initial configuration (add) screen will only present two options: "Save" and "Cancel". If the configuration is re-visited, a new option "Save and Finish" will appear. The behavior of this feature is defined below.

"Save" will store the current configuration level in the database and it will return to the previous screen to review your changes or to configure deeper settings.

"Save and Finish" will store the current configuration level in the database and it will return to the previous screen in the configuration hierarchy (to the immediate upper configuration level).

"Cancel" will discard any configuration change to the current configuration level and will return to the previous screen in the configuration hierarchy.

### 11.4.3.7.1. Webservice Requester Übertragung

In future the list of available network transports will be increased. Currently only the "HTTP::SOAP" transport is available. Each transport has different configuration options to setup and they might use different frontend modules to configure it, but mostly they should look similar to the "HTTP::SOAP" transport configuration module.

It is quite simple to configure the "HTTP::SOAP" protocol as provider. There are only two settings: "Namespace" and "Maximum message length". These fields are required. The first one is a URI to give SOAP methods a context, reducing ambiguities, and the second one is a field where you can specify the maximum size (in bytes) for SOAP messages that OTRS will process.

The screenshot shows the OTRS web interface. At the top right, it says 'You are logged in as Miguel Hidalgo y Costilla'. The navigation menu includes 'DASHBOARD', 'TICKETS', 'STATISTICS', 'CUSTOMERS', and 'ADMIN'. The main heading is 'GenericInterface Transport HTTP::SOAP for Web Service Test'. Below this is a breadcrumb trail: '» Web Services » Test » Provider Transport HTTP::SOAP'. On the left, there is an 'Actions' section with a button 'Go back to web service'. The main configuration area is titled 'Network transport' and contains a 'Properties' section. The 'Type' is 'HTTP::SOAP'. The '\*Name space' field contains 'TransportOne'. Below this, there is a note: 'URI to give SOAP methods a context, reducing ambiguities. e.g. urn:otrs-com:soap:functions or http://www.otrs.com/GenericInterface/actions'. The '\*Maximum message length' field contains '100000000'. Below this, there is a note: 'Here you can specify the maximum size (in bytes) of SOAP messages that OTRS will process.' At the bottom of the form are three buttons: 'Save', 'Save and finish', and 'or Cancel'.

Powered by OTRS 3.0.x CVS

Top of page

*Abbildung: Webservice Provider Übertragung.*

### 11.4.3.7.2. Webservice-Operation

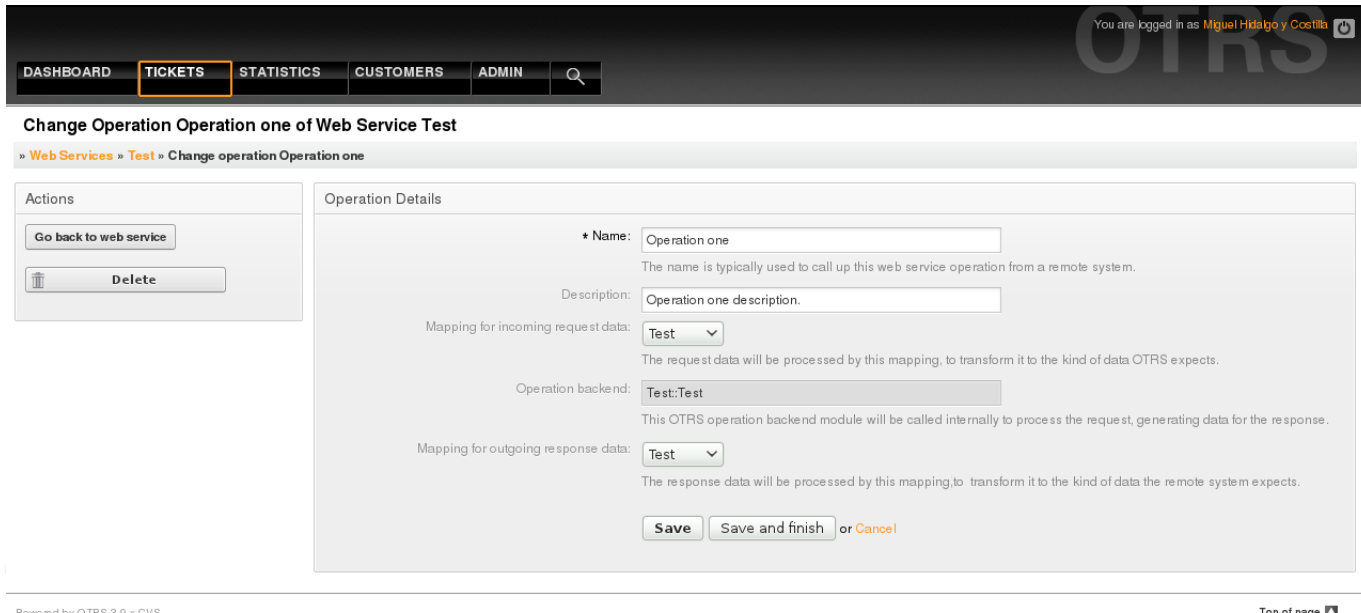
The actions that can be performed when you are using OTRS as a provider are called "Operations". Each operation belongs to a controller. Controllers are collections of operations or invokers, normally operations from the same controller need similar settings and share the same configuration dialog. But each operation can have independent configuration dialogues if needed.

Name, Description, Backend, and Mappings are fields that normally appear on every operation, other special fields can appear in non default configuration dialogues to fulfill specific needs of the operation.

Normalerweise gibt es zwei Mapping-Konfigurationsabteilungen bei jeder Operation, eine für die ankommenden Daten und eine für die ausgehenden Daten. Sie können verschiedene Mapping-Arten (Backends) für jede Mapping-Richtung auswählen, da deren Konfiguration unabhängig voneinander und unabhängig vom Operations-Backend ist. Die normale und am meisten übliche Praxis ist es, dass die Operation in beiden Fällen die gleiche Mapping-Art nutzt (mit umgekehrter Konfiguration). Die komplette Mapping-Konfiguration wird in einer extra Anzeige, die auf die Mapping-Art drauf ankommt, gemacht.

The operation backend is pre-populated and is not editable. You will see this parameter when you choose the operation on the web service edit screen. The field is only informative.

Im linken Teil der Anzeige in der Aktionen-Spalte haben Sie die Optionen: "Gehe zurück zum Webservice" (alle Änderungen seit dem letzten Speichern werden verworfen) und "Löschen". Wenn Sie letzteres wählen wird sich ein Dialogfenster öffnen, in dem Sie das Löschen der Operation bestätigen sollen. Klicken Sie auf "Löschen" um die Entfernung der Operation und ihrer Konfiguration zu bestätigen oder "Abbrechen" um den Lösch-Dialog zu schließen.



The screenshot shows the OTRS web interface. At the top, there is a navigation menu with 'DASHBOARD', 'TICKETS', 'STATISTICS', 'CUSTOMERS', and 'ADMIN'. The 'TICKETS' menu item is highlighted. In the top right corner, it says 'You are logged in as Miguel Hidalgo y Costilla'. Below the navigation, the page title is 'Change Operation Operation one of Web Service Test'. The breadcrumb trail is '» Web Services » Test » Change operation Operation one'. On the left, there is an 'Actions' panel with two buttons: 'Go back to web service' and 'Delete'. The main area is titled 'Operation Details' and contains the following fields:

- Name:** Operation one (Text input field)
- Description:** Operation one description. (Text input field)
- Mapping for incoming request data:** Test (Dropdown menu)
- Operation backend:** Test:Test (Text input field)
- Mapping for outgoing response data:** Test (Dropdown menu)

Below the fields, there are three buttons: 'Save', 'Save and finish', and 'or Cancel'. At the bottom left, it says 'Powered by OTRS 3.0.x CVS'. At the bottom right, it says 'Top of page' with a small icon.

Abbildung: Webservice Operation.

### 11.4.3.7.3. Webservice Requester Übertragung

The network transport configuration for the requester is similar to the configuration for the provider. For the Requester "HTTP::SOAP" network transport there are more fields to be set.

Apart from the "Endpoint" (URI of the Remote System web service interface to accept requests) and "Namespace" which are required fields, you can also specify:

- Verschlüsselung (z. B. utf-8, latin1, iso-8859-1, cp1250, usw.) für die SOAP-Nachricht.
- SOAPAction Header: you can use this to send an empty or filled SOAPAction header. Set to "No" and the SOAPAction header on the SOAP message will be an empty string, or set to "Yes" to send the soap action in Namespace#Action format and define the separator (typically "/" for .Net web services and "#" for the rest).
- Authentication: to set the authentication mechanism, set to "-" to not use any authentication or select one from the list and the detail fields will appear.

## Anmerkung

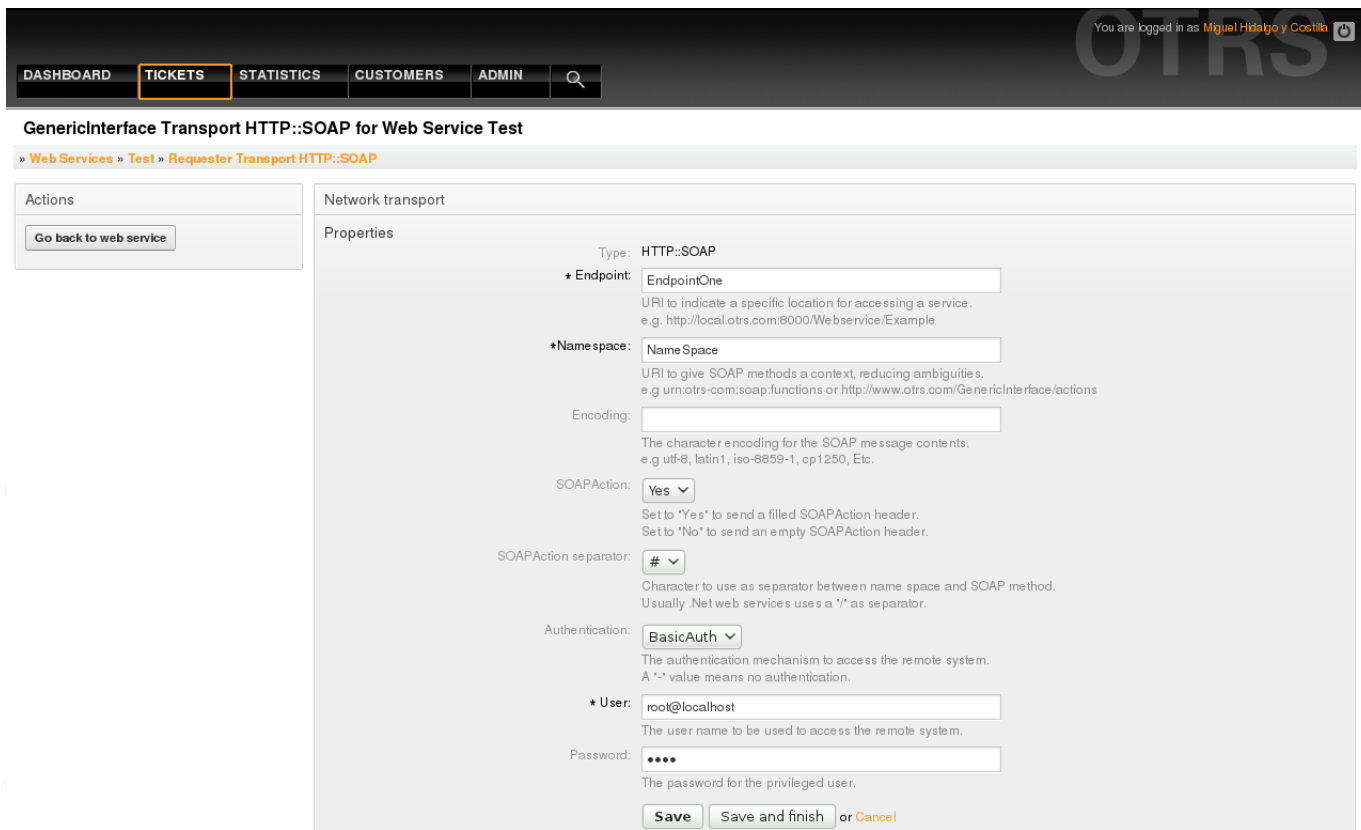
Currently only the "BasicAuth" (HTTP) authentication mechanism is implemented. You can decide whether or not to use it depending on the Remote System confi-



guration. If used, you must provide the User Name and the Password to access the remote system.

## Warnung

If you supply a password for authentication and after you export the web service to a YAML file this password will be revealed and will be written into a plain text string inside the YAML file. Be aware of it and take precautions if needed.



GenericInterface Transport HTTP::SOAP for Web Service Test

» Web Services » Test » Requester Transport HTTP::SOAP

Actions

Go back to web service

Network transport

Properties

Type: HTTP::SOAP

\* Endpoint: EndpointOne  
 URI to indicate a specific location for accessing a service.  
 e.g. http://local.otrs.com:8000/WebService/Example

\* Namespace: NameSpace  
 URI to give SOAP methods a context, reducing ambiguities.  
 e.g. urn:otrs-com:soap:functions or http://www.otrs.com/GenericInterface/actions

Encoding:

The character encoding for the SOAP message contents.  
 e.g. utf-8, latin1, iso-8859-1, cp1250, Etc.

SOAPAction: Yes   
 Set to "Yes" to send a filled SOAPAction header.  
 Set to "No" to send an empty SOAPAction header.

SOAPAction separator: #   
 Character to use as separator between name space and SOAP method.  
 Usually .Net web services use a '/' as separator.

Authentication: BasicAuth   
 The authentication mechanism to access the remote system.  
 A "-" value means no authentication.

\* User: root@localhost  
 The user name to be used to access the remote system.

Password:   
 The password for the privileged user.

Save Save and finish or Cancel

Abbildung: Webservice Requester Übertragung.

### 11.4.3.7.4. Webservice Invoker

The actions that can be performed when you are using OTRS as a requester are called "Invokers". Each invoker belongs to a controller (controllers are collections of operations or invokers). Usually invokers from the same controller need similar settings and share the same configuration dialogues. Each invoker can have independent configuration dialogues if needed.

Name, Description, Backend, and Mappings are fields that normally appear on every invoker. Additionally the list of event triggers and other special fields can appear on non default configuration dialogues to fulfill special needs of the invoker.

Normally there are two mapping configuration sections for each invoker, one for the incoming data and another one for the outgoing data. You can choose different mapping types (backends) for each mapping direction, since their configuration is independent from each other and also independent from the invoker backend. The normal and most common practice is that the invoker uses the same mapping type in both cases, with inverted configuration. The complete mapping configuration is done in a separate screen, which depends on the mapping type.

---

The invoker backend is pre-populated and can not be edited. You will see this parameter when you choose the invoker on the web service edit screen. The field is only informative.

Event triggers are events within OTRS such as "TicketCreate", "ArticleSend", etc. These can act as triggers to execute the invoker. Each invoker needs to have at least one event trigger registered, or the invoker will be useless, because it will never be called. The asynchronous property of the event triggers define if the OTRS process will handle the invoker or if it will be delegated to the Scheduler.

## Anmerkung

The OTRS Scheduler is a separate process that executes tasks in the background. Using this the OTRS process itself will not be affected if the Remote System takes a long time to respond, if it is not available or if there are network problems. If you don't use the scheduler using web services can make OTRS slow or non-responsive. Therefore it is highly recommend to use asynchronous event triggers as often as possible.

To add an Event trigger, first select the event family from the first list, then the event name from the second list, then set the asynchronous property (if unchecked means that the event trigger will not be asynchronous) and finally click on the plus button. A new event trigger will be created and it will be listed on the invoker "Event Triggers" list.

To delete an Event trigger, simply locate the event trigger to be deleted in the "Event Triggers" list and click on the trash icon at the end of the row. This will open a dialog that asks you if you are sure to delete the event trigger. Click "Delete" to remove the event trigger from the list, or "Cancel" to close the dialog.

In the left part of the screen on the action column you have the options: "Go back to web service" (discarding all changes since the last save) and "Delete". If you click on the last one, a dialog will emerge and ask you if you like to remove the invoker. Click on the "Delete" button to confirm the removal of the invoker and its configuration or "Cancel" to close the delete dialog.

## Change Invoker Invoker one of Web Service Test

» Web Services » Test » Change invoker Invoker one

Actions

[Go back to web service](#)

[Delete](#)

Invoker Details

\* Name:

The name is typically used to call up an operation of a remote web service.

Description:

Invoker backend:

This OTRS invoker backend module will be called to prepare the data to be sent to the remote system, and to process its response data.

Mapping for outgoing request data:

The data from the invoker of OTRS will be processed by this mapping, to transform it to the kind of data the remote system expects.

Mapping for incoming response data:

The response data will be processed by this mapping, to transform it to the kind of data the invoker of OTRS expects.

Event Triggers:

EVENT	ASYNCHRONOUS	DELETE
HistoryAdd	Yes	<a href="#">Delete</a>

This invoker will be triggered by the configured events.

Add Event Trigger:    Asynchronous

To add a new event select the event object and event name and click on the '+' button.  
Asynchronous event triggers are handled by the OTRS Scheduler in background (recommended).  
Synchronous event triggers would be processed directly during the web request.

or

Abbildung: Webservice Invoker.

### 11.4.3.7.5. Webservice Mapping

There are cases where you need to transform the data from one format to another (map or change data structure), because normally a web service is used to interact with a Remote System, that is highly probable that is not another OTRS system and / or could not understand the OTRS data structures and values. In these cases some or all values have to be changed, and sometimes even the names of the values (keys) or even the complete structure, in order to match with the expected data on the other end. To accomplish this task the Generic Interface Mapping Layer exists.

Each Remote System has its own data structures and it is possible to create new mapping modules for each case (e.g. there is a customized mapping module for SAP Solution Manager shipped with OTRS), but it is not always necessary. The module Mapping::Simple should cover most of the mapping needs.

## Anmerkung

When Mapping::Simple does not cover all mapping needs for a web service, a new mapping module should be created. To learn more about how to create new mapping modules please consult the OTRS Development Manual.

This module gives you the opportunity to set default values to map for each key or value for the whole communication data.

At the beginning of the screen you will see a general section where you can set the default rules that will apply for all the unmapped keys and values. There are three options available, these options are listed below:

- Keep (leave unchanged): doesn't touch the keys or values in any way.

- Ignore (drop key/value pair): when this is applied to the key it deletes the key and value, because when a key is deleted then in consequence its associated value is deleted too. When this is applied to the value, only the value is deleted, keeping the key, that now will be associated to an empty value.
- MapTo (use provided key or value as default): all keys and / or values without a defined map rule, will use this as default, when you select this option a new text field will appear to set this default.

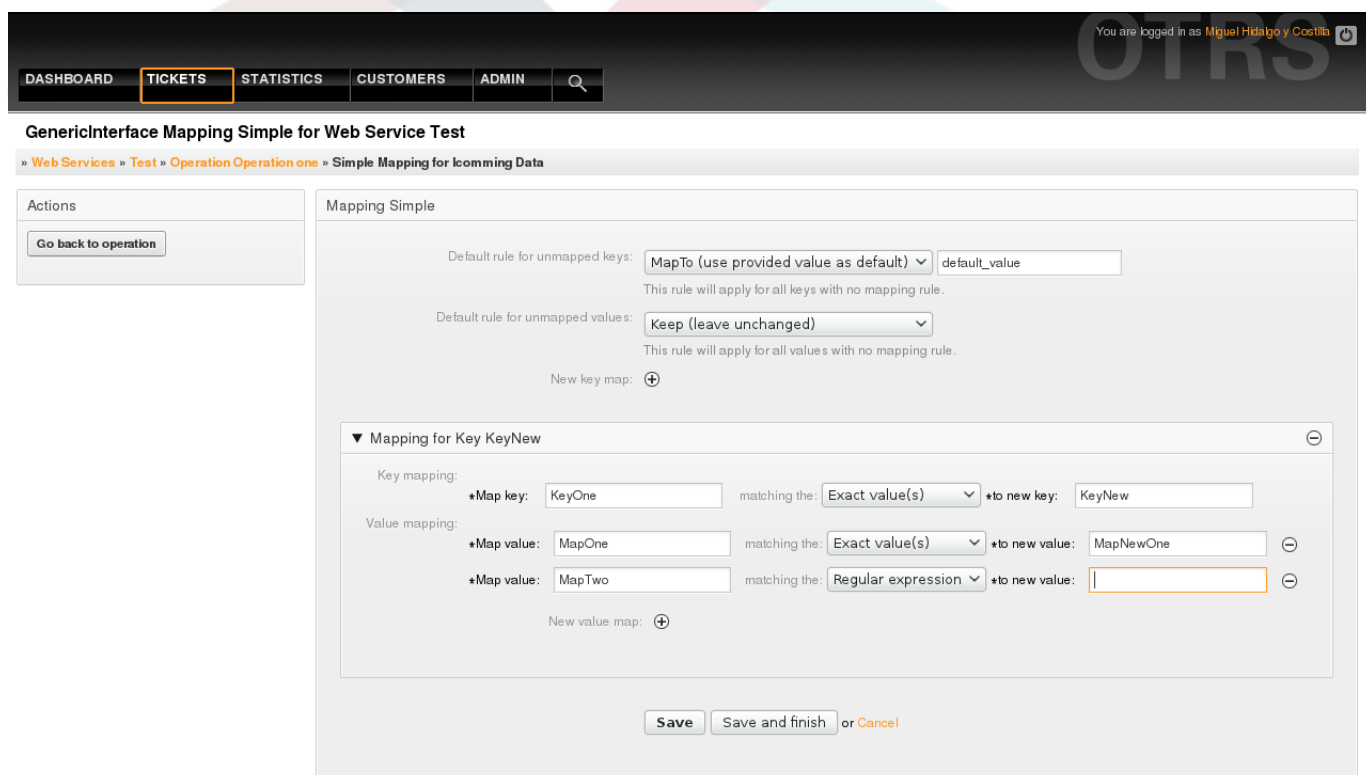
Clicking on the "+" button for new key map, will display a new box for a single mapping configuration. You can add as many key mappings as needed. Just click on the "+" button again and a new mapping box will appear below the existing one. From this mapping boxes you can define a map for a single key, with the next options:

- Exact value(s): the old key string will be changed to a new one if the old key matches exactly.
- Regular expression: The key string will be replaced following a regular expression rule.

Pressing the new value map "+" button will display a new row for a value map. Here it is also possible to define rules for each value to be mapped with the same options as for the key map (Exact value and Regular expression). You can add as many values to map as needed, and if you want to delete one of them, just click on the "-" button for each mapping value row.

Deleting the complete key mapping section (box) is possible, just push on the "-" button located on the up right corner of each box that you want to delete.

If you need to delete a complete mapping configuration: go back to the corresponding operation or invoker screen, look for the mapping direction that you select before and set its value to "-", and save the configuration to apply changes.



The screenshot shows the OTRS web interface for configuring a mapping. At the top, there is a navigation menu with 'TICKETS' selected. The page title is 'GenericInterface Mapping Simple for Web Service Test'. Below the title, there is a breadcrumb trail: 'Web Services » Test » Operation Operation one » Simple Mapping for Incoming Data'. On the left, there is an 'Actions' panel with a 'Go back to operation' button. The main content area is titled 'Mapping Simple' and contains the following configuration options:

- Default rule for unmapped keys: MapTo (use provided value as default) with a text field containing 'default\_value'.
- Default rule for unmapped values: Keep (leave unchanged).
- New key map: +
- Mapping for Key KeyNew (expanded):
  - Key mapping: +Map key: KeyOne matching the: Exact value(s) \*to new key: KeyNew
  - Value mapping: +Map value: MapOne matching the: Exact value(s) \*to new value: MapNewOne
  - +Map value: MapTwo matching the: Regular expression \*to new value: (empty text field)
  - New value map: +

At the bottom of the configuration area, there are buttons for 'Save', 'Save and finish', and 'Cancel'.

Abbildung: Webservice-Mapping.

## 11.5. Webdienst-Befehlszeilenoberfläche

The Command Line Interface (CLI) is a fast way to work with the web services. It consists of a set of tools that can be used to perform basic operations like:

- Create, Update, Read, List and Delete web services based on YAML files.
- Lesen der Debugger-Logdatei, mit gesetzten Filtern.

### Anmerkung

You don't need to use the CLI to work with web services. Integrated into the Admin interface there is a complete set of screens to interact with every part of the web services. Please read the web service GUI section included in this manual.

### 11.5.1. Webservice Konfiguration

The "WebserviceConfig.pl" was developed in order to create basic, but fast and powerful tool to work with web service configurations. It gives you the ability to perform the following actions:

- Add: Um einen Webservice mit einer YAML-Datei als Konfigurationsquelle zu erstellen.
- Update: to change an existing web service, the configuration can be changed using a different or modified YAML file.
- Read: to get the current web service configuration displayed on the screen.
- List: to get a complete list of all the web services registered in system.
- Delete: to delete a web service from the system. Be careful when you use it, because this action can't be undone.

### Warnung

A web service READ operation will display all the configuration as plain text on the screen, including any stored passwords. Please be aware of this and take the needed precautions!

Beispiel: Eine neue Webservice-Konfiguration erstellen:

```
shell> OTRS_HOME/bin/otrs.WebserviceConfig.pl -a write -n <webservice_name> -f /pfad/zur/yaml/datei
```

Ebenso können Sie 'otrs.WebserviceConfig.pl' mit den folgenden Optionen benutzen:

- **-a read -i <webservice\_id>** - um eine gespeicherte Konfiguration einzulesen.
- **-a write -n <webservice\_name> -f /path/to/yaml/file** - um einen neuen Webservice zu erstellen.
- **-a write -i <webservice\_id> -f /path/to/yaml/file** - um einen Webservice upzudaten.
- **-a list** - um alle verfügbaren Webservices anzuzeigen.
- **-a delete -i <webservice\_id>** - Um einen Webservice zu löschen.

## 11.5.2. Webservice Debugger

Another available tool via the command line interface is the "otrs.GenericInterfaceDebugRead.pl" script, which is an interface to search for web service debugger log entries.

Beispiel: Suche nach Debugger-Logeinträgen:

```
shell> bin/otrs.GenericInterfaceDebugRead.pl
```

Optional parameters can be used for the "otrs.GenericInterfaceDebugRead.pl" script:

- **-c** - Um nach der Kommunikations-ID zu filtern (md5sum-Format).
- **-t** - Um nach dem Kommunikationstyp zu filtern ('Provider' or 'Requester').
- **-a** - Um nach einem Datum zu filtern ('bestimmtes Datum' oder 'Nach einem bestimmten Datum').
- **-b** - Um nach einem Datum zu filtern ('bestimmtes Datum' oder 'Vor einem bestimmten Datum').
- **-i** - Um nach einer IP-Adresse zu filtern (muss eine gültige IPv4 oder IPv6 Adresse sein).
- **-w** - Um nach der Webservice ID zu filtern.
- **-d** - Um die detaillierten Kommunikationsdaten anzufügen.

Beispiel: Suche nach Debugger-Logeinträgen mit allen Parametern:

```
shell> ./otrs.GenericInterfaceDebugRead.pl -c a7cc4d9f5c70387a9bfbe1351bc88966 -t Provider  
-a '2011-07-22 00:00:00' -b '2011-07-26 00:00:00' -i 127.0.0.1 -w 123 -d 1
```

### Anmerkung

It is highly recommended to include at least one of the filter options listed above, and even more if the "-d" option is selected, because *a lot of* information can be retrieved from the data base and displayed on the screen, this could result in slow response times and much more information than what you really needed.

## 11.6. Webservice Konfiguration

From its design the web services were conceived to be portable from one OTRS system to another, e.g. from a test or development environment to a production system. Therefore it was needed to have an easy way to extract the web service configuration from the database, and import it to another. To accomplish this task the Generic Interface uses YAML files as the web services configuration basis.

Why YAML? YAML is a markup language designed to be human friendly to read and write (it is easier to understand than JSON), it does not have some of the limitations of XML like numeric tags, it is open, standardized, and is complete enough to store the whole web service configuration.

### Anmerkung

To learn more about YAML please visit <http://www.yaml.org/>.

The following is a web service configuration file example in YAML format:

```
---
Debugger:
  DebugThreshold: debug
Description: This an example of a web service configuration
Provider:
  Operation:
    CloseIncident:
      Description: This is a test operation
      MappingInbound: {}
      MappingOutbound: {}
      RemoteSystemGuid: ''
      Type: Test::Test
    Test:
      Description: This is a test operation
      MappingInbound:
        Config:
          KeyMapDefault:
            MapTo: ''
            MapType: Keep
          KeyMapExact:
            Prio: Priority
          ValueMap:
            Priority:
              ValueMapExact:
                Critical: 5 Very High
                Information: 1 Very Low
                Warning: 3 Normal
            ValueMapDefault:
              MapTo: 3 Normal
              MapType: MapTo
          Type: Simple
        MappingOutbound:
          Config:
            KeyMapDefault:
              MapTo: ''
              MapType: Ignore
            KeyMapExact:
              Priority: Prio
            ValueMap:
              Prio:
                ValueMapExact:
                  1 Very Low: Information
                  3 Normal: Warning
                  5 Very High: Critical
            ValueMapDefault:
              MapTo: ''
              MapType: Ignore
          Type: Simple
        Type: Test::Test
      Transport:
        Config:
          MaxLength: 10000000
          NameSpace: http://www.example.com/actions
          Type: HTTP::SOAP
      RemoteSystem: remote.system.description.example.com
    Requester:
      Invoker:
        Test:
          Description: This is a test invoker
          Events:
            - Asynchronous: 1
              Event: TicketCreate
            - Asynchronous: 0
              Event: ArticleUpdate
          MappingInbound:
            Type: Simple
          MappingOutbound:
            Type: Simple
          Type: Test::Test
```



```
Transport:
  Config:
    Authentication:
      Password: '*****'
      Type: BasicAuth
      User: otrs
    Encoding: utf-8
    Endpoint: http://www.example.com:8080/endpoint
    NameSpace: http://www.example.com/actions
    SOAPAction: Yes
    SOAPActionSeparator: '#'
    Type: HTTP::SOAP
```

## 11.6.1. Konfigurationsdetails

### 11.6.1.1. Allgemein

- Beschreibung: ein kurzer Text, der den Webservice beschreibt.
- RemoteSystem: eine kurze Beschreibung des Remote-Systems.
- Debugger: ein Behälter für die Debugger-Einstellungen.
- Provider: ein Behälter für die Anbieter-Einstellungen.
- Requester: ein Behälter für die Anforderer-Einstellungen.

### 11.6.1.2. Debugger

- DebugThreshold: das Debugger-Level

#### mögliche Werte

- debug: alle Protokolle werden in der Datenbank gespeichert.
- info: info, notice und error level - Protokolle werden in der Datenbank gespeichert.
- notice: notice und error level - Protokolle werden in der Datenbank gespeichert.
- error: nur error level - Protokolle werden in der Datenbank gespeichert.

### 11.6.1.3. Provider

- Operation: ein Behälter für alle Operations-Einstellungen.
- Transport: ein Behälter für Provider-Netzwerk-Transport-Einstellungen.

#### 11.6.1.3.1. Operation

- <OperationName>: eindeutiger Name für die Operation, eigener Container für eigene Operationseinstellungen (Kardinalität 0 ..n, aber nicht mehrfach).

##### 11.6.1.3.1.1. <Operationname>

Dieser Abschnitt basiert auf Operationen vom Typ "Test::Test" andere Operationen können unterschiedliche Einstellungen beinhalten.

- Beschreibung: ein kurzer Text, der die Operation beschreibt.
- MappingInbound: Ein Container für die Mapping-Einstellung für eingehende Anfragen.
- MappingOutbound: Ein Container für die Mapping-Einstellung für ausgehende Anfragen.
- Type: Das Operation-Backend, im Format Controller::Operation.

### 11.6.1.3.1.1.1. eingehendes Mapping

Dieser Abschnitt basiert auf Mappings vom Typ "Simple". Andere Mappings können eventuell mehr oder andere Einstellungen beinhalten.

- Config: Ein Container für diese Mapping-Einstellungen.
- Type: Das Mapping-Backend.

### 11.6.1.3.1.1.1.1. Konfiguration

- KeyMapDefault: Ein Container für alle nicht gemappten Key-Einstellungen.
- ValueMapDefault: Ein Container für alle nicht gemappten Wert-Einstellungen.
- KeyMapExact: Ein Container für alle exakten Key-Mappings (Kardinalität 0 .. 1).
- KeyMapRegEx: Ein Container für alle regulären Regular Expression Key-Mappings (Kardinalität 0 .. 1).
- ValueMap: Ein Container für alle Werte-Mappings (Kardinalität 0 .. 1).

### 11.6.1.3.1.1.1.1.1. KeyMapDefault

- MapTo: Der neue Wert welcher benutzt werden soll (nur anwendbar wenn der MapType auf MapTo gesetzt ist).
- MapType: Die Regel für das Mapping.

#### mögliche Werte

- Keep: unverändert lassen.
- Ignore: verwerfen.
- MapTo: Ändern auf den MapTo-Wert.

### 11.6.1.3.1.1.1.1.2. ValueMapDefault

Ähnlich zu KeyMapDefault.

### 11.6.1.3.1.1.1.1.3. KeyMapExact

- <alterKey>: <neuerKey> (Kardinalität 0 .. n aber nicht mehrfach).

### 11.6.1.3.1.1.1.1.4. KeyMapRegEx

- <oldkey(RegEx)>: <newkey> (Kardinalität 0 .. n, aber nicht mehrfach).

### 11.6.1.3.1.1.1.1.5. ValueMap

- <newkey>: Ein Container für das Werte-Mapping für diesen neuen Key (Kardinalität hängt von den neuen Keys aus KeyMapExact und KeyMapRegEx ab).

### 11.6.1.3.1.1.1.1.5.1. <newkey>

- ValueMapExact: Ein Container für alle exakten Werte-Mappings (Kardinalität 0 .. 1).
- ValueMapRegEx: Ein Container für alle Regular Expression Werte-Mappings (Kardinalität 0 .. 1).

### 11.6.1.3.1.1.1.1.5.1.1. valueMapExact

- <oldvalue>: <newvalue> (Kardinalität 0 .. n, aber nicht mehrfach).

### **11.6.1.3.1.1.1.1.5.1.2. ValueMapRegEx**

- <oldvalue(RegEx)>: <newvalue> (Kardinalität 0 .. n, aber nicht mehrfach).

### **11.6.1.3.1.1.2. ausgehendes Mapping**

Das gleiche wie beim eingehenden Mapping

### **11.6.1.3.1.1.3. Transport**

Dieser Abschnitt basiert auf Provider-Übertragungsart HTTP::SOAP, andere Übertragungsarten können unterschiedliche Einstellungen beinhalten.

- Config: Ein Container für die spezifischen Netzwerk-Transport-Einstellungen.
- Type: Netzwerk-Transport-Backend des Providers.

### **11.6.1.3.1.1.3.1. Konfiguration**

- MaxLength: Die maximale Länge in Bytes die in SOAP-Nachrichten von OTRS gelesen werden.
- NameSpace: eine URI die eine Zusammenfassung aller möglichen Operationen liefert, die zu diesem Webservice gehören.

### **11.6.1.4. Requester**

- Invoker: ein Container für jede 'Invoker'-Einstellung.
- Transport: ein Container für Netzwerk-Transport-Einstellungen für Requester.

#### **11.6.1.4.1. Invoker**

- <InvokerName>: eindeutiger Name für den Invoker, Container für eigene Invoker-Einstellungen (Kardinalität 0..n, aber nicht mehrfach).

##### **11.6.1.4.1.1. <InvokerName>**

Dieser Abschnitt basiert auf Invoker vom Typ "Test::Test" andere Operationen können unterschiedliche Einstellungen beinhalten.

- Beschreibung: ein kurzer Text, der den Aufrufer beschreibt
- Events: ein Container für Eventtrigger-Einstellungen, die keinen Namen besitzen.
- MappingInbound: Ein Container für die Mapping-Einstellung für eingehende Anfragen.
- MappingOutbound: Ein Container für die Mapping-Einstellung für ausgehende Anfragen.
- Type: Das Invoker-Backend, im Format Controller::Invoker

##### **11.6.1.4.1.1.1. Ereignisse**

- *Auflistung der Elemente*: (Kardinalität 0 .. n)
  - Asynchron: bestimmt ob die Invoker-Ausführung an den Scheduler delegiert werden

#### **mögliche Werte**

- 0: nicht vom Scheduler verarbeitet
- 1: vom Scheduler verarbeitet.
- Event: Der Name des Event-Triggers.

---

## Mögliche Werte (für TicketEvents)

- TicketCreate
- TicketDelete
- TicketTitleUpdate
- TicketUnlockTimeoutUpdate
- TicketQueueUpdate
- TicketTypeUpdate
- TicketServiceUpdate
- TicketSLAUpdate
- TicketCustomerUpdate
- TicketFreeTextUpdate
- TicketFreeTimeUpdate
- TicketPendingTimeUpdate
- TicketLockUpdate
- TicketArchiveFlagUpdate
- TicketStateUpdate
- TicketOwnerUpdate
- TicketResponsibleUpdate
- TicketPriorityUpdate
- HistoryAdd
- HistoryDelete
- TicketAccountTime
- TicketMerge
- TicketSubscribe
- TicketUnsubscribe
- TicketFlagSet
- TicketFlagDelete
- TicketSlaveLinkAdd
- TicketSlaveLinkDelete
- TicketMasterLinkDelete

---

## Mögliche Werte (für Artikel-Events)

- Article Events
- ArticleCreate
- ArticleFreeTextUpdate
- ArticleUpdate
- ArticleSend
- ArticleBounce
- ArticleAgentNotification
- ArticleCustomerNotification
- ArticleAutoResponse
- ArticleFlagSet
- ArticleFlagDelete
- ArticleAgentNotification
- ArticleCustomerNotification

### 11.6.1.4.1.1.2. eingehendes Mapping

Das gleiche wie bei der Operation MappingInbound

### 11.6.1.4.1.1.3. ausgehendes Mapping

Das gleiche wie bei der Operation MappingInbound

### 11.6.1.4.1.1.4. Transport

Dieser Abschnitt basiert auf Requester-Übertragungsart HTTP::SOAP, andere Übertragungsarten können unterschiedliche Einstellungen beinhalten.

- Config: Ein Container für die spezifischen Netzwerk-Transport-Einstellungen.
- Type: Netzwerk-Transport-Backend des Requesters.

#### 11.6.1.4.1.1.4.1. Konfiguration

- Authentifizierung: ein Behälter für die Authentifizierungs-Einstellungen.
- Enkodieren: die SOAP-Nachrichtenanfrage enkodieren
- Endpoint: the URI of the Remote Server web service to accept OTRS requests
- NameSpace: an URI that gives a context to all invokers that belongs to this web service.
- SOAPAction: to send an empty or filled SOAPAction header in the SOAP Message (in "<NameSpace> <Separator> <Action>" format).

### mögliche Werte

- JA: um einen befüllten SOAPAction-Header zu senden.
- Nein: um einen leeren SOAPAction-Header zu senden.

- SOAPActionSeparator: Für das setzen eines <Separator> eines SOAPAction Headers.

### **mögliche Werte**

- '/': genutzt für .net-Webservices.
- '#': genutzt für alle anderen Webservices.

#### **11.6.1.4.1.1.4.1.1. Authentifizierung**

- User: der vertrauliche Benutzername, der Zugang zu dem entfernten Webservice hat.
- Passwort: das Passwort für den vertraulichen Benutzer im Klartext.
- Type: der Typ der Authentifizierung.

## **11.7. Verbinder**

A Connector is in essence a set of actions that are either called Operations if OTRS acts as a web service provider or Invokers if OTRS acts as a web service requester. But it can also include special Mappings or Transports.

One Connector can either have only Operations, Only Invokers or both. A connector can even use parts of other connectors like the Mappings or Transports if they are not to specific for the Connector that is trying to implement them.

In other words a Connector is not limited to just the Controller layer but it can be extended to Data Mapping or Network Transport layers if needed.

Due to the modular design of the Generic Interface a Connector can be seen as a plug-in; this means that by adding Connectors the capabilities of the generic interface can be extended using: OTRS Feature add ons, OTRS Custom modules, 3rd Party modules, and so on.

### **11.7.1. gebündelte Verbinder**

In dieser OTRS Version sind die folgenden Verbinder verfügbar.

- Sitzung
- Ticket

#### **11.7.1.1. Session-Connector**

This connector is capable to create a valid SessionID that can be used in any other operation.

Liefert:

- Operationen:
  - SessionCreate

##### **11.7.1.1.1. Operationen**

###### **11.7.1.1.1.1. SessionCreate**

Creates a new new valid SessionID to be used in other operations from other connectors like TicketCreate.

### **Anmerkung**

To use the SessionID in other operations from other connectors it is necessary that the operation implements authentication by SessionID. All the rest of the bund-

led operations are capable of accepting a valid SessionID as an authentication method.

Mögliche Attribute:

```
<SessionCreate>
<!--You have a MANDATORY CHOICE of the next 2 items at this level-->
<!--Optional:-->
<UserLogin?></UserLogin>
<!--Optional:-->
<CustomerUserLogin?></CustomerUserLogin>
<!--Optional:-->
<Password?></Password>
</SessionCreate>
```

### 11.7.1.2. Ticket Connector

Dieser Connector liefert die Basisfunktionalität um mit Tickets zu interagieren.

Liefert:

- Operationen:
  - TicketCreate
  - TicketUpdate
  - TicketGet
  - TicketSearch

#### 11.7.1.2.1. Operationen

##### 11.7.1.2.1.1. TicketCreate

Provides an interface to create a ticket in OTRS. A ticket must contain an Article and can contain several attachments, all defined Dynamic Fields can be also set on TicketCreate operation.

Mögliche Attribute:

```
<TicketCreate>
<!--You have a MANDATORY CHOICE of the next 3 items at this level-->
<!--Optional:-->
<UserLogin?></UserLogin>
<!--Optional:-->
<CustomerUserLogin?></CustomerUserLogin>
<!--Optional:-->
<SessionID?></SessionID>
<!--Optional:-->
<Password?></Password>
<Ticket>
<Title?></Title>
<!--You have a MANDATORY CHOICE of the next 2 items at this level-->
<!--Optional:-->
<QueueID?></QueueID>
<!--Optional:-->
<Queue?></Queue>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<TypeID?></TypeID>
<!--Optional:-->
<Type?></Type>
```



```

<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ServiceID?</ServiceID>
<!--Optional:-->
<Service?</Service>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<SLAID?</SLAID>
<!--Optional:-->
<SLA?</SLA>
<!--You have a MANDATORY CHOICE of the next 2 items at this level-->
<!--Optional:-->
<StateID?</StateID>
<!--Optional:-->
<State?</State>
<!--You have a MANDATORY CHOICE of the next 2 items at this level-->
<!--Optional:-->
<PriorityID?</PriorityID>
<!--Optional:-->
<Priority?</Priority>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<OwnerID?</OwnerID>
<!--Optional:-->
<Owner?</Owner>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ResponsibleID?</ResponsibleID>
<!--Optional:-->
<Responsible?</Responsible>
<CustomerUser?</CustomerUser>
<!--Optional:-->
<CustomerID?</CustomerID>
<!--Optional:-->
<PendingTime>
<Year?</Year>
<Month?</Month>
<Day?</Day>
<Hour?</Hour>
<Minute?</Minute>
</PendingTime>
</Ticket>
<Article>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ArticleTypeID?</ArticleTypeID>
<!--Optional:-->
<ArticleType?</ArticleType>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<SenderTypeID?</SenderTypeID>
<!--Optional:-->
<SenderType?</SenderType>
<!--Optional:-->
<From?</From>
<Subject?</Subject>
<Body?</Body>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ContentType?</ContentType>
<Charset?</Charset>
<MimeType?</MimeType>
<!--Optional:-->
<HistoryType?</HistoryType>
<!--Optional:-->
<HistoryComment?</HistoryComment>
<!--Optional:-->
<AutoResponseType?</AutoResponseType>
<!--Optional:-->
<TimeUnit?</TimeUnit>
<!--Optional:-->
<NoAgentNotify?</NoAgentNotify>

```

```

<!--Zero or more repetitions:-->
<ForceNotificationToUserID?></ForceNotificationToUserID>
<!--Zero or more repetitions:-->
<ExcludeNotificationToUserID?></ExcludeNotificationToUserID>
<!--Zero or more repetitions:-->
<ExcludeMuteNotificationToUserID?></ExcludeMuteNotificationToUserID>
</Article>
<!--Zero or more repetitions:-->
<DynamicField>
<Name?></Name>
<!--1 or more repetitions:-->
<Value?></Value>
</DynamicField>
<!--Zero or more repetitions:-->
<Attachment>
<Content>cid:61886944659</Content>
<ContentType?></ContentType>
<Filename?></Filename>
</Attachment>
</TicketCreate>

```

### 11.7.1.2.1.2. TicketUpdate

TicketUpdate operation adds the capability to modify attributes from an existing ticket or to add a new article, including attachments and all defined dynamic fields for the ticket and the new article.

#### Anmerkung

It is not necessary to create a new article to modify a ticket attribute.

Mögliche Attribute:

```

<TicketUpdate>
<!--You have a MANDATORY CHOICE of the next 3 items at this level-->
<!--Optional:-->
<UserLogin?></UserLogin>
<!--Optional:-->
<CustomerUserLogin?></CustomerUserLogin>
<!--Optional:-->
<SessionID?></SessionID>
<!--Optional:-->
<Password?></Password>
<!--You have a CHOICE of the next 2 items at this level-->
<TicketID?></TicketID>
<TicketNumber?></TicketNumber>
<!--Optional:-->
<Ticket>
<!--Optional:-->
<Title?></Title>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<QueueID?></QueueID>
<!--Optional:-->
<Queue?></Queue>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<TypeID?></TypeID>
<!--Optional:-->
<Type?></Type>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ServiceID?></ServiceID>
<!--Optional:-->
<Service?></Service>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->

```

```

<SLAID?></SLAID>
<!--Optional:-->
<SLA?></SLA>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<StateID?></StateID>
<!--Optional:-->
<State?></State>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<PriorityID?></PriorityID>
<!--Optional:-->
<Priority?></Priority>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<OwnerID?></OwnerID>
<!--Optional:-->
<Owner?></Owner>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ResponsibleID?></ResponsibleID>
<!--Optional:-->
<Responsible?></Responsible>
<!--Optional:-->
<CustomerUser?></CustomerUser>
<!--Optional:-->
<CustomerID?></CustomerID>
<!--Optional:-->
<PendingTime>
<Year?></Year>
<Month?></Month>
<Day?></Day>
<Hour?></Hour>
<Minute?></Minute>
</PendingTime>
</Ticket>
<!--Optional:-->
<Article>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ArticleTypeID?></ArticleTypeID>
<!--Optional:-->
<ArticleType?></ArticleType>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<SenderTypeID?></SenderTypeID>
<!--Optional:-->
<SenderType?></SenderType>
<!--Optional:-->
<From?></From>
<Subject?></Subject>
<Body?></Body>
<!--You have a CHOICE of the next 2 items at this level-->
<!--Optional:-->
<ContentType?></ContentType>
<Charset?></Charset>
<MimeType?></MimeType>
<!--Optional:-->
<HistoryType?></HistoryType>
<!--Optional:-->
<HistoryComment?></HistoryComment>
<!--Optional:-->
<AutoResponseType?></AutoResponseType>
<!--Optional:-->
<TimeUnit?></TimeUnit>
<!--Optional:-->
<NoAgentNotify?></NoAgentNotify>
<!--Zero or more repetitions:-->
<ForceNotificationToUserID?></ForceNotificationToUserID>
<!--Zero or more repetitions:-->
<ExcludeNotificationToUserID?></ExcludeNotificationToUserID>
<!--Zero or more repetitions:-->

```

```

<ExcludeMuteNotificationToUserID?</ExcludeMuteNotificationToUserID>
</Article>
<!--Zero or more repetitions:-->
<DynamicField>
<Name?</Name>
<!--1 or more repetitions:-->
<Value?</Value>
</DynamicField>
<!--Zero or more repetitions:-->
<Attachment>
<Content>cid:166861569966</Content>
<ContentType?</ContentType>
<Filename?</Filename>
</Attachment>
</TicketUpdate>

```

### 11.7.1.2.1.3. TicketGet

This operation is used to get all the attributes of a ticket including the dynamic fields, all articles and all of the attachments that belong to the ticket.

Mögliche Attribute:

```

<TicketGet>
<!--You have a MANDATORY CHOICE of the next 3 items at this level-->
<!--Optional:-->
<UserLogin?</UserLogin>
<!--Optional:-->
<CustomerUserLogin?</CustomerUserLogin>
<!--Optional:-->
<SessionID?</SessionID>
<!--Optional:-->
<Password?</Password>
<!--1 or more repetitions:-->
<TicketID?</TicketID>
<!--Optional:-->
<DynamicFields?</DynamicFields>
<!--Optional:-->
<Extended?</Extended>
<!--Optional:-->
<AllArticles?</AllArticles>
<!--Optional:-->
<ArticleSenderType?</ArticleSenderType>
<!--Optional:-->
<ArticleOrder?</ArticleOrder>
<!--Optional:-->
<ArticleLimit?</ArticleLimit>
<!--Optional:-->
<Attachments?</Attachments>
</TicketGet>

```

### 11.7.1.2.1.4. TicketSearch

Die Operation TicketSearch liefert eine Liste mit TicketIDs die auf die eingegebenen Suchkriterien passen.

Mögliche Attribute:

```

<TicketSearch>
<!--You have a MANDATORY CHOICE of the next 3 items at this level-->
<!--Optional:-->

```

```
<UserLogin>?</UserLogin>
<!--Optional:-->
<CustomerUserLogin>?</CustomerUserLogin>
<!--Optional:-->
<SessionID>?</SessionID>
<!--Optional:-->
<Password>?</Password>
<!--Optional:-->
<Limit>?</Limit>
<!--Zero or more repetitions:-->
<TicketNumber>?</TicketNumber>
<!--Zero or more repetitions:-->
<Title>?</Title>
<!--Zero or more repetitions:-->
<Queues>?</Queues>
<!--Zero or more repetitions:-->
<QueueIDs>?</QueueIDs>
<!--Optional:-->
<UseSubQueues>?</UseSubQueues>
<!--Zero or more repetitions:-->
<Types>?</Types>
<!--Zero or more repetitions:-->
<TypeID>?</TypeID>
<!--Zero or more repetitions:-->
<States>?</States>
<!--Zero or more repetitions:-->
<StateIDs>?</StateIDs>
<!--Zero or more repetitions:-->
<StateType>?</StateType>
<!--Zero or more repetitions:-->
<StateTypeID>?</StateTypeID>
<!--Zero or more repetitions:-->
<Priorities>?</Priorities>
<!--Zero or more repetitions:-->
<PriorityIDs>?</PriorityIDs>
<!--Zero or more repetitions:-->
```

```
<Services>?</Services>
<!--Zero or more repetitions:-->
<ServiceIDs>?</ServiceIDs>
<!--Zero or more repetitions:-->
<SLAs>?</SLAs>
<!--Zero or more repetitions:-->
<SLAIDs>?</SLAIDs>
<!--Zero or more repetitions:-->
<Locks>?</Locks>
<!--Zero or more repetitions:-->
<LockIDs>?</LockIDs>
<!--Zero or more repetitions:-->
<OwnerIDs>?</OwnerIDs>
<!--Zero or more repetitions:-->
<ResponsibleIDs>?</ResponsibleIDs>
<!--Zero or more repetitions:-->
<WatchUserIDs>?</WatchUserIDs>
<!--Zero or more repetitions:-->
<CustomerID>?</CustomerID>
<!--Zero or more repetitions:-->
<CustomerUserLogin>?</CustomerUserLogin>
<!--Zero or more repetitions:-->
<CreatedUserIDs>?</CreatedUserIDs>
<!--Zero or more repetitions:-->
<CreatedTypes>?</CreatedTypes>
<!--Zero or more repetitions:-->
<CreatedTypeIDs>?</CreatedTypeIDs>
<!--Zero or more repetitions:-->
<CreatedPriorities>?</CreatedPriorities>
<!--Zero or more repetitions:-->
<CreatedPriorityIDs>?</CreatedPriorityIDs>
<!--Zero or more repetitions:-->
<CreatedStates>?</CreatedStates>
<!--Zero or more repetitions:-->
<CreatedStateIDs>?</CreatedStateIDs>
<!--Zero or more repetitions:-->
```

```
<CreatedQueues?</CreatedQueues>
<!--Zero or more repetitions:-->
<CreatedQueueIDs?</CreatedQueueIDs>
<!--Zero or more repetitions:-->
<DynamicFields>
<!--You have a MANDATORY CHOICE of the next 6 items at this level-->
<!--Optional:-->
<Equals?</Equals>
<!--Optional:-->
<Like?</Like>
<!--Optional:-->
<GreaterThan?</GreaterThan>
<!--Optional:-->
<GreaterThanEquals?</GreaterThanEquals>
<!--Optional:-->
<SmallerThan?</SmallerThan>
<!--Optional:-->
<SmallerThanEquals?</SmallerThanEquals>
</DynamicFields>
<!--Optional:-->
<Ticketflag>
<!--Optional:-->
<Seen?</Seen>
</Ticketflag>
<!--Optional:-->
<From?</From>
<!--Optional:-->
<To?</To>
<!--Optional:-->
<Cc?</Cc>
<!--Optional:-->
<Subject?</Subject>
<!--Optional:-->
<Body?</Body>
<!--Optional:-->
<FullTextIndex?</FullTextIndex>
```



```
<!--Optional:-->
<ContentSearch?></ContentSearch>
<!--Optional:-->
<ConditionInline?></ConditionInline>
<!--Optional:-->
<ArticleCreateTimeOlderMinutes?></ArticleCreateTimeOlderMinutes>
<!--Optional:-->
<ArticleCreateTimeNewerMinutes?></ArticleCreateTimeNewerMinutes>
<!--Optional:-->
<ArticleCreateTimeNewerDate?></ArticleCreateTimeNewerDate>
<!--Optional:-->
<ArticleCreateTimeOlderDate?></ArticleCreateTimeOlderDate>
<!--Optional:-->
<TicketCreateTimeOlderMinutes?></TicketCreateTimeOlderMinutes>
<!--Optional:-->
<ATicketCreateTimeNewerMinutes?></ATicketCreateTimeNewerMinutes>
<!--Optional:-->
<TicketCreateTimeNewerDate?></TicketCreateTimeNewerDate>
<!--Optional:-->
<TicketCreateTimeOlderDate?></TicketCreateTimeOlderDate>
<!--Optional:-->
<TicketChangeTimeOlderMinutes?></TicketChangeTimeOlderMinutes>
<!--Optional:-->
<TicketChangeTimeNewerMinutes?></TicketChangeTimeNewerMinutes>
<!--Optional:-->
<TicketChangeTimeNewerDate?></TicketChangeTimeNewerDate>
<!--Optional:-->
<TicketChangeTimeOlderDate?></TicketChangeTimeOlderDate>
<!--Optional:-->
<TicketCloseTimeOlderMinutes?></TicketCloseTimeOlderMinutes>
<!--Optional:-->
<TicketCloseTimeNewerMinutes?></TicketCloseTimeNewerMinutes>
<!--Optional:-->
<TicketCloseTimeNewerDate?></TicketCloseTimeNewerDate>
<!--Optional:-->
<TicketCloseTimeOlderDate?></TicketCloseTimeOlderDate>
```

```

<!--Optional:-->
<TicketPendingTimeOlderMinutes>?</TicketPendingTimeOlderMinutes>
<!--Optional:-->
<TicketPendingTimeNewerMinutes>?</TicketPendingTimeNewerMinutes>
<!--Optional:-->
<TicketPendingTimeNewerDate>?</TicketPendingTimeNewerDate>
<!--Optional:-->
<TicketPendingTimeOlderDate>?</TicketPendingTimeOlderDate>
<!--Optional:-->
<TicketEscalationTimeOlderMinutes>?</TicketEscalationTimeOlderMinutes>
<!--Optional:-->
<TTicketEscalationTimeNewerMinutes>?</TTicketEscalationTimeNewerMinutes>
<!--Optional:-->
<TicketEscalationTimeNewerDate>?</TicketEscalationTimeNewerDate>
<!--Optional:-->
<TicketEscalationTimeOlderDate>?</TicketEscalationTimeOlderDate>
<!--Optional:-->
<ArchiveFlags>?</ArchiveFlags>
<!--Zero or more repetitions:-->
<OrderBy>?</OrderBy>
<!--Zero or more repetitions:-->
<SortBy>?</SortBy>
<!--Zero or more repetitions:-->
<CustomerUserID>?</CustomerUserID>
</TicketSearch>

```

## 11.7.2. Beispiele:

### 11.7.2.1. Webservice Konfiguration

The following is a basic but complete web service configuration file in YAML format to use all the Ticket Connector operations. In order to use it in OTRS you need to copy the content, save it into a file called GenericTicketConnector.yml, and import it into OTRS in the Web Services screen in the Admin panel by clicking in the "Add web service" action from the overview screen and then clicking in the "Import web service" action in the add screen.

```

---
Debugger:
DebugThreshold: debug
TestMode: 0

```

```

Description: Ticket Connector Sample
FrameworkVersion: 3.2.x CVS
Provider:
Operation:
SessionCreate:
Description: Creates a Session
MappingInbound: {}
MappingOutbound: {}
Type: Session::SessionCreate
TicketCreate:
Description: Creates a Ticket
MappingInbound: {}
MappingOutbound: {}
Type: Ticket::TicketCreate
TicketUpdate:
Description: Updates a Ticket
MappingInbound: {}
MappingOutbound: {}
Type: Ticket::TicketUpdate
TicketGet:
Description: Retrieve Ticket data
MappingInbound: {}
MappingOutbound: {}
Type: Ticket::TicketGet
TicketSearch:
Description: Search for Tickets
MappingInbound: {}
MappingOutbound: {}
Type: Ticket::TicketSearch
Transport:
Config:
MaxLength: 100000000
Namespace: http://www.otrs.org/TicketConnector/
Type: HTTP::SOAP
RemoteSystem: ''
Requester:
Transport:
Type: ''

```

### 11.7.2.2. Perl SOAP Requester

The following code is a Perl script that can connect to OTRS via the generic interface. In order to perform the operations provided by the Ticket Connector, it uses two Perl CPAN modules SOAP::Lite and Data::Dumper. Please make sure that your environment is capable to use these modules before you try to run the script.

```

#!/usr/bin/perl -w
# --
# otrs.SOAPRequest.pl - sample to send a SOAP request to OTRS Generic Interface Ticket
# Connector
# Copyright (C) 2001-2015 OTRS AG, http://otrs.com/
# --
# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU AFFERO General Public License as published by
# the Free Software Foundation; either version 3 of the License, or
# any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU Affero General Public License
# along with this program; if not, write to the Free Software
# Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
# or see http://www.gnu.org/licenses/agpl.txt.
# --

```

```

use strict;
use warnings;

# use ../ as lib location
use File::Basename;
use FindBin qw($RealBin);
use lib dirname($RealBin);

use SOAP::Lite;
use Data::Dumper;

# ---
# Variables to be defined.

# this is the URL for the web service
# the format is
# <HTTP_TYPE>:://<OTRS_FQDN>/nph-genericinterface.pl/Webservice/<WEB_SERVICE_NAME>
# or
# <HTTP_TYPE>:://<OTRS_FQDN>/nph-genericinterface.pl/WebserviceID/<WEB_SERVICE_ID>
my $URL = 'http://localhost/otrs/nph-genericinterface.pl/Webservice/GenericTicketConnector';

# this name space should match the specified name space in the SOAP transport for the web
# service.
my $NameSpace = 'http://www.otrs.org/TicketConnector/';

# this is operation to execute, it could be TicketCreate, TicketUpdate, TicketGet,
# TicketSearch
# or SessionCreate. and they must to be defined in the web service.
my $Operation = 'TicketCreate';

# this variable is used to store all the parameters to be included on a request in XML
# format. Each
# operation has a determined set of mandatory and non mandatory parameters to work
# correctly. Please
# check the OTRS Admin Manual in order to get a complete list of parameters.
my $XMLData = '
<UserLogin>some user login</UserLogin>
<Password>some password</Password>
<Ticket>
  <Title>some title</Title>
  <CustomerUser>some customer user login</CustomerUser>
  <Queue>some queue</Queue>
  <State>some state</State>
  <Priority>some priority</Priority>
</Ticket>
<Article>
  <Subject>some subject</Subject>
  <Body>some body</Body>
  <ContentType>text/plain; charset=utf8</ContentType>
</Article>
';

# ---

# create a SOAP::Lite data structure from the provided XML data structure.
my $SOAPData = SOAP::Data
  ->type( 'xml' => $XMLData );

my $SOAPObject = SOAP::Lite
  ->uri($NameSpace)
  ->proxy($URL)
  ->$Operation($SOAPData);

# check for a fault in the soap code.
if ( $SOAPObject->fault ) {
  print $SOAPObject->faultcode, " ", $SOAPObject->faultstring, "\n";
}

# otherwise print the results.
else {

```

```
# get the XML response part from the SOAP message.
my $XMLResponse = $SOAPObject->context()->transport()->proxy()->http_response()-
>content();

# deserialize response (convert it into a perl structure).
my $Deserialized = eval {
    SOAP::Deserializer->deserialize($XMLResponse);
};

# remove all the headers and other not needed parts of the SOAP message.
my $Body = $Deserialized->body();

# just output relevant data and no the operation name key (like TicketCreateResponse).
for my $ResponseKey ( keys %{$Body} ) {
    print Dumper( $Body->{$ResponseKey} );
}
}
```

## 12. OTRS Scheduler

The OTRS Scheduler is an independent system process that executes tasks in background. These kind of processes are known as *daemons* in Unix / Linux systems or as *services* on Windows environments. It is independent but that doesn't mean that the Scheduler does everything alone, it is fully integrated into OTRS and can use any OTRS module as needed to complete each task.

For sanity reasons the Scheduler process needs to be restarted from time to time. This is done automatically by the scheduler process itself once a day, but it can be adjusted as needed using the SysConfig by editing the "Scheduler::RestartAfterSeconds" setting.

The OTRS Scheduler is a fully automated process, the only needed human interaction is to check its status periodically and start or stop it as needed.

### Anmerkung

If the Scheduler is stopped for any reason, all pending tasks and new tasks registered when the Scheduler is stopped will be executed as soon as the Scheduler starts again (unless the tasks are set to be executed in the future).

## 12.1. Scheduler - Grafisches Interface

Der Scheduler ist nicht sichtbar in der grafischen Oberfläche von OTRS solange er läuft.

### 12.1.1. Benachrichtigung: Scheduler läuft nicht.

There are two different types of notifications if the system detects that the scheduler is not running. This detection is based on the update frequency of the Scheduler process. If the difference between current time and the last process update time is 2 times the process update frequency a warning message will be displayed in the OTRS notification area. If it is over 4 times the process frequency then an alert will be displayed instead.

The Scheduler process update time can be configured via the SysConfig in the "Scheduler::PIDUpdateTime" setting.

If you see a warning message it is not always necessary to take an action, but it is highly recommended to check if the scheduler process is running. If you see an alert, then there is a high chance that the scheduler is in fact not running and should be started.

By default the Scheduler not running notification is enabled, if there is a valid web service registered in the database, and is only displayed to the users in the "admin" group.

To disable the notification (not recommended) or to change or add the notification groups, please edit the "Frontend::NotifyModule###800-Scheduler-Check" setting in the SysConfig.



Abbildung: Scheduler Benachrichtigung.

## 12.1.2. Scheduler starten

By clicking on the Scheduler not running notification link (either warning or alert) a dialog box will open to let you start the Scheduler process again. The Scheduler can be started normally or forced to start, by clicking on the appropriate check box in the dialog.

### Anmerkung

A forced Scheduler start is only necessary if previous Scheduler process was terminated abnormally and the Process ID is still registered in the database.

To have full control of the Scheduler process and to check its real status please use the command line tools described below.

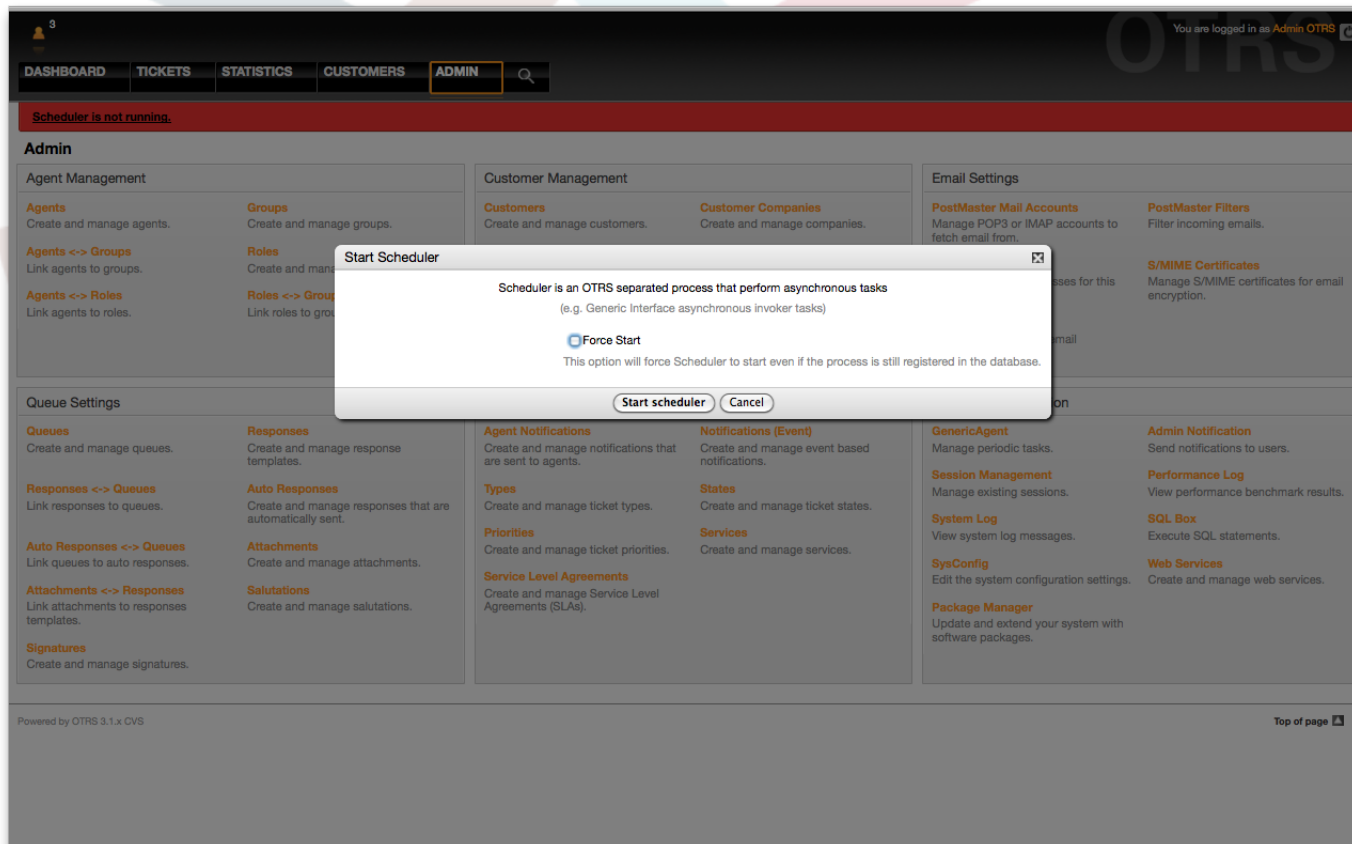


Abbildung: Start Scheduler.

## 12.2. Scheduler-Befehlszeilenoberfläche

The Scheduler command line tools let you control the Scheduler process (Start / Stop) or query its status. There are also tools to register the process to be controlled by the operating system.

Included with OTRS there are two sets of CLI tools, one for Unix / Linux and another for Microsoft Windows.

### 12.2.1. Unix / Linux

#### 12.2.1.1. Scheduler init.d Dateien

Init.d files are special scripts that are called by the operating system at startup and shutdown.

OTRS provides init.d scripts to start / stop the OTRS Scheduler process automatically by the operating system. These scripts are located under OTRS\_HOME/scripts.

The init.d scripts need to be copied to the correct location for your operating system. They need to have the proper permissions and some internal variables need to be set to work properly. If you used the OTRS RPMs to set up the system, this is taken care of automatically.

#### interne Werte des Init.d Skript

- **OTRS\_HOME** - Der Installationspfad von OTRS.
- **User** - Der Benutzer unter dem Apache ausgeführt wird.
- **Group** - Die Gruppe unter dem Apache ausgeführt wird.

#### Anmerkung

Zur Zeit bietet OTRS init.d-Skripte nur für Linux-Plattformen an.

**Tabelle 4.7. Liste der init-Skripte und der unterstützten Betriebssysteme**

Init-Skript	Unterstützte Betriebssysteme
OTRS Scheduler Linux	Red Hat, Fedora, CentOS, SUSE, openSUSE, Debian, Ubuntu
otrs-scheduler-gentoo-init.d, otrs-scheduler-gentoo-conf.d	Gentoo

#### Beispiel 4.29. Ein Beispiel wie der OTRS Scheduler unter Linux gestartet wird.

```
shell> /etc/init.d/otrs-scheduler-linux start
```

#### Verfügbare Aktionen

- **start** startet den OTRS Scheduler
- **stop** stoppt den OTRS Scheduler.
- **restart** startet den OTRS Scheduler neu.

- **status** Statusabfrage des OTRS Schedulers

Der Scheduler benötigt die Datenbank um die Prozess ID zu registrieren. Aus diesem Grund sind folgende Dinge notwendig:

- Execute the Scheduler init.d script to *start* the Scheduler process after the database process is up and running.
- Execute the Scheduler init.d script to *stop* the Scheduler before the database process shuts down.

## Anmerkung

If you want the Scheduler to run at system startup, please read the documentation of the operating system to find out the right location to place the init.d scripts, how to configure them to run automatically and how to set the run order.

### 12.2.1.2. Zeitplaner-Hintergrunddatei

This is the part of the Scheduler that stays running in the background checking for tasks to execute. It also provides the main functions to control the process.

Alle Unix / Linux Betriebssysteme nutzen die Datei **OTRS\_HOME/bin/otrs.Scheduler.pl**.

### Beispiel 4.30. Ein Beispiel wie der OTRS Scheduler gestartet wird.

```
shell> OTRS_HOME/bin/otrs.Scheduler.pl -a start
```

### Verfügbare Optionen

- **-a** Aktion.

#### mögliche Werte

- **start**- startet den Scheduler.
- **stop**- stoppt den Scheduler.
- **status**- fragt den Status des Scheduler ab.
- **-f** erzwingt das starten oder stoppen des Scheduler.

### Beispiel 4.31. Beispiel für das erzwungene stoppen des OTRS Scheduler.

```
shell> OTRS_HOME/bin/otrs.Scheduler.pl -a stop -f 1
```

## Anmerkung

Das erzwungene stoppen des Schedulers wird verwendet um die Prozess ID aus der Datenbank zu entfernen wenn der Scheduler nicht läuft, aber der Prozess registriert ist

Das erzwungene starten des Schedulers wird verwendet wenn der Scheduler nicht läuft, aber der Prozess registriert ist

Force start or stop are only necessary if the start of the process is needed to be done before the process update time expires. Otherwise an expired entry in the database is discarded by normal start.



## 12.2.2. Windows

### 12.2.2.1. Schedu

On Windows, the OTRS Scheduler is registered as a Service via the Windows Service Control Manager (SCM). In order to have the OTRS Scheduler process to be controlled by the SCM is necessary to register this service. If you used the Windows Installer this is taken care of by the installer, and there are no manual actions required.

OTRS provides the script **OTRS\_HOME/bin/otrs.Scheduler4WinInstaller.pl** to register or unregister the OTRS Scheduler into the SCM.

#### Anmerkung

Registering and de-registering can only be performed by members of the Administrator group on Windows. You might need to right-click on cmd.exe and select 'Run as Administrator' before you can register the service correctly.

#### Beispiel 4.32. Ein Beispiel wie der OTRS Scheduler unter Windows als Service registriert wird.

```
shell> perl OTRS_HOME/bin/otrs.Scheduler4WinInstaller.pl -a install
```

#### Verfügbare Optionen

- **-a** Aktion.

#### mögliche Werte

- **install**- um den Scheduler in den Windows ServiceManager zu installieren.
- **remove**- um den Scheduler vom Windows ServiceManager zu entfernen.

After installing into the Windows SCM the OTRS Scheduler process can be used like any other service on Windows. It can be started, stopped and restarted and can be configured to be started manually or automatic.

#### Anmerkung

To learn more about Windows Services and the Windows SCM please read the Windows documentation, and Microsoft online help.

### 12.2.2.2. Zeitplaner-Dienstdatei

This is the part of the Scheduler that stays running in the background checking for tasks to execute. It also provides the main functions to control the process.

Microsoft Windows verwendet die Datei **OTRS\_HOME/bin/otrs.Scheduler4Win.pl**.

#### Beispiel 4.33. Ein Beispiel wie der OTRS Scheduler unter Windows gestartet wird.

```
shell> OTRS_HOME/bin/otrs.Scheduler4Win.pl -a start
```

#### Verfügbare Optionen

- **-a** Aktion.

## mögliche Werte

- **start**- startet den Scheduler.
- **stop**- stoppt den Scheduler.
- **status**- fragt den Status des Scheduler ab.
- **-f** erzwingt das starten oder stoppen des Scheduler.

### Beispiel 4.34. Beispiel für das erzwungene stoppen des OTRS Scheduler unter Windows.

```
shell> OTRS_HOME/bin/otrs.Scheduler4Win.pl -a stop -f 1
```

## Anmerkung

Force stopping the Scheduler is used to remove the process ID from the database when the scheduler is not running and the process is still registered.

Force starting the Scheduler is used to start the Scheduler process if the scheduler is not running and the process is still registered.

Force start or stop are only necessary if starting the process is needed to be done before the process update time expires. Otherwise an expired entry in the database would be discarded by a normal start.

# Kapitel 5. Anpassung

## 1. Access Control Lists (ACLs)

### 1.1. Einführung

Seit OTRS 2.0 können Access Control Lists (ACLs) verwendet werden, um den Zugriff auf Tickets, Module, Queues, usw. zu steuern bzw. um in bestimmten Situationen Aktionen auf Tickets (schließen, verschieben, usw.) zu beeinflussen. ACLs können als Ergänzung zum bestehenden Berechtigungssystem der Rollen und Gruppen verwendet werden. Mit ACLs lassen sich, basierend auf Ticket-Attributen, rudimentäre Workflows innerhalb des Systems abbilden.

As yet, ACLs cannot be created using the SysConfig interface. They must be directly entered into the `Kernel/Config.pm` file. This chapter has some ACL examples which will walk you through the process of defining ACL definitions, and a reference of all possible important ACL settings.

### 1.2. Beispiele

#### **Beispiel 5.1. ACL, die das Verschieben von Tickets in eine Queue nur bei einer Ticket-Priorität von 5 erlaubt.**

This example shows you the basic structure of an ACL. First, it needs to have a name. In this case, it is "ACL-Name-2". Note that the ACLs will be numerically sorted before execution, so you should use the names carefully.

Secondly, you have a "Properties" section which is a filter for your tickets. All the criteria defined here will be applied to a ticket to determine if the ACL must be applied or not. In our example, a ticket will match if it is in the queue "Raw" and has priority "5 very high". This is also affected by changes in the form (e.g. if the ticket is the queue "raw" and had a priority "3 normal", but then priority drop-down is selected and the priority is changed now to "5 very high" will also match).

Lastly, a section "Possible" defines modifications to the screens. In this case, from the available queues, only the queue "Alert" can be selected in a ticket screen.

```
# ticket acl
$self->{TicketAcl}->{'100-Example-ACL'} = {
# match properties
Properties => {
# current ticket match properties
Ticket => {
Queue => ['Raw'],
Priority => ['5 very high'],
},
},
# return possible options (white list)
Possible => {
# possible ticket options (white list)
Ticket => {
Queue => ['Alert'],
},
},
};
```

## Beispiel 5.2. ACL, die das Verschieben von Tickets in eine Queue nur bei einer Ticket-Priorität von 5 erlaubt.

This example is very similar to the last one, but in this case only tickets in the queue "Raw" and with a priority "5 very high", both stored in the database will match. This kind of ACLs does not consider changes in the form before the ticket is really updated in the database.

```
# ticket acl
$self->{TicketAcl}->{'100-Example-ACL'} = {
# match properties
PropertiesDatabase => {
# current ticket match properties
Ticket => {
Queue => ['Raw'],
Priority => ['5 very high'],
},
},
# return possible options (white list)
Possible => {
# possible ticket options (white list)
Ticket => {
Queue => ['Alert'],
},
},
};
```

## Beispiel 5.3. ACL, die das Schließen von Tickets in der raw-Queue verbietet und den Schließen-Schalter ausblendet.

Here you can see how a ticket field (state) can be filtered with more than one possible value to select from. It is also possible to limit the actions that can be executed for a certain ticket. In this case, the ticket cannot be closed.

```
$self->{TicketAcl}->{'101-Second-Example-ACL'} = {
# match properties
Properties => {
# current ticket match properties
Ticket => {
Queue => ['Raw'],
},
},
# return possible options (white list)
Possible => {
# possible ticket options (white list)
Ticket => {
State => ['new', 'open', 'pending reminder'],
},
},
# possible action options
Action => {
AgentTicketBounce => 1,
AgentTicketClose => 0,
AgentTicketCompose => 1,
AgentTicketCustomer => 1,
AgentTicketForward => 1,
AgentTicketFreeText => 1,
AgentTicketHistory => 1,
AgentTicketLink => 1,
AgentTicketLock => 1,
AgentTicketMerge => 1,
AgentTicketMove => 1,
AgentTicketNote => 1,
AgentTicketOwner => 1,
AgentTicketPending => 1,
AgentTicketPhone => 1, # only used to hide the Split action
AgentTicketPhoneInbound => 1,
AgentTicketPhoneOutbound => 1,
AgentTicketPrint => 1,
}
```

```

    AgentTicketPriority    => 1,
    AgentTicketResponsible => 1,
    AgentTicketWatcher    => 1,
    AgentTicketZoom       => 1,
    AgentLinkObject       => 1, # only used to hide the Link action
  },
},
};

```

### Beispiel 5.4. ACL entfernt immer den Status Erfolgreich geschlossen

This example shows how it is possible to define negative filters (the state "closed successful" will be removed). You can also see that not defining match properties for a ticket will match any ticket, i. e. the ACL will always be applied. This may be useful if you want to hide certain values by default, and only enable them in special circumstances (e. g. if the agent is in a specific group).

```

$self->{TicketAcl}->{'102-Third-ACL-Example'} = {
  # match properties
  Properties => {
    # current ticket match properties (match always)
  },
  # return possible options
  PossibleNot => {
    # possible ticket options
    Ticket => {
      State => ['closed successful'],
    },
  },
};

```

### Beispiel 5.5. ACL, die nur Hardware-Services für Tickets anzeigt, die in Queues erstellt wurden, die mit "HW" beginnen.

This example also shows you how you can use regular expressions for matching tickets and for filtering the available options.

```

$self->{TicketAcl}->{'Only-Hardware-Services-for-HW-Queues'} = {
  # match properties
  # note we don't have "Ticket => {" because there's no ticket yet
  Properties => {
    Queue => {
      Name => ['[RegExp]HW'],
    }
  },
  # return possible options
  Possible => {
    # possible ticket options
    Ticket => {
      Service => ['[RegExp]^(Hardware)'],
    },
  },
};

```

## 1.3. Referenz

In dem angehängten Beispiel finden Sie eine Liste aller Parameter, welche für ACLs verwendet werden können.

Please see the section on ACLs in the ProcessManagement documentation for a detailed description of how to use ACLs for process tickets.

## Beispiel 5.6. Die Liste zeigt alle möglichen und wichtigen ACL-Einstellungen

```
# ticket acl
$self->{TicketAcl}->{'200-ACL-Reference'} = {
  # match properties (current values from the form)
  Properties => {

    # the used frontend module
    Frontend => {
      Action => ['AgentTicketPhone', 'AgentTicketEmail'],
    },

    # the logged in agent
    User => {
      UserLogin => ['some login'],
      Group_rw => [
        'hotline',
      ],
      Role => [
        'admin',
      ],
      # ...
    },

    # the logged in customer
    CustomerUser => {
      UserLogin => ['some login'],
      Group_rw => [
        'hotline',
      ],
      Role => [
        'admin',
      ],
      # ...
    },

    # process properties
    Process => {
      ProcessEntityID      => ['P1'], # the Process that the current ticket is
part of
      ActivityEntityID     => ['A1'], # the current Activity of the ticket
      ActivityDialogEntityID => ['AD1'], # the current ActivityDialog that the Agent/
Customer is using
    },

    # ticket properties
    Queue => {
      Name      => ['Raw'],
      QueueID   => ['some id'],
      GroupID   => ['some id'],
      Email     => ['some email'],
      RealName  => ['OTRS System'],
      # ...
    },
    Service => {
      ServiceID => ['some id'],
      Name      => ['some name'],
      ParentID  => ['some id'],
      # ...
    },
    Type => {
      ID      => ['some id'],
      Name    => ['some name'],
      # ...
    },
    Priority = {
      ID      => ['some id'],
      Name    => ['some name'],
      # ...
    }
  }
}
```

```

},
SLA = {
  SLAID    => ['some id'],
  Name     => ['some name'],
  Calendar => ['some calendar'],
  # ...
},
State = {
  ID       => ['some id'],
  Name     => ['some name'],
  TypeName => ['some state type name'],,
  TypeID   => ['some state type id'],
  # ...
},
Owner => {
  UserLogin => ['some login'],
  Group_rw => [
    'some group',
  ],
  Role => [
    'admin',
  ],
  # ...
},
Responsible => {
  UserLogin => ['some login'],
  Group_rw => [
    'some group',
  ],
  Role => [
    'admin',
  ],
  # ...
},
DynamicField => {
  # Names must be in DynamicField_<field_name> format.
  # Values in [ ... ] must always be the untranslated internal data keys
  #   specified in the dynamic field definition and
  #   not the data values shown to the user.
  DynamicField_Field1      => ['some value'],
  DynamicField_OtherField  => ['some value'],
  DynamicField_TicketFreeText2 => ['some value'],
  # ...
},
# alternatively, ticket properties can be specified in the ticket hash
Ticket => {
  Queue          => ['Raw'],
  State          => ['new', 'open'],
  Priority        => ['some priority'],
  Lock           => ['lock'],
  CustomerID     => ['some id'],
  CustomerUserID => ['some id'],
  Owner          => ['some owner'],
  DynamicField_Field1 => ['some value'],
  DynamicField_MyField => ['some value'],
  # ...
},
},

# match properties (existing values from the database)
PropertiesDatabase => {
  # See section "Properties", the same config can be used here.
  # ...
}

# return possible options (white list)
Possible => {
  # possible ticket options (white list)
  Ticket => {
    Queue => ['Hotline', 'Coordination'],
    State => ['some state'],
    Priority => ['5 very high'],

```

```

    DynamicField_Field1 => ['some value'],
    DynamicField_MyField => ['some value'],
    # ...
    NewOwner => ['some owner'],
    OldOwner => ['some owner'],
    # ...
  },

  # Limit the number of possible ActivityDialogs the Agent/Customer
  # can use in a process ticket.
  ActivityDialog => ['AD1', 'AD3'],

  # Limit the number of possible Processes that can be started
  Process => ['P1', 'P2'],

  # possible action options (white list)
  Action => {
    AgentTicketBounce      => 1,
    AgentTicketClose       => 1,
    AgentTicketCompose     => 0,
    AgentTicketCustomer    => 0,
    AgentTicketForward     => 0,
    AgentTicketFreeText    => 1,
    AgentTicketHistory     => 1,
    AgentTicketLink        => 0,
    AgentTicketLock        => 1,
    AgentTicketMerge       => 0,
    AgentTicketMove        => 1,
    AgentTicketNote        => 1,
    AgentTicketOwner       => 1,
    AgentTicketPending     => 1,
    AgentTicketPhone       => 1, # only used to hide the Split action
    AgentTicketPhoneInbound => 0,
    AgentTicketPhoneOutbound => 1,
    AgentTicketPrint       => 1,
    AgentTicketPriority     => 0,
    AgentTicketResponsible => 1,
    AgentTicketWatcher     => 1,
    AgentTicketZoom        => 1,
    AgentLinkObject        => 1, # only used to hide the Link action
  },
},
# remove options (black list)
PossibleNot => {
  # See section "Possible"
  # ...
},
};

```

## Anmerkung

While matching ACLs if CustomerUserID parameter sent, the ACL mechanism will compare the defined ACLs using the supplied CustomerUserID to gather the CustomerUser details to fill the CustomerUser hash and it also overrides the Customer information in the Ticket hash for the Properties match. On the other hand this calculations are also made for the PropertiesDatabase part, but using the Ticket Customer as the basis to gather the data.

Notice that in Customer Interface, the CustomerUserID is always sent with the current logged Customer User.

Be aware that in ticket search screens (AgentTicketSearch and CustomerTicketSearch) the only affected attributes by ACLs are the Dynamic Fields. This means that this screens you can not restrict any other attribute like ticket type, state, queue, etc.



## 2. Prozess-Management

### 2.1. Einführung

Diese Funktion erlaubt Ihnen in OTRS Prozesse (Work-Flows) zu modellieren. Die grundlegende Idee ist wiederkehrende Prozesse zu definieren und die Arbeit an verschiedene Personen zu delegieren, genauso um den Prozess in verschiedene Richtungen, basierend auf bestimmten Kriterien, zu führen.

### 2.2. Beispiel Prozess

Zur Demonstration schauen wir uns ein Beispiel an. Wir wollen die Bestellung eines Buches in einem Prozess abbilden.

#### 2.2.1. Aufnahme der Anforderungen

Bevor eine Bestellung abgesetzt wird, wird die Anforderung eines Mitarbeiters von Literatur gespeichert. Das folgende Buch wird in unserem Beispiel benötigt:

Titel: Prozessmanagement für Dummies Autor: Thilo Knuppertz ISBN: 3527703713
--

#### 2.2.2. Genehmigung durch Manager

Der Abteilungsleiter des Mitarbeiters muss über die Bestellung entscheiden. Im Falle einer Verweigerung sollte ein Grund vom Manager angegeben werden. Im Falle einer Genehmigung wird die Bestellung zur Einkauf-Abteilung weitergeleitet.

#### 2.2.3. Verarbeitung durch Einkaufsabteilung

Die Einkauf-Abteilung muss nun herausfinden, wo das Buch zu den besten Konditionen bestellt werden kann. Wenn es ausverkauft ist kann das in der Bestellung vermerkt werden. Im Falle einer erfolgreichen Bestellung wird die Einkauf-Abteilung den Lieferanten, den Preis und das Lieferdatum aufnehmen.

#### 2.2.4. Verarbeitung durch Poststelle

Die Lieferung kommt an der Firma an. Die Warenannahme überprüft die Lieferung und notiert das Empfangsdatum. Nun wird der Mitarbeiter informiert, dass seine Bestellung angekommen ist und bereit ist, abgeholt zu werden.

### 2.3. Implementierung des Beispiels

Wenn wir davon ausgehen, dass sich ein Ticket in diesem Work-Flow wie ein Begleitdokument verhält, das Veränderungen als Notizen empfängt, dann haben wir schon ein klares Bild der Prozess-Tickets.

Nach der Analyse des Beispielprozesses, konnten wir folgende nötigen Elemente identifizieren:

- Möglichkeiten zur Datenaufnahme, hier *Aktivitäten-Dialoge*,
- Kontrollen, die automatisch auf geänderte Daten reagieren kann, nennen wir sie *Übergänge*,
- Änderungen, die sich auf ein Prozess-Ticket nach erfolgreichem Übergang eines Prozess-Ticket angewendet werden können, nennen wir sie *Übergangsaktionen*.

Wir brauchen noch ein zusätzliches Element, was nicht so offensichtlich sein könnte:

- Eine Möglichkeit mehr als nur einen Aktivitätsdialog zur Verfügung zu stellen. In unserem Beispiel ist das erforderlich, wenn die Führungskraft zwischen "Genehmigen" und "Ablehnen" zu entscheiden hat. Nennen wir sie *Aktivität* .

Mit Aktivitäten, Aktivitätsdialogen, Übergängen und Übergangsaktionen haben wir die notwendigen Werkzeuge, um die einzelnen Schritte unseres Beispiels zu modellieren. Was ist noch fehlt, ist ein Bereich, wo für jeden Arbeitsablauf die Reihenfolge der Schritte festgelegt wird. Nennen wir diesen *Prozess*. Um uns auf all diese Personen später beziehen zu können, werden wir ihnen in Klammern eine Abkürzung zuweisen. Diese Abkürzungen basieren auf einem internen Identifikations-Mechanismus namens EntityIDs.

Die EntityIDs werden mit einem oder zwei Buchstaben (je nach Prozessteil) und einer fortlaufenden Nummer gebildet, Beispiel:

- Prozess: 'P1', 'P2' ... 'Pn'.
- Aktivität: 'A1', 'A2' ... 'An'.
- Aktivitätsdialog: 'AD1', 'AD2' ... 'ADn'.
- Übergang: 'T1', 'T2' ... 'Tn'.
- Übergangsaktivität: 'TA1', 'TA2' ... 'TAn'.

Vor der Erstellung des Prozesses und seiner Abschnitte ist es notwendig, das System vorzubereiten, wir müssen sowohl einige Queues, Nutzer und Dynamic Fields definieren, als auch ein paar SysConfig-Optionen festlegen.

Erstellen Sie die folgenden Queues:

- Management
- Mitarbeiter
- Einkauf
- Post

Erstellen Sie die folgenden Benutzer:

- Manager
- Mitarbeiter

Erstellen Sie die folgenden DynamicFields

- Titel

Beschriftung	Titel
Typ	Text
Objekt	Ticket

- Autor

Beschriftung	Autor
Typ	Text
Objekt	Ticket

- ISBN

Beschriftung	ISBN
--------------	------

Typ	Text
Objekt	Ticket

- Status

Beschriftung	Status
Typ	Einfachauswahl
Objekt	Ticket
mögliche Werte	<ul style="list-style-type: none"> <li>• Genehmigung</li> <li>• Genehmigung abgelehnt</li> <li>• genehmigt</li> <li>• Bestellung abgelehnt</li> <li>• Bestellung aufgegeben</li> <li>• Sendung empfangen</li> </ul>

Bemerkung: Bitte benutzen Sie exakt diese möglichen Werte für "Schlüssel" und "Wert" in den DynamicField-Einstellungen

- Lieferant

Beschriftung	Lieferant
Typ	Text
Objekt	Ticket

- Preis

Beschriftung	Preis
Typ	Text
Objekt	Ticket

- LieferDatum

Beschriftung	Liefertermin
Typ	Datum
Objekt	Ticket

- Eingangsdatum

Beschriftung	Datum des Eingangs
Typ	Datum
Objekt	Ticket

Setzen Sie die folgenden SysConfig-Einstellungen:

- 'Ticket::Responsible': Ja
- 'Ticket::Frontend::AgentTicketZoom###ProcessWidgetDynamicFieldGroups':

<b>Schlüssel:</b>	<b>Inhalt:</b>
Buch	Titel, Autor,ISBN

<b>Schlüssel:</b>	<b>Inhalt:</b>
Allgemein	Status
Auftrag	Preis, Lieferant, Liefertermin
Lieferung	Eingangsdatum

- 'Ticket::Frontend::AgentTicketZoom###ProcessWidgetDynamicField':

<b>Schlüssel:</b>	<b>Inhalt:</b>
Autor	1
Eingangsdatum	1
LieferDatum	1
ISBN	1
Preis	1
Status	1
Lieferant	1
Titel	1

Fangen wir mit dem realen Prozessmanagement an. Im nächsten Schritt werden wir die einzelnen Objekte, die wir benötigen, definieren.

### 2.3.1. Prozess (als ein Container)

Um einen neuen Prozess zu erstellen ist es notwendig auf den Link "Prozess Management" in der Systemverwaltungs-Box im Admin-Menü zu klicken, anschließend gelangen wir zur Prozessmanagement-Übersicht. Nachdem der Prozess erstellt wurden, können wir alle anderen Objekte (oder Prozessteile) erstellen.

#### Anmerkung

Aktivitäten, Aktivitätsdialoge, Übergänge und Übergangsaktionen die in einem Prozess definiert wurden, sind ebenfalls für alle anderen Prozesse im System verfügbar.

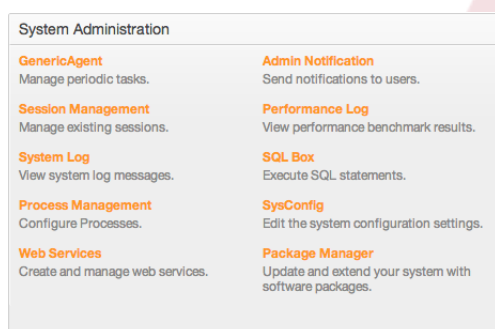


Abbildung.: OTRS Administrationsbereich.

Klicken Sie auf "Neuen Prozess erstellen" im Adminmenü

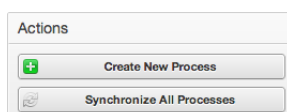


Abbildung.: Neuen Prozess hinzufügen.

Füllen Sie die Prozessinformationen aus, definieren Sie einen Prozessname und die Beschreibung für diesen Prozess, wir belassen den Prozessstatus auf "inaktiv", bis wir alle Aufgaben erledigt haben. Speichern Sie den Vorgang.

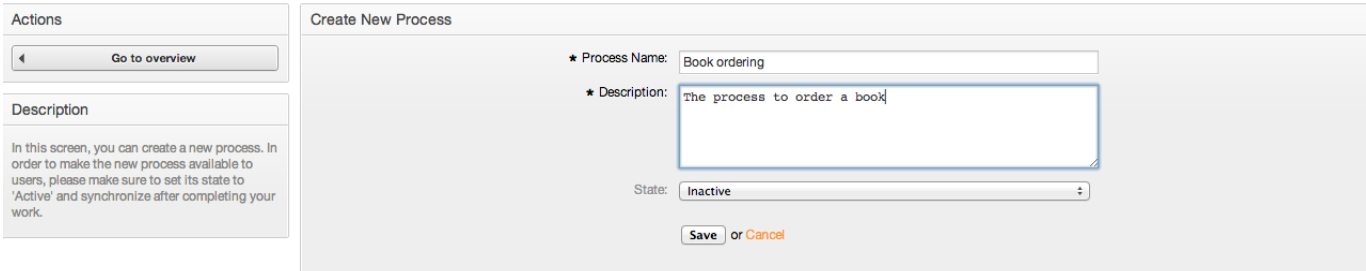


Abb.: Neuen Prozess hinzufügen.

### 2.3.2. Aktivitäts-Dialoge

Klicken Sie auf den neuen Prozessnamen in der Prozessmanagement-Übersichtsbild, dann in den "verfügbaren Prozess Elementen" klicken Sie auf "Activity Dialoge" (diese Aktion wird die möglichen Dialogoptionen erweitern), anschließend klicken Sie auf "Neuen Aktivitätsdialog erstellen".

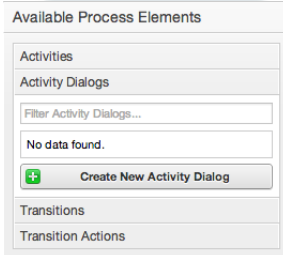


Abbildung: Erstelle neue Aktivitätsdialog.

In the opened popup screen fill the "Activity dialog Name" as well as the "Description (short)" fields, for this example we will leave all other fields as the default, to assign fields to the Activity Dialog simple drag the required field from the "Available Fields" pool and drop into the "Assigned Fields" pool. The order in the "Assigned Fields" pool is the order as the fields will have in the screen, to modify the order simply drag and drop the filed within the pool to rearrange it in the correct place.

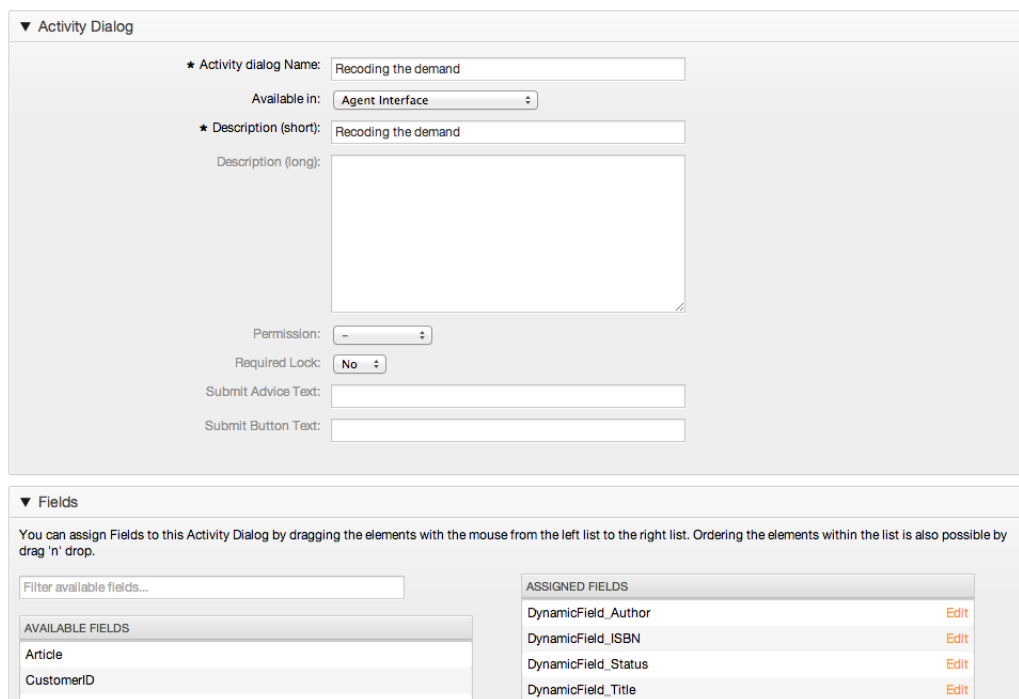


Abbildung: Neuen Aktivitätsdialog hinzufügen.

As soon as the fields are dropped into the "Assigned Fields" pool another popup screen is shown with some details about the field, we will leave the default options and only for Article fields we should make sure that the ArticleType field is set to "note-internal".



Abbildung: Felddetails bearbeiten (Artikel).

After all fields are assigned click on the submit button in the main popup screen to save the changes.

In this example we will use Article field for comments, but another option could be to create a TextArea type Dynamic Field, the rest of the mentioned fields in the lines below are the Dynamic Fields that we define before.

Please be aware that in this screen all the Dynamic Fields has the prefix "DynamicField\_" as in "DynamicField\_Title", Do not confuse with the field "Title" that is the Ticket Title.

Erstellen Sie die folgenden Aktivitätsdialoge:

- "Aufnahme der Nachfrage" (AD1)

Ein Aktivitätsdialog, welcher alle erforderlichen Felder für die Daten der Bestellung enthält (Titel, Autor und ISBN) und ein Statusfeld mit der Möglichkeit "Approval" zu wählen.

- "Genehmigung verweigert" (AD2)

Ein Aktivitätsdialog mit einem Kommentarfeld (Artikel) und einem Statusfeld mit der Möglichkeit "Approval denied".

- "Genehmigt" (AD3)

Hier benötigen Sie das Statusfeld mit der Option "Genehmigt".

- "Bestellung abgelehnt" (AD4)

Ein Aktivitätsdialog, welcher es ermöglicht eine unmögliche Bestellung abzulehnen (Buch ist nicht auf Lager). Hier wird ebenfalls ein Kommentarfeld und ein Statusfeld mit der Option "Order denied" benötigt.

- "Bestellung aufgegeben" (AD5)

Ein Aktivitätsdialog mit den Feldern Lieferant, Preis und Lieferdatum und dem Statusfeld mit der Option "Bestellung abgegeben".

- "Sendung empfangen" (AD6)

Eine Aktivität für die Poststelle mit einem Feld für das Empfangsdatum und dem Statusfeld mit der Option "Bestellung empfangen".

Um das Statusfeld zu beschränken, benötigen wir für jeden Aktivitätsdialog mindestens eine ACL in Kernel/Config.pm oder in einer neuen Perl-Datei in Kernel/Config/Files.

```
$Self->{TicketAcl}->{'P1-AD1-1'} = {
    Properties => {
        Process => {
            ActivityDialogEntityID => ['AD1'],
        },
    },
    Possible => {
        Ticket => {
            DynamicField_Status => ['Approval'],
        },
    },
};

$Self->{TicketAcl}->{'P1-AD2-1'} = {
    Properties => {
        Process => {
            ActivityDialogEntityID => ['AD2'],
        },
    },
    Possible => {
        Ticket => {
            DynamicField_Status => ['Approval denied'],
        },
    },
};

$Self->{TicketAcl}->{'P1-AD3-1'} = {
    Properties => {
        Process => {
            ActivityDialogEntityID => ['AD3'],
        },
    },
    Possible => {
        Ticket => {
            DynamicField_Status => ['Approved'],
        },
    },
};
```

```

$Self->{TicketAcl}->{'P1-AD4-1'} = {
  Properties => {
    Process => {
      ActivityDialogEntityID => ['AD4'],
    },
  },
  Possible => {
    Ticket => {
      DynamicField_Status => ['Order denied'],
    },
  },
};

$Self->{TicketAcl}->{'P1-AD5-1'} = {
  Properties => {
    Process => {
      ActivityDialogEntityID => ['AD5'],
    },
  },
  Possible => {
    Ticket => {
      DynamicField_Status => ['Order placed'],
    },
  },
};

$Self->{TicketAcl}->{'P1-AD6-1'} = {
  Properties => {
    Process => {
      ActivityDialogEntityID => ['AD6'],
    },
  },
  Possible => {
    Ticket => {
      DynamicField_Status => ['Shipment received'],
    },
  },
};

```

### 2.3.3. Übergänge

Klicken Sie in den "Verfügbaren Prozesselementen" auf "Übergänge", anschließend klicken Sie auf "Erstelle neue Übergans-Aktion".

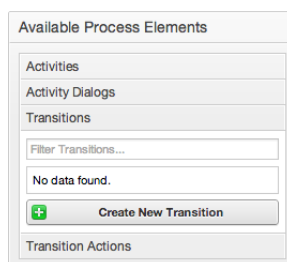


Abbildung: Neuen Übergang hinzufügen.

In dem öffnenden Popup füllen Sie bitte den "Übergangsnamen" aus, anschließend tragen Sie die benötigten Zustände ein. In diesem Beispiel werden wir nur einen Zustand und nur ein Feld benutzen. Für diese beiden lassen für den Linktyp auf "and" und wir werden den Match-Type-Wert als "String" nutzen.



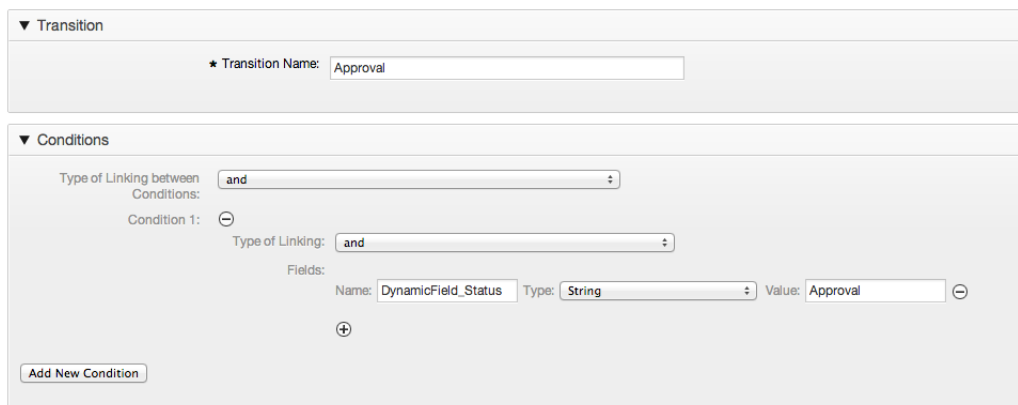


Abbildung: Neuen Übergang hinzufügen.

Nachdem alle Parameter und Werte gesetzt worden sind, klicken Sie auf die "Übermitteln"-Schaltfläche um die Werte zu speichern.

Erstellen Sie die folgenden Übergänge:

- "Genehmigung" (T1)  
Ein Übergang, der überprüft ob das Statusfeld auf "Genehmigung" gesetzt ist.
- "Genehmigung verweigert" (T2)  
Ein Übergang, der überprüft ob das Statusfeld auf "Genehmigung verweigert" gesetzt ist.
- "Genehmigt" (T3)  
Ein Übergang, der überprüft ob das Statusfeld auf "Genehmigung erteilt" gesetzt ist.
- "Bestellung abgelehnt" (T4)  
Ein Übergang, der überprüft ob das Statusfeld auf "Bestellung verweigert" gesetzt ist.
- "Bestellung aufgegeben" (T5)  
Ein Übergang, der überprüft ob das Statusfeld auf "Bestellung aufgegeben" gesetzt ist.
- "Sendung empfangen" (T6)  
Ein Übergang, der überprüft ob das Statusfeld auf "Sendung empfangen" gesetzt ist.

### 2.3.4. Übergangs-Aktionen

Klicken Sie auf "Übergangs-Aktionen" in den "Verfügbaren Prozesselementen", anschließend klicken Sie auf "Erstelle neue Übergangs-Aktion".

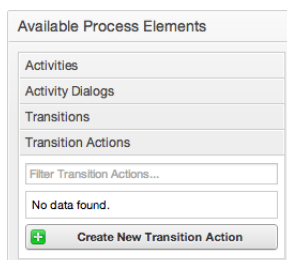


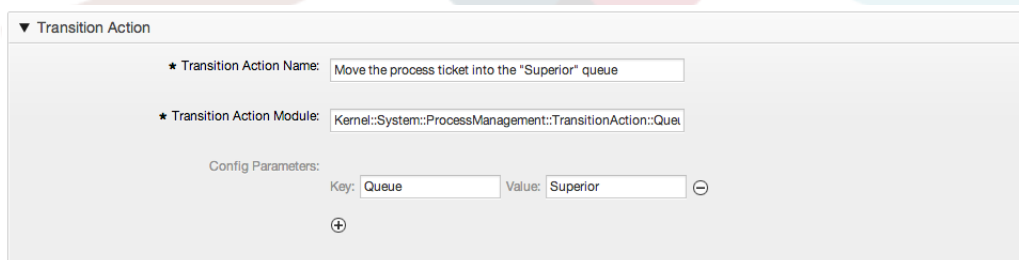
Abbildung: Erstelle neue Übergangsaktion.

In dem öffnenden Popup füllen Sie bitte den "Übergangsnamen" und das "Übergangsaktionsmodul" aus, dann tragen Sie die benötigten und optionalen Parameternamen und Werte ein.

Alle Übergangsaktionsmodule befinden sich in Kernel/System/ProcessManagement/TransitionAction und die folgende Liste zeigt Ihnen alle Übergangsaktionen die mit diesem Release ausgeliefert werden

- DynamicFieldSet
- TicketArticleCreate
- TicketCustomerSet
- TicketLockSet
- TicketOwnerSet
- TicketQueueSet
- TicketResponsibleSet
- TicketServiceSet
- TicketSLASet
- TicketStateSet
- TicketTitleSet
- TicketTypeSet

Jedes Modul hat seine eigenen und verschiedenen Parameter. Eine Übersicht aller benötigten und optionalen Parameter finden Sie unter Moduldokumentation.



▼ Transition Action

\* Transition Action Name:

\* Transition Action Module:

Config Parameters:

Key:  Value:  ⊖

⊕

*Abbildung: Hinzufügen einer Übergangsaktion.*

Nachdem alle Parameter und Werte gesetzt worden sind, klicken Sie auf die "Übermitteln"-Schaltfläche um die Werte zu speichern.

Erstellen Sie die folgenden Übergangs-Aktionen:

- "Verschiebe das Prozessticket in die Management-Queue" (TA1)

Diese Aktion wird vermutlich ausgeführt wenn der Übergang "Approval" (T1) angewandt wurde.

- "Ändere den Ticket-Verantwortlichen zu 'Manager'" (TA2)

Wird ausgeführt, wenn der Übergang "Approval" (T1) ausgeführt wurde.

- "Verschiebe das Prozessticket in die 'Employees'-Queue" (TA3)

Wird ausgeführt, wenn:

- Der Übergang "Approval denied" (T2) wird ausgeführt
- Der Übergang "Order denied" (T4) wird ausgeführt.
- Der Übergang "Shipment received" (T6) wird ausgeführt
- Ändere den Ticket-Verantwortlichen zu 'Employee'" (TA4)

Wird ausgeführt, wenn:

- Der Übergang "Approval denied" (T2) wird ausgeführt
- Der Übergang "Order denied" (T4) wird ausgeführt
- Der Übergang "Shipment received" (T6) wird ausgeführt
- "Verschiebe das Prozessticket in die 'Purchasing'-Queue" (TA5)

Wird ausgeführt, wenn der Übergang "Approved" (T3) ausgeführt wurde.

- "Verschiebe das Prozessticket in die 'Post office'-Queue" (TA6)

Wird ausgeführt, wenn der Übergang "Order placed (T5) ausgeführt wurde.

- "Ticket erfolgreich schließen" (TA7)

Wird ausgeführt, wenn:

- Der Übergang "Shipment received" (T6) wird ausgeführt
- Ticket erfolglos schließen" (TA8)

Wird ausgeführt, wenn:

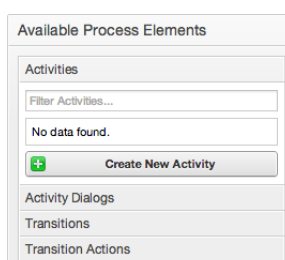
- Der Übergang "Approval denied" (T2) wird ausgeführt
- Der Übergang "Order denied" (T4) wird ausgeführt

Wie Sie sehen, gibt es Orte an denen gleiche Übergangsaktionen ausgeführt werden sollen. Deshalb ist es sinnvoll Übergangsaktionen frei mit Übergängen zu verknüpfen, um sie wiederverwenden zu können.

## 2.3.5. Aktivitäten

We chose the approach to see Activities as a basket which can contain one or more Activity Dialogs.

Klicken Sie auf "Aktivitäten" in den verfügbaren "Prozesselementen", anschließend klicken Sie auf "Erstelle neue Aktivität".



*Abbildung: Erstelle neue Aktivitätsschaltfläche.*

In the opened popup screen fill the "Activity Name", Then drag the required Activity Dialogs from the "Available Activity Dialogs" pool, and drop them into to the "Assigned Activity Dialogs" pool. This dialog will be presented (in the ticket zoom screen) in the same order as it is defined on this screen translating from top to bottom, to left to right.

This order is specially important in the first Activity, since the first Activity Dialog for this activity is the only one that is presented when the process starts

Erstellen Sie die folgenden Aktivitäten:

- "Aufnahme der Nachfrage" (A1)  
Beinhaltet die Aktivität "Aufnahme der Nachfrage" (AD1)
- "Genehmigung" (A2)  
Beinhaltet die Aktivitätsdialoge "Genehmigung verweigert" (AD2) und "Genehmigt" (AD3)
- "Bestellung" (A3)  
Beinhaltet die Aktivitätsdialoge "Bestellung abgelehnt" (AD4) und "Bestellung aufgegeben" (AD5)
- Eingehend (A4)  
Beinhaltet den Aktivitätsdialog "Bestellung erhalten" (AD6)
- "Prozess beendet" (A5): Das ist eine Aktivität ohne mögliche Aktivitätsdialoge. Sie wird nach "Genehmigung verweigert", "Genehmigt", "Bestellung abgelehnt", "Bestellung aufgegeben" oder "Bestellung erhalten" angezeigt und stellt das Ende des Prozesses dar.

Now we can clearly see that Activities are precisely defined states of a process ticket. After a successful Transition a process ticket moves from one Activity to another.

### **2.3.6. Buchbestellprozesspfad**

Let us conclude our example with the last missing piece in the puzzle, the Process as the a flow describer. In our case this is the whole ordering work-flow. Other processes could be office supply ordering or completely different processes.

The process has a starting point which consists of the start Activity and the start Activity Dialog. For any new book order, the start Activity Dialog (first Activity Dialog for the first Activity) is the first screen that is displayed. If this is completed and saved, the Process ticket will be created and can follow the configured work-flow.

The process also contains the directions for how the process ticket can move through the Process. Let's call this the "Path". It consists of the start Activity, one or more Transitions (possibly with Transition Actions), and other Activities.

Assuming that the Activities has already assigned their Activity Dialogs drag an Activity from the accordion (in the left part of the screen) and drop it into the canvas area (below process information). Notice that an arrow from the process start (green circle) to the Activity is placed automatically. (This is the first Activity and its first Activity Dialog is the first screen that will be shown when the process starts).

**Available Process Elements**

**Activities**

Filter Activities...

- Recording the demand ✎ ✖
- Approval ✎ ✖
- Order ✎ ✖
- Incoming ✎ ✖
- Process complete ✎ ✖

+ Create New Activity

Activity Dialogs

Transitions

Transition Actions

---

**Description**

The Elements listed above in this sidebar can be moved to the canvas area on the right by using drag'n'drop.

**Activities:** You can place Activities on the canvas area to assign this Activity to the Process.


**Activity Dialogs:** To assign an Activity Dialog to an Activity drop the Activity Dialog element from this sidebar over the Activity placed in the canvas area.

**Transitions:** You can start a connection between to Activities by dropping the Transition element over the Start Activity of the connection. After that you can move the loose end of the arrow to the End Activity.

**Transition Actions:** Actions can be assigned to a Transition by dropping the Action Element onto the label of a Transition.

State: Inactive

**▼ Add and Edit Activities, Activity Dialogs and Transitions**



Save or Save and finish or Cancel

Abbildung: Ziehen der ersten Aktivität in die Arbeitsfläche.

Next, drag another Activity into the canvas too. now we will have two Activities in the canvas the first one is connected to the start point and the second has no connections, you can hover the mouse over each activity to reveal their own Activity Dialogs.

**Available Process Elements**

**Activities**

Filter Activities...

- Recording the demand ✎ ✖
- Approval ✎ ✖
- Order ✎ ✖
- Incoming ✎ ✖
- Process complete ✎ ✖

+ Create New Activity

Activity Dialogs

Transitions

Transition Actions

---

**Description**

The Elements listed above in this sidebar can be moved to the canvas area on the right by using drag'n'drop.

**Activities:** You can place Activities on the canvas area to assign this Activity to the Process.

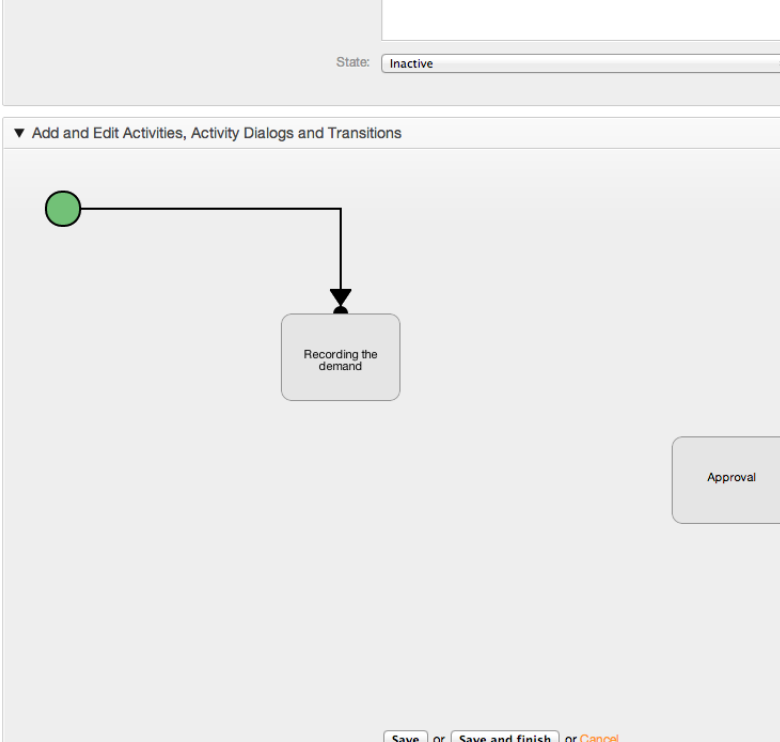
**Activity Dialogs:** To assign an Activity Dialog to an Activity drop the Activity Dialog element from this sidebar over the Activity placed in the canvas area.

**Transitions:** You can start a connection between to Activities by dropping the Transition element over the Start Activity of the connection. After that you can move the loose end of the arrow to the End Activity.

**Transition Actions:** Actions can be assigned to a Transition by dropping the Action Element onto the label of a Transition.

State: Inactive

**▼ Add and Edit Activities, Activity Dialogs and Transitions**



Save or Save and finish or Cancel

Abbildung: Ziehen der zweiten Aktivität in die Arbeitsfläche.

Then let's create the "Path" (connection) between this two Activities, for this we will use the Transitions, Click on Transitions in the accordion drag a Transition and drop it inside the first Activity, notice that the Activity change its color indicating that the Transition is attached, as soon as the Transition is dropped the end point of the Transition arrow will be placed next to the process start point. Drag the Transition arrow end point and drop it inside the other Activity to create the connection between the Activities.

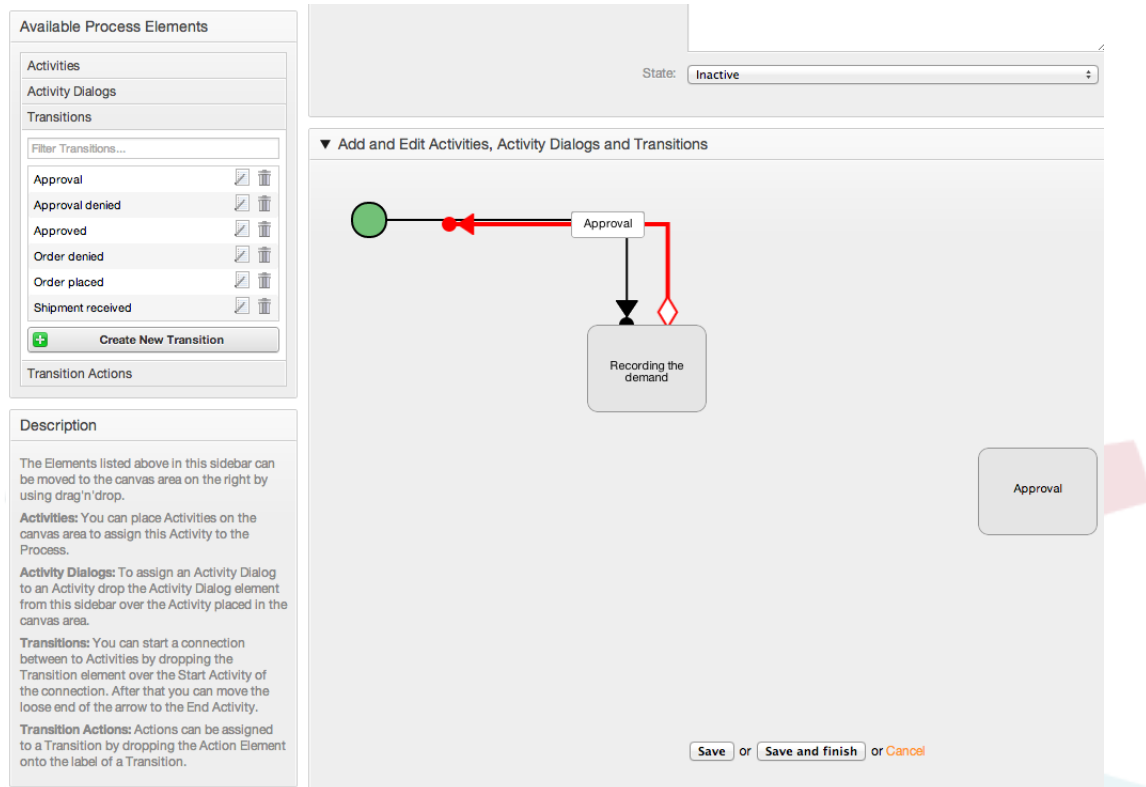


Abbildung: Ziehen des Überganges in die Arbeitsfläche.

Now that the "Path" between the Actions is defined, then we need to assign the Transition Actions to the Transition, double click the Transition label (in the canvas), this will open a new popup window.

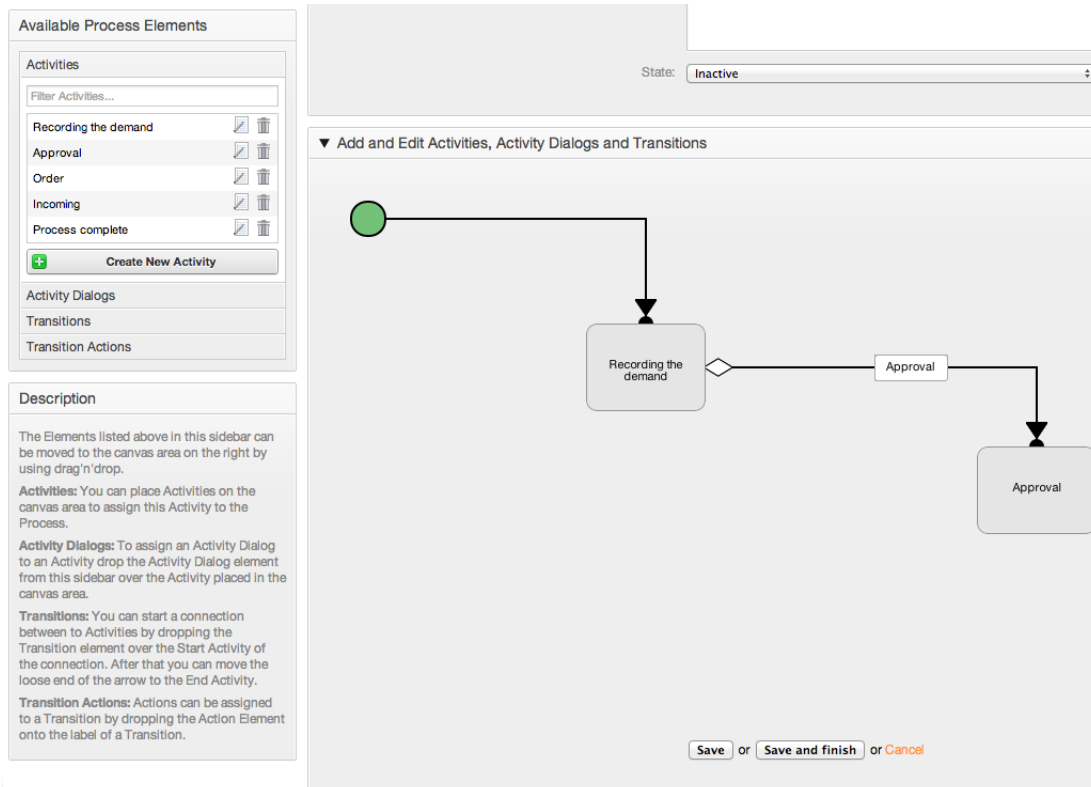


Abbildung: Verbinden von Aktivitäten mit Übergängen.

Drag the needed Transition Actions from Available Transition Actions pool and drop them into the Assigned Transition Actions pool and click on submit button.

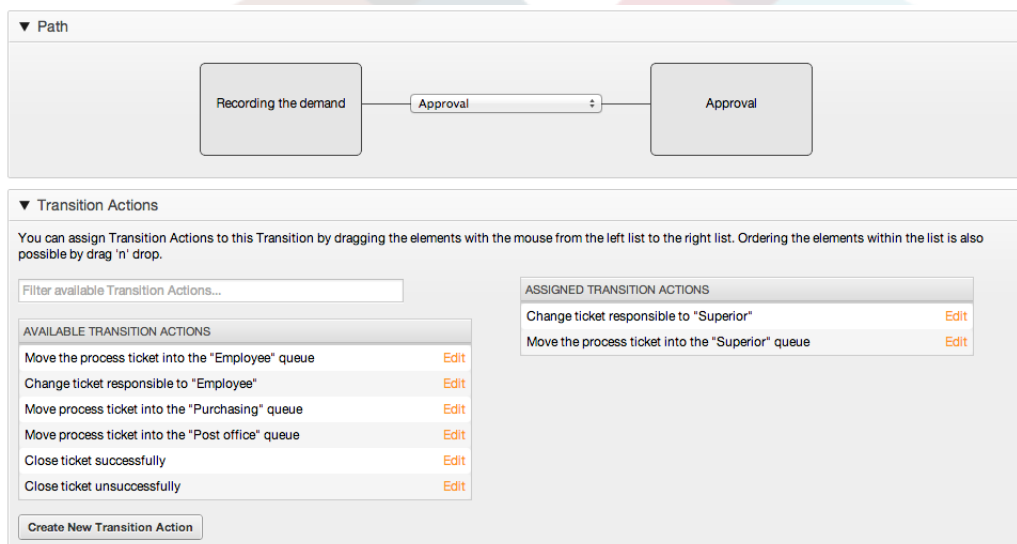


Abbildung: Zuweisen von Übergangsaktionen. Assign Transition Actions.

Then back in the main process edit screen click on save button below the canvas to save all other changes.

Complete the "path" adding the following Activities, Transitions and Transition Actions:

Aufnahme der Nachfrage bis zur "Approval"

- Startpunkt: Aktivität "Aufnahme der Nachfrage" (A1)

- Möglicher Übergang: Approval (T1)
  - Wenn die Bedingung der Aktivität erfüllt ist, wird das Ticket in die Aktivität: Approval (A2) geschoben.
  - Zusätzlich werden die folgenden Übergangs-Aktionen ausgeführt:
    - "Verschiebe das Ticket in die 'Management' Queue (TA1)
    - "Setze den Ticketverantwortlichen auf 'Manager'" (TA2)

The Activity: "Recording the demand" (A1) is a defined step of the process ticket, where there is the possibility for the Transition: "Approval" (T1). If this applies, the ticket will move to the next Activity: "Approval" (A2), and the Transition Actions: "Moving the ticket into the 'Management' Queue" (TA1) and "Set ticket responsible to 'manager'" (TA2) are executed. In the Activity: "Approval" (A2), the Activity Dialogs: "Approval denied" (AD2) and "Approved" (AD3) are available.

#### Genehmigung

- Startpunkt: Aktivität "Approval" (A2)
- Mögliche Übergänge:
  - "Genehmigung verweigert" (T2)
    - Wenn dies zutrifft, wird das Ticket in die Aktivität: "Process complete (A5) geschoben.
    - Zusätzlich werden die folgenden Übergangs-Aktionen ausgeführt:
      - "Verschiebe das Ticket in die 'Employees' Queue (TA3)
      - "Setze den Ticketverantwortlichen auf 'Employee'" (TA4)
      - Ticket erfolglos schließen" (TA8)
  - "Genehmigt" (T3)
    - Wenn dies zutrifft, wird das Ticket in die Aktivität: "Order" (A3) geschoben.
    - Zusätzlich werden die folgenden Übergangs-Aktionen ausgeführt:
      - "Verschiebe das Ticket in die 'Purchasing' Queue (TA5)

We can see that from the current Activity, which defines a step of the process ticket, there are one or more possibilities for Transition which have exactly one target Activity (and possibly one or more Transition Actions).

#### Auftrag

- Startpunkt: Aktivität "Order" (A3)
- Mögliche Übergänge:
  - "Bestellung abgelehnt" (T4)
    - Wenn dies zutrifft, wird das Ticket in die Aktivität: "Process complete (A5) geschoben.
    - Zusätzlich werden die folgenden Übergangs-Aktionen ausgeführt:
      - "Verschiebe das Ticket in die 'Employees' Queue (TA3)



- "Setze den Ticketverantwortlichen auf 'Employee'" (TA4)
- Ticket erfolglos schließen" (TA8)
- "Bestellung aufgegeben" (T5)
  - Wenn dies zutrifft, wird das Ticket in die Aktivität: "Incoming" (A5) geschoben.
  - Zusätzlich werden die folgenden Übergangs-Aktionen ausgeführt:
    - "Verschiebe das Ticket in die 'Post office' Queue (TA6)

#### Eingehend

- Startpunkt: Aktivität "Incoming" (A4)
- Mögliche Übergänge:
  - "Sendung empfangen" (T6)
    - Wenn dies zutrifft, wird das Ticket in die Aktivität: "Process complete (A5) geschoben.
    - Zusätzlich werden die folgenden Übergangs-Aktionen ausgeführt:
      - "Verschiebe das Ticket in die 'Employees' Queue (TA3)
      - "Setze den Ticketverantwortlichen auf 'Employee'" (TA4)
      - "Ticket erfolgreich schließen" (TA7)

Der komplette Pfad für den Buchbestellprozess schaut wie folgt aus:

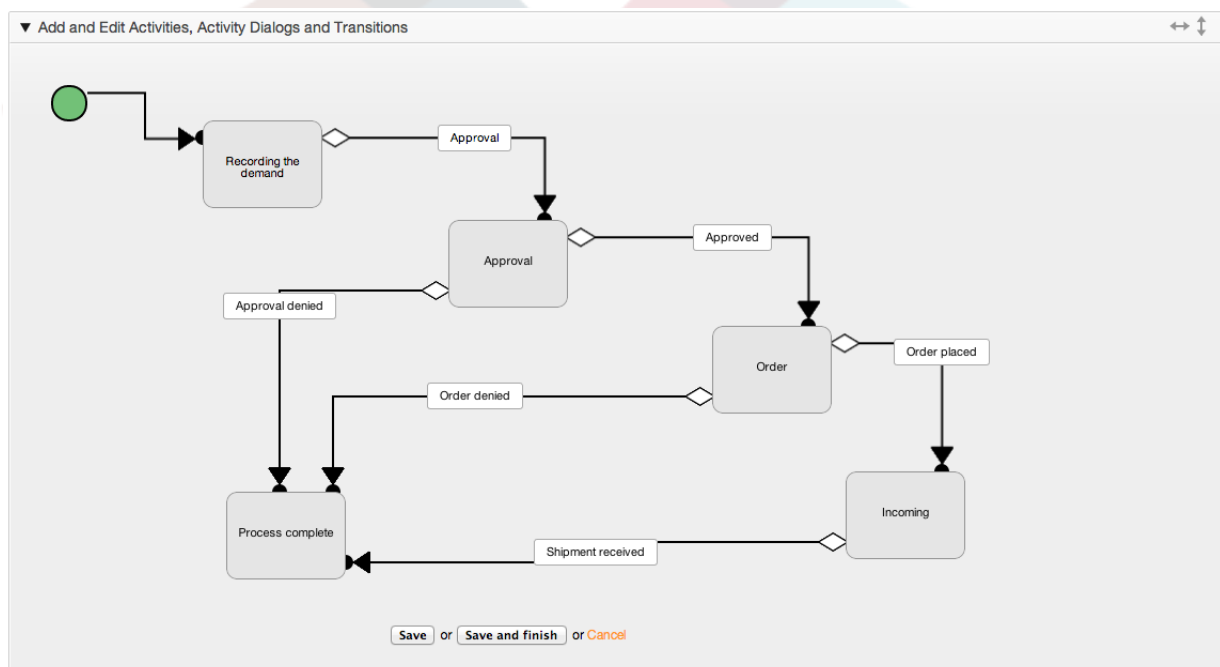


Abbildung: vollständiger Buchbestellprozesspfad.

After you finish the process path please click on "Save" button in the lower part of the canvas and then click on "Synchronize All Processes" button. This will gather all processes information form the Database and create a cache file (in Perl language). This cache file

is actually the processes configuration that the system will use to create or use process tickets.

Any change that is made of the process (in the GUI) will require to re-synchronize the cache file in order to get the change reflected in the system.

It is also possible to import the whole process from a YAML file, but it is still necessary to create all Dynamic Fields, Users, Queues, etc that are needed by each process before the import.

Notice that if the process requires the use of ACLs those are also needed to be set manually.

Im folgenden sehen Sie die komplette YAML-Datei für den Buchbestellprozess:

```
---
Activities:
A1:
ActivityDialogs:
- AD1
ChangeTime: 2012-11-23 14:49:22
Config:
ActivityDialog:
1: AD1
CreateTime: 2012-11-23 11:49:38
EntityID: A1
ID: 151
Name: Recording the demand
A2:
ActivityDialogs:
- AD2
- AD3
ChangeTime: 2012-12-13 00:55:12
Config:
ActivityDialog:
1: AD2
2: AD3
CreateTime: 2012-11-23 11:50:11
EntityID: A2
ID: 152
Name: Approval
A3:
ActivityDialogs:
- AD4
- AD5
ChangeTime: 2012-11-23 18:12:14
Config:
ActivityDialog:
1: AD4
2: AD5
CreateTime: 2012-11-23 11:50:35
EntityID: A3
ID: 153
Name: Order
A4:
ActivityDialogs:
- AD6
ChangeTime: 2012-11-23 18:12:35
Config:
ActivityDialog:
1: AD6
CreateTime: 2012-11-23 11:51:00
EntityID: A4
ID: 154
Name: Incoming
A5:
ActivityDialogs: []
ChangeTime: 2012-11-23 11:51:33
Config: {}
```

```
CreateTime: 2012-11-23 11:51:33
EntityID: A5
ID: 155
Name: Process complete
ActivityDialogs:
AD1:
ChangeTime: 2012-12-06 02:16:21
Config:
DescriptionLong: ''
DescriptionShort: Recoding the demand
FieldOrder:
- DynamicField_Author
- DynamicField_ISBN
- DynamicField_Title
- DynamicField_Status
Fields:
DynamicField_Author:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_ISBN:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Status:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Title:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
Interface:
- AgentInterface
Permission: ''
RequiredLock: 0
SubmitAdviceText: ''
SubmitButtonText: ''
CreateTime: 2012-11-23 14:34:43
EntityID: AD1
ID: 154
Name: Recording the demand
AD2:
ChangeTime: 2012-11-23 14:57:41
Config:
DescriptionLong: ''
DescriptionShort: Approval denied
FieldOrder:
- Article
- DynamicField_Status
Fields:
Article:
Config:
ArticleType: note-internal
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Status:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
Interface:
- AgentInterface
Permission: ''
RequiredLock: 0
SubmitAdviceText: ''
```

```
SubmitButtonText: Deny Request
CreateTime: 2012-11-23 14:36:39
EntityID: AD2
ID: 155
Name: Approval denied
AD3:
ChangeTime: 2012-12-14 03:14:23
Config:
DescriptionLong: ''
DescriptionShort: Approved
FieldOrder:
- DynamicField_Status
Fields:
DynamicField_Status:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
Interface:
- AgentInterface
Permission: ''
RequiredLock: 0
SubmitAdviceText: ''
SubmitButtonText: Approve Request
CreateTime: 2012-11-23 14:37:35
EntityID: AD3
ID: 156
Name: Approved
AD4:
ChangeTime: 2012-11-23 14:58:52
Config:
DescriptionLong: ''
DescriptionShort: Order rejected
FieldOrder:
- Article
- DynamicField_Status
Fields:
Article:
Config:
ArticleType: note-internal
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Status:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
Interface:
- AgentInterface
Permission: ''
RequiredLock: 0
SubmitAdviceText: ''
SubmitButtonText: Reject Order
CreateTime: 2012-11-23 14:38:48
EntityID: AD4
ID: 157
Name: Order rejected
AD5:
ChangeTime: 2012-12-06 02:20:12
Config:
DescriptionLong: ''
DescriptionShort: Order placed
FieldOrder:
- DynamicField_DeliveryDate
- DynamicField_Price
- DynamicField_Supplier
- DynamicField_Status
Fields:
DynamicField_DeliveryDate:
DefaultValue: ''
```

```

DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Price:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Status:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Supplier:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
Interface:
- AgentInterface
Permission: ''
RequiredLock: 0
SubmitAdviceText: ''
SubmitButtonText: Place Order
CreateTime: 2012-11-23 14:41:28
EntityID: AD5
ID: 158
Name: Order placed
AD6:
ChangeTime: 2012-11-23 14:42:43
Config:
DescriptionLong: ''
DescriptionShort: Shipment received
FieldOrder:
- DynamicField_DateOfReceipt
- DynamicField_Status
Fields:
DynamicField_DateOfReceipt:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
DynamicField_Status:
DefaultValue: ''
DescriptionLong: ''
DescriptionShort: ''
Display: 1
Interface:
- AgentInterface
Permission: ''
RequiredLock: 0
SubmitAdviceText: ''
SubmitButtonText: ''
CreateTime: 2012-11-23 14:42:43
EntityID: AD6
ID: 159
Name: Shipment received
Process:
Activities:
- A1
- A2
- A3
- A4
- A5
ChangeTime: 2012-12-06 02:31:59
Config:
Description: The process to order a book
Path:
A1:
T1:
ActivityEntityID: A2
TransitionAction:

```

```
- TA2
- TA1
A2:
T2:
ActivityEntityID: A5
TransitionAction:
- TA3
- TA4
- TA8
T3:
ActivityEntityID: A3
TransitionAction:
- TA5
A3:
T4:
ActivityEntityID: A5
TransitionAction:
- TA3
- TA4
- TA8
T5:
ActivityEntityID: A4
TransitionAction:
- TA6
A4:
T6:
ActivityEntityID: A5
TransitionAction:
- TA3
- TA4
- TA7
A5: {}
StartActivity: A1
StartActivityDialog: AD1
CreateTime: 2012-11-23 11:45:12
EntityID: P1
ID: 94
Layout:
A1:
left: 172
top: 63
A2:
left: 402
top: 156
A3:
left: 649
top: 255
A4:
left: 774
top: 391
A5:
left: 194
top: 410
Name: Book ordering
State: Active
StateEntityID: S1
TransitionActions:
- TA1
- TA2
- TA3
- TA4
- TA8
- TA5
- TA3
- TA4
- TA8
- TA6
- TA3
- TA4
- TA7
Transitions:
- T1
```

```
- T2
- T3
- T4
- T5
- T6
TransitionActions:
TA1:
ChangeTime: 2012-11-23 16:01:37
Config:
Config:
Queue: Management
Module: Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet
CreateTime: 2012-11-23 15:50:59
EntityID: TA1
ID: 61
Name: Move the process ticket into the "Management" queue
TA2:
ChangeTime: 2012-11-23 16:02:12
Config:
Config:
Responsible: manager
Module: Kernel::System::ProcessManagement::TransitionAction::TicketResponsibleSet
CreateTime: 2012-11-23 15:58:22
EntityID: TA2
ID: 62
Name: Change ticket responsible to "manager"
TA3:
ChangeTime: 2012-11-24 14:27:02
Config:
Config:
Queue: Employees
Module: Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet
CreateTime: 2012-11-23 16:02:54
EntityID: TA3
ID: 63
Name: Move the process ticket into the "Employees" queue
TA4:
ChangeTime: 2012-11-23 16:04:06
Config:
Config:
Responsible: Employee
Module: Kernel::System::ProcessManagement::TransitionAction::TicketResponsibleSet
CreateTime: 2012-11-23 16:04:06
EntityID: TA4
ID: 64
Name: Change ticket responsible to "Employee"
TA5:
ChangeTime: 2012-12-06 02:18:34
Config:
Config:
Queue: Purchasing
Module: Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet
CreateTime: 2012-11-23 16:04:54
EntityID: TA5
ID: 65
Name: Move process ticket into the "Purchasing" queue
TA6:
ChangeTime: 2012-12-06 02:18:48
Config:
Config:
Queue: Post office
Module: Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet
CreateTime: 2012-11-23 16:06:20
EntityID: TA6
ID: 66
Name: Move process ticket into the "Post office" queue
TA7:
ChangeTime: 2012-12-06 02:29:55
Config:
Config:
State: closed successful
Module: Kernel::System::ProcessManagement::TransitionAction::TicketStateSet
```

```
CreateTime: 2012-12-06 02:29:27
EntityID: TA7
ID: 67
Name: Close ticket successfully
TA8:
ChangeTime: 2012-12-06 02:31:12
Config:
Config:
State: closed unsuccessful
Module: Kernel::System::ProcessManagement::TransitionAction::TicketStateSet
CreateTime: 2012-12-06 02:31:12
EntityID: TA8
ID: 68
Name: Close ticket unsuccessfully
Transitions:
T1:
ChangeTime: 2012-11-23 15:12:20
Config:
Condition:
1:
Fields:
DynamicField_Status:
Match: Approval
Type: String
Type: and
ConditionLinking: and
CreateTime: 2012-11-23 11:53:52
EntityID: T1
ID: 94
Name: Approval
T2:
ChangeTime: 2012-11-23 15:12:50
Config:
Condition:
1:
Fields:
DynamicField_Status:
Match: Approval denied
Type: String
Type: and
ConditionLinking: and
CreateTime: 2012-11-23 11:54:26
EntityID: T2
ID: 95
Name: Approval denied
T3:
ChangeTime: 2012-11-23 15:13:29
Config:
Condition:
1:
Fields:
DynamicField_Status:
Match: Approved
Type: String
Type: and
ConditionLinking: and
CreateTime: 2012-11-23 11:54:54
EntityID: T3
ID: 96
Name: Approved
T4:
ChangeTime: 2012-11-23 15:14:08
Config:
Condition:
1:
Fields:
DynamicField_Status:
Match: Order denied
Type: String
Type: and
ConditionLinking: and
CreateTime: 2012-11-23 11:55:25
```



```

EntityID: T4
ID: 97
Name: Order denied
T5:
ChangeTime: 2012-11-23 18:30:33
Config:
Condition:
1:
Fields:
DynamicField_Status:
Match: Order placed
Type: String
Type: and
ConditionLinking: and
CreateTime: 2012-11-23 11:56:15
EntityID: T5
ID: 98
Name: Order placed
T6:
ChangeTime: 2012-11-23 15:15:30
Config:
Condition:
1:
Fields:
DynamicField_Status:
Match: Shipment received
Type: String
Type: and
ConditionLinking: and
CreateTime: 2012-11-23 11:56:48
EntityID: T6
ID: 99
Name: Shipment received

```

## 2.4. Prozesskonfigurationsempfehlung

### 2.4.1. Prozess

Ein Prozess modelliert den Pfad eines Workflows/Prozess. Die Wegpunkte auf diesem Pfad können Aktivitäten oder Übergänge sein. Auf diese wird später noch genauer eingegangen.

#### 2.4.1.1. Prozesskonfiguration

Die Prozesskonfiguration kann in der Datei Kernel/Config.pm vorgenommen werden, aber es wird dringend empfohlen neue Dateien, wie Kernel/Config/Files/MeinProzess.pm, zu erstellen. Beachten Sie das die GUI die Datei Kernel/Config/File/ZZZProcessManagement automatisch generiert, somit sollte dieser Dateiname nicht für eigene Prozesse verwendet werden. Andererseits wird diese Datei überschrieben, sobald Sie Prozesse synchronisieren. Anbei eine Beispielprozesskonfiguration (aus dem Prozesscache):

```

$self->{'Process'} = {
  'P1' => {
    Name => 'Book order',
    CreateTime => '16-02-2012 13:37:00',
    CreateBy => '1',
    ChangeTime => '17-02-2012 13:37:00',
    ChangeBy => '1',
    State => 'Active',
    StartActivity => 'A1',
    StartActivityDialog => 'AD1',
    Path => {
      'A1' => {
        'T1' => {
          ActivityEntityID => 'A2',

```

```
},  
},  
'A2' => {  
'T2' => {  
ActivityEntityID => 'A3',  
},  
},  
},  
},  
'P2' => {  
Name => 'IT order',  
CreateTime => '26-02-2012 13:37:00',  
CreateBy => '1',  
ChangeTime => '27-02-2012 13:37:00',  
ChangeBy => '1',  
State => 'Active',  
StartActivity => 'A2',  
StartActivityDialog => 'AD2',  
Path => {  
'A2' => {  
'T3' => {  
ActivityEntityID => 'A4',  
},  
},  
},  
},  
};
```

#### **2.4.1.2. Name**

Der Name des Prozesses, dieser kann vom Agenten ausgewählt werden, wenn ein neues Prozessticket erstellt wird.

#### **2.4.1.3. CreateTime**

Die Zeit, wann der Prozess erstellt wurde.

#### **2.4.1.4. CreateBy**

Die UID des Users, der den Prozess erstellt hat.

#### **2.4.1.5. ChangeTime**

Die Zeit, wann der Prozess zuletzt geändert wurde.

#### **2.4.1.6. ChangeBy**

Die UID des Users, der den Prozess zuletzt bearbeitet hat.

#### **2.4.1.7. State**

Definiert den Status eines Prozesses. Möglich Werte sind:

- 'Active' sind alle Prozesse, welche in neuen Prozesstickets genutzt werden können.
- 'FadeAway' sind Prozesse, welche nicht mehr für neue Tickets genutzt werden können, aber bereits existierende Tickets können diesen Prozess immer noch ausführen.
- 'Inactive' Prozesse sind deaktiviert und können nicht neue und bereits existierende Tickets genutzt werden.

#### **2.4.1.8. StartActivity**

Wenn ein neues Prozessticket erstellt wird, muss eine Startaktivität definiert werden. Sobald das Ticket erstellt wurde, wird diese Aktivität gesetzt und als Basis für die erste Prüfung des Übergangs genutzt.

### 2.4.1.9. StartActivityDialog

Für neue Prozesstickets muss ein StartActivityDialog definiert werden. Dieser wird angezeigt, wenn ein neues Prozessticket erstellt wird (nachdem der Prozess ausgewählt wurde). Das Ticket existiert noch nicht, wird aber nach Übermittlung des StartActivityDialog erstellt.

### 2.4.1.10. Pfad

Der Pfad beinhaltet die aktuelle Prozessstruktur der Aktivitäten und möglichen Übergänge zwischen ihnen.

```
'A1' => {
'T1' => {
ActivityEntityID => 'A2',
},
'T2' => {
ActivityEntityID => 'A3',
},
'T3' => {
ActivityEntityID => 'A4',
TransitionAction => ['TA1', 'TA2'],
},
},
```

Wenn ein Prozessticket in Aktivität 'A1' ist, hat es 3 mögliche Wege um zu einer anderen Aktivität zugelingen. In den Übergängen 'T1' bis 'T3' wurden Bedingungen festgelegt, die ein Prozessticket erfüllen muss um zu einer anderen Aktivität zu gelangen.

If in this case all the values of the process ticket and its dynamic fields that are needed for the Transition 'T2' are correct, the ticket will be moved from Activity 'A1' to 'A3'. After an ActivityDialog is submitted, or any other change is made to a ticket, it will be checked for possible Transitions from the current Activity. If multiple Transitions are possible, the first one will be used (based on numerical sorting of the TransitionIDs).

Additionally, it is possible to assign Transition Actions to Transitions in the Path configuration. These are modules which are executed after a successful Transition. They have to be specified in array form as in the example, we'll talk about the details later.

## 2.4.2. Aktivität

An Activity contains one or more Activity Dialogs and models a 'step' in the process. All Activity Dialogs of the current Activity are displayed in the ticket zoom and can be used until the conditions of a Transition are fulfilled.

### 2.4.2.1. Aktivitäts-Konfiguration

Hier sehen Sie eine Beispiel Aktivitätskonfiguration:

```
$Self->{'Process::Activity'} =
{
'A1' => {
Name => 'Activity 1 optional',
CreateTime => '16-02-2012 13:37:00',
CreateBy => '1',
ChangeTime => '17-02-2012 13:37:00',
ChangeBy => '1',
ActivityDialog => {
1 => 'AD1',
},
},
'A2' => {
Name => 'Activity 2 optional',
```

```

CreateTime => '16-02-2012 13:37:00',
CreateBy => '1',
ChangeTime => '17-02-2012 13:37:00',
ChangeBy => '1',
ActivityDialog => {
  1 => 'AD5',
  2 => 'AD6',
  3 => 'AD1',
},
},
};

```

#### 2.4.2.2. Name

Der Name der Aktivität.

#### 2.4.2.3. CreateTime

Die Erstellzeit.

#### 2.4.2.4. CreateBy

Die UID des Benutzers, der die Aktivität erstellt hat.

#### 2.4.2.5. ChangeTime

Die letzte Änderung.

#### 2.4.2.6. ChangeBy

Die UID des Benutzers, der die letzte Aktivitätsänderung gemacht hat.

#### 2.4.2.7. Aktivitäts-Dialog

Activity Dialog contains the list of Activity Dialogs which are available in this Activity. All Activity Dialogs of the current Activity are displayed in the ticket zoom. Their order is set by the order in the configuration, here 'AD5' is shown before 'AD6' and 'AD1'.

### 2.4.3. Aktivitäts-Dialog

An Activity Dialog is a particular screen and can be used in different Activities.

#### 2.4.3.1. Aktivitätsdialog-Konfiguration

Hier sehen Sie eine Beispiel Konfiguration:

```

$self->{'Process::ActivityDialog'} = {
  'AD1' => {
    Name => 'ActivityDialog 1 optional',
    DescriptionShort => 'Basic info',
    DescriptionLong => 'Please insert the necessary basic information for IT orders',
    CreateTime => '28-02-2012 13:37:00',
    CreateBy => '1',
    ChangeTime => '29-02-2012 13:37:00',
    ChangeBy => '1',
    Fields => {
      PriorityID => {
        DescriptionShort => 'Priority ID',
        DescriptionLong => 'Enter the priority here',
        Display => 2,
      },
    },
    FieldOrder => [ 'PriorityID' ],
    SubmitAdviceText => 'Note: If you submit the form...',
    SubmitButtonText => 'Send request',
  },
},
};

```

```

},
'AD2' => {
  Name => 'ActivityDialog 2 optional',
  DescriptionShort => 'Basic info',
  DescriptionLong => 'Please insert the necessary basic information for Book orders',
  CreateTime => '28-02-2012 13:37:00',
  CreateBy => '1',
  ChangeTime => '29-02-2012 13:37:00',
  ChangeBy => '1',
  Fields => {
    StateID => {
      DescriptionShort => 'State ID',
      DescriptionLong => 'Enter the state here',
      Display => 2,
      DefaultValue => '2',
    },
    Queue => {
      DescriptionShort => 'Queue ID',
      DescriptionLong => 'Enter the queue here',
      Display => 2,
      DefaultValue => 'Raw',
    },
    Title => {
      DescriptionShort => 'Title',
      DescriptionLong => 'Enter the title here',
      Display => 1,
      DefaultValue => 'Default Title',
    },
    DynamicField_Anzahl => {
      DescriptionShort => 'Amount',
      DescriptionLong => 'Enter the amount here',
      Display => 2,
      DefaultValue => '4',
    },
  },
  FieldOrder => [ 'DynamicField_Anzahl', 'StateID', 'Queue', 'Title' ],
  SubmitAdviceText => 'Note: If you submit the form...',
  SubmitButtonText => 'Send request',
},
};

```

### 2.4.3.2. Name

Name des Aktivitäts-Dialog.

### 2.4.3.3. CreateTime

Die Zeit, wann er erstellt wurde.

### 2.4.3.4. CreateBy

Die UID des Benutzers, der den Aktivitätendialog erstellt hat.

### 2.4.3.5. ChangeTime

Die letzte Änderung

### 2.4.3.6. ChangeBy

Die UID des Benutzers, der die letzte Änderung an diesem Aktivitätsdialog gemacht hat.

### 2.4.3.7. Felder

Beinhaltet alle Felder, welche in diesem Aktivitätsdialog angezeigt werden können. Die folgenden Felder können zurzeit benutzt werden:

Title

```

State
StateID
Priority
PriorityID
Lock
LockID
Queue
QueueID
Customer
CustomerID
CustomerNo
CustomerUserID
Owner
OwnerID
Type
TypeID
SLA
SLAID
Service
ServiceID
Responsible
ResponsibleID
PendingTime
DynamicField_$_fieldName # for all dynamic fields

```

Beispielkonfiguration eines einfachen Feldes:

```

StateID => {
DescriptionShort => 'State ID',
DescriptionLong => 'Enter the state here',
Display => 2,
DefaultValue => '2',
},

```

The field "Article" is a special case. If it is present in a "Fields" configuration, the Activity Dialog will contain a complete Richtext editor with subject field and attachment handling. The entered text will then be added to the ticket as an article and sent by email. Let's see an example Article field configuration:

```

Article => {
DescriptionShort => 'Please insert your comment here.',
DescriptionLong => '',
Display => 1,
Config => {
ArticleType => 'note-internal',
LabelSubject => '',
LabelBody => '',
},
},

```

Werfen wir einen Blick auf die Optionen der Konfigurationsfelder:

#### 2.4.3.7.1. Beschreibung (kurz)

Optionale Kurzbeschreibung, welche im Titel des Feldes angezeigt wird.

#### 2.4.3.7.2. Beschreibung (lang)

Optionale längere Beschreibung, welche bei MouseOver über dem Feld angezeigt wird. Zum Beispiel Hinweise, wie das Feld ausgefüllt werden soll.

#### 2.4.3.7.3. Anzeige

Steuert, ob das Feld angezeigt und/oder verpflichtend ist. Möglich Werte:

- '0': Das Feld ist unsichtbar. Das kann hilfreich sein, wenn Feld-Werte automatisch gesetzt werden sollen. Der konfigurierte Standard-Wert wird in diesem Fall gespeichert.

- '1': Das Feld ist sichtbar, aber optional.
- '2': Das Feld ist sichtbar und verpflichtend. Die folgenden Felder können nur unsichtbar oder verpflichtend sein:

```
QueueID
Queue
State
StateID
Lock
LockID
Priority
PriorityID
Type
TypeID
```

Wenn Felder als optional konfiguriert sind und kein Wert vom Benutzer eingegeben wurde, wird der Standard-Wert übernommen, wenn der Aktivitätsdialog vom Benutzer übermittelt wurde.

#### 2.4.3.7.4. Standard-Wert

For fields with 'ID' (like QueueID, OwnerID), this refers to the database ID of the value. For other fields without 'ID' (like Queue, Owner), the DefaultValue must contain the value itself. Example:

```
Queue => {
  DescriptionShort => 'Queue',
  DescriptionLong => 'Hier die Queue eingeben',
  Display => 2,
  DefaultValue => 'Raw',
},
```

#### 2.4.3.8. Feldreihenfolge

Here the display order of the fields is configured. IMPORTANT: Invisible fields also must be configured here, because only configured fields will be considered when saving. Fields which are not configured will not be saved.

#### 2.4.3.9. SubmitAdviceText

Optional text to be shown right above the submit button for additional help or advice text.

#### 2.4.3.10. SubmitButtonText

Optionaler Text für den "Übermitteln" Button

### 2.4.4. Übergang

A Transition decides - based on configurable conditions - which path in the Process is taken, i. e. to which Activity a Process ticket can be moved.

#### 2.4.4.1. Übergangs-Konfiguration

Hier sehen Sie ein Beispiel:

```
$Self->{'Process::Transition'} = {
  'T1' => {
    Name => 'Transition 1',
    CreateTime => '14-03-2012 13:37:00', # optional
    CreateBy => '1', # optional
    ChangeTime => '15-03-2012 13:37:00', # optional
  }
}
```

```

ChangeBy => '15-03-2012 13:37:00', # optional
Condition => {
  Cond1 => {
    Fields => {
      StateID => {
        Type => 'String',
        Match => '1',
      },
    },
  },
},
'T2' => {
  Name => 'Transition 2 optional',
  CreateTime => 'DATE', # optional
  CreateBy => 'USERID', # optional
  ChangeTime => 'DATE', # optional
  ChangeBy => 'USERID', # optional
  Condition => {
    Cond1 => {
      Queue => 'Raw',
      DynamicField_Farbe => '2',
      DynamicField_Anzahl => '1',
    },
  },
},
};

```

#### 2.4.4.2. Name

Name des Übergangs.

#### 2.4.4.3. CreateTime

Die Zeit, wann er erstellt wurde.

#### 2.4.4.4. CreateBy

Die UID des Benutzers, der den Übergang erstellt hat.

#### 2.4.4.5. ChangeTime

Die letzte Änderung

#### 2.4.4.6. ChangeBy

UID des Users, der den Übergang geändert hat.

#### 2.4.4.7. Bedingung

Beinhaltet alle Bedingungen, die notwendig sind, damit der Übergang wirksam ist. Beispiel:

```

Condition => {
  Type => 'and',
  Cond1 => {
    Type => 'and',
    Fields => {
      StateID => {
        Type => 'String',
        Match => '1',
      },
      DynamicField_Marke => {
        Type => 'String',
        Match => 'VW',
      },
    },
  },
},

```



```

    },
  },
  Cond2 => {
    Type => 'and',
    Fields => {
      Queue => {
        Type => 'String',
        Match => 'Raw',
      },
    },
  },
},
},
},

```

Werfen wir einen Blick auf den Zustand der Konfiguration im Detail.

#### 2.4.4.7.1. Typ (Bedingung)

Specifies the way the different condition elements are connected to each other. Possible values:

- 'UND': Das ist der Standard. Alle Bedingungen müssen erfüllt sein damit der Übergang angewendet wird.
- 'ODER': Mindestens eine Bedingung muss erfüllt sein.
- 'XOR': Genau eine Bedingung muss erfüllt sein, nicht mehr.

#### 2.4.4.7.2. Cond1

This is the name of an example condition. It can be freely chosen. Conditions are evaluated in sorted order.

#### 2.4.4.7.3. Typ (Cond)

Specifies the way how the individual field tests of this condition are connected to each other. Possible values:

- 'UND': Das ist der Standard. Alle Feldtests müssen erfüllt sein damit die Bedingung erfüllt ist.
- 'ODER': Mindestens ein Feldtest muss erfüllt sein.
- 'XOR': Genau ein Feldtest muss erfüllt sein, nicht mehr.

#### 2.4.4.7.4. Felder

Specifies the particular fields whose values should be tested. From our example:

```

Fields => {
  StateID => {
    Type => 'String',
    Match => '1',
  },
},

```

#### 2.4.4.7.5. StateID

Beispiel für einen Feldnamen. Die folgenden Ticketfelder können verwendet werden:

```

Title
State
StateID
Priority
PriorityID
Lock

```

```

LockID
Queue
QueueID
Customer
CustomerID
CustomerNo
CustomerUserID
Owner
OwnerID
Type
TypeID
SLA
SLAID
Service
ServiceID
Responsible
ResponsibleID
DynamicField_{$FieldName} # for all DynamicFields

```

Beim Testen eines Feldes mit "ID" (wie SLAID), wird die Datenbank-ID des Feldes für die Prüfung verwendet werden, für andere Bereiche (wie SLA) wird der Ist-Wert für den Test verwendet.

#### 2.4.4.7.6. Typ

Bestimmt die Art der Feldtests. Mögliche Werte:

- 'String': Vergleicht den Feldwert mit der in 'Match' angegebene Zeichenfolge. Stimmt überein, wenn sie genau gleich sind.
- 'Hash': Vergleicht den Feldwert (Hash) mit dem in 'Match' angegebenen Hash. Alle Hash-Werte müssen identisch sein.
- 'Array': Vergleicht den Wert des Feldes (Array) mit dem in 'Match' angegebene Array. Beide Listen müssen gleich sein.
- 'Regex': The field value can be tested with a regular expression. It is important that 'Match' contains `qr{ }xms` as a base condition. Between the braces the actual regular expression can be noted.
- 'Module': Allows you to use a perl module for condition checking. If it returns 1, the check was positive. You can find an example module in `Kernel/System/ProcessManagement/TransitionValidation/ValidateDemo.pm`.

### 2.4.5. Übergangs-Aktionen

Transition Actions are actions which can be triggered after successfully applied transitions (when a process ticket moves from one activity to another). These Transition Actions can be used to perform different changes on the ticket, e. g. change the Queue or the Owner of the ticket, and you can also create your own Transition Actions to perform other complex changes.

#### 2.4.5.1. Übergangs-Aktionen-Konfiguration

Hier sehen Sie ein Beispiel:

```

$self->{'Process::TransitionAction'} = {
    'TA1' => {
        Name => 'Queue Move',
        Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet',
        Config => {
            Queue => 'Junk',
            UserID => 123,
        }
    }
}

```

```

    },
};

```

### 2.4.5.2. Name

Name der Übergangs-Aktion

### 2.4.5.3. Modul

Spezifiziert das Perl-Modul, welches benutzt werden soll.

### 2.4.5.4. Konfiguration

This parameter contains all settings which are required for the module. Its content depends on the particular Transition Action module which is used. Please see the documentation of the individual modules for details. In our example, only the Queue must be specified, Nevertheless we are also sending UserID parameter, by using the UserID parameter, the transition action will be executed impersonating the user with the given UserID.

The use of UserID inside the "Config" parameter of a Transition Action is accepted by all Transition Actions (since OTRS 3.2.4), in this example it could be particularly important if the user that triggers the Transition does not have permissions to move the ticket to the queue 'Junk', while the user with the UserID 123 might have.

### 2.4.5.5. Wiederverwendung von Übergangs-Aktionsmodulen

To use Transition Action modules multiple times, just specify several TransitionActions in your configuration. Example:

```

$self->{'Process::TransitionAction'} = {
    'TA1' => {
        Name => 'Queue Move Junk',
        Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet',
        Config => {
            Queue => 'Junk',
        },
    },
    'TA2' => {
        Name => 'Queue Move Raw',
        Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet',
        Config => {
            Queue => 'Raw',
        },
    },
};

```

Here the same module is used to move a process ticket into the 'Raw' queue, and another time to move it into the junk queue. The Transition Action which must be used for a particular Transition is determined from the 'Path' setting of the Process configuration.

### 2.4.5.6. Verfügbare Übergangs-Aktionen

OTRS comes with several Transition Actions that can be used in your processes. Here you can find their documentation and how they need to be configured.

#### 2.4.5.6.1. DynamicFieldSet

Fügt eins oder mehrere dynamischen Felder an ein Prozessticket an. Beispiel:

---

```
$Self->{'Process::TransitionAction'} = {
  'TA1' => {
    Name => 'Set DynamicField Master to Master and Approved to 1',
    Module => 'Kernel::System::ProcessManagement::TransitionAction::DynamicFieldSet',
    Config => {
      MasterSlave => 'Master',
      Approved => '1',
    },
  },
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'MasterSlave' and 'Approved' are given as examples of DynamicField names. The values of the fields ('Master' and '1') will be set by this TransitionAction.

#### 2.4.5.6.2. TicketArticleCreate

Erzeugt einen Artikel und wird verwendet um Notizen oder E-Mail Antworten erzeugen.  
Beispiel:

```
$Self->{'Process::TransitionAction'} = {
  'TA1' => {
    Name => 'Article Create Note Internal',
    Module =>
'Kernel::System::ProcessManagement::TransitionAction::TicketArticleCreate',
    Config => {
      ArticleType => 'note-internal', #
note-external|phone|fax|sms|... #
excluding any email type #
      SenderType => 'agent', #
agent|system|customer
      ContentType => 'text/plain; charset=ISO-8859-15', # or
optional Charset & MimeType
      Subject => 'some short description', #
required
      Body => 'the message text', #
required
      HistoryType => 'OwnerUpdate', #
EmailCustomer|Move|AddNote|PriorityUpdate|WebRequestCustomer|...
      HistoryComment => 'Some free text!', #
      From => 'Some Agent <email@example.com>', #
not required but useful
      To => 'Some Customer A <customer-a@example.com>', #
not required but useful
      Cc => 'Some Customer B <customer-b@example.com>', #
not required but useful
      ReplyTo => 'Some Customer B <customer-b@example.com>', #
not required
      InReplyTo => '<asdasdasd.12@example.com>', #
not required but useful
      References => '<asdasdasd.1@example.com> <asdasdasd.12@example.com>', #
not required but useful
      NoAgentNotify => 0, # if
you don't want to send agent notifications
      AutoResponseType => 'auto reply', #
auto reject|auto follow up|auto reply/new ticket|auto remove

      ForceNotificationToUserID => [ 1, 43, 56 ], # if
you want to force somebody
      ExcludeNotificationToUserID => [ 43, 56 ],
      # if you want full exclude somebody from notfications,
      # will also be removed in To: line of article,
      # higher prio as ForceNotificationToUserID
      ExcludeMuteNotificationToUserID => [ 43, 56 ],
      # the same as ExcludeNotificationToUserID but only the
      # sending gets muted, agent will still shown in To:
```

```

        # line of article
    },
};

```

'Name' specifies the name of the configured TransitionAction. It can be freely chosen, but should reflect the purpose of the configured action.

'ArticleType' defines the type of the article to be created. Possible values: phone, fax, sms, webrequest, note-internal, note-external and note-report.

SenderType definiert den Absendertyp des Artikel. Mögliche Werte sind: Agent, System, Customer.

'ContentType' defines the content type of the article. Possible values: 'text/plain; charset=ISO-8859-15' or any other valid charset and mime type.

'Betreff' definiert den Artikeltitle. Verpflichtend.

'Body' definiert den Artikelinhalt. Verpflichtend

Der Historientyp definiert den Typ des Historieneintrages. Mögliche Werte sind: AddNote, ArchiveFlagUpdate, Bounce, CustomerUpdate, EmailAgent, EmailCustomer, EscalationResponseTimeNotifyBefore, EscalationResponseTimeStart, EscalationResponseTimeStop, EscalationSolutionTimeNotifyBefore, EscalationSolutionTimeStart, EscalationSolutionTimeStop, EscalationUpdateTimeNotifyBefore, EscalationUpdateTimeStart, EscalationUpdateTimeStop, FollowUp, Forward, Lock, LoopProtection, Merged, Misc, Move, NewTicket, OwnerUpdate, PhoneCallAgent, PhoneCallCustomer, PriorityUpdate, Remove, ResponsibleUpdate, SendAgentNotification, SendAnswer, SendAutoFollowUp, SendAutoReject, SendAutoReply, SendCustomerNotification, ServiceUpdate, SetPendingTime, SLAUpdate, StateUpdate, Subscribe, SystemRequest, TicketDynamicFieldUpdate, TicketLinkAdd, TicketLinkDelete, TimeAccounting, TypeUpdate, Unlock, Unsubscribe, WebrequestCustomer.

'HistoryContent' definiert den Inhalt von Historieneinträgen.

'Von', 'An', 'Cc' und 'ReplyTo' nehmen E-Mailadressen in der oben angegebenen Schreibweise.

'InReplyTo' und 'References' nehmen E-Mailnachrichten-IDs

'NoAgentNotify' - Ist dieser Wert auf 1 gesetzt, werden keine E-Mailbenachrichtigungen an Agenten verschickt.

'AutoResponseType' kann die folgenden Werte annehmen: Auto FollowUp, Auto-Reject, Auto-Remove, Auto-Reply, Auto-Reply/New Ticket.

'ForceNotificationToUserID', 'ExcludeNotificationToUserID', 'ExcludeMuteNotificationToUserID' can take a list of UserIDs that are either always notified, not notified or listed as notified but not actually sent a notification email.

### 2.4.5.6.3. TicketCustomerSet

Legt den Kunden für ein Prozessticket fest. Beispiel:

```

$self->{'Process::TransitionAction'} = {
  'TA1' => {
    Name => 'Customer Set Customer to test',
    Module => 'Kernel::System::Process::TransitionAction::TicketCustomerSet',
    Config => {
      No => 'test',
      User => 'client-user-123',
    }
  }
}

```

```
# or in other words
# CustomerID => 'client123',
# CustomerUserID => 'client-user-123',
},
},
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

No oder CustomerID setzt die Kundennummer des Kunden.

User oder CustomerUserID setzt den Benutzernamen des Kunden

#### 2.4.5.6.4. TicketLockSet

Ändert die Sperre eines Prozessticket. Beispiel:

```
$Self->{'Process::TransitionAction'} = {
'TA1' => {
Name => 'Set Lock to lock',
Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketLockSet',
Config => {
Lock => 'lock',
# or
LockID => 2,
},
},
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'Lock' definiert den neuen Sperrstatus des Prozesstickets.

'LockID' definiert die interne ID des neuen Sperrstatus.

#### 2.4.5.6.5. TicketOwnerSet

Ändert den Besitzer eines Prozesstickets. Beispiel:

```
$Self->{'Process::TransitionAction'} = {
'TA1' => {
Name => 'Owner Set root@localhost',
Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketOwnerSet',
Config => {
Owner => 'root@localhost',
# or
OwnerID => 1,
},
},
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'Owner' definiert den Loginnamen des neuen Besitzers.

'OwnerID' definiert die interne ID des neuen Besitzers.

#### 2.4.5.6.6. TicketQueueSet

Verschiebt das Ticket in eine Ziel-Queue. Beispiel:

```
$Self->{'Process::TransitionAction'} = {
  'TA1' => {
    Name => 'Queue Move Raw',
    Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketQueueSet',
    Config => {
      Queue => 'Raw',
      # or
      # QueueID => '2',
    },
  },
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'Queue' definiert den Namen der Ziel-Queue.

'QueueID' definiert die interne ID der Ziel-Queue.

#### 2.4.5.6.7. TicketResponsibleSet

Ändert den Verantwortlichen eines Prozesstickets. Beispiel:

```
$Self->{'Process::TransitionAction'} = {
  'TA1' => {
    Name => 'Responsible Set root@localhost',
    Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketResponsibleSet',
    Config => {
      Responsible => 'root@localhost',
      # or
      ResponsibleID => 1,
    },
  },
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'Responsible' definiert den Loginnamen des neuen Verantwortlichen

'ResponsibleID' definiert die interne ID des neuen Verantwortlichen.

#### 2.4.5.6.8. TicketServiceSet

Ordnet einem Prozessticket einen Service zu. Das Ticket benötigt einen Kunden und der Service muss diesem Kunden zugeordnet sein. Beispiel:

```
$Self->{'Process::TransitionAction'} = {
  'TA1' => {
    Name => 'Set MyService service',
    Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketServiceSet',
    Config => {
      Service => 'MyService',
      # or
      ServiceID => 123,
    },
  },
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'Service' definiert den neuen Service des Prozesstickets. Es wird der vollständige Name des Service benötigt. (zum Beispiel: GrandFatherService::FatherService::SonService ).

'ServiceID' definiert die interne ID des neuen Services.

#### 2.4.5.6.9. TicketSLASet

Ordnet eine Service-Level-Vereinbarung einem Prozessticket zu. Das Ticket muss einen Service haben und das SLA muss diesem Service zugeordnet sein. Beispiel:

```
$Self->{'Process::TransitionAction'} = {  
  'TA1' => {  
    Name => 'Set MySLA SLA',  
    Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketSLASet',  
    Config => {  
      SLA => 'MyService',  
    # or  
    SLAID => 123,  
    },  
  },  
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'SLA' definiert die neue Service-Level-Vereinbarung des Prozesstickets.

'SLAID' definiert die interne ID des neuen SLA.

#### 2.4.5.6.10. TicketStateSet

Ändert den Status eines Prozesstickets. Beispiel:

```
$Self->{'Process::TransitionAction'} = {  
  'TA1' => {  
    Name => 'Set State to open',  
    Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketStateSet',  
    Config => {  
      State => 'open',  
    # or  
      StateID => 4,  
    PendingTimeDiff => 123,  
    },  
  },  
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'State' definiert den neuen Status des Prozesstickets.

'StateID' definiert die interne ID des neuen Status.

'PendingTimeDiff' used only for pending type states, defines the time difference in seconds relative (relative to the Transition Action execution time) to set ticket pending time (e.g. 3600 means that the pending time is 1hr after the Transition Action is executed).

#### 2.4.5.6.11. TicketTitleSet

Setzt den Tickettitel eines Prozesstickets. Beispiel:

```
$Self->{'Process::TransitionAction'} = {  
  'TA1' => {  
    Name => 'Set Ticket Title to Ticket-title',  
    Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketTitleSet',  
    Config => {  
      Title => 'Ticket-title',  
    },  
  },  
};
```



```
},
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'Title' definiert den neuen Titel des Tickets.

#### 2.4.5.6.12. TicketTypeSet

Setzt den Tickettyp eines Prozesstickets. Beispiel:

```
$Self->{'Process::TransitionAction'} = {
  'TA1' => {
    Name => 'Set Ticket Type to default',
    Module => 'Kernel::System::ProcessManagement::TransitionAction::TicketTypeSet',
    Config => {
      Type => 'default',
      # or
      #TypeID => '1',
    },
  },
};
```

'Name' definiert den Namen der konfigurierten Übergangsaktion.

'Type' definiert den Namen des Tickettyps.

'TypeID' definiert die interne ID des Tickettyps.

### 2.4.6. Access Control Lists (ACLs)

Mit der Hilfe von ACLs, können Sie die auswählbaren Werte in Prozesstickets limitieren. Weitere Beschreibungen der ACL-Syntax finden Sie in der ACL-Referenz

#### 2.4.6.1. ACL Konfiguration

ACLs können nur in der Kernel/Config.pm definiert werden. Beispiel:

```
$Self->{TicketAcl}->{'001-ACL-ProcessProperties'} = {
  Properties => {
    Process => {
      ProcessEntityID => ['P1'],
      ActivityEntityID => ['A1'],
      ActivityDialogEntityID => ['AD1'],
    },
  },
  Possible => {
    ActivityDialog => ['AD1', 'AD3'],
  },
  PossibleNot => {
    ActivityDialog => ['AD3'],
  },
};
```

#### 2.4.6.2. 001-ACL-ProzessEigenschaften

Seit OTRS 2.0 können Access Control Lists (ACLs) verwendet werden, um den Zugriff auf Tickets, Module, Queues, usw. zu steuern bzw. um in bestimmten Situationen Aktionen auf Tickets (schließen, verschieben, usw.) zu beeinflussen. ACLs können als Ergänzung zum bestehenden Berechtigungssystem der Rollen und Gruppen verwendet werden. Mit ACLs lassen sich, basierend auf Ticket-Attributen, rudimentäre Workflows innerhalb des Systems abbilden.

### 2.4.6.3. Prozess

This is the section that is used to check if an ACL must be applied. If it has the specified values, the rule is applied. The following values can be used:

#### 2.4.6.3.1. ProcessEntityID

The ID of a process that the process. Matches if the ticket is assigned to this process.

#### 2.4.6.3.2. ActivityEntityID

Die Nummer der Aktivität die dem Prozessticket aktuell zugeordnet ist.

#### 2.4.6.3.3. ActivityDialogEntityID

Die Nummer des Aktivitätendialogs der dem Prozessticket aktuell zugeordnet ist.

### 2.4.6.4. Possible/PossibleNot Activity Dialog

Hier können Sie eine Liste von Aktivitätsdialogen-Nummern definieren. Diese Liste beschränkt die möglichen Aktivitätsdialoge die dem Agenten in der TicketZoom-Oberfläche angeboten werden.

'Möglich' listet die Aktivitätsdialoge auf, die erlaubt sind. Durch diese Einstellung wird nur 'AD1' und 'AD3' in der Liste der konfigurierten Aktivitätsdialoge angezeigt.

'Nicht Möglich' listet die Aktivitätsdialoge auf, die nicht erlaubt sind. Im oberen Beispiel wird diese Einstellung 'AD3' aus der Liste der konfigurierten Aktivitätsdialoge entfernen.

If both 'Possible' and 'PossibleNot' are specified, the list of configured Activity Dialogs will first be filtered by 'Possible', leaving only 'AD1' and 'AD3' in our example. Then 'Possible-Not' will be applied and filter out 'AD3', so that only 'AD1' remains and is shown as a possible Activity Dialog that the user can use.

Wenn mehrere ACL-Regeln übereinstimmen, wird der Durchschnitt aller passenden Regeln berechnet um die möglichen Aktivitätsdialoge zu bestimmen. Beispiel:

Konfigurierte Aktivitätsdialoge: 'AD1', 'AD2', 'AD3', 'AD4', 'AD5', 'AD6', 'AD7'.

```

$Self->{TicketAcl}->{'001-ACL-Status'} = {
  Properties => {
    Ticket => {
      Status => 'new',
    }
  },
  Possible => {
    ActivityDialog => ['AD1', 'AD2', 'AD3', 'AD6', 'AD7'],
  },
};
$Self->{TicketAcl}->{'002-ACL-Queue'} = {
  Properties => {
    Ticket => {
      Queue => ['Raw']
    }
  },
  Possible => {
    ActivityDialog => ['AD2', 'AD3', 'AD4', 'AD7'],
  },
};
$Self->{TicketAcl}->{'003-ACL-Priority'} = {
  Properties => {
    Ticket => {
      Priority => ['3 normal']
    }
  },
};

```

```
PossibleNot => {
  ActivityDialog => ['AD3', 'AD4'],
},
};
```

Wenn ein Prozessticket den Zustand "Neu" hat, in der "Raw"-Queue ist und eine Priorität "3 normal" hat, dann werden alle drei ACL-Regeln angewendet werden.

Die erste Regel reduziert die Aktivitätsdialoge von 'AD1', 'AD2', 'AD3', 'AD4', 'AD5', 'AD6', 'AD7' to 'AD1', 'AD2', 'AD3', 'AD6', 'AD7' und verbietet 'AD4' and 'AD5'.

Die zweite Regel reduziert die verbleibende Aktivitätsdialoge weiter. In unserem Beispiel werden 'AD2', 'AD3', 'AD 7' bleiben.

Nun wird die dritte Regel die Liste durch 'PossibleNot' weiter reduzieren. 'AD3' wird von der Liste entfernt. 'AD4' wird nicht entfernt, da er in der Liste nicht an erster Stelle steht. Am Ende bleiben 'AD2' und 'AD 7' als mögliche Aktivitätsdialoge, die der Benutzer verwenden kann.

It is also possible to limit the processes that can be displayed in the "New process ticket" screen, the functionality is similar to limiting the ActivityDialogs with one exception: The ACLs could only be based on Users.

Siehe Beispiele:

```
$Self->{TicketAcl}->{'200-ACL-Process'} = {
  # match properties
  Properties => {
    User => {
      UserID => [2, 3],
    },
  },
  Possible => {
    Process => ['P1', 'P2', 'P3'],
  },
  PossibleNot => {
    Process => ['P4'],
  },
};
```

```
$Self->{TicketAcl}->{'201-ACL-Process'} = {
  # match properties
  Properties => {
    User => {
      Group_rw => [ 'MyGroup' ],
    },
  },
  Possible => {
    Process => ['P1', 'P2', 'P3'],
  },
  PossibleNot => {
    Process => ['P4'],
  },
};
```

```
$Self->{TicketAcl}->{'202-ACL-Process'} = {
  # match properties
  Properties => {
    User => {
      Role => [ 'MyRole' ],
    },
  },
  Possible => {
```

```
Process => ['P1', 'P2', 'P3'],
},
PossibleNot => {
  Process => ['P4'],
},
};
```

## 3. Erstellung eigener Themes

Für OTRS können verschiedene Themes angelegt werden, also verschiedene Layouts zur Gestaltung der Web-Oberfläche. Dazu müssen Sie die vorhandenen Templates ändern und Ihren Wünschen entsprechend anpassen.

More information on the syntax and structure of output templates can be found in the Developer Manual at <http://otrs.github.io/doc>, especially in the chapter on [templates](#).

Führen Sie beispielsweise folgende Schritte durch um ein neues Theme namens "Company" zu erstellen:

1. Erstellen Sie das Verzeichnis `Kernel/Output/HTML/Company` und kopieren Sie die Dateien, die Sie für das Company-Theme anpassen möchten, aus `Kernel/Output/HTML/Standard` in das neu erstellte Verzeichnis.

### Wichtig

Kopieren Sie nur diejenigen Dateien, die Sie verändern möchten. Fehlende Dateien wird OTRS automatisch vom Standard-Theme laden. Dadurch werden Systemaktualisierungen vereinfacht.

2. Passen Sie die Dateien im Verzeichnis `Kernel/Output/HTML/Company` Ihren Wünschen entsprechend an.
3. To activate the new theme, add them in SysConfig under `Frontend::Themes`.

Ab nun sollten sie das neue Theme nutzen und über Ihre persönlichen Einstellungen aktivieren können.

### Warnung

Nehmen Sie keine Änderungen an den Theme-Dateien vor, die mit OTRS installiert wurden, da diese bei einem Update verloren gehen können. Erstellen Sie eigene Themes ausschließlich nach dem oben beschriebenen Verfahren.

## 4. Übersetzung des OTRS-Frontends

OTRS bietet Mehrsprachigkeit in der Weboberfläche an.

Procedures for localization for the OTRS framework, steps to be followed to create a new language translation, as well as procedures for translation customizations, can be found in the "[Language Translations](#)" chapter from the developer manual on <http://otrs.github.io/doc>.

# Kapitel 6.

## Leistungsverbesserung

Presented below is a list of performance enhancing techniques for your OTRS installation, including configuration, coding, memory use, and more.

### 1. OTRS

Es gibt verschiedene Ansätze zur Leistungssteigerung von OTRS.

#### 1.1. TicketIndexModule

Zur Verfügung stehen zwei Backend-Module für den Ticket Index:

- `Kernel::System::Ticket::IndexAccelerator::RuntimeDB` (Standard), generiere jede Queue-Ansicht dynamisch aus der Ticket Tabelle. Sie werden keine Probleme mit der Leistung bekommen bis zu etwa 60.000 Tickets (oder 6000 offenen) in Ihrem System.
- `Kernel::System::Ticket::IndexAccelerator::StaticDB`, das leistungsfähigste Modul. Es sollte ab 80.000 Tickets oder mehr als 6000 offenen eingesetzt werden. Benutzt eine extra `ticket_index` Tabelle, arbeitet wie eine Ansicht (View). Führen Sie `bin/otrs.RebuildTicketIndex.pl` zum erstmaligen Aufbau des Index aus.

Sie können den `IndexAccelerator` per `SysConfig` einstellen.

#### 1.2. TicketStorageModule

Es stehen zwei Module für das Speichern der Tickets und Artikel bereit:

- `Kernel::System::Ticket::ArticleStorageDB` (Standard), speichert Anhänge u. A. in der Datenbank. Merke: Benutzen Sie diese Option nicht für größere Systeme.

Pro: Ist der Benutzer, unter dem der Webserver läuft, nicht der Benutzer 'otrs', können Sie mit diesem Modul Dateiberechtigungsprobleme vermeiden.

Contra: Es ist nicht wirklich ratsa,, Anhänge in Ihrer Datenbank zu speichern. Achten Sie darauf, dass Ihre Datenbank das kann. Für MySQL setzen Sie in dessen Konfiguration bspw. "`set-variable = max_allowed_packet=8M`", um 8 MB große Objekte zu speichern (Standard ist 2M).

- `Kernel::System::Ticket::ArticleStorageFS`, speichert Anhänge u. A. im lokalen Filesystem ab. Merke: Benutzen Sie dies für große Installationen.

Pro: Schneller!

Con: Your web server user should be the 'otrs' user. Also, if you have multiple front-end servers, you should make sure the filesystem is shared between the servers. Place it on an NFS share or preferably a SAN or similar solution.

Note: you can switch from one back-end to the other on the fly. You can switch the backend in the `SysConfig`, and then run the command line utility `otrs.ArticleStorageSwitch.pl` to put the articles from the database onto the filesystem or the other way around. You can use the `-s` and `-d` options to specify the source and destination back-ends. Please note that the entire process can take considerable time to run, depending on the number of articles you have and the available CPU power and/or network capacity.

```
shell> bin/otrs.ArticleStorageSwitch.pl -s ArticleStorageDB -d ArticleStorageFS
```

---

Skript: Wechsel des TicketStorage-Backends von Datenbank zu Dateisystem.

## 1.3. Tickets archivieren

Da OTRS als revisionssicheres System betrieben werden kann, ist das Löschen von geschlossenen Tickets möglicherweise nicht empfehlenswert. Daher haben wir eine Funktion implementiert, mit der Sie Tickets archivieren können.

Tickets that match certain criteria can be marked as "archived". These tickets are not accessed if you do a regular ticket search or run a Generic Agent job. The system itself does not have to deal with a huge amount of tickets any longer as only the "latest" tickets are taken into consideration when using OTRS. This can result in a huge performance gain on large systems.

Befolgen Sie folgende Schritte, um die Archivierungsfunktion zu nutzen:

### 1. Archivsystem in der SysConfig aktivieren

Wählen Sie in der SysConfig die Gruppe Ticket aus. In `Core::Ticket` finden Sie die Option `Ticket::ArchiveSystem`, die standardmäßig auf "Nein" steht. Ändern Sie diese auf "Ja" und speichern Sie die Änderung ab.

### 2. Anlegen eines GenericAgent-Jobs

Wählen Sie im Administrationsbereich den "GenericAgent" aus und legen Sie dort einen neuen Job an.

#### a. Job-Einstellungen

Geben Sie dem Job einen geeigneten Namen und angemessene Optionen.

#### b. Ticket-Filter

Der Ticketfilter ist eine Ticketsuche, die Tickets nach bestimmten Kriterien auswählt. Es könnte empfehlenswert sein, nur Tickets zu archivieren, die seit einigen Monaten im Status "geschlossen" sind.

#### c. Ticket-Aktion

Im Abschnitt "Ticket-Aktion" werden Sie eine Aktion "Ausgewählte Tickets archivieren" finden. Wählen Sie dort "Tickets archivieren" aus.

#### d. Job speichern

Am Ende der Seite finden Sie einen Knopf zum Speichern des Jobs.

#### e. Betroffene Tickets

Das System wird dann alle Tickets anzeigen, die beim Ausführen des GenericAgent-Jobs archiviert werden.

### 3. Ticketsuche

Wenn Sie nun nach Tickets suchen, werden standardmäßig nur Tickets gefunden, die nicht archiviert sind. Wenn Sie auch in archivierten Tickets suchen wollen, fügen Sie "Archivsuche" zu Ihren Suchkriterien hinzu.

## 2. Datenbank

Einstellungen sind immer spezifisch für die jeweils eingesetzte Datenbank. Bei Problemen lesen Sie die Dokumentation und fragen Sie Ihren Datenbankadministrator.

## 2.1. MySQL

Wenn Sie den Tabellentyp MyISAM (Standard) benutzen, und einen großen Teil einer Tabelle gelöscht haben, oder wenn Sie sehr viele Änderungen an einer Tabelle mit Zeilen variabler Länge vorgenommen haben (Tabellen mit VARCHAR, BLOB oder TEXT Spalten), sollten Sie die Datendateien (Tabellen) mit dem "optimize" Kommando behandeln.

Dies bietet sich an, wenn MySQL viel CPU Zeit braucht. Optimieren Sie die Tabellen ticket, ticket\_history und article.

```
shell$ mysql -u user -p database
mysql$ optimize table ticket;
mysql$ optimize table ticket_history;
mysql$ optimize table article;
```

*Skript: Optimierung von Datenbanktabellen.*

## 2.2. PostgreSQL

PostgreSQL konfigurieren Sie am besten in der postgresql.conf Datei in Ihrem PostgreSQL Datenverzeichnis. Hier gibt es Hilfe dazu:

- <http://www.revsys.com/writings/postgresql-performance.html>
- <http://varlena.com/GeneralBits/Tidbits/perf.html>
- [http://varlena.com/GeneralBits/Tidbits/annotated\\_conf\\_e.html](http://varlena.com/GeneralBits/Tidbits/annotated_conf_e.html)

Ist die Leistung immer noch nicht genügend, empfehlen wir, Fragen auf der "PostgreSQL Performance Mailing Liste" ( <http://www.postgresql.org/community/lists/> ) zu stellen. Die Teilnehmer der PostgreSQL Liste sind sehr freundlich und können wahrscheinlich helfen.

## 3. Webserver

Natürlich empfehlen wir mod\_perl 2.0 (<http://perl.apache.org/>). Es ist sehr viel schneller (etwa um den Faktor 100) als pures CGI, braucht aber auch mehr Speicher. Ihr httpd wird mit mod\_perl also größer sein.

### 3.1. Persistente Datenbankverbindungen

Sie können die Datenbankverbindung bereits beim Start des Webservers herstellen lassen. Dies spart ebenso Zeit (siehe auch README.webserver).

### 3.2. Vorgeladene Module - startup.pl

Nutzen Sie das Start Skript scripts/apache2-perl-startup.pl, um die Perl Module vorzuladen (siehe README.webserver). Dadurch wird der Webserver schneller und braucht weniger Speicher.

### 3.3. Perl Module bei Änderung neu laden

Standardmäßig wird Apache::Reload in scripts/apache2-httpd.include.conf eingesetzt. Deaktivieren Sie es und die Geschwindigkeit steigt um etwa 8%. Ab nun müssen Sie den Webserver neu starten, wenn Sie irgendetwas ändern! Wichtig: Dies hat zur Folge, dass der OTRS-Paket-Manager nicht mehr über das Web-Interface bedient werden kann sondern nur noch auf der Kommandozeile - bin/otrs.PackageManager.pl.

---

## 3.4. Die richtige Strategie wählen

Bei wirklich großen Installationen (über 1000 neue Tickets am Tag, über 40 Agenten) ist es eine sehr gute Idee, den Artikel "Choosing the Right Strategy" (in englisch) zu lesen (<http://perl.apache.org/docs/1.0/guide/strategy.html>).

## 3.5. mod\_gzip/mod\_deflate

Falls Ihre Bandbreite ein wenig schmal sein sollte, benutzen Sie mod\_deflate für Apache2. Eine HTML-Seite von 45k wird mod\_gzip/mod\_deflate auf etwa 7k zusammendrücken. Allerdings wird dadurch die Last auf dem Server erhöht.





# Anhang A. Weitere Quellen

We try to support you with the very latest information about OTRS. We also give you an opportunity to provide us with your feedback.

## 1. Webseite OTRS Gruppe

You can find the website of the OTRS Group, the company behind OTRS, at <http://www.otrs.com>. It contains a lot of product-related information, such as white papers, release notes, case studies and so on.

## 2. Mailinglisten

The Table A-1 displays our various community mailing lists.

**Tabelle A.1. Mailinglisten**

Name	Beschreibung	Homepage
announce@otrs.org	Ankündigungen zu OTRS (neue Versionen, Updates, ...) mit wenig Verkehr.	<a href="http://lists.otrs.org/cgi-bin/listinfo/announce">http://lists.otrs.org/cgi-bin/listinfo/announce</a>
otrs@otrs.org	Medium to high traffic list, in English, where you can find all sorts of relevant questions and support for the product.	<a href="http://lists.otrs.org/cgi-bin/listinfo/otrs">http://lists.otrs.org/cgi-bin/listinfo/otrs</a>
ç	Medium to high traffic list, in German, where you can find all sorts of relevant questions and support for the product.	<a href="http://lists.otrs.org/cgi-bin/listinfo/otrs-de">http://lists.otrs.org/cgi-bin/listinfo/otrs-de</a>
dev@otrs.org	Mailingliste für die Entwickler von OTRS mit wenig Verkehr.	<a href="http://lists.otrs.org/cgi-bin/listinfo/dev">http://lists.otrs.org/cgi-bin/listinfo/dev</a>
i18n@otrs.org	Englische Mailingliste mit wenig Verkehr für Übersetzungs- und Lokalisierungsfragen. Wenn Sie OTRS übersetzen oder übersetzen wollen oder Probleme mit einer unserer Applikationen in einer internationalen Umgebung haben, sollten Sie sich in diese Liste eintragen.	<a href="http://lists.otrs.org/cgi-bin/listinfo/i18n">http://lists.otrs.org/cgi-bin/listinfo/i18n</a>

Um eine dieser Listen zu abonnieren besuchen Sie folgenden Link: <http://lists.otrs.org/>.

## 3. Fehler berichten

To submit bugs visit <http://bugs.otrs.org/> (see Figure below). Please take note of the difference between a bug and a configuration issue. Configuration issues are problems that

you encounter when setting a system, or general questions regarding the use of OTRS. Bug reports should only be used for issues with the source code of OTRS itself, or to file enhancements for OTRS. All your bug reports and enhancement requests are very welcome in the bug tracker.

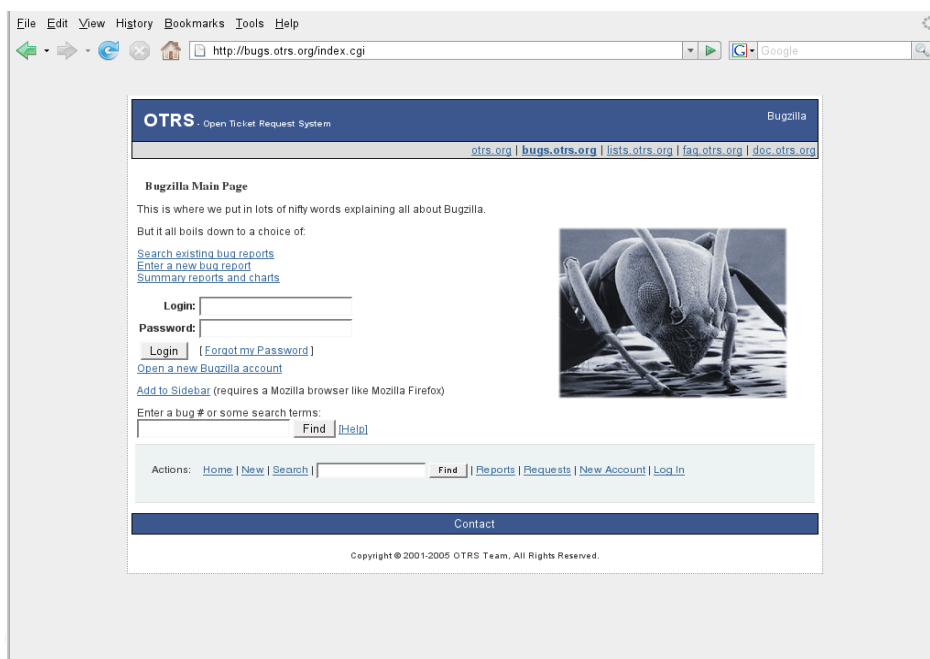


Abb. A-2. Fehlerverfolgungssystem.

For configuration issues, you should either use the [commercial support, available from OTRS.com](#), or the public mailing lists.

Wenn Sie uns Fehler berichten, tragen Sie zur Verbesserung des Produkts bei. Wir freuen uns auf Ihre Mitwirkung!

## 4. Kommerzieller Support

For services (support, consulting, development, and training) you can contact the company behind OTRS, OTRS AG. Our offices are located in Germany, USA, Mexico, the Netherlands, and in other countries. Visit our website for contact information: <http://www.otrs.com/en/corporate-navigation/contact/>

# Anhang B. Referenz der Konfigurationsoptionen

## 1. DynamicFields

### 1.1. DynamicFields::Driver::Registration

#### 1.1.1. DynamicFields::Driver###Text

Description:	DynamicField backend registration.
Group:	DynamicFields
SubGroup:	DynamicFields::Driver::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::Driver'}-&gt;{'Text'} = {   'ConfigDialog' =&gt; 'AdminDynamicFieldText',   'DisplayName' =&gt; 'Text',   'Module' =&gt; 'Kernel::System::DynamicField::Driver::Text' };</pre>

#### 1.1.2. DynamicFields::Driver###TextArea

Description:	DynamicField backend registration.
Group:	DynamicFields
SubGroup:	DynamicFields::Driver::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::Driver'}-&gt;{'TextArea'} = {   'ConfigDialog' =&gt; 'AdminDynamicFieldText',   'DisplayName' =&gt; 'Textarea',   'Module' =&gt; 'Kernel::System::DynamicField::Driver::TextArea' };</pre>

#### 1.1.3. DynamicFields::Driver###Checkbox

Description:	DynamicField backend registration.
Group:	DynamicFields
SubGroup:	DynamicFields::Driver::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::Driver'}-&gt;{'Checkbox'} = {   'ConfigDialog' =&gt; 'AdminDynamicFieldCheckbox',   'DisplayName' =&gt; 'Checkbox',   'Module' =&gt; 'Kernel::System::DynamicField::Driver::Checkbox' };</pre>

#### 1.1.4. DynamicFields::Driver###Dropdown

Description:	DynamicField backend registration.
Group:	DynamicFields

SubGroup:	DynamicFields::Driver::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::Driver'}-&gt;{'Dropdown'} = {   'ConfigDialog' =&gt; 'AdminDynamicFieldDropdown',   'DisplayName' =&gt; 'Dropdown',   'Module' =&gt; 'Kernel::System::DynamicField::Driver::Dropdown' };</pre>

### 1.1.5. DynamicFields::Driver###DateTime

Description:	DynamicField backend registration.
Group:	DynamicFields
SubGroup:	DynamicFields::Driver::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::Driver'}-&gt;{'DateTime'} = {   'ConfigDialog' =&gt; 'AdminDynamicFieldDateTime',   'DisplayName' =&gt; 'Date / Time',   'Module' =&gt; 'Kernel::System::DynamicField::Driver::DateTime' };</pre>

### 1.1.6. DynamicFields::Driver###Date

Description:	DynamicField backend registration.
Group:	DynamicFields
SubGroup:	DynamicFields::Driver::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::Driver'}-&gt;{'Date'} = {   'ConfigDialog' =&gt; 'AdminDynamicFieldDateTime',   'DisplayName' =&gt; 'Date',   'Module' =&gt; 'Kernel::System::DynamicField::Driver::Date' };</pre>

### 1.1.7. DynamicFields::Driver###Multiselect

Description:	DynamicField backend registration.
Group:	DynamicFields
SubGroup:	DynamicFields::Driver::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::Driver'}-&gt;{'Multiselect'} = {   'ConfigDialog' =&gt; 'AdminDynamicFieldMultiselect',   'DisplayName' =&gt; 'Multiselect',   'ItemSeparator' =&gt; ', ',   'Module' =&gt; 'Kernel::System::DynamicField::Driver::Multiselect' };</pre>

## 1.2. DynamicFields::ObjectType::Registration

### 1.2.1. DynamicFields::ObjectType###Ticket

Description:	DynamicField object registration.
--------------	-----------------------------------

Group:	DynamicFields
SubGroup:	DynamicFields::ObjectType::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::ObjectType'}-&gt;{'Ticket'} = {   'DisplayName' =&gt; 'Ticket',   'Module' =&gt; 'Kernel::System::DynamicField::ObjectType::Ticket' };</pre>

### 1.2.2. DynamicFields::ObjectType###Article

Description:	DynamicField object registration.
Group:	DynamicFields
SubGroup:	DynamicFields::ObjectType::Registration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFields::ObjectType'}-&gt;{'Article'} = {   'DisplayName' =&gt; 'Article',   'Module' =&gt; 'Kernel::System::DynamicField::ObjectType::Article' };</pre>

## 1.3. Frontend::Admin::ModuleRegistration

### 1.3.1. Frontend::Module###AdminDynamicField

Description:	Frontend module registration for the agent interface.
Group:	DynamicFields
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminDynamicField'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.DynamicField.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.DynamicField.js'     ]   },   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Create and manage dynamic fields.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Dynamic Fields',     'Prio' =&gt; '1000'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Dynamic Fields GUI' };</pre>

### 1.3.2. Frontend::Module###AdminDynamicFieldText

Description:	Frontend module registration for the agent interface.
Group:	DynamicFields

SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminDynamicFieldText'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.Admin.DynamicField.js'     ]   },   'Title' =&gt; 'Dynamic Fields Text Backend GUI' };</pre>

### 1.3.3. Frontend::Module###AdminDynamicFieldCheckbox

Description:	Frontend module registration for the agent interface.
Group:	DynamicFields
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminDynamicFieldCheckbox'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.Admin.DynamicField.js'     ]   },   'Title' =&gt; 'Dynamic Fields Checkbox Backend GUI' };</pre>

### 1.3.4. Frontend::Module###AdminDynamicFieldDropdown

Description:	Frontend module registration for the agent interface.
Group:	DynamicFields
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminDynamicFieldDropdown'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.DynamicField.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.DynamicField.js',       'Core.Agent.Admin.DynamicFieldDropdown.js'     ]   }, };</pre>

```
'Title' => 'Dynamic Fields Drop-down Backend GUI'
};
```

### 1.3.5. Frontend::Module###AdminDynamicFieldDateTime

Description:	Frontend module registration for the agent interface.
Group:	DynamicFields
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminDynamicFieldDateTime'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.DynamicField.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.DynamicField.js',       'Core.Agent.Admin.DynamicFieldDateTime.js'     ]   },   'Title' =&gt; 'Dynamic Fields Date Time Backend GUI' };</pre>

### 1.3.6. Frontend::Module###AdminDynamicFieldMultiselect

Description:	Frontend module registration for the agent interface.
Group:	DynamicFields
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminDynamicFieldMultiselect'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.DynamicField.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.DynamicField.js',       'Core.Agent.Admin.DynamicFieldMultiselect.js'     ]   },   'Title' =&gt; 'Dynamic Fields Multiselect Backend GUI' };</pre>

## 1.4. Frontend::Agent::Preferences

### 1.4.1. PreferencesGroups###DynamicField

Description:	Defines the config parameters of this item, to be shown in the preferences view.
--------------	--

Group:	DynamicFields
SubGroup:	Frontend::Agent::Preferences
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'DynamicField'} = {   'Active' =&gt; '1',   'Block' =&gt; 'Input',   'Column' =&gt; 'Other Settings',   'Data' =&gt; '\$Env{"UserDynamicField_NameX"}',   'Key' =&gt; 'Default value for NameX',   'Label' =&gt; 'NameX',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserDynamicField_NameX',   'Prio' =&gt; '7000' };</pre>

## 1.4.2. PreferencesGroups###DynamicFieldsOverviewPageShown

Description:	Parameters for the pages (in which the dynamic fields are shown) of the dynamic fields overview.
Group:	DynamicFields
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'DynamicFieldsOverviewPageShown'} = {   'Active' =&gt; '0',   'Column' =&gt; 'Other Settings',   'Data' =&gt; {     '10' =&gt; '10',     '15' =&gt; '15',     '20' =&gt; '20',     '25' =&gt; '25',     '30' =&gt; '30',     '35' =&gt; '35'   },   'DataSelected' =&gt; '25',   'Key' =&gt; 'Dynamic fields limit per page for Dynamic Fields Overview',   'Label' =&gt; 'Dynamic Fields Overview Limit',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'AdminDynamicFieldsOverviewPageShown',   'Prio' =&gt; '8000' };</pre>

## 2. Framework

### 2.1. Core

#### 2.1.1. SecureMode

Description:	Disables the web installer ( <a href="http://yourhost.example.com/otrs/installer.pl">http://yourhost.example.com/otrs/installer.pl</a> ), to prevent the system from being hijacked. If set to "No", the system can be reinstalled and the current basic configuration will be used to pre-populate the questions within the installer script. If not active, it also disables the GenericAgent, PackageManager and SQL Box.
--------------	--



Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SecureMode'} = '0';</code>

### 2.1.2. Frontend::DebugMode

Description:	Enables or disable the debug mode over frontend interface.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::DebugMode'} = '0';</code>

### 2.1.3. ConfigLevel

Description:	Sets the configuration level of the administrator. Depending on the config level, some sysconfig options will be not shown. The config levels are in in ascending order: Expert, Advanced, Beginner. The higher the config level is (e.g. Beginner is the highest), the less likely is it that the user can accidentally configure the system in a way that it is not usable any more.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'ConfigLevel'} = '100';</code>

### 2.1.4. ProductName

Description:	Defines the name of the application, shown in the web interface, tabs and title bar of the web browser.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'ProductName'} = 'OTRS';</code>

### 2.1.5. SystemID

Description:	Defines the system identifier. Every ticket number and http session string contains this ID. This ensures that only tickets which belong to your system will be processed as follow-ups (useful when communicating between two instances of OTRS).
Group:	Framework
SubGroup:	Core

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SystemID'} = '10';</code>

## 2.1.6. FQDN

Description:	Defines the fully qualified domain name of the system. This setting is used as a variable, OTRS_CONFIG_FQDN which is found in all forms of messaging used by the application, to build links to the tickets within your system.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'FQDN'} = 'yourhost.example.com';</code>

## 2.1.7. SupportDataCollector::HTTPHostname

Description:	Defines the HTTP hostname for the support data collection with the public module 'PublicSupportDataCollector' (e.g. used from the OTRS Daemon).
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SupportDataCollector::HTTPHostname'} = '';</code>

## 2.1.8. HttpType

Description:	Defines the type of protocol, used by the web server, to serve the application. If https protocol will be used instead of plain http, it must be specified here. Since this has no affect on the web server's settings or behavior, it will not change the method of access to the application and, if it is wrong, it will not prevent you from logging into the application. This setting is only used as a variable, OTRS_CONFIG_HttpType which is found in all forms of messaging used by the application, to build links to the tickets within your system.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'HttpType'} = 'http';</code>

## 2.1.9. ScriptAlias

Description:	Sets the prefix to the scripts folder on the server, as configured on the web server. This setting is used as a variable,
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	OTRS_CONFIG_ScriptAlias which is found in all forms of messaging used by the application, to build links to the tickets within the system.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'ScriptAlias'} = 'otrs/';</code>

### 2.1.10. AdminEmail

Description:	Defines the system administrator's email address. It will be displayed in the error screens of the application.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'AdminEmail'} = 'admin@example.com';</code>

### 2.1.11. Organization

Description:	Company name which will be included in outgoing emails as an X-Header.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Organization'} = 'Example Company';</code>

### 2.1.12. DefaultLanguage

Description:	Defines the default front-end language. All the possible values are determined by the available language files on the system (see the next setting).
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'DefaultLanguage'} = 'en';</code>

### 2.1.13. DefaultUsedLanguages

Description:	Defines all the languages that are available to the application. The Key/Content pair links the front-end display name to the appropriate language PM file. The "Key" value should be the base-name of the PM file (i.e. de.pm is the file, then de is the "Key" value). The "Content" value should be the display name for the front-end. Spe-
--------------	---

	<p>cify any own-defined language here (see the developer documentation <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> for more information). Please remember to use the HTML equivalents for non-ASCII characters (i.e. for the German oe = o umlaut, it is necessary to use the &amp;ouml; symbol).</p>
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'DefaultUsedLanguages'} = {   'ar_SA' =&gt; 'Arabic (Saudi Arabia)',   'bg' =&gt; 'Bulgarian (&amp;#x0411;&amp;#x044a;&amp;#x043b;&amp;#x0433;&amp;#x0430;&amp;#x0440;&amp;#x0441;&amp;#x043a;&amp;#x0438;)',   'ca' =&gt; 'Catal&amp;agrave;',   'cs' =&gt; 'Czech (&amp;#x010c;esky)',   'da' =&gt; 'Dansk',   'de' =&gt; 'Deutsch',   'el' =&gt; 'Greek (&amp;#x0395;&amp;#x03bb;&amp;#x03bb;&amp;#x03b7;&amp;#x03bd;&amp;#x03b9;&amp;#x03ba;&amp;#x03ac;)',   'en' =&gt; 'English (United States)',   'en_CA' =&gt; 'English (Canada)',   'en_GB' =&gt; 'English (United Kingdom)',   'es' =&gt; 'Espa&amp;ntilde;ol',   'es_CO' =&gt; 'Espa&amp;ntilde;ol (Colombia)',   'es_MX' =&gt; 'Espa&amp;ntilde;ol (M&amp;eacute;xico)',   'et' =&gt; 'Eesti',   'fa' =&gt; 'Persian (&amp;#x0641;&amp;#x0627;&amp;#x0631;&amp;#x0633;&amp;#x0649;)',   'fi' =&gt; 'Suomi',   'fr' =&gt; 'Fran&amp;ccedil;ais',   'fr_CA' =&gt; 'Fran&amp;ccedil;ais (Canada)',   'he' =&gt; 'Hebrew (#####)',   'hi' =&gt; 'Hindi',   'hr' =&gt; 'Hrvatski',   'hu' =&gt; 'Magyar',   'it' =&gt; 'Italiano',   'ja' =&gt; 'Japanese (&amp;#x65e5;&amp;#x672c;&amp;#x8a9e)',   'lt' =&gt; 'Lietuvių kalba',   'lv' =&gt; 'Latvijas',   'ms' =&gt; 'Malay',   'nb_NO' =&gt; 'Norsk bokm&amp;aring;l',   'nl' =&gt; 'Nederlands',   'pl' =&gt; 'Polski',   'pt' =&gt; 'Portugu&amp;ecirc;s',   'pt_BR' =&gt; 'Portugu&amp;ecirc;s Brasileiro',   'ru' =&gt; 'Russian (&amp;#x0420;&amp;#x0443;&amp;#x0441;&amp;#x0441;&amp;#x043a;&amp;#x0438;&amp;#x0439;)',   'sk_SK' =&gt; 'Slovak (Sloven&amp;#x010d;ina)',   'sl' =&gt; 'Slovenian (Sloven&amp;#x0161;ina)',   'sr_Cyrl' =&gt; 'Serbian Cyrillic (srpski)',   'sr_Latn' =&gt; 'Serbian Latin (Srpski)',   'sv' =&gt; 'Svenska',   'tr' =&gt; 'T&amp;uuml;rks&amp;ccedil;e',   'uk' =&gt; 'Ukrainian (&amp;#x0423;&amp;#x043a;&amp;#x0440;&amp;#x0430;&amp;#x0457;&amp;#x043d;&amp;#x0441;&amp;#x044c;&amp;#x043a;&amp;#x0430;)',   'vi_VN' =&gt; 'Vietnam (Vi&amp;#x0246;t Nam)',   'zh_CN' =&gt; 'Chinese (Sim.) (&amp;#x7b80;&amp;#x4f53;&amp;#x4e2d;&amp;#x6587;)',   'zh_TW' =&gt; 'Chinese (Tradi.) (&amp;#x6b63;&amp;#x9ad4;&amp;#x4e2d;&amp;#x6587;)' }; </pre>

## 2.1.14. DefaultTheme

Description:	<p>Defines the default front-end (HTML) theme to be used by the agents and customers. If you like, you can add your own theme. Please refer the administrator manual located at <a href="http://doc.otrs.org/">http://doc.otrs.org/</a>.</p>
Group:	Framework

SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'DefaultTheme'} = 'Standard';</code>

### 2.1.15. DefaultTheme::HostBased

Description:	It is possible to configure different themes, for example to distinguish between agents and customers, to be used on a per-domain basis within the application. Using a regular expression (regex), you can configure a Key/Content pair to match a domain. The value in "Key" should match the domain, and the value in "Content" should be a valid theme on your system. Please see the example entries for the proper form of the regex.
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'DefaultTheme::HostBased'} = {        'host1\\.example\\.com' =&gt; 'SomeTheme1',        'host2\\.example\\.com' =&gt; 'SomeTheme2'      };</code>

### 2.1.16. CheckMXRecord

Description:	Makes the application check the MX record of email addresses before sending an email or submitting a telephone or email ticket.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CheckMXRecord'} = '1';</code>

### 2.1.17. CheckMXRecord::Nameserver

Description:	Defines the address of a dedicated DNS server, if necessary, for the "CheckMXRecord" look-ups.
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CheckMXRecord::Nameserver'} = 'ns.example.com';</code>

### 2.1.18. CheckEmailAddresses

Description:	Makes the application check the syntax of email addresses.
Group:	Framework
SubGroup:	Core

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CheckEmailAddresses'} = '1';</code>

## 2.1.19. CheckEmailValidAddress

Description:	Defines a regular expression that excludes some addresses from the syntax check (if "CheckEmailAddresses" is set to "Yes"). Please enter a regex in this field for email addresses, that aren't syntactically valid, but are necessary for the system (i.e. "root@localhost").
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CheckEmailValidAddress'} = '^(root@localhost admin@localhost)\$';</code>

## 2.1.20. CheckEmailInvalidAddress

Description:	Defines a regular expression that filters all email addresses that should not be used in the application.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CheckEmailInvalidAddress'} = '@(example)\.\.\. ...)\$';</code>

## 2.1.21. CGILogPrefix

Description:	Specifies the text that should appear in the log file to denote a CGI script entry.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CGILogPrefix'} = 'OTRS-CGI';</code>

## 2.1.22. DemoSystem

Description:	Runs the system in "Demo" mode. If set to "Yes", agents can change preferences, such as selection of language and theme via the agent web interface. These changes are only valid for the current session. It will not be possible for agents to change their passwords.
Group:	Framework
SubGroup:	Core

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'DemoSystem'} = '0';</code>

### 2.1.23. SwitchToUser

Description:	Allows the administrators to login as other users, via the users administration panel.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SwitchToUser'} = '0';</code>

### 2.1.24. SwitchToCustomer

Description:	Allows the administrators to login as other customers, via the customer user administration panel.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SwitchToCustomer'} = '0';</code>

### 2.1.25. SwitchToCustomer::PermissionGroup

Description:	Specifies the group where the user needs rw permissions so that he can access the "SwitchToCustomer" feature.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SwitchToCustomer::PermissionGroup'} = 'admin';</code>

### 2.1.26. NotificationSenderName

Description:	Specifies the name that should be used by the application when sending notifications. The sender name is used to build the complete display name for the notification master (i.e. "OTRS Notification Master" otrs@your.example.com). Notifications are messages such as en::Customer::QueueUpdate or en::Agent::Move.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'NotificationSenderName'} = 'OTRS Notification Master';</code>

## 2.1.27. NotificationSenderEmail

Description:	Specifies the email address that should be used by the application when sending notifications. The email address is used to build the complete display name for the notification master (i.e. "OTRS Notification Master" otrs@your.example.com). You can use the OTRS_CONFIG_FQDN variable as set in your configuration, or choose another email address. Notifications are messages such as en::Customer::QueueUpdate or en::Agent::Move.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'NotificationSenderEmail'} = 'otrs@&lt;OTRS_CONFIG_FQDN&gt;';</code>

## 2.1.28. System::Customer::Permission

Description:	Defines the standard permissions available for customers within the application. If more permissions are needed, you can enter them here. Permissions must be hard coded to be effective. Please ensure, when adding any of the afore mentioned permissions, that the "rw" permission remains the last entry.
Group:	Framework
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'System::Customer::Permission'} = [     'ro',     'rw' ];</code>

## 2.1.29. LanguageDebug

Description:	Debugs the translation set. If this is set to "Yes" all strings (text) without translations are written to STDERR. This can be helpful when you are creating a new translation file. Otherwise, this option should remain set to "No".
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'LanguageDebug'} = '0';</code>

## 2.1.30. Secure::DisableBanner

Description:	If enabled, the OTRS version tag will be removed from the Webinterface, the HTTP headers and the X-Headers of outgoing mails.
Group:	Framework
SubGroup:	Core
Valid:	0



Required:	0
Config-Setting:	<code>\$Self-&gt;{'Secure::DisableBanner'} = '0';</code>

### 2.1.31. StandardTemplate2QueueByCreating

Description:	List of default Standard Templates which are assigned automatically to new Queues upon creation.
Group:	Framework
SubGroup:	Core
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'StandardTemplate2QueueByCreating'} = [</code> <code>];</code>

## 2.2. Core::Cache

### 2.2.1. Cache::Module

Description:	Selects the cache backend to use.
Group:	Framework
SubGroup:	Core::Cache
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Cache::Module'} = 'Kernel::System::Cache::FileStorable';</code>

### 2.2.2. Cache::SubdirLevels

Description:	Specify how many sub directory levels to use when creating cache files. This should prevent too many cache files being in one directory.
Group:	Framework
SubGroup:	Core::Cache
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Cache::SubdirLevels'} = '2';</code>

## 2.3. Core::CustomerCompany

### 2.3.1. CustomerCompany::EventModulePost###100-UpdateCustomerUsers

Description:	Event module that updates customer users after an update of the Customer Company.
Group:	Framework
SubGroup:	Core::CustomerCompany
Valid:	1
Required:	0

Config-Setting:	<pre>\$Self-&gt;{'CustomerCompany::EventModulePost'}-&gt;{'100-UpdateCustomerUsers'} = {   'Event' =&gt; 'CustomerCompanyUpdate',   'Module' =&gt;   'Kernel::System::CustomerCompany::Event::CustomerUserUpdate',   'Transaction' =&gt; '0' };</pre>
-----------------	---

## 2.4. Core::CustomerUser

### 2.4.1. CustomerUser::EventModulePost###100-UpdateServiceMembership

Description:	Event module that updates customer user service membership if login changes.
Group:	Framework
SubGroup:	Core::CustomerUser
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerUser::EventModulePost'}-&gt;{'100-UpdateServiceMembership'} = {   'Event' =&gt; 'CustomerUserUpdate',   'Module' =&gt;   'Kernel::System::CustomerUser::Event::ServiceMemberUpdate',   'Transaction' =&gt; '0' };</pre>

## 2.5. Core::LinkObject

### 2.5.1. LinkObject::ViewMode

Description:	Determines the way the linked objects are displayed in each zoom mask.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'LinkObject::ViewMode'} = 'Simple';</pre>

### 2.5.2. LinkObject::Type###Normal

Description:	Defines the link type 'Normal'. If the source name and the target name contain the same value, the resulting link is a non-directional one; otherwise, the result is a directional link.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'LinkObject::Type'}-&gt;{'Normal'} = {   'SourceName' =&gt; 'Normal',   'TargetName' =&gt; 'Normal' };</pre>

### 2.5.3. LinkObject::Type###ParentChild

Description:	Defines the link type 'ParentChild'. If the source name and the target name contain the same value, the resulting link is a non-directional one; otherwise, the result is a directional link.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'LinkObject::Type'}-&gt;{'ParentChild'} = {   'SourceName' =&gt; 'Parent',   'TargetName' =&gt; 'Child' };</pre>

### 2.5.4. LinkObject::TypeGroup###0001

Description:	Defines the link type groups. The link types of the same group cancel one another. Example: If ticket A is linked per a 'Normal' link with ticket B, then these tickets could not be additionally linked with link of a 'ParentChild' relationship.
Group:	Framework
SubGroup:	Core::LinkObject
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'LinkObject::TypeGroup'}-&gt;{'0001'} = [   'Normal',   'ParentChild' ];</pre>

## 2.6. Core::Log

### 2.6.1. LogModule

Description:	Defines the log module for the system. "File" writes all messages in a given logfile, "SysLog" uses the syslog daemon of the system, e.g. syslogd.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'LogModule'} = 'Kernel::System::Log::SysLog';</pre>

### 2.6.2. LogModule::SysLog::Facility

Description:	If "SysLog" was selected for LogModule, a special log facility can be specified.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'LogModule::SysLog::Facility'} = 'user';</code>
-----------------	---

### 2.6.3. LogModule::SysLog::LogSock

Description:	If "SysLog" was selected for LogModule, a special log sock can be specified (on solaris you may need to use 'stream').
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'LogModule::SysLog::LogSock'} = 'unix';</code>

### 2.6.4. LogModule::SysLog::Charset

Description:	If "SysLog" was selected for LogModule, the charset that should be used for logging can be specified.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'LogModule::SysLog::Charset'} = 'utf-8';</code>

### 2.6.5. LogModule::LogFile

Description:	If "file" was selected for LogModule, a logfile must be specified. If the file doesn't exist, it will be created by the system.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'LogModule::LogFile'} = '/tmp/otrs.log';</code>

### 2.6.6. LogModule::LogFile::Date

Description:	Adds a suffix with the actual year and month to the OTRS log file. A logfile for every month will be created.
Group:	Framework
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'LogModule::LogFile::Date'} = '0';</code>

## 2.7. Core::MIME-Viewer

### 2.7.1. MIME-Viewer###application/excel

Description:	Specifies the path to the converter that allows the view of Microsoft Excel files, in the web interface.
--------------	--

Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'MIME-Viewer'}-&gt;{'application/excel'} = 'xlhtml';</code>

## 2.7.2. MIME-Viewer###application/msword

Description:	Specifies the path to the converter that allows the view of Microsoft Word files, in the web interface.
Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'MIME-Viewer'}-&gt;{'application/msword'} = 'wvWare';</code>

## 2.7.3. MIME-Viewer###application/pdf

Description:	Specifies the path to the converter that allows the view of PDF documents, in the web interface.
Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'MIME-Viewer'}-&gt;{'application/pdf'} = 'pdftohtml -stdout -i';</code>

## 2.7.4. MIME-Viewer###text/xml

Description:	Specifies the path to the converter that allows the view of XML files, in the web interface.
Group:	Framework
SubGroup:	Core::MIME-Viewer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'MIME-Viewer'}-&gt;{'text/xml'} = '&lt;OTRS_CONFIG_Home&gt;/scripts/tools/xml2html.pl';</code>

## 2.8. Core::MirrorDB

### 2.8.1. Core::MirrorDB::DSN

Description:	If you want to use a mirror database for agent ticket fulltext search or to generate stats, specify the DSN to this database.
Group:	Framework
SubGroup:	Core::MirrorDB
Valid:	0

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Core::MirrorDB::DSN'} = 'DBI:mysql:database=mirrordb;host=mirrordbhost';</code>

## 2.8.2. Core::MirrorDB::User

Description:	If you want to use a mirror database for agent ticket fulltext search or to generate stats, the user to authenticate to this database can be specified.
Group:	Framework
SubGroup:	Core::MirrorDB
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Core::MirrorDB::User'} = 'some_user';</code>

## 2.8.3. Core::MirrorDB::Password

Description:	If you want to use a mirror database for agent ticket fulltext search or to generate stats, the password to authenticate to this database can be specified.
Group:	Framework
SubGroup:	Core::MirrorDB
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Core::MirrorDB::Password'} = 'some_password';</code>

## 2.9. Core::PDF

### 2.9.1. PDF

Description:	Enables PDF output. The CPAN module PDF::API2 is required, if not installed, PDF output will be disabled.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF'} = '1';</code>

### 2.9.2. PDF::LogoFile

Description:	Specifies the path of the file for the logo in the page header (gif jpg png, 700 x 100 pixel).
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF::LogoFile'} = '&lt;OTRS_CONFIG_Home&gt;/var/logo-otrs.png';</code>

### 2.9.3. PDF::PageSize

Description:	Defines the standard size of PDF pages.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF::PageSize'} = 'a4';</code>

### 2.9.4. PDF::MaxPages

Description:	Defines the maximum number of pages per PDF file.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF::MaxPages'} = '100';</code>

### 2.9.5. PDF::TTFontFile###Proportional

Description:	Defines the path and TTF-File to handle proportional font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'Proportional'} = 'DejaVuSans.ttf';</code>

### 2.9.6. PDF::TTFontFile###ProportionalBold

Description:	Defines the path and TTF-File to handle bold proportional font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'ProportionalBold'} = 'DejaVuSans-Bold.ttf';</code>

### 2.9.7. PDF::TTFontFile###ProportionalItalic

Description:	Defines the path and TTF-File to handle italic proportional font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0

Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'ProportionalItalic'} = 'DejaVuSans-Oblique.ttf';</code>
-----------------	--

### 2.9.8. PDF::TTFontFile###ProportionalBoldItalic

Description:	Defines the path and TTF-File to handle bold italic proportional font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'ProportionalBoldItalic'} = 'DejaVuSans-BoldOblique.ttf';</code>

### 2.9.9. PDF::TTFontFile###Monospaced

Description:	Defines the path and TTF-File to handle monospaced font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'Monospaced'} = 'DejaVuSansMono.ttf';</code>

### 2.9.10. PDF::TTFontFile###MonospacedBold

Description:	Defines the path and TTF-File to handle bold monospaced font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'MonospacedBold'} = 'DejaVuSansMono-Bold.ttf';</code>

### 2.9.11. PDF::TTFontFile###MonospacedItalic

Description:	Defines the path and TTF-File to handle italic monospaced font in PDF documents.
Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'MonospacedItalic'} = 'DejaVuSansMono-Oblique.ttf';</code>

### 2.9.12. PDF::TTFontFile###MonospacedBoldItalic

Description:	Defines the path and TTF-File to handle bold italic monospaced font in PDF documents.
--------------	---



Group:	Framework
SubGroup:	Core::PDF
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PDF::TTFontFile'}-&gt;{'MonospacedBoldItalic'} = 'DejaVuSansMono-BoldOblique.ttf';</code>

## 2.10. Core::Package

### 2.10.1. Package::FileUpload

Description:	Enables file upload in the package manager frontend.
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Package::FileUpload'} = '1';</code>

### 2.10.2. Package::RepositoryRoot

Description:	Defines the location to get online repository list for additional packages. The first available result will be used.
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Package::RepositoryRoot'} = [ 'http://ftp.otrs.org/pub/otrs/misc/packages/repository.xml' ];</code>

### 2.10.3. Package::RepositoryList

Description:	Defines the list of online repositories. Another installations can be used as repository, for example: Key="http://example.com/otrs/public.pl?Action=PublicRepository;File=" and Content="Some Name".
Group:	Framework
SubGroup:	Core::Package
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Package::RepositoryList'} = { 'ftp://ftp.example.com/pub/otrs/misc/packages/' =&gt; '[Example] ftp://ftp.example.com/' };</code>

### 2.10.4. Package::RepositoryAccessRegExp

Description:	Defines the IP regular expression for accessing the local repository. You need to enable this to have access to your local repository and the package::RepositoryList is required on the remote host.
--------------	---

Group:	Framework
SubGroup:	Core::Package
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Package::RepositoryAccessRegExp'} = '127\\.0\\.0\\.1';</code>

### 2.10.5. Package::Timeout

Description:	Sets the timeout (in seconds) for package downloads. Overwrites "WebUserAgent::Timeout".
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Package::Timeout'} = '15';</code>

### 2.10.6. Package::Proxy

Description:	Fetches packages via proxy. Overwrites "WebUserAgent::Proxy".
Group:	Framework
SubGroup:	Core::Package
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Package::Proxy'} = 'http://proxy.sn.no:8001/';</code>

### 2.10.7. Package::ShowFeatureAddons

Description:	Toggles display of OTRS FeatureAddons list in PackageManager.
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Package::ShowFeatureAddons'} = '1';</code>

### 2.10.8. Package::EventModule###99-SupportData-Send

Description:	Package event module file a scheduler task for update registration.
Group:	Framework
SubGroup:	Core::Package
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Package::EventModule'}-&gt;{'99-SupportDataSend'} = {        'Event' =&gt; '(PackageInstall PackageReinstall PackageUpgrade         PackageUninstall)',        'Module' =&gt; 'Kernel::System::Package::Event::SupportDataSend',        'Transaction' =&gt; '1'</code>

```
};
```

## 2.11. Core::PerformanceLog

### 2.11.1. PerformanceLog

Description:	Enables performance log (to log the page response time). It will affect the system performance. Frontend::Module###AdminPerformanceLog must be enabled.
Group:	Framework
SubGroup:	Core::PerformanceLog
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PerformanceLog'} = '0';</code>

### 2.11.2. PerformanceLog::File

Description:	Specifies the path of the file for the performance log.
Group:	Framework
SubGroup:	Core::PerformanceLog
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PerformanceLog::File'} = '&lt;OTRS_CONFIG_Home&gt;/var/log/Performance.log';</code>

### 2.11.3. PerformanceLog::FileMax

Description:	Defines the maximum size (in MB) of the log file.
Group:	Framework
SubGroup:	Core::PerformanceLog
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PerformanceLog::FileMax'} = '25';</code>

## 2.12. Core::ReferenceData

### 2.12.1. ReferenceData::OwnCountryList

Description:	This setting allows you to override the built-in country list with your own list of countries. This is particularly handy if you just want to use a small select group of countries.
Group:	Framework
SubGroup:	Core::ReferenceData
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'ReferenceData::OwnCountryList'} = { 'AT' =&gt; 'Austria', 'CH' =&gt; 'Switzerland',</code>

```
'DE' => 'Germany'
};
```

## 2.13. Core::SOAP

### 2.13.1. SOAP::User

Description:	Defines the username to access the SOAP handle (bin/cgi-bin/rpc.pl).
Group:	Framework
SubGroup:	Core::SOAP
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SOAP::User'} = 'some_user';</code>

### 2.13.2. SOAP::Password

Description:	Defines the password to access the SOAP handle (bin/cgi-bin/rpc.pl).
Group:	Framework
SubGroup:	Core::SOAP
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SOAP::Password'} = 'some_pass';</code>

### 2.13.3. SOAP::Keep-Alive

Description:	Enable keep-alive connection header for SOAP responses.
Group:	Framework
SubGroup:	Core::SOAP
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SOAP::Keep-Alive'} = '0';</code>

## 2.14. Core::Sendmail

### 2.14.1. SendmailModule

Description:	Defines the module to send emails. "Sendmail" directly uses the sendmail binary of your operating system. Any of the "SMTP" mechanisms use a specified (external) mailserver. "DoNotSendEmail" doesn't send emails and it is useful for test systems.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SendmailModule'} = 'Kernel::System::Email::Sendmail';</code>

## 2.14.2. SendmailModule::CMD

Description:	If "Sendmail" was selected as SendmailModule, the location of the sendmail binary and the needed options must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SendmailModule::CMD'} = '/usr/sbin/sendmail -i -f';</code>

## 2.14.3. SendmailModule::Host

Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, the mailhost that sends out the mails must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SendmailModule::Host'} = 'mail.example.com';</code>

## 2.14.4. SendmailModule::Port

Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, the port where your mailserver is listening for incoming connections must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SendmailModule::Port'} = '25';</code>

## 2.14.5. SendmailModule::AuthUser

Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, and authentication to the mail server is needed, an username must be specified.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SendmailModule::AuthUser'} = 'MailserverLogin';</code>

## 2.14.6. SendmailModule::AuthPassword

Description:	If any of the "SMTP" mechanisms was selected as SendmailModule, and authentication to the mail server is needed, a password must be specified.
--------------	--

Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SendmailModule::AuthPassword'} = 'MailserverPassword';</code>

### 2.14.7. SendmailBcc

Description:	Sends all outgoing email via bcc to the specified address. Please use this only for backup reasons.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SendmailBcc'} = '';</code>

### 2.14.8. SendmailEnvelopeFrom

Description:	If set, this address is used as envelope sender in outgoing messages (not notifications - see below). If no address is specified, the envelope sender is equal to queue e-mail address.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SendmailEnvelopeFrom'} = '';</code>

### 2.14.9. SendmailNotificationEnvelopeFrom

Description:	If set, this address is used as envelope sender header in outgoing notifications. If no address is specified, the envelope sender header is empty.
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SendmailNotificationEnvelopeFrom'} = '';</code>

### 2.14.10. SendmailEncodingForce

Description:	Forces encoding of outgoing emails (7bit 8bit quoted-printable base64).
Group:	Framework
SubGroup:	Core::Sendmail
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SendmailEncodingForce'} = 'base64';</code>

## 2.15. Core::Session

### 2.15.1. SessionModule

Description:	Defines the module used to store the session data. With "DB" the frontend server can be splitted from the db server. "FS" is faster.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionModule'} = 'Kernel::System::AuthSession::DB';</code>

### 2.15.2. SessionName

Description:	Defines the name of the session key. E.g. Session, SessionID or OTRS.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionName'} = 'OTRSAgentInterface';</code>

### 2.15.3. CustomerPanelSessionName

Description:	Defines the name of the key for customer sessions.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelSessionName'} = 'OTRSCustomerInterface';</code>

### 2.15.4. SessionCheckRemoteIP

Description:	Turns on the remote ip address check. It should be set to "No" if the application is used, for example, via a proxy farm or a dialup connection, because the remote ip address is mostly different for the requests.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionCheckRemoteIP'} = '1';</code>

### 2.15.5. SessionDeleteIfNotRemoteID

Description:	Deletes a session if the session id is used with an invalid remote IP address.
Group:	Framework

SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionDeleteIfNotRemoteID'} = '1';</code>

## 2.15.6. SessionMaxTime

Description:	Defines the maximal valid time (in seconds) for a session id.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionMaxTime'} = '57600';</code>

## 2.15.7. SessionMaxIdleTime

Description:	Sets the inactivity time (in seconds) to pass before a session is killed and a user is logged out.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionMaxIdleTime'} = '21600';</code>

## 2.15.8. SessionActiveTime

Description:	Sets the time (in seconds) a user is marked as active.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionActiveTime'} = '600';</code>

## 2.15.9. SessionDeleteIfTimeToOld

Description:	Deletes requested sessions if they have timed out.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionDeleteIfTimeToOld'} = '1';</code>

## 2.15.10. SessionUseCookie

Description:	Makes the session management use html cookies. If html cookies are disabled or if the client browser disabled html cookies, then the system will work as usual and append the session id to the links.
--------------	--



Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionUseCookie'} = '1';</code>

### 2.15.11. SessionUseCookieAfterBrowserClose

Description:	Stores cookies after the browser has been closed.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionUseCookieAfterBrowserClose'} = '0';</code>

### 2.15.12. SessionCSRFProtection

Description:	Protection against CSRF (Cross Site Request Forgery) exploits (for more info see <a href="http://en.wikipedia.org/wiki/Cross-site_request_forgery">http://en.wikipedia.org/wiki/Cross-site_request_forgery</a> ).
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionCSRFProtection'} = '1';</code>

### 2.15.13. AgentSessionLimit

Description:	Sets the maximum number of active agents within the timespan defined in SessionActiveTime.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'AgentSessionLimit'} = '100';</code>

### 2.15.14. CustomerSessionLimit

Description:	Sets the maximum number of active customers within the time-span defined in SessionActiveTime.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerSessionLimit'} = '100';</code>

## 2.15.15. SessionDir

Description:	If "FS" was selected for SessionModule, a directory where the session data will be stored must be specified.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionDir'} = '&lt;OTRS_CONFIG_Home&gt;/var/sessions';</code>

## 2.15.16. SessionTable

Description:	If "DB" was selected for SessionModule, a table in database where session data will be stored must be specified.
Group:	Framework
SubGroup:	Core::Session
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SessionTable'} = 'sessions';</code>

## 2.16. Core::SpellChecker

### 2.16.1. SpellChecker

Description:	Enables spell checker support.
Group:	Framework
SubGroup:	Core::SpellChecker
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SpellChecker'} = '0';</code>

### 2.16.2. SpellCheckerBin

Description:	Install ispell or aspell on the system, if you want to use a spell checker. Please specify the path to the aspell or ispell binary on your operating system.
Group:	Framework
SubGroup:	Core::SpellChecker
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SpellCheckerBin'} = '/usr/bin/ispell';</code>

### 2.16.3. SpellCheckerDictDefault

Description:	Defines the default spell checker dictionary.
Group:	Framework
SubGroup:	Core::SpellChecker

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SpellCheckerDictDefault'} = 'english';</code>

## 2.16.4. SpellCheckerIgnore

Description:	Defines a default list of words, that are ignored by the spell checker.
Group:	Framework
SubGroup:	Core::SpellChecker
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SpellCheckerIgnore'} = [   'www',   'webmail',   'https',   'http',   'html',   'rfc' ];</code>

## 2.17. Core::Stats

### 2.17.1. Stats::StatsHook

Description:	Sets the stats hook.
Group:	Framework
SubGroup:	Core::Stats
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::StatsHook'} = 'Stat#';</code>

### 2.17.2. Stats::StatsStartNumber

Description:	Start number for statistics counting. Every new stat increments this number.
Group:	Framework
SubGroup:	Core::Stats
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::StatsStartNumber'} = '10000';</code>

### 2.17.3. Stats::MaxXaxisAttributes

Description:	Defines the default maximum number of X-axis attributes for the time scale.
Group:	Framework
SubGroup:	Core::Stats
Valid:	0
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Stats::MaxXaxisAttributes'} = '1000';</code>
-----------------	---

## 2.18. Core::Stats::Graph

### 2.18.1. Stats::Graph::t\_margin

Description:	Specifies the top margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::t_margin'} = '10';</code>

### 2.18.2. Stats::Graph::l\_margin

Description:	Specifies the left margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::l_margin'} = '10';</code>

### 2.18.3. Stats::Graph::b\_margin

Description:	Specifies the bottom margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::b_margin'} = '10';</code>

### 2.18.4. Stats::Graph::r\_margin

Description:	Specifies the right margin of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::r_margin'} = '20';</code>

### 2.18.5. Stats::Graph::bgclr

Description:	Specifies the background color of the picture.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::bgclr'} = 'white';</code>
-----------------	--

## 2.18.6. Stats::Graph::transparent

Description:	Makes the picture transparent.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::transparent'} = '0';</code>

## 2.18.7. Stats::Graph::fgclr

Description:	Specifies the border color of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::fgclr'} = 'black';</code>

## 2.18.8. Stats::Graph::boxclr

Description:	Specifies the background color of the chart.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::boxclr'} = 'white';</code>

## 2.18.9. Stats::Graph::accentclr

Description:	Specifies the border color of the legend.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::accentclr'} = 'black';</code>

## 2.18.10. Stats::Graph::legendclr

Description:	Specifies the text color of the legend.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::legendclr'} = 'black';</code>

### 2.18.11. Stats::Graph::textclr

Description:	Specifies the text color of the chart (e. g. caption).
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::textclr'} = 'black';</code>

### 2.18.12. Stats::Graph::dclrs

Description:	Defines the colors for the graphs.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'Stats::Graph::dclrs'} = [   'red',   'green',   'blue',   'yellow',   'purple',   'orange',   'pink',   'marine',   'cyan',   'lgray',   'lblue',   'lyellow',   'lgreen',   'lred',   'lpurple',   'lorange',   'lbrown' ]; </pre>

### 2.18.13. Stats::Graph::TitleFont

Description:	Defines the title font in graphs (place custom fonts in var/fonts).
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::TitleFont'} = 'DejaVuSans-Bold.ttf';</code>

### 2.18.14. Stats::Graph::LegendFont

Description:	Defines the legend font in graphs (place custom fonts in var/fonts).
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::LegendFont'} = 'DejaVuSans.ttf';</code>

### 2.18.15. Stats::Graph::line\_width

Description:	Defines the boldness of the line drawn by the graph.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::line_width'} = '1';</code>

### 2.18.16. Stats::Graph::legend\_placement

Description:	Defines the placement of the legend. This should be a two letter key of the form: 'B[LCR] R[TCB]'. The first letter indicates the placement (Bottom or Right), and the second letter the alignment (Left, Right, Center, Top, or Bottom).
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::legend_placement'} = 'BC';</code>

### 2.18.17. Stats::Graph::legend\_spacing

Description:	Defines the spacing of the legends.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::legend_spacing'} = '4';</code>

### 2.18.18. Stats::Graph::legend\_marker\_width

Description:	Defines the width of the legend.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::legend_marker_width'} = '12';</code>

### 2.18.19. Stats::Graph::legend\_marker\_height

Description:	Defines the height of the legend.
Group:	Framework
SubGroup:	Core::Stats::Graph
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Stats::Graph::legend_marker_height'} = '8';</code>
-----------------	---

## 2.19. Core::Time

### 2.19.1. TimeInputFormat

Description:	Defines the date input format used in forms (option or input fields).
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeInputFormat'} = 'Option';</code>

### 2.19.2. TimeShowAlwaysLong

Description:	Shows time in long format (days, hours, minutes), if set to "Yes"; or in short format (days, hours), if set to "No".
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeShowAlwaysLong'} = '0';</code>

### 2.19.3. TimeZone

Description:	Sets the system time zone (required a system with UTC as system time). Otherwise this is a diff time to the local time.
Group:	Framework
SubGroup:	Core::Time
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'TimeZone'} = '+0';</code>

### 2.19.4. TimeZoneUser

Description:	Sets the user time zone per user (required a system with UTC as system time and UTC under TimeZone). Otherwise this is a diff time to the local time.
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'TimeZoneUser'} = '0';</code>

### 2.19.5. TimeZoneUserBrowserAutoOffset

Description:	Sets the user time zone per user based on java script / browser time zone offset feature at login time.
--------------	---



Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'TimeZoneUserBrowserAutoOffset'} = '1';</code>

## 2.19.6. CalendarWeekDayStart

Description:	Define the start day of the week for the date picker.
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CalendarWeekDayStart'} = '1';</code>

## 2.19.7. TimeVacationDays

Description:	Adds the permanent vacation days. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } };</pre>

## 2.19.8. TimeVacationDaysOneTime

Description:	Adds the one time vacation days. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } };</pre>

## 2.19.9. TimeWorkingHours

Description:	Defines the hours and week days to count the working time.
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<pre> \$self-&gt;{'TimeWorkingHours'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Sat' =&gt; [],   'Sun' =&gt; [],   'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19', </pre>

```

    '20'
  ],
  'Wed' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ]
];

```

## 2.19.10. TimeShowCompleteDescription

Description:	Shows time use complete description (days, hours, minutes), if set to "Yes"; or just first letter (d, h, m), if set to "No".
Group:	Framework
SubGroup:	Core::Time
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeShowCompleteDescription'} = '0';</code>

## 2.20. Core::Time::Calendar1

### 2.20.1. TimeZone::Calendar1Name

Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar1Name'} = 'Calendar Name 1';</code>

### 2.20.2. TimeZone::Calendar1

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar1'} = '0';</code>

### 2.20.3. TimeVacationDays::Calendar1

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
--------------	--

Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays::Calendar1'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } }</pre>

## 2.20.4. TimeVacationDaysOneTime::Calendar1

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar1'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } }</pre>

## 2.20.5. TimeWorkingHours::Calendar1

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar1
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar1'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ], }</pre>

```

'Mon' => [
  '8',
  '9',
  '10',
  '11',
  '12',
  '13',
  '14',
  '15',
  '16',
  '17',
  '18',
  '19',
  '20'
],
'Sat' => [],
'Sun' => [],
'Thu' => [
  '8',
  '9',
  '10',
  '11',
  '12',
  '13',
  '14',
  '15',
  '16',
  '17',
  '18',
  '19',
  '20'
],
'Tue' => [
  '8',
  '9',
  '10',
  '11',
  '12',
  '13',
  '14',
  '15',
  '16',
  '17',
  '18',
  '19',
  '20'
],
'Wed' => [
  '8',
  '9',
  '10',
  '11',
  '12',
  '13',
  '14',
  '15',
  '16',
  '17',
  '18',
  '19',
  '20'
]
];

```

## 2.21. Core::Time::Calendar2

### 2.21.1. TimeZone::Calendar2Name

Description:	Defines the name of the indicated calendar.
--------------	---

Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar2Name'} = 'Calendar Name 2';</code>

## 2.21.2. TimeZone::Calendar2

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar2'} = '0';</code>

## 2.21.3. TimeVacationDays::Calendar2

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays::Calendar2'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } };</pre>

## 2.21.4. TimeVacationDaysOneTime::Calendar2

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar2'} = {   '2004' =&gt; {     '1' =&gt; {</pre>

```
'1' => 'test'
}
}
};
```

## 2.21.5. TimeWorkingHours::Calendar2

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar2
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar2'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Sat' =&gt; [],   'Sun' =&gt; [],   'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',</pre>

```

    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ],
  'Wed' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ]
}
};

```

## 2.22. Core::Time::Calendar3

### 2.22.1. TimeZone::Calendar3Name

Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar3Name'} = 'Calendar Name 3';</code>

### 2.22.2. TimeZone::Calendar3

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar3'} = '0';</code>

### 2.22.3. TimeVacationDays::Calendar3

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar3



Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays::Calendar3'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } };</pre>

## 2.22.4. TimeVacationDaysOneTime::Calendar3

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar3'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } };</pre>

## 2.22.5. TimeWorkingHours::Calendar3

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar3
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar3'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',</pre>

```

'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
],
'Sat' => [],
'Sun' => [],
'Thu' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
],
'Tue' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
],
'Wed' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
]
]
};

```

## 2.23. Core::Time::Calendar4

### 2.23.1. TimeZone::Calendar4Name

Description:	Defines the name of the indicated calendar.
Group:	Framework

SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar4Name'} = 'Calendar Name 4';</code>

## 2.23.2. TimeZone::Calendar4

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar4'} = '0';</code>

## 2.23.3. TimeVacationDays::Calendar4

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays::Calendar4'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } };</pre>

## 2.23.4. TimeVacationDaysOneTime::Calendar4

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar4'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } };</pre>

```

    }
  }
};

```

## 2.23.5. TimeWorkingHours::Calendar4

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar4
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'TimeWorkingHours::Calendar4'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Sat' =&gt; [],   'Sun' =&gt; [],   'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13', </pre>

```
'14',
'15',
'16',
'17',
'18',
'19',
'20'
],
'Wed' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
]
};
```

## 2.24. Core::Time::Calendar5

### 2.24.1. TimeZone::Calendar5Name

Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar5Name'} = 'Calendar Name 5';</code>

### 2.24.2. TimeZone::Calendar5

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar5'} = '0';</code>

### 2.24.3. TimeVacationDays::Calendar5

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1

Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays::Calendar5'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } };</pre>

## 2.24.4. TimeVacationDaysOneTime::Calendar5

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar5'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } };</pre>

## 2.24.5. TimeWorkingHours::Calendar5

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar5
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar5'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',</pre>

```

    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ],
  'Sat' => [],
  'Sun' => [],
  'Thu' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ],
  'Tue' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ],
  'Wed' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ]
]
};

```

## 2.25. Core::Time::Calendar6

### 2.25.1. TimeZone::Calendar6Name

Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar6

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar6Name'} = 'Calendar Name 6';</code>

## 2.25.2. TimeZone::Calendar6

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar6'} = '0';</code>

## 2.25.3. TimeVacationDays::Calendar6

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays::Calendar6'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } };</pre>

## 2.25.4. TimeVacationDaysOneTime::Calendar6

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar6'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } };</pre>



```
};
```

## 2.25.5. TimeWorkingHours::Calendar6

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar6
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar6'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Sat' =&gt; [],   'Sun' =&gt; [],   'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',</pre>

```
'16',
'17',
'18',
'19',
'20'
],
'Wed' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
]
];
```

## 2.26. Core::Time::Calendar7

### 2.26.1. TimeZone::Calendar7Name

Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar7Name'} = 'Calendar Name 7';</code>

### 2.26.2. TimeZone::Calendar7

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar7'} = '0';</code>

### 2.26.3. TimeVacationDays::Calendar7

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1

Config-Setting:	<pre> \$Self-&gt;{'TimeVacationDays::Calendar7'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } } }; </pre>
-----------------	---

## 2.26.4. TimeVacationDaysOneTime::Calendar7

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'TimeVacationDaysOneTime::Calendar7'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } } }; </pre>

## 2.26.5. TimeWorkingHours::Calendar7

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar7
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'TimeWorkingHours::Calendar7'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',     '11', </pre>

```

'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
],
'Sat' => [],
'Sun' => [],
'Thu' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
],
'Tue' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
],
'Wed' => [
'8',
'9',
'10',
'11',
'12',
'13',
'14',
'15',
'16',
'17',
'18',
'19',
'20'
]
];

```

## 2.27. Core::Time::Calendar8

### 2.27.1. TimeZone::Calendar8Name

Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar8Name'} = 'Calendar Name 8';</code>

## 2.27.2. TimeZone::Calendar8

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar8'} = '0';</code>

## 2.27.3. TimeVacationDays::Calendar8

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDays::Calendar8'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve',     '25' =&gt; 'First Christmas Day',     '26' =&gt; 'Second Christmas Day',     '31' =&gt; 'New Year\'s Eve'   },   '5' =&gt; {     '1' =&gt; 'International Workers\' Day'   } };</pre>

## 2.27.4. TimeVacationDaysOneTime::Calendar8

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar8'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } };</pre>

## 2.27.5. TimeWorkingHours::Calendar8

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar8
Valid:	1
Required:	1
Config-Setting:	<pre> \$self-&gt;{'TimeWorkingHours::Calendar8'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Sat' =&gt; [],   'Sun' =&gt; [],   'Thu' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Tue' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',   ] } </pre>

```

    '19',
    '20'
  ],
  'Wed' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ]
};

```

## 2.28. Core::Time::Calendar9

### 2.28.1. TimeZone::Calendar9Name

Description:	Defines the name of the indicated calendar.
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar9Name'} = 'Calendar Name 9';</code>

### 2.28.2. TimeZone::Calendar9

Description:	Defines the time zone of the indicated calendar, which can be assigned later to a specific queue.
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeZone::Calendar9'} = '0';</code>

### 2.28.3. TimeVacationDays::Calendar9

Description:	Adds the permanent vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TimeVacationDays::Calendar9'} = {   '1' =&gt; {     '1' =&gt; 'New Year\'s Day'   },   '12' =&gt; {     '24' =&gt; 'Christmas Eve', </code>

	<pre>'25' =&gt; 'First Christmas Day', '26' =&gt; 'Second Christmas Day', '31' =&gt; 'New Year\'s Eve' }, '5' =&gt; {   '1' =&gt; 'International Workers\' Day' } };</pre>
--	--

## 2.28.4. TimeVacationDaysOneTime::Calendar9

Description:	Adds the one time vacation days for the indicated calendar. Please use single digit pattern for numbers from 1 to 9 (instead of 01 - 09).
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeVacationDaysOneTime::Calendar9'} = {   '2004' =&gt; {     '1' =&gt; {       '1' =&gt; 'test'     }   } } };</pre>

## 2.28.5. TimeWorkingHours::Calendar9

Description:	Defines the hours and week days of the indicated calendar, to count the working time.
Group:	Framework
SubGroup:	Core::Time::Calendar9
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'TimeWorkingHours::Calendar9'} = {   'Fri' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19',     '20'   ],   'Mon' =&gt; [     '8',     '9',     '10',     '11',     '12',     '13',     '14',     '15',     '16',     '17',     '18',     '19', </pre>



```

    '20'
  ],
  'Sat' => [],
  'Sun' => [],
  'Thu' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ],
  'Tue' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ],
  'Wed' => [
    '8',
    '9',
    '10',
    '11',
    '12',
    '13',
    '14',
    '15',
    '16',
    '17',
    '18',
    '19',
    '20'
  ]
]
};

```

## 2.29. Core::Web

### 2.29.1. Frontend::WebPath

Description:	Defines the URL base path of icons, CSS and Java Script.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::WebPath'} = '/otrs-web/';</code>

### 2.29.2. Frontend::ImagePath

Description:	Defines the URL image path of icons for navigation.
--------------	---

Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::ImagePath'} = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;skins/Agent/default/img/';</code>

### 2.29.3. Frontend::CSSPath

Description:	Defines the URL CSS path.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::CSSPath'} = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;css/';</code>

### 2.29.4. Frontend::JavaScriptPath

Description:	Defines the URL java script path.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::JavaScriptPath'} = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;js/';</code>

### 2.29.5. Frontend::RichText

Description:	Uses richtext for viewing and editing: articles, salutations, signatures, standard templates, auto responses and notifications.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::RichText'} = '1';</code>

### 2.29.6. Frontend::RichTextPath

Description:	Defines the URL rich text editor path.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::RichTextPath'} = '&lt;OTRS_CONFIG_Frontend::WebPath&gt;js/thirdparty/ckeditor-4.4.5/';</code>

## 2.29.7. Frontend::RichTextWidth

Description:	Defines the width for the rich text editor component. Enter number (pixels) or percent value (relative).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::RichTextWidth'} = '620';</code>

## 2.29.8. Frontend::RichTextHeight

Description:	Defines the height for the rich text editor component. Enter number (pixels) or percent value (relative).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::RichTextHeight'} = '320';</code>

## 2.29.9. Frontend::RichText::DefaultCSS

Description:	Defines the default CSS used in rich text editors.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::RichText::DefaultCSS'} = 'font-family:Geneva,Helvetica,Arial,sans-serif; font-size: 12px;';</code>

## 2.29.10. Frontend::RichText::EnhancedMode

Description:	Defines if the enhanced mode should be used (enables use of table, replace, subscript, superscript, paste from word, etc.).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::RichText::EnhancedMode'} = '0';</code>

## 2.29.11. DisableMSIFrameSecurityRestricted

Description:	Disable restricted security for IFrames in IE. May be required for SSO to work in IE8.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'DisableMSIFrameSecurityRestricted'} = '0';</code>
-----------------	--

## 2.29.12. DisableContentSecurityPolicy

Description:	Disable HTTP header "Content-Security-Policy" to allow loading of external script contents. Disabling this HTTP header can be a security issue! Only disable it, if you know what you are doing!
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'DisableContentSecurityPolicy'} = '0';</code>

## 2.29.13. DefaultViewNewLine

Description:	Automated line break in text messages after x number of chars.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'DefaultViewNewLine'} = '90';</code>

## 2.29.14. DefaultViewLines

Description:	Sets the number of lines that are displayed in text messages (e.g. ticket lines in the QueueZoom).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'DefaultViewLines'} = '6000';</code>

## 2.29.15. Frontend::AnimationEnabled

Description:	Turns on the animations used in the GUI. If you have problems with these animations (e.g. performance issues), you can turn them off here.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::AnimationEnabled'} = '1';</code>

## 2.29.16. AttachmentDownloadType

Description:	Allows choosing between showing the attachments of a ticket in the browser (inline) or just make them downloadable (attachment).
--------------	--

Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'AttachmentDownloadType'} = 'attachment';</code>

## 2.29.17. WebMaxFileUpload

Description:	Defines the maximal size (in bytes) for file uploads via the browser. Warning: Setting this option to a value which is too low could cause many masks in your OTRS instance to stop working (probably any mask which takes input from the user).
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'WebMaxFileUpload'} = '24000000';</code>

## 2.29.18. WebUploadCacheModule

Description:	Selects the module to handle uploads via the web interface. "DB" stores all uploads in the database, "FS" uses the file system.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'WebUploadCacheModule'} = 'Kernel::System::Web::UploadCache::DB';</code>

## 2.29.19. Frontend::Output::FilterText###AAAURL

Description:	Defines the filter that processes the text in the articles, in order to highlight URLs.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::Output::FilterText'}-&gt;{'AAAURL'} = {          'Module' =&gt; 'Kernel::Output::HTML::OutputFilterTextURL',          'Templates' =&gt; {            'AgentTicketZoom' =&gt; '1'          }        }      };</code>

## 2.29.20. Frontend::Themes

Description:	Activates the available themes on the system. Value 1 means active, 0 means inactive.
Group:	Framework
SubGroup:	Core::Web

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Themes'} = {   'Lite' =&gt; '0',   'Standard' =&gt; '1' };</pre>

## 2.29.21.

### Frontend::Output::FilterText###OutputFilterTextAutoLink

Description:	Defines a filter to process the text in the articles, in order to highlight predefined keywords.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Output::FilterText'}-&gt;{'OutputFilterTextAutoLink'} = {   'Module' =&gt; 'Kernel::Output::HTML::OutputFilterTextAutoLink',   'Templates' =&gt; {     'AgentTicketZoom' =&gt; '1'   } };</pre>

## 2.29.22.

### Frontend::Output::OutputFilterTextAutoLink###CVE

Description:	Defines a filter for html output to add links behind CVE numbers. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Output::OutputFilterTextAutoLink'}-&gt;{'CVE'} = {   'RegExp' =&gt; [     '(CVE CAN)\{3,4}\{2,}'   ],   'Templates' =&gt; {     'AgentTicketZoom' =&gt; '1'   },   'URL1' =&gt; {     'Description' =&gt; 'Mitre',     'Image' =&gt; 'http://cve.mitre.org/favicon.ico',     'Target' =&gt; '_blank',     'URL' =&gt; 'http://cve.mitre.org/cgi-bin/cvename.cgi?name=&lt;MATCH1&gt;-&lt;MATCH2&gt;-&lt;MATCH3&gt;'   },   'URL2' =&gt; {     'Description' =&gt; 'Google',     'Image' =&gt; 'http://www.google.de/favicon.ico',     'Target' =&gt; '_blank',     'URL' =&gt; 'http://google.com/search?q=&lt;MATCH1&gt;-&lt;MATCH2&gt;-&lt;MATCH3&gt;'   },   'URL3' =&gt; {     'Description' =&gt; 'US-CERT NVD',     'Image' =&gt; 'http://nvd.nist.gov/favicon.ico',   } };</pre>

	<pre>'Target' =&gt; '_blank', 'URL' =&gt; 'http://nvd.nist.gov/nvd.cfm?cvename=&lt;MATCH1&gt;-&lt;MATCH2&gt;-&lt;MATCH3&gt;' } };</pre>
--	---

## 2.29.23.

### Frontend::Output::OutputFilterTextAutoLink###Bugtraq

Description:	Defines a filter for html output to add links behind bugtraq numbers. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Output::OutputFilterTextAutoLink'}-&gt;{'Bugtraq'} = { 'RegExp' =&gt; [ 'Bugtraq[\\s\\w\\t]*?ID[\\s\\w\\t]*?:[\\s\\w\\t]*?(\\d{2,8})', 'Bugtraq[\\s\\w\\t]*?ID[\\s\\w\\t]*?(\\d{2,8})', 'Bugtraq[\\s\\w\\t]*?:[\\s\\w\\t]*?(\\d{2,8})', 'Bugtraq[\\s\\w\\t]*?(\\d{2,8})', 'BID[\\s\\w\\t]*?:[\\s\\w\\t]*?(\\d{2,8})', 'BID[\\s\\w\\t]*?(\\d{2,8})' ], 'Templates' =&gt; { 'AgentTicketZoom' =&gt; '1' }, }, 'URL1' =&gt; { 'Description' =&gt; 'Security Focus', 'Image' =&gt; 'http://www.securityfocus.com/favicon.ico', 'Target' =&gt; '_blank', 'URL' =&gt; 'http://www.securityfocus.com/bid/&lt;MATCH1&gt;/info' }, 'URL2' =&gt; { 'Description' =&gt; 'Google', 'Image' =&gt; 'http://www.google.de/favicon.ico', 'Target' =&gt; '_blank', 'URL' =&gt; 'http://google.com/search?q=&lt;MATCH&gt;' } } };</pre>

## 2.29.24.

### Frontend::Output::OutputFilterTextAutoLink###MSBulletins

Description:	Defines a filter for html output to add links behind MSBulletin numbers. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Output::OutputFilterTextAutoLink'}-&gt;{'MSBulletins'} = { 'RegExp' =&gt; [ 'MS[^A-Za-z]{0,5}(\\d\\d)?.?(\\d{2,4})' ], },</pre>

```
'Templates' => {
  'AgentTicketZoom' => '1'
},
'URL1' => {
  'Description' => 'Microsoft Technet',
  'Image' => 'http://www.microsoft.com/favicon.ico',
  'Target' => '_blank',
  'URL' => 'http://www.microsoft.com/technet/security/bulletin/
MS<MATCH1>-<MATCH2>.mspx'
},
'URL2' => {
  'Description' => 'Google',
  'Image' => 'http://www.google.de/favicon.ico',
  'Target' => '_blank',
  'URL' => 'http://google.com/search?q=MS<MATCH1>-<MATCH2>'
}
};
```

## 2.29.25. Frontend::Output::OutputFilterTextAutoLink###Setting1

Description:	Define a filter for html output to add links behind a defined string. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Output::OutputFilterTextAutoLink'}-&gt;{'Setting1'} = {   'RegExp' =&gt; [     'RegExp'   ],   'Templates' =&gt; {     'AgentTicketZoom' =&gt; '1'   },   'URL1' =&gt; {     'Description' =&gt; 'Description',     'Image' =&gt; 'right-small.png',     'Target' =&gt; '_blank',     'URL' =&gt; 'URL'   },   'URL2' =&gt; {     'Description' =&gt; 'Description',     'Image' =&gt; 'Image',     'Target' =&gt; '_blank',     'URL' =&gt; 'URL'   } };</pre>

## 2.29.26. Frontend::Output::OutputFilterTextAutoLink###Setting2

Description:	Defines a filter for html output to add links behind a defined string. The element Image allows two input kinds. At once the name of an image (e.g. faq.png). In this case the OTRS image path will be used. The second possibility is to insert the link to the image.
Group:	Framework
SubGroup:	Core::Web
Valid:	0



Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Output::OutputFilterTextAutoLink'}-&gt;{'Setting2'} = {   'RegExp' =&gt; [     'RegExp'   ],   'Templates' =&gt; {     'AgentTicketZoom' =&gt; '1'   },   'URL1' =&gt; {     'Description' =&gt; 'Description',     'Image' =&gt; 'right-small.png',     'Target' =&gt; '_blank',     'URL' =&gt; 'URL'   },   'URL2' =&gt; {     'Description' =&gt; 'Description',     'Image' =&gt; 'Image',     'Target' =&gt; '_blank',     'URL' =&gt; 'URL'   },   'URL3' =&gt; {     'Description' =&gt; 'Description',     'Image' =&gt; 'Image',     'Target' =&gt; '_blank',     'URL' =&gt; 'URL'   } }; </pre>

### 2.29.27. Loader::Enabled::CSS

Description:	If enabled, OTRS will deliver all CSS files in minified form. WARNING: If you turn this off, there will likely be problems in IE 7, because it cannot load more than 32 CSS files.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Loader::Enabled::CSS'} = '1';</code>

### 2.29.28. Loader::Enabled::JS

Description:	If enabled, OTRS will deliver all JavaScript files in minified form.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Loader::Enabled::JS'} = '1';</code>

### 2.29.29. Loader::Agent::CommonCSS###000-Framework

Description:	List of CSS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1

Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::CommonCSS'}-&gt;{'000-Framework'} = [   'Core.Reset.css',   'Core.Default.css',   'Core.Header.css',   'Core.OverviewControl.css',   'Core.OverviewSmall.css',   'Core.OverviewMedium.css',   'Core.OverviewLarge.css',   'Core.Footer.css',   'Core.PageLayout.css',   'Core.Form.css',   'Core.Table.css',   'Core.Widget.css',   'Core.WidgetMenu.css',   'Core.TicketDetail.css',   'Core.Tooltip.css',   'Core.Dialog.css',   'Core.Print.css',   'thirdparty/fontawesome/font-awesome.css' ];</pre>

## 2.29.30. Loader::Agent::CommonCSS::IE8###000-Framework

Description:	List of IE8-specific CSS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::CommonCSS::IE8'}-&gt;{'000-Framework'} = [   'Core.OverviewSmall.IE8.css' ];</pre>

## 2.29.31. Loader::Agent::CommonJS###000-Framework

Description:	List of JS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::CommonJS'}-&gt;{'000-Framework'} = [   'thirdparty/jquery-1.10.0/jquery.js',   'thirdparty/jquery-browser-detection/jquery-browser-detection.js',   'thirdparty/jquery-ui-1.10.3/jquery-ui.js',   'thirdparty/jquery-validate-1.11.1/jquery.validate.js',   'thirdparty/stacktrace-0.4/stacktrace.js',   'thirdparty/jquery-pubsub/pubsub.js',   'thirdparty/jquery-jstree-v.pre1.0/jquery.jstree.js',   'thirdparty/jquery-jstree-v.pre1.0/_lib/jquery.hotkeys.js',   'Core.JavaScriptEnhancements.js',   'Core.Debug.js',   'Core.Data.js',   'Core.Config.js',   'Core.Exception.js',   'Core.JSON.js',   'Core.App.js',   'Core.AJAX.js',   'Core.UI.js', ];</pre>

	<pre>'Core.UI.Accordion.js', 'Core.UI.Datepicker.js', 'Core.UI.Resizable.js', 'Core.UI.Table.js', 'Core.UI.Accessibility.js', 'Core.UI.RichTextEditor.js', 'Core.UI.Dialog.js', 'Core.UI.ActionRow.js', 'Core.UI.Popup.js', 'Core.UI.TreeSelection.js', 'Core.UI.Autocomplete.js', 'Core.Form.js', 'Core.Form.ErrorTooltips.js', 'Core.Form.Validate.js', 'Core.Agent.js', 'Core.Agent.Search.js', 'Core.Agent.CustomerInformationCenterSearch.js' ];</pre>
--	---

### 2.29.32. Loader::Agent::CommonJS###001-JQueryMigrate

Description:	List of JS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::CommonJS'}-&gt;{'001-JQueryMigrate'} = [ 'thirdparty/jquery-migrate-1.2.1/jquery-migrate.js' ];</pre>

### 2.29.33. Loader::Customer::CommonCSS###000-Framework

Description:	List of CSS files to always be loaded for the customer interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Customer::CommonCSS'}-&gt;{'000-Framework'} = [ 'Core.Reset.css', 'Core.Default.css', 'Core.Form.css', 'Core.Dialog.css', 'Core.Tooltip.css', 'Core.Login.css', 'Core.Control.css', 'Core.Table.css', 'Core.TicketZoom.css', 'Core.Print.css', 'thirdparty/fontawesome/font-awesome.css' ];</pre>

### 2.29.34. Loader::Customer::CommonCSS::IE8###000-Framework

Description:	List of IE8-specific CSS files to always be loaded for the customer interface.
--------------	--

Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Loader::Customer::CommonCSS::IE8'}-&gt;{'000-Framework'} = [];</code>

## 2.29.35. Loader::Customer::CommonJS###000-Framework

Description:	List of JS files to always be loaded for the customer interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Loader::Customer::CommonJS'}-&gt;{'000-Framework'} = [     'thirdparty/jquery-1.10.0/jquery.js',     'thirdparty/jquery-browser-detection/jquery-browser-detection.js',     'thirdparty/jquery-validate-1.11.1/jquery.validate.js',     'thirdparty/jquery-ui-1.10.3/jquery-ui.js',     'thirdparty/stacktrace-0.4/stacktrace.js',     'thirdparty/jquery-pubsub/pubsub.js',     'thirdparty/jquery-jstree-v.pre1.0/jquery.jstree.js',     'thirdparty/jquery-jstree-v.pre1.0/_lib/jquery.hotkeys.js',     'Core.Debug.js',     'Core.Data.js',     'Core.Exception.js',     'Core.JSON.js',     'Core.JavaScriptEnhancements.js',     'Core.Config.js',     'Core.App.js',     'Core.AJAX.js',     'Core.UI.js',     'Core.UI.Accessibility.js',     'Core.UI.Dialog.js',     'Core.UI.RichTextEditor.js',     'Core.UI.Datepicker.js',     'Core.UI.Popup.js',     'Core.UI.TreeSelection.js',     'Core.UI.Autocomplete.js',     'Core.Form.js',     'Core.Form.ErrorTooltips.js',     'Core.Form.Validate.js',     'Core.Customer.js'   ];</code>

## 2.29.36. Loader::Customer::CommonJS###001-JQuery-Migrate

Description:	List of JS files to always be loaded for the agent interface.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Loader::Customer::CommonJS'}-&gt;{'001-JQueryMigrate'} = [     'thirdparty/jquery-migrate-1.2.1/jquery-migrate.js'   ];</code>

## 2.29.37. Loader::Agent::DefaultSelectedSkin

Description:	The agent skin's InternalName which should be used in the agent interface. Please check the available skins in Frontend::Agent::Skins.
Group:	Framework
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Loader::Agent::DefaultSelectedSkin'} = 'default';</code>

## 2.29.38. Loader::Customer::SelectedSkin::HostBased

Description:	It is possible to configure different skins, for example to distinguish between different customers, to be used on a per-domain basis within the application. Using a regular expression (regex), you can configure a Key/Content pair to match a domain. The value in "Key" should match the domain, and the value in "Content" should be a valid skin on your system. Please see the example entries for the proper form of the regex.
Group:	Framework
SubGroup:	Core::Web
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Loader::Customer::SelectedSkin::HostBased'} = {   'host1\\.example\\.com' =&gt; 'Someskin1',   'host2\\.example\\.com' =&gt; 'Someskin2' };</code>

## 2.30. Core::WebUserAgent

### 2.30.1. WebUserAgent::Timeout

Description:	Sets the timeout (in seconds) for http/ftp downloads.
Group:	Framework
SubGroup:	Core::WebUserAgent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'WebUserAgent::Timeout'} = '15';</code>

### 2.30.2. WebUserAgent::Proxy

Description:	Defines the connections for http/ftp, via a proxy.
Group:	Framework
SubGroup:	Core::WebUserAgent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'WebUserAgent::Proxy'} = 'http://proxy.sn.no:8001/';</code>

### 2.30.3. WebUserAgent::DisableSSLVerification

Description:	Turns off SSL certificate validation, for example if you use a transparent HTTPS proxy. Use at your own risk!
Group:	Framework
SubGroup:	Core::WebUserAgent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'WebUserAgent::DisableSSLVerification'} = '0';</code>

## 2.31. Crypt::PGP

### 2.31.1. PGP

Description:	Enables PGP support. When PGP support is enabled for signing and encrypting mail, it is HIGHLY recommended that the web server runs as the OTRS user. Otherwise, there will be problems with the privileges when accessing .gnupg folder.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PGP'} = '0';</code>

### 2.31.2. PGP::Bin

Description:	Defines the path to PGP binary.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PGP::Bin'} = '/usr/bin/gpg';</code>

### 2.31.3. PGP::Options

Description:	Sets the options for PGP binary.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PGP::Options'} = '--homedir /opt/otrs/.gnupg/ --batch --no-tty --yes';</code>

### 2.31.4. PGP::Key::Password

Description:	Sets the password for private PGP key.
--------------	--

Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PGP::Key::Password'} = {   '488A0B8F' =&gt; 'SomePassword',   'D2DF79FA' =&gt; 'SomePassword' };</pre>

### 2.31.5. PGP::TrustedNetwork

Description:	Set this to yes if you trust in all your public and private pgp keys, even if they are not certified with a trusted signature.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PGP::TrustedNetwork'} = '0';</pre>

### 2.31.6. PGP::Log

Description:	Configure your own log text for PGP.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PGP::Log'} = {   'BADSIG' =&gt; 'The PGP signature with the keyid has not been verified successfully.',   'ERRSIG' =&gt; 'It was not possible to check the PGP signature, this may be caused by a missing public key or an unsupported algorithm.',   'EXPKEYSIG' =&gt; 'The PGP signature was made by an expired key.',   'GOODSIG' =&gt; 'Good PGP signature.',   'KEYREVOKED' =&gt; 'The PGP signature was made by a revoked key, this could mean that the signature is forged.',   'NODATA' =&gt; 'No valid OpenPGP data found.',   'NO_PUBKEY' =&gt; 'No public key found.',   'REVKEYSIG' =&gt; 'The PGP signature was made by a revoked key, this could mean that the signature is forged.',   'SIGEXPIRED' =&gt; 'The PGP signature is expired.',   'SIG_ID' =&gt; 'Signature data.',   'TRUST_UNDEFINED' =&gt; 'This key is not certified with a trusted signature!.',   'VALIDSIG' =&gt; 'The PGP signature with the keyid is good.' };</pre>

### 2.31.7. PGP::StoreDecryptedData

Description:	If this option is enabled, then the decrypted data will be stored in the database if they are displayed in AgentTicketZoom.
Group:	Framework
SubGroup:	Crypt::PGP
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'PGP::StoreDecryptedData'} = '1';</code>

## 2.32. Crypt::SMIME

### 2.32.1. SMIME

Description:	Enables S/MIME support.
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME'} = '0';</code>

### 2.32.2. SMIME::Bin

Description:	Defines the path to open ssl binary. It may need a HOME env ( <code>\$ENV{HOME} = '/var/lib/wwwrun';</code> ).
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::Bin'} = '/usr/bin/openssl';</code>

### 2.32.3. SMIME::CertPath

Description:	Specifies the directory where SSL certificates are stored.
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::CertPath'} = '/etc/ssl/certs';</code>

### 2.32.4. SMIME::PrivatePath

Description:	Specifies the directory where private SSL certificates are stored.
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::PrivatePath'} = '/etc/ssl/private';</code>

### 2.32.5. SMIME::CacheTTL

Description:	Cache time in seconds for the SSL certificate attributes.
--------------	---



Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::CacheTTL'} = '86400';</code>

## 2.32.6. SMIME::StoreDecryptedData

Description:	If this option is enabled, then the decrypted data will be stored in the database if they are displayed in AgentTicketZoom.
Group:	Framework
SubGroup:	Crypt::SMIME
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SMIME::StoreDecryptedData'} = '1';</code>

## 2.33. CustomerInformationCenter

### 2.33.1.

#### AgentCustomerInformationCenter::MainMenu###010-EditCustomerID

Description:	Main menu registration.
Group:	Framework
SubGroup:	CustomerInformationCenter
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'AgentCustomerInformationCenter::MainMenu'}-&gt;{'010-EditCustomerID'} = {        'Link' =&gt;        '\$Env{"Baselink"}Action=AdminCustomerCompany;Subaction=Change;CustomerID=\$LQData{"CustomerID"};Nav=0',        'Name' =&gt; 'Edit customer company'        };</code>

## 2.34. Frontend::Admin

### 2.34.1. Events###Package

Description:	List of all Package events to be displayed in the GUI.
Group:	Framework
SubGroup:	Frontend::Admin
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Events'}-&gt;{'Package'} = [        'PackageInstall',        'PackageReinstall',        'PackageUpgrade',        ]</code>

	<code>'PackageUninstall'</code> <code>];</code>
--	--

## 2.34.2. Events###CustomerUser

Description:	List of all CustomerUser events to be displayed in the GUI.
Group:	Framework
SubGroup:	Frontend::Admin
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Events'}-&gt;{'CustomerUser'} = [ 'CustomerUserAdd', 'CustomerUserUpdate' ];</code>

## 2.34.3. Events###CustomerCompany

Description:	List of all CustomerCompany events to be displayed in the GUI.
Group:	Framework
SubGroup:	Frontend::Admin
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Events'}-&gt;{'CustomerCompany'} = [ 'CustomerCompanyAdd', 'CustomerCompanyUpdate' ];</code>

## 2.35. Frontend::Admin::AdminCustomerUser

### 2.35.1. AdminCustomerUser::RunInitialWildcardSearch

Description:	Runs an initial wildcard search of the existing customer users when accessing the AdminCustomerUser module.
Group:	Framework
SubGroup:	Frontend::Admin::AdminCustomerUser
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'AdminCustomerUser::RunInitialWildcardSearch'} = '1';</code>

## 2.36. Frontend::Admin::AdminSelectBox

### 2.36.1. AdminSelectBox::AllowDatabaseModification

Description:	Controls if the admin is allowed to make changes to the database via AdminSelectBox.
Group:	Framework
SubGroup:	Frontend::Admin::AdminSelectBox
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'AdminSelectBox::AllowDatabaseModification'} = '0';</code>

## 2.37. Frontend::Admin::ModuleRegistration

### 2.37.1. Frontend::Module###Admin

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'Admin'} = {   'Description' =&gt; 'Admin-Area',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.SysConfig.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'a',       'Block' =&gt; 'ItemArea',       'Description' =&gt; '',       'Link' =&gt; 'Action=Admin',       'LinkOption' =&gt; '',       'Name' =&gt; 'Admin',       'NavBar' =&gt; 'Admin',       'Prio' =&gt; '10000',       'Type' =&gt; 'Menu'     }   ],   'NavBarModule' =&gt; {     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; '' }; </pre>

### 2.37.2. Frontend::Module###AdminInit

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminInit'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarName' =&gt; '',   'Title' =&gt; 'Init' }; </pre>

### 2.37.3. Frontend::Module###AdminUser

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminUser'} = {   'Description' =&gt; 'Create and manage agents.',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Agent',     'Description' =&gt; 'Create and manage agents.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Agents',     'Prio' =&gt; '100'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Agents' };</pre>

### 2.37.4. Frontend::Module###AdminGroup

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminGroup'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Agent',     'Description' =&gt; 'Create and manage groups.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Groups',     'Prio' =&gt; '150'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Groups' };</pre>

### 2.37.5. Frontend::Module###AdminUserGroup

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminUserGroup'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ], };</pre>

```

'NavBarModule' => {
  'Block' => 'Agent',
  'Description' => 'Link agents to groups.',
  'Module' => 'Kernel::Output::HTML::NavBarModuleAdmin',
  'Name' => 'Agents <-> Groups',
  'Prio' => '200'
},
'NavBarName' => 'Admin',
'Title' => 'Agents <-> Groups'
};

```

### 2.37.6. Frontend::Module###AdminCustomerUser

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminCustomerUser'} = {   'Description' =&gt; 'Edit Customer Users',   'Group' =&gt; [     'admin',     'users'   ],   'GroupRo' =&gt; [     ''   ],   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; '',       'Block' =&gt; 'ItemArea',       'Description' =&gt; 'Customer User Administration.',       'Link' =&gt; 'Action=AdminCustomerUser;Nav=Agent',       'LinkOption' =&gt; '',       'Name' =&gt; 'Customer User Administration',       'NavBar' =&gt; 'Customers',       'Prio' =&gt; '9000',       'Type' =&gt; ''     }   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Customer',     'Description' =&gt; 'Create and manage customer users.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Customer User',     'Prio' =&gt; '300'   },   'NavBarName' =&gt; 'Customers',   'Title' =&gt; 'Customer Users' }; </pre>

### 2.37.7. Frontend::Module###AdminCustomerCompany

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0

Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminCustomerCompany'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin',     'users'   ],   'GroupRo' =&gt; [     ''   ],   'NavBar' =&gt; [     {       'AccessKey' =&gt; '',       'Block' =&gt; 'ItemArea',       'Description' =&gt; 'Customer Company Administration.',       'Link' =&gt; 'Action=AdminCustomerCompany;Nav=Agent',       'LinkOption' =&gt; '',       'Name' =&gt; 'Customer Company Administration',       'NavBar' =&gt; 'Customers',       'Prio' =&gt; '9100',       'Type' =&gt; ''     }   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Customer',     'Description' =&gt; 'Create and manage customers.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Customers',     'Prio' =&gt; '310'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Customer Companies' }; </pre>
-----------------	---

## 2.37.8. Frontend::Module###AdminCustomerUserGroup

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminCustomerUserGroup'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Customer',     'Description' =&gt; 'Link customer user to groups.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Customer User &lt;-&gt; Groups',     'Prio' =&gt; '400'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Customers &lt;-&gt; Groups' }; </pre>

## 2.37.9. Frontend::Module###AdminCustomerUserService

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminCustomerUserService'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Customer',     'Description' =&gt; 'Link customer user to services.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Customer User &lt;-&gt; Services',     'Prio' =&gt; '500'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Customer User &lt;-&gt; Services' };</pre>

### 2.37.10. Frontend::Module###AdminRole

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminRole'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Agent',     'Description' =&gt; 'Create and manage roles.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Roles',     'Prio' =&gt; '600'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Roles' };</pre>

### 2.37.11. Frontend::Module###AdminRoleUser

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminRoleUser'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Agent',     'Description' =&gt; 'Link agents to roles.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Agents &lt;-&gt; Roles',     'Prio' =&gt; '700'   },   'NavBarName' =&gt; 'Admin', };</pre>

	<pre>'Title' =&gt; 'Agents &lt;-&gt; Roles' };</pre>
--	--

## 2.37.12. Frontend::Module###AdminRoleGroup

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminRoleGroup'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Agent',     'Description' =&gt; 'Link roles to groups.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Roles &lt;-&gt; Groups',     'Prio' =&gt; '800'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Roles &lt;-&gt; Groups' };</pre>

## 2.37.13. Frontend::Module###AdminSMIME

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminSMIME'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Email',     'Description' =&gt; 'Manage S/MIME certificates for email encryption.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'S/MIME Certificates',     'Prio' =&gt; '1100'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'S/MIME Management' };</pre>

## 2.37.14. Frontend::Module###AdminPGP

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0



Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminPGP'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Email',     'Description' =&gt; 'Manage PGP keys for email encryption.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'PGP Keys',     'Prio' =&gt; '1200'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'PGP Key Management' }; </pre>
-----------------	--

### 2.37.15. Frontend::Module###AdminMailAccount

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminMailAccount'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Email',     'Description' =&gt; 'Manage POP3 or IMAP accounts to fetch email from.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'PostMaster Mail Accounts',     'Prio' =&gt; '100'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Mail Accounts' }; </pre>

### 2.37.16. Frontend::Module###AdminPostMasterFilter

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminPostMasterFilter'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Email',     'Description' =&gt; 'Filter incoming emails.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'PostMaster Filters',     'Prio' =&gt; '200'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'PostMaster Filters' }; </pre>

## 2.37.17. Frontend::Module###AdminEmail

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminEmail'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Send notifications to users.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Admin Notification',     'Prio' =&gt; '400'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Admin Notification' };</pre>

## 2.37.18. Frontend::Module###AdminSession

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminSession'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Manage existing sessions.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Session Management',     'Prio' =&gt; '500'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Session Management' };</pre>

## 2.37.19. Frontend::Module###AdminPerformanceLog

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminPerformanceLog'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ] };</pre>

```

],
'Loader' => {
  'CSS' => [
    'Core.Agent.Admin.PerformanceLog.css'
  ]
},
'NavBarModule' => {
  'Block' => 'System',
  'Description' => 'View performance benchmark results.',
  'Module' => 'Kernel::Output::HTML::NavBarModuleAdmin',
  'Name' => 'Performance Log',
  'Prio' => '550'
},
'NavBarName' => 'Admin',
'Title' => 'Performance Log'
};

```

## 2.37.20. Frontend::Module###AdminRegistration

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminRegistration'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.Registration.css'     ]   },   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Manage system registration.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'System Registration',     'Prio' =&gt; '350'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'System Registration' }; </pre>

## 2.37.21. Frontend::Module###AdminServiceCenter

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminServiceCenter'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.ServiceCenter.css'     ]   }, }; </pre>

	<pre>'NavBarModule' =&gt; {   'Block' =&gt; 'System',   'Description' =&gt; 'Manage OTRS Group services.',   'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',   'Name' =&gt; 'Service Center',   'Prio' =&gt; '351' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Service Center' };</pre>
--	---

## 2.37.22. Frontend::Module###AdminLog

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminLog'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'View system log messages.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'System Log',     'Prio' =&gt; '600'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'System Log' };</pre>

## 2.37.23. Frontend::Module###AdminSelectBox

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminSelectBox'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Execute SQL statements.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'SQL Box',     'Prio' =&gt; '700'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'SQL Box' };</pre>

## 2.37.24. Frontend::Module###AdminPackageManager

Description:	Frontend module registration for the agent interface.
--------------	---

Group:	Framework
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminPackageManager'} = {   'Description' =&gt; 'Software Package Manager',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Update and extend your system with software packages.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Package Manager',     'Prio' =&gt; '1000'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Package Manager' };</pre>

## 2.38. Frontend::Agent

### 2.38.1. AgentLogo

Description:	The logo shown in the header of the agent interface. The URL to the image can be a relative URL to the skin image directory, or a full URL to a remote web server.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AgentLogo'} = {   'StyleHeight' =&gt; '67px',   'StyleRight' =&gt; '38px',   'StyleTop' =&gt; '-4px',   'StyleWidth' =&gt; '244px',   'URL' =&gt; 'skins/Agent/default/img/logo_bg.png' };</pre>

### 2.38.2. AgentLoginLogo

Description:	The logo shown on top of the login box of the agent interface. The URL to the image must be relative URL to the skin image directory.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AgentLoginLogo'} = {   'StyleHeight' =&gt; '100px',   'URL' =&gt; 'skins/Agent/default/img/loginlogo_default.png' };</pre>

### 2.38.3. LoginURL

Description:	Defines an alternate URL, where the login link refers to.
--------------	---

Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'LoginURL'} = 'http://host.example.com/login.html';</code>

### 2.38.4. LogoutURL

Description:	Defines an alternate URL, where the logout link refers to.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'LogoutURL'} = 'http://host.example.com/thanks-for-using-otrs.html';</code>

### 2.38.5. PreApplicationModule###AgentInfo

Description:	Defines a useful module to load specific user options or to display news.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PreApplicationModule'}-&gt;{'AgentInfo'} = 'Kernel::Modules::AgentInfo';</code>

### 2.38.6. InfoKey

Description:	Defines the key to be checked with Kernel::Modules::AgentInfo module. If this user preferences key is true, the message is accepted by the system.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'InfoKey'} = 'wpt22';</code>

### 2.38.7. InfoFile

Description:	File that is displayed in the Kernel::Modules::AgentInfo module, if located under Kernel/Output/HTML/Standard/AgentInfo.dtl.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'InfoFile'} = 'AgentInfo';</code>

## 2.38.8. LostPassword

Description:	Activates lost password feature for agents, in the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'LostPassword'} = '1';</code>

## 2.38.9. ShowMotd

Description:	Shows the message of the day on login screen of the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'ShowMotd'} = '0';</code>

## 2.38.10. NotificationSubjectLostPasswordToken

Description:	Defines the subject for notification mails sent to agents, with token about new requested password.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'NotificationSubjectLostPasswordToken'} = 'New OTRS password request';</code>

## 2.38.11. NotificationBodyLostPasswordToken

Description:	Defines the body text for notification mails sent to agents, with token about new requested password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'NotificationBodyLostPasswordToken'} = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  You or someone impersonating you has requested to change your OTRS password.  If you want to do this, click on the link below. You will receive another email containing the password.  &lt;OTRS_CONFIG_ContentType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;index.pl? Action=LostPassword;Token=&lt;OTRS_TOKEN&gt; </pre>

	If you did not request a new password, please ignore this email. ';
--	--

## 2.38.12. NotificationSubjectLostPassword

Description:	Defines the subject for notification mails sent to agents, about new password.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'NotificationSubjectLostPassword'} = 'New OTRS password';</code>

## 2.38.13. NotificationBodyLostPassword

Description:	Defines the body text for notification mails sent to agents, about new password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'NotificationBodyLostPassword'} = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  Here\'s your new OTRS password.  New password: &lt;OTRS_NEWPW&gt;  You can log in via the following URL:  &lt;OTRS_CONFIG_ContentType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;index.pl '; </pre>

## 2.38.14. OpenMainMenuOnHover

Description:	If enabled, the first level of the main menu opens on mouse hover (instead of click only).
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'OpenMainMenuOnHover'} = '0';</code>

## 2.38.15. FirstnameLastnameOrder

Description:	Specifies the order in which the firstname and the lastname of agents will be displayed.
Group:	Framework
SubGroup:	Frontend::Agent



Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'FirstnameLastnameOrder'} = '0';</code>

### 2.38.16. Loader::::Skin###000-default

Description:	Default skin for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Loader::<agent>::Skin'}-&gt;{'000-default'} = {        'Description' =&gt; 'This is the default orange - black skin.',        'HomePage' =&gt; 'www.otrs.org',        'InternalName' =&gt; 'default',        'VisibleName' =&gt; 'Default'      };</agent></code>

### 2.38.17. Loader::::Skin###001-slim

Description:	Default skin for the agent interface (slim version).
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Loader::<agent>::Skin'}-&gt;{'001-slim'} = {        'Description' =&gt; '"Slim" skin which tries to save screen space for        power users.',        'HomePage' =&gt; 'www.otrs.org',        'InternalName' =&gt; 'slim',        'VisibleName' =&gt; 'Default (Slim)'      };</agent></code>

### 2.38.18. Loader::::Skin###001-ivory

Description:	Balanced white skin by Felix Niklas.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Loader::<agent>::Skin'}-&gt;{'001-ivory'} = {        'Description' =&gt; 'Balanced white skin by Felix Niklas.',        'HomePage' =&gt; 'www.felixniklas.de',        'InternalName' =&gt; 'ivory',        'VisibleName' =&gt; 'Ivory'      };</agent></code>

### 2.38.19. Loader::::Skin###001-ivory-slim

Description:	Balanced white skin by Felix Niklas (slim version).
Group:	Framework
SubGroup:	Frontend::Agent

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::Skin'}-&gt;{'001-ivory-slim'} = {   'Description' =&gt; 'Balanced white skin by Felix Niklas (slim version).',   'HomePage' =&gt; 'www.felixniklas.de',   'InternalName' =&gt; 'ivory-slim',   'VisibleName' =&gt; 'Ivory (Slim)' };</pre>

## 2.38.20.

### Loader::Agent::DefaultSelectedSkin::HostBased

Description:	It is possible to configure different skins, for example to distinguish between different agents, to be used on a per-domain basis within the application. Using a regular expression (regex), you can configure a Key/Content pair to match a domain. The value in "Key" should match the domain, and the value in "Content" should be a valid skin on your system. Please see the example entries for the proper form of the regex.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Loader::Agent::DefaultSelectedSkin::HostBased'} = {   'host1\\.example\\.com' =&gt; 'SomeSkin1',   'host2\\.example\\.com' =&gt; 'SomeSkin2' };</pre>

## 2.38.21. AutoComplete::Agent###Default

Description:	Defines the config options for the autocompletion feature.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AutoComplete::Agent'}-&gt;{'Default'} = {   'AutoCompleteActive' =&gt; '1',   'ButtonText' =&gt; 'Search',   'MaxResultsDisplayed' =&gt; '20',   'MinQueryLength' =&gt; '2',   'QueryDelay' =&gt; '100' };</pre>

## 2.38.22. AutoComplete::Agent###CustomerSearch

Description:	Defines the config options for the autocompletion feature.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AutoComplete::Agent'}-&gt;{'CustomerSearch'} = {   'AutoCompleteActive' =&gt; '1',</pre>

	<pre>'ButtonText' =&gt; 'Search Customer', 'MaxResultsDisplayed' =&gt; '20', 'MinQueryLength' =&gt; '2', 'QueryDelay' =&gt; '100' };</pre>
--	--

## 2.38.23. AutoComplete::Agent###UserSearch

Description:	Defines the config options for the autocompletion feature.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AutoComplete::Agent'}-&gt;{'UserSearch'} = { 'AutoCompleteActive' =&gt; '1', 'ButtonText' =&gt; 'Search User', 'MaxResultsDisplayed' =&gt; '20', 'MinQueryLength' =&gt; '2', 'QueryDelay' =&gt; '100' };</pre>

## 2.38.24. PossibleNextActions

Description:	Defines the list of possible next actions on an error screen.
Group:	Framework
SubGroup:	Frontend::Agent
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PossibleNextActions'} = { 'Go to dashboard!' =&gt; '\$Env{"CGIHandle"}?Action=AgentDashboard' };</pre>

## 2.39. Frontend::Agent::Dashboard

### 2.39.1.

### AgentCustomerInformationCenter::Backend###0600-CIC-CustomerCompanyInformation

Description:	Parameters for the dashboard backend of the customer company information of the agent interface . "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AgentCustomerInformationCenter::Backend'}-&gt;{'0600-CIC-CustomerCompanyInformation'} = { 'Attributes' =&gt; '', 'Block' =&gt; 'ContentSmall', 'Default' =&gt; '1',</pre>

```
'Description' => 'Customer Company Information',
'Group' => '',
'Module' =>
'Kernel::Output::HTML::DashboardCustomerCompanyInformation',
'Title' => 'Customer Company Information'
};
```

## 2.39.2. DashboardBackend###0000-ProductNotify

Description:	Defines the parameters for the dashboard backend. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" defines the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{'0000-ProductNotify'} = { 'Block' =&gt; 'ContentLarge', 'CacheTTLLocal' =&gt; '1440', 'Default' =&gt; '1', 'Description' =&gt; 'News about OTRS releases!', 'Group' =&gt; 'admin', 'Module' =&gt; 'Kernel::Output::HTML::DashboardProductNotify', 'Title' =&gt; 'Product News', 'URL' =&gt; 'http://www.otrs.com/product.xml' };</pre>

## 2.39.3. DashboardBackend###0390-UserOutOfOffice

Description:	Defines the parameters for the dashboard backend. "Limit" defines the number of entries displayed by default. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" defines the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{'0390-UserOutOfOffice'} = { 'Block' =&gt; 'ContentSmall', 'CacheTTLLocal' =&gt; '5', 'Default' =&gt; '1', 'Description' =&gt; '', 'Group' =&gt; '', 'IdleMinutes' =&gt; '60', 'Limit' =&gt; '10', 'Module' =&gt; 'Kernel::Output::HTML::DashboardUserOutOfOffice', 'SortBy' =&gt; 'UserFullname', 'Title' =&gt; 'Out Of Office' };</pre>

## 2.39.4. DashboardBackend###0400-UserOnline

Description:	Defines the parameters for the dashboard backend. "Limit" defines the number of entries displayed by default. "Group" is used to
--------------	--

	restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" defines the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'DashboardBackend'}-&gt;{'0400-UserOnline'} = {   'Block' =&gt; 'ContentSmall',   'CacheTTLLocal' =&gt; '5',   'Default' =&gt; '0',   'Description' =&gt; '',   'Filter' =&gt; 'Agent',   'Group' =&gt; '',   'IdleMinutes' =&gt; '60',   'Limit' =&gt; '10',   'Module' =&gt; 'Kernel::Output::HTML::DashboardUserOnline',   'ShowEmail' =&gt; '0',   'SortBy' =&gt; 'UserFullname',   'Title' =&gt; 'Online' }; </pre>

### 2.39.5. DashboardBackend###0410-RSS

Description:	Defines the parameters for the dashboard backend. "Limit" defines the number of entries displayed by default. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTL" indicates the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'DashboardBackend'}-&gt;{'0410-RSS'} = {   'Block' =&gt; 'ContentSmall',   'CacheTTL' =&gt; '360',   'Default' =&gt; '1',   'Description' =&gt; '',   'Group' =&gt; '',   'Limit' =&gt; '6',   'Module' =&gt; 'Kernel::Output::HTML::DashboardRSS',   'Title' =&gt; 'OTRS News',   'URL' =&gt; 'http://www.otrs.com/en/rss.xml',   'URL_de' =&gt; 'http://www.otrs.com/de/rss.xml',   'URL_es' =&gt; 'http://www.otrs.com/es/rss.xml',   'URL_nl' =&gt; 'http://www.otrs.com/nl/rss.xml',   'URL_ru' =&gt; 'http://www.otrs.com/ru/rss.xml',   'URL_zh' =&gt; 'http://www.otrs.com/cn/rss.xml' }; </pre>

### 2.39.6. DashboardBackend###0200-Image

Description:	Defines the parameters for the dashboard backend. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTL" indicates the cache expiration period in minutes for the plugin.
--------------	---

Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	0
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'DashboardBackend'}-&gt;{'0200-Image'} = {   'Block' =&gt; 'ContentLarge',   'Default' =&gt; '1',   'Description' =&gt; 'Some picture description!',   'Group' =&gt; '',   'Height' =&gt; '140',   'Link' =&gt; 'http://otrs.org/',   'LinkTitle' =&gt; 'http://otrs.org/',   'Module' =&gt; 'Kernel::Output::HTML::DashboardImage',   'Title' =&gt; 'A picture',   'URL' =&gt; 'http://www.otrs.com/uploads/pics/ jointhecommunity_02.jpg',   'Width' =&gt; '198' }; </pre>

### 2.39.7. DashboardBackend###0210-MOTD

Description:	Shows the message of the day (MOTD) in the agent dashboard. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	0
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'DashboardBackend'}-&gt;{'0210-MOTD'} = {   'Block' =&gt; 'ContentLarge',   'Default' =&gt; '1',   'Group' =&gt; '',   'Module' =&gt; 'Kernel::Output::HTML::DashboardMOTD',   'Title' =&gt; 'Message of the Day' }; </pre>

### 2.39.8. DashboardBackend###0300-IFrame

Description:	Defines the parameters for the dashboard backend. "Group" is used to restrict access to the plugin (e. g. Group: admin;group1;group2;). "Default" indicates if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTL" indicates the cache expiration period in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	0
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'DashboardBackend'}-&gt;{'0300-IFrame'} = {   'Align' =&gt; 'left',   'Block' =&gt; 'ContentLarge',   'Default' =&gt; '1',   'Description' =&gt; 'Some description!',   'Frameborder' =&gt; '1',   'Group' =&gt; '',   'Height' =&gt; '800',   'Link' =&gt; 'http://otrs.org/',   'LinkTitle' =&gt; 'OTRS.org/', </pre>

	<pre>'Marginheight' =&gt; '5', 'Marginwidth' =&gt; '5', 'Module' =&gt; 'Kernel::Output::HTML::DashboardIFrame', 'Scrolling' =&gt; 'auto', 'Title' =&gt; 'A Website', 'URL' =&gt; 'http://www.otrs.org/', 'Width' =&gt; '1024' };</pre>
--	--

## 2.39.9. AgentCustomerInformationCenter::Backend###0050-CIC-CustomerUserList

Description:	Parameters for the dashboard backend of the customer user list overview of the agent interface . "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Framework
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AgentCustomerInformationCenter::Backend'}-&gt;{'0050-CIC-CustomerUserList'} = {   'Attributes' =&gt; '',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'Description' =&gt; 'All customer users of a CustomerID',   'Group' =&gt; '',   'Limit' =&gt; '10',   'Module' =&gt; 'Kernel::Output::HTML::DashboardCustomerUserList',   'Permission' =&gt; 'ro',   'Title' =&gt; 'Customer Users' };</pre>

## 2.40. Frontend::Agent::LinkObject

### 2.40.1. Frontend::AgentLinkObject::WildcardSearch

Description:	Starts a wildcard search of the active object after the link object mask is started.
Group:	Framework
SubGroup:	Frontend::Agent::LinkObject
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::AgentLinkObject::WildcardSearch'} = '0';</pre>

## 2.41. Frontend::Agent::ModuleMetaHead

### 2.41.1. Frontend::HeaderMetaModule###100-Refresh

Description:	Defines the module to generate html refresh headers of html sites.
--------------	--

Group:	Framework
SubGroup:	Frontend::Agent::ModuleMetaHead
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::HeaderMetaModule'}-&gt;{'100-Refresh'} = {   'Module' =&gt; 'Kernel::Output::HTML::HeaderMetaRefresh' };</pre>

## 2.42. Frontend::Agent::ModuleNotify

### 2.42.1. Frontend::NotifyModule###200-UID-Check

Description:	Defines the module to display a notification in the agent interface, if the system is used by the admin user (normally you shouldn't work as admin).
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NotifyModule'}-&gt;{'200-UID-Check'} = {   'Module' =&gt; 'Kernel::Output::HTML::NotificationUIDCheck' };</pre>

### 2.42.2. Frontend::NotifyModule###300-ShowAgentOnline

Description:	Defines the module that shows all the currently logged in agents in the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NotifyModule'}-&gt;{'300-ShowAgentOnline'} = {   'IdleMinutes' =&gt; '60',   'Module' =&gt; 'Kernel::Output::HTML::NotificationAgentOnline',   'ShowEmail' =&gt; '1' };</pre>

### 2.42.3. Frontend::NotifyModule###400-ShowCustomerOnline

Description:	Defines the module that shows all the currently logged in customers in the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NotifyModule'}-&gt;{'400-ShowCustomerOnline'} = {   'IdleMinutes' =&gt; '60',   'Module' =&gt; 'Kernel::Output::HTML::NotificationCustomerOnline', };</pre>



	<pre>'ShowEmail' =&gt; '1';</pre>
--	-----------------------------------

## 2.42.4. Frontend::NotifyModule###500-OutofOffice-Check

Description:	Defines the module to display a notification in the agent interface, if the agent is logged in while having out-of-office active.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NotifyModule'}-&gt;{'500-OutofOffice-Check'} = {   'Module' =&gt; 'Kernel::Output::HTML::NotificationOutofOfficeCheck' };</pre>

## 2.42.5. Frontend::NotifyModule###900-Generic

Description:	Defines the module that shows a generic notification in the agent interface. Either "Text" - if configured - or the contents of "File" will be displayed.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NotifyModule'}-&gt;{'900-Generic'} = {   'File' =&gt; '&lt;OTRS_CONFIG_Home&gt;/var/notify.txt',   'Link' =&gt; 'http://www.otrs.com',   'Module' =&gt; 'Kernel::Output::HTML::NotificationGeneric',   'Priority' =&gt; 'Warning',   'Text' =&gt; 'The OTRS Website' };</pre>

## 2.43. Frontend::Agent::ModuleRegistration

### 2.43.1. Frontend::Module###Logout

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'Logout'} = {   'Description' =&gt; 'Logout',   'NavBarName' =&gt; '',   'Title' =&gt; '' };</pre>

### 2.43.2. Frontend::Module###AgentDashboard

Description:	Frontend module registration for the agent interface.
Group:	Framework

SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AgentDashboard'} = {   'Description' =&gt; 'Agent Dashboard',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Dashboard.css',       'Core.AllocationList.css',       'thirdparty/fullcalendar-1.6.1/fullcalendar.css',       'thirdparty/d3js/nv.d3.css'     ],     'JavaScript' =&gt; [       'thirdparty/flot-0.8.1/excanvas.js',       'thirdparty/flot-0.8.1/jquery.flot.js',       'thirdparty/fullcalendar-1.6.1/fullcalendar.min.js',       'thirdparty/d3js/d3.v3.min.js',       'thirdparty/d3js/nv.d3.min.js',       'thirdparty/d3js/models/OTRSmultiBarChart.js',       'thirdparty/d3js/models/OTRSstackedAreaChart.js',       'Core.UI.Chart.js',       'Core.UI.AdvancedChart.js',       'Core.UI.DnD.js',       'Core.UI.AllocationList.js',       'Core.Agent.TableFilters.js',       'Core.Agent.Dashboard.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'd',       'Block' =&gt; 'ItemArea',       'Description' =&gt; '',       'Link' =&gt; 'Action=AgentDashboard',       'LinkOption' =&gt; '',       'Name' =&gt; 'Dashboard',       'NavBar' =&gt; 'Dashboard',       'Prio' =&gt; '50',       'Type' =&gt; 'Menu'     }   ],   'NavBarName' =&gt; 'Dashboard',   'Title' =&gt; '' }; </pre>

### 2.43.3. Frontend::Module###AgentCustomerInformationCenter

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AgentCustomerInformationCenter'} = {   'Description' =&gt; 'Customer Information Center',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'thirdparty/flot-0.8.1/excanvas.js',       'thirdparty/flot-0.8.1/jquery.flot.js',       'Core.UI.Chart.js', </pre>

```

'Core.UI.DnD.js',
'Core.UI.AllocationList.js',
'Core.Agent.Dashboard.js',
'Core.Agent.TableFilters.js'
]
},
'NavBar' => [
{
'AccessKey' => '',
'Block' => 'ItemArea',
'Description' => 'Customer Information Center.',
'Link' => 'Action=AgentCustomerInformationCenter',
'LinkOption' => 'onclick="window.setTimeout(function()
{Core.Agent.CustomerInformationCenterSearch.OpenSearchDialog();},
0); return false;"',
'Name' => 'Customer Information Center',
'NavBar' => 'Customers',
'Prio' => '50',
'Type' => ''
},
{
'AccessKey' => 'c',
'Block' => 'ItemArea',
'Description' => 'Customer Information Center.',
'Link' => 'Action=AgentCustomerInformationCenter',
'LinkOption' => '',
'Name' => 'Customers',
'NavBar' => 'Customers',
'Prio' => '60',
'Type' => 'Menu'
}
],
'NavBarName' => 'Customer Information Center',
'Title' => ''
};

```

### 2.43.4. Frontend::Module###AgentCustomerInformationCenterSearch

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentCustomerInformationCenterSearch'} = { 'Description' =&gt; 'Customer Information Center Search', 'Title' =&gt; '' };</code>

### 2.43.5. Frontend::Module###AgentPreferences

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentPreferences'} = { 'Description' =&gt; 'Agent Preferences', 'NavBarName' =&gt; 'Preferences', 'Title' =&gt; '' };</code>

```
};
```

### 2.43.6. Frontend::Module###PictureUpload

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'PictureUpload'} = {   'Description' =&gt; 'Picture upload module',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Picture-Upload' };</pre>

### 2.43.7. Frontend::Module###AgentSpelling

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentSpelling'} = {   'Description' =&gt; 'Spell checker',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; '',   'Title' =&gt; 'Spell Checker' };</pre>

### 2.43.8. Frontend::Module###SpellingInline

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'SpellingInline'} = {   'Description' =&gt; 'Spell checker',   'NavBarName' =&gt; '',   'Title' =&gt; 'Spell Checker' };</pre>

### 2.43.9. Frontend::Module###AgentBook

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0

Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentBook'} = {   'Description' =&gt; 'Address book of CustomerUser sources',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.CustomerSearch.js',       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; '',   'Title' =&gt; 'Address Book' };</pre>
-----------------	---

### 2.43.10. Frontend::Module###AgentLinkObject

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentLinkObject'} = {   'Description' =&gt; 'Link Object',   'NavBarName' =&gt; '',   'Title' =&gt; 'Link Object' };</pre>

### 2.43.11. Frontend::Module###AgentInfo

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentInfo'} = {   'Description' =&gt; 'Generic Info module',   'NavBarName' =&gt; '',   'Title' =&gt; 'Info' };</pre>

### 2.43.12. Frontend::Module###AgentSearch

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentSearch'} = {   'Description' =&gt; 'Global Search Module',   'NavBarName' =&gt; '',   'Title' =&gt; 'Search' };</pre>

### 2.43.13. CustomerFrontend::Module###SpellingInline

Description:	Frontend module registration for the customer interface.
Group:	Framework

SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'SpellingInline'} = {   'Description' =&gt; 'Spell checker',   'NavBarName' =&gt; '',   'Title' =&gt; 'Spell Checker' };</pre>

## 2.43.14. Frontend::Module###AgentHTMLReference

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentHTMLReference'} = {   'Description' =&gt; 'HTML Reference',   'Group' =&gt; [     'users'   ],   'GroupRo' =&gt; [     'users'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.HTMLReference.css'     ]   },   'NavBarName' =&gt; '',   'Title' =&gt; 'HTML Reference' };</pre>

## 2.43.15. Frontend::Module###AgentStats

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentStats'} = {   'Description' =&gt; 'Stats',   'Group' =&gt; [     'stats'   ],   'GroupRo' =&gt; [     'stats'   ],   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.Stats.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; '',       'Block' =&gt; 'ItemArea',       'Description' =&gt; '',       'Link' =&gt; 'Action=AgentStats;Subaction=0overview',       'LinkOption' =&gt; ''     }   ] };</pre>

```

    'Name' => 'Statistics',
    'NavBar' => 'Stats',
    'Prio' => '8500',
    'Type' => 'Menu'
  },
  {
    'AccessKey' => '',
    'Block' => '',
    'Description' => 'Overview',
    'GroupRo' => [
      'stats'
    ],
    'Link' => 'Action=AgentStats;Subaction=Overview',
    'LinkOption' => '',
    'Name' => 'Overview',
    'NavBar' => 'Stats',
    'Prio' => '100',
    'Type' => ''
  },
  {
    'AccessKey' => '',
    'Block' => '',
    'Description' => 'New',
    'Group' => [
      'stats'
    ],
    'Link' => 'Action=AgentStats;Subaction=Add',
    'LinkOption' => '',
    'Name' => 'New',
    'NavBar' => 'Stats',
    'Prio' => '200',
    'Type' => ''
  },
  {
    'AccessKey' => '',
    'Block' => '',
    'Description' => 'Import',
    'Group' => [
      'stats'
    ],
    'Link' => 'Action=AgentStats;Subaction=Import',
    'LinkOption' => '',
    'Name' => 'Import',
    'NavBar' => 'Stats',
    'Prio' => '300',
    'Type' => ''
  }
],
'NavBarName' => 'Stats',
'Title' => 'Stats'
};

```

## 2.44. Frontend::Agent::NavBarModule

### 2.44.1. Frontend::NavBarModule###6-CustomerCompany

Description:	Frontend module registration (disable company link if no company feature is used).
Group:	Framework
SubGroup:	Frontend::Agent::NavBarModule
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::NavBarModule'}-&gt;{'6-CustomerCompany'} = { 'Module' =&gt; 'Kernel::Output::HTML::NavBarCustomerCompany'</code>

```
};
```

## 2.45. Frontend::Agent::Preferences

### 2.45.1. PreferencesTableValue

Description:	Defines the name of the column to store the data in the preferences table.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PreferencesTableValue'} = 'preferences_value';</code>

### 2.45.2. PreferencesTableUserID

Description:	Defines the name of the column to store the user identifier in the preferences table.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PreferencesTableUserID'} = 'user_id';</code>

### 2.45.3. PreferencesView

Description:	Sets the display order of the different items in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PreferencesView'} = [          'User Profile',          'Email Settings',          'Other Settings'      ];</code>

### 2.45.4. PreferencesGroups###Password

Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Password'} = {          'Active' =&gt; '1',          'Area' =&gt; 'Agent',          'Column' =&gt; 'User Profile',</code>



	<pre>'Label' =&gt; 'Change password', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesPassword', 'PasswordMaxLoginFailed' =&gt; '0', 'PasswordMin2Characters' =&gt; '0', 'PasswordMin2Lower2UpperCharacters' =&gt; '0', 'PasswordMinSize' =&gt; '0', 'PasswordNeedDigit' =&gt; '0', 'PasswordRegExp' =&gt; '', 'Prio' =&gt; '0500' };</pre>
--	--

## 2.45.5. PreferencesGroups###SpellDict

Description:	Defines the config parameters of this item, to be shown in the preferences view. Take care to maintain the dictionaries installed in the system in the data section.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'SpellDict'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Data' =&gt; {     'deutsch' =&gt; 'Deutsch',     'english' =&gt; 'English'   },   'DataSelected' =&gt; 'english',   'Key' =&gt; 'Default spelling dictionary',   'Label' =&gt; 'Spelling Dictionary',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserSpellDict',   'Prio' =&gt; '2000' };</pre>

## 2.45.6. PreferencesGroups###Comment

Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Comment'} = {   'Active' =&gt; '0',   'Block' =&gt; 'Input',   'Column' =&gt; 'Other Settings',   'Data' =&gt; '\$Env{"UserComment"}',   'Key' =&gt; 'Comment',   'Label' =&gt; 'Comment',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserComment',   'Prio' =&gt; '6000' };</pre>

## 2.45.7. PreferencesGroups###Language

Description:	Defines the config parameters of this item, to be shown in the preferences view.
--------------	--

Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Language'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Key' =&gt; 'Frontend language',   'Label' =&gt; 'Language',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesLanguage',   'PrefKey' =&gt; 'UserLanguage',   'Prio' =&gt; '1000' };</pre>

## 2.45.8. PreferencesGroups###Skin

Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Skin'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Key' =&gt; 'Wear this frontend skin',   'Label' =&gt; 'Skin',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesSkin',   'PrefKey' =&gt; 'UserSkin',   'Prio' =&gt; '2000' };</pre>

## 2.45.9. PreferencesGroups###Theme

Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'Theme'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Key' =&gt; 'Frontend theme',   'Label' =&gt; 'Theme',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesTheme',   'PrefKey' =&gt; 'UserTheme',   'Prio' =&gt; '3000' };</pre>

## 2.45.10. PreferencesGroups###OutOfOffice

Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework

SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'OutOfOffice'} = {   'Active' =&gt; '1',   'Block' =&gt; 'OutOfOffice',   'Column' =&gt; 'User Profile',   'Key' =&gt; '',   'Label' =&gt; 'Out Of Office Time',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesOutOfOffice',   'PrefKey' =&gt; 'UserOutOfOffice',   'Prio' =&gt; '4000' };</pre>

## 2.45.11. PreferencesGroups###TimeZone

Description:	Defines the config parameters of this item, to be shown in the preferences view.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'TimeZone'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Key' =&gt; 'Time Zone',   'Label' =&gt; 'Time Zone',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesTimeZone',   'PrefKey' =&gt; 'UserTimeZone',   'Prio' =&gt; '5000' };</pre>

## 2.45.12. PreferencesGroups###CSVSeparator

Description:	Gives end users the possibility to override the separator character for CSV files, defined in the translation files.
Group:	Framework
SubGroup:	Frontend::Agent::Preferences
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'CSVSeparator'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Other Settings',   'Data' =&gt; {     ' ' =&gt; ' ',     ',' =&gt; ',',     ';' =&gt; ';',     '\\t' =&gt; 'tab',     ' ' =&gt; ' '   },   'DataSelected' =&gt; '0',   'Desc' =&gt; 'Select the separator character used in CSV files (stats and searches). If you don\\t select a separator here, the default separator for your language will be used.',   'Key' =&gt; 'CSV Separator',   'Label' =&gt; 'CSV Separator',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserCSVSeparator',   'Prio' =&gt; '4000' };</pre>

```
};
```

## 2.46. Frontend::Agent::SearchRouter

### 2.46.1. Frontend::SearchDefault

Description:	Search backend default router.
Group:	Framework
SubGroup:	Frontend::Agent::SearchRouter
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::SearchDefault'} = 'Action=AgentTicketSearch;Subaction=AJAX';</code>

## 2.47. Frontend::Agent::Stats

### 2.47.1. Stats::SearchPageShown

Description:	Defines the default maximum number of search results shown on the overview page.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::SearchPageShown'} = '20';</code>

### 2.47.2. Stats::DefaultSelectedDynamicObject

Description:	Defines the default selection at the drop down menu for dynamic objects (Form: Common Specification).
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::DefaultSelectedDynamicObject'} = 'Ticket';</code>

### 2.47.3. Stats::DefaultSelectedPermissions

Description:	Defines the default selection at the drop down menu for permissions (Form: Common Specification).
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::DefaultSelectedPermissions'} = [ 'stats' ];</code>

## 2.47.4. Stats::DefaultSelectedFormat

Description:	Defines the default selection at the drop down menu for stats format (Form: Common Specification). Please insert the format key (see Stats::Format).
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Stats::DefaultSelectedFormat'} = [   'Print',   'CSV' ];</pre>

## 2.47.5. Stats::SearchLimit

Description:	Defines the search limit for the stats.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Stats::SearchLimit'} = '500';</pre>

## 2.47.6. Stats::Format

Description:	Defines all the possible stats output formats.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Stats::Format'} = {   'CSV' =&gt; 'CSV',   'GD::Graph::area' =&gt; 'graph-area',   'GD::Graph::bars' =&gt; 'graph-bars',   'GD::Graph::hbars' =&gt; 'graph-hbars',   'GD::Graph::lines' =&gt; 'graph-lines',   'GD::Graph::linespoints' =&gt; 'graph-lines-points',   'GD::Graph::pie' =&gt; 'graph-pie',   'GD::Graph::points' =&gt; 'graph-points',   'Print' =&gt; 'Print' };</pre>

## 2.47.7. Stats::GraphSize

Description:	Sets the size of the statistic graph.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Stats::GraphSize'} = {   '1200x800' =&gt; '1200x800', };</pre>

```
'1600x1200' => '1600x1200',
'800x600' => '800x600'
};
```

## 2.47.8. Stats::TimeType

Description:	Sets the time type which should be shown.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Stats::TimeType'} = 'Extended';</code>

## 2.47.9. Stats::ExchangeAxis

Description:	Allows agents to exchange the axis of a stat if they generate one.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Stats::ExchangeAxis'} = '0';</code>

## 2.47.10. Stats::UseAgentElementInStats

Description:	Allows agents to generate individual-related stats.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Stats::UseAgentElementInStats'} = '0';</code>

## 2.47.11. Stats::UseInvalidAgentInStats

Description:	Allows invalid agents to generate individual-related stats.
Group:	Framework
SubGroup:	Frontend::Agent::Stats
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Stats::UseInvalidAgentInStats'} = '1';</code>

## 2.47.12. Stats::CustomerIDAsMultiSelect

Description:	Shows all the customer identifiers in a multi-select field (not useful if you have a lot of customer identifiers).
Group:	Framework
SubGroup:	Frontend::Agent::Stats

Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Stats::CustomerIDAsMultiSelect'} = '1';</code>

## 2.48. Frontend::Customer

### 2.48.1. CustomerHeadline

Description:	The headline shown in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerHeadline'} = 'Example Company Support';</code>

### 2.48.2. CustomerLogo

Description:	The logo shown in the header of the customer interface. The URL to the image can be a relative URL to the skin image directory, or a full URL to a remote web server.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerLogo'} = {        'StyleHeight' =&gt; '50px',        'StyleRight' =&gt; '25px',        'StyleTop' =&gt; '2px',        'StyleWidth' =&gt; '135px',        'URL' =&gt; 'skins/Customer/default/img/logo.png'      };</code>

### 2.48.3. CustomerPanelUserID

Description:	Defines the user identifier for the customer panel.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelUserID'} = '1';</code>

### 2.48.4. CustomerGroupSupport

Description:	Activates support for customer groups.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'CustomerGroupSupport'} = '0';</code>
-----------------	---

## 2.48.5. CustomerGroupAlwaysGroups

Description:	Defines the groups every customer user will be in (if CustomerGroupSupport is enabled and you don't want to manage every user for these groups).
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerGroupAlwaysGroups'} = [ 'users' ];</code>

## 2.48.6. CustomerPanelLoginURL

Description:	Defines an alternate login URL for the customer panel..
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelLoginURL'} = 'http://host.example.com/cgi-bin/login.pl';</code>

## 2.48.7. CustomerPanelLogoutURL

Description:	Defines an alternate logout URL for the customer panel.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelLogoutURL'} = 'http://host.example.com/cgi-bin/login.pl';</code>

## 2.48.8. Frontend::CustomerUser::Item###1-Google-Maps

Description:	Defines a customer item, which generates a google maps icon at the end of a customer info block.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'1-GoogleMaps'} = { 'Attributes' =&gt; 'UserStreet;UserCity;UserCountry;', 'CSS' =&gt; 'Core.Agent.CustomerUser.GoogleMaps.css', 'CSSClass' =&gt; 'GoogleMaps', 'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGeneric',</code>



	<pre>'Required' =&gt; 'UserStreet;UserCity;', 'Target' =&gt; '_blank', 'Text' =&gt; 'Location', 'URL' =&gt; 'http://maps.google.com/maps?z=7&amp;q=' };</pre>
--	---

## 2.48.9. Frontend::CustomerUser::Item###2-Google

Description:	Defines a customer item, which generates a google icon at the end of a customer info block.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'2-Google'} = {   'Attributes' =&gt; 'UserFirstname;UserLastname;',   'CSS' =&gt; 'Core.Agent.CustomerUser.Google.css',   'CSSClass' =&gt; 'Google',   'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGeneric',   'Required' =&gt; 'UserFirstname;UserLastname;',   'Target' =&gt; '_blank',   'Text' =&gt; 'Google',   'URL' =&gt; 'http://google.com/search?q=' };</pre>

## 2.48.10. Frontend::CustomerUser::Item###2-LinkedIn

Description:	Defines a customer item, which generates a LinkedIn icon at the end of a customer info block.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'2-LinkedIn'} = {   'Attributes' =&gt; 'UserFirstname;UserLastname;',   'CSS' =&gt; 'Core.Agent.CustomerUser.Linkedin.css',   'CSSClass' =&gt; 'LinkedIn',   'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGeneric',   'Required' =&gt; 'UserFirstname;UserLastname;',   'Target' =&gt; '_blank',   'Text' =&gt; 'LinkedIn',   'URL' =&gt; 'http://www.linkedin.com/commonSearch? type=people&amp;keywords=' };</pre>

## 2.48.11. Frontend::CustomerUser::Item###3-XING

Description:	Defines a customer item, which generates a XING icon at the end of a customer info block.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'3-XING'} = {   'Attributes' =&gt; 'UserFirstname;UserLastname;',</pre>

```
'CSS' => 'Core.Agent.CustomerUser.Xing.css',
'CSSClass' => 'Xing',
'Module' => 'Kernel::Output::HTML::CustomerUserGeneric',
'Required' => 'UserFirstname;UserLastname;',
'Target' => '_blank',
'Text' => 'XING',
'URL' => 'https://www.xing.com/app/search?op=search;keywords='
};
```

## 2.48.12. CustomerPanelPreApplicationModule###CustomerAccept

Description:	This module and its PreRun() function will be executed, if defined, for every request. This module is useful to check some user options or to display news about new applications.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelPreApplicationModule'}-&gt;{'CustomerAccept'} = 'Kernel::Modules::CustomerAccept';</code>

## 2.48.13. CustomerPanel::InfoKey

Description:	Defines the key to check with CustomerAccept. If this user preferences key is true, then the message is accepted by the system.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerPanel::InfoKey'} = 'CustomerAccept1';</code>

## 2.48.14. CustomerPanel::InfoFile

Description:	Defines the path of the shown info file, that is located under Kernel/Output/HTML/Standard/CustomerAccept.dtl.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerPanel::InfoFile'} = 'CustomerAccept';</code>

## 2.48.15. CustomerPanelLostPassword

Description:	Activates lost password feature for customers.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'CustomerPanelLostPassword'} = '1';</code>
-----------------	--

## 2.48.16. CustomerPanelCreateAccount

Description:	Enables customers to create their own accounts.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelCreateAccount'} = '1';</code>

## 2.48.17. CustomerPanelSubjectLostPasswordToken

Description:	Defines the subject for notification mails sent to customers, with token about new requested password.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelSubjectLostPasswordToken'} = 'New OTRS password request';</code>

## 2.48.18. CustomerPanelBodyLostPasswordToken

Description:	Defines the body text for notification mails sent to customers, with token about new requested password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'CustomerPanelBodyLostPasswordToken'} = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  You or someone impersonating you has requested to change your OTRS password.  If you want to do this, click on this link. You will receive another email containing the password.  &lt;OTRS_CONFIG_HttpType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;customer.pl? Action=CustomerLostPassword;Token=&lt;OTRS_TOKEN&gt;  If you did not request a new password, please ignore this email. '; </pre>

## 2.48.19. CustomerPanelSubjectLostPassword

Description:	Defines the subject for notification mails sent to customers, about new password.
Group:	Framework

SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelSubjectLostPassword'} = 'New OTRS password';</code>

## 2.48.20. CustomerPanelBodyLostPassword

Description:	Defines the body text for notification mails sent to customers, about new password (after using this link the new password will be sent).
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'CustomerPanelBodyLostPassword'} = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  New password: &lt;OTRS_NEWPW&gt;  &lt;OTRS_CONFIG_ContentType&gt;://&lt;OTRS_CONFIG_FQDN&gt;/ &lt;OTRS_CONFIG_ScriptAlias&gt;customer.pl '; </pre>

## 2.48.21. CustomerPanelSubjectNewAccount

Description:	Defines the subject for notification mails sent to customers, about new account.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelSubjectNewAccount'} = 'New OTRS Account!';</code>

## 2.48.22. CustomerPanelBodyNewAccount

Description:	Defines the body text for notification mails sent to customers, about new account.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'CustomerPanelBodyNewAccount'} = 'Hi &lt;OTRS_USERFIRSTNAME&gt;,  You or someone impersonating you has created a new OTRS account for you.  Full name: &lt;OTRS_USERFIRSTNAME&gt; &lt;OTRS_USERLASTNAME&gt; User name: &lt;OTRS_USERLOGIN&gt; Password : &lt;OTRS_USERPASSWORD&gt;  You can log in via the following URL. We encourage you to change your password via the Preferences button after logging in. </pre>

```
<OTRS_CONFIG_ContentType>://<OTRS_CONFIG_FQDN>/
<OTRS_CONFIG_ScriptAlias>customer.pl
';
```

## 2.48.23. Loader::Customer::Skin###000-default

Description:	Default skin for OTRS 3.0 interface.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Loader::Customer::Skin'}-&gt;{'000-default'} = {   'Description' =&gt; 'This is the default orange - black skin for OTRS 3.0.',   'HomePage' =&gt; 'www.otrs.org',   'InternalName' =&gt; 'default',   'VisibleName' =&gt; 'Default' };</pre>

## 2.48.24. Loader::Customer::SelectedSkin

Description:	The customer skin's InternalName which should be used in the customer interface. Please check the available skins in Frontend::Customer::Skins.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Loader::Customer::SelectedSkin'} = 'default';</pre>

## 2.48.25. AutoComplete::Customer###Default

Description:	Defines the config options for the autocompletion feature.
Group:	Framework
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AutoComplete::Customer'}-&gt;{'Default'} = {   'AutoCompleteActive' =&gt; '1',   'ButtonText' =&gt; 'Search',   'MaxResultsDisplayed' =&gt; '20',   'MinQueryLength' =&gt; '2',   'QueryDelay' =&gt; '100' };</pre>

## 2.49. Frontend::Customer::Auth

### 2.49.1. Customer::AuthModule

Description:	Defines the module to authenticate customers.
Group:	Framework

SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule'} = 'Kernel::System::CustomerAuth::DB';</code>

## 2.49.2. Customer::AuthModule::DB::CryptType

Description:	If "DB" was selected for Customer::AuthModule, the crypt type of passwords must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::CryptType'} = 'sha2';</code>

## 2.49.3. Customer::AuthModule::DB::Table

Description:	If "DB" was selected for Customer::AuthModule, the name of the table where your customer data should be stored must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::Table'} = 'customer_user';</code>

## 2.49.4. Customer::AuthModule::DB::CustomerKey

Description:	If "DB" was selected for Customer::AuthModule, the name of the column for the CustomerKey in the customer table must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::CustomerKey'} = 'login';</code>

## 2.49.5. Customer::AuthModule::DB::CustomerPassword

Description:	If "DB" was selected for Customer::AuthModule, the column name for the CustomerPassword in the customer table must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::CustomerPassword'} = 'pw';</code>

## 2.49.6. Customer::AuthModule::DB::DSN

Description:	If "DB" was selected for Customer::AuthModule, the DSN for the connection to the customer table must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::DSN'} = 'DBI:mysql:database=customerdb;host=customerdbhost';</code>

## 2.49.7. Customer::AuthModule::DB::User

Description:	If "DB" was selected for Customer::AuthModule, a username to connect to the customer table can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::User'} = 'some_user';</code>

## 2.49.8. Customer::AuthModule::DB::Password

Description:	If "DB" was selected for Customer::AuthModule, a password to connect to the customer table can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::Password'} = 'some_password';</code>

## 2.49.9. Customer::AuthModule::DB::Type

Description:	If "DB" was selected for Customer::AuthModule, a database driver (normally autodetection is used) can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::DB::Type'} = 'mysql';</code>

## 2.49.10.

### Customer::AuthModule::HTTPBasicAuth::Replace

Description:	If "HTTPBasicAuth" was selected for Customer::AuthModule, you can specify to strip leading parts of user names (e. g. for domains like example_domain\user to user).
--------------	--

Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::HTTPBasicAuth::Replace'} = 'example_domain\\\\';</code>

## 2.49.11.

### Customer::AuthModule::HTTPBasicAuth::ReplaceRegExp

Description:	If "HTTPBasicAuth" was selected for Customer::AuthModule, you can specify (by using a RegExp) to strip parts of REMOTE_USER (e. g. for to remove trailing domains). RegExp-Note, \$1 will be the new Login.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::HTTPBasicAuth::ReplaceRegExp'} = '^(.+?)@.+?';</code>

## 2.49.12. Customer::AuthModule::LDAP::Host

Description:	If "LDAP" was selected for Customer::AuthModule, the LDAP host can be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::Host'} = 'ldap.example.com';</code>

## 2.49.13. Customer::AuthModule::LDAP::BaseDN

Description:	If "LDAP" was selected for Customer::AuthModule, the BaseDN must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::BaseDN'} = 'dc=example,dc=com';</code>

## 2.49.14. Customer::AuthModule::LDAP::UID

Description:	If "LDAP" was selected for Customer::AuthModule, the user identifier must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth



Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::UID'} = 'uid';</code>

## 2.49.15. Customer::AuthModule::LDAP::GroupDN

Description:	If "LDAP" was selected for Customer::Authmodule, you can check if the user is allowed to authenticate because he is in a posixGroup, e.g. user needs to be in a group xyz to use OTRS. Specify the group, who may access the system.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::GroupDN'} = 'cn=otrsallow,ou=posixGroups,dc=example,dc=com';</code>

## 2.49.16. Customer::AuthModule::LDAP::AccessAttr

Description:	If "LDAP" was selected for Customer::AuthModule, you can specify access attributes here.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::AccessAttr'} = 'memberUid';</code>

## 2.49.17. Customer::AuthModule::LDAP::UserAttr

Description:	If "LDAP" was selected for Customer::AuthModule, user attributes can be specified. For LDAP posixGroups use UID, for non LDAP posixGroups use full user DN.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::UserAttr'} = 'UID';</code>

## 2.49.18. Customer::AuthModule::LDAP::SearchUserDN

Description:	If "LDAP" was selected for Customer::AuthModule and your users have only anonymous access to the LDAP tree, but you want to search through the data, you can do this with a user who has access to the LDAP directory. Specify the username for this special user here.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::SearchUserDN'} = 'cn=binduser,ou=users,dc=example,dc=com';</code>

## 2.49.19. Customer::AuthModule::LDAP::SearchUserPw

Description:	If "LDAP" was selected for Customer::AuthModule and your users have only anonymous access to the LDAP tree, but you want to search through the data, you can do this with a user who has access to the LDAP directory. Specify the password for this special user here.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::SearchUserPw'} = 'some_password';</code>

## 2.49.20. Customer::AuthModule::LDAP::AlwaysFilter

Description:	If "LDAP" was selected, you can add a filter to each LDAP query, e.g. (mail=*), (objectclass=user) or (!objectclass=computer).
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::AlwaysFilter'} = '(!objectclass=computer)';</code>

## 2.49.21. Customer::AuthModule::LDAP::UserSuffix

Description:	If "LDAP" was selected for Customer::AuthModule and if you want to add a suffix to every customer login name, specify it here, e. g. you just want to write the username user but in your LDAP directory exists user@domain.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::LDAP::UserSuffix'} = '@domain.com';</code>

## 2.49.22. Customer::AuthModule::LDAP::Params

Description:	If "LDAP" was selected for Customer::AuthModule and special paramaters are needed for the Net::LDAP perl module, you can specify them here. See "perldoc Net::LDAP" for more information about the parameters.
Group:	Framework
SubGroup:	Frontend::Customer::Auth

Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Customer::AuthModule::LDAP::Params'} = {   'async' =&gt; '0',   'port' =&gt; '389',   'timeout' =&gt; '120',   'version' =&gt; '3' };</pre>

### 2.49.23. Customer::AuthModule::LDAP::Die

Description:	If "LDAP" was selected for Customer::AuthModule, you can specify if the applications will stop if e. g. a connection to a server can't be established due to network problems.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Customer::AuthModule::LDAP::Die'} = '1';</pre>

### 2.49.24. Customer::AuthModule::Radius::Host

Description:	If "Radius" was selected for Customer::AuthModule, the radius host must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Customer::AuthModule::Radius::Host'} = 'radiushost';</pre>

### 2.49.25. Customer::AuthModule::Radius::Password

Description:	If "Radius" was selected for Customer::AuthModule, the password to authenticate to the radius host must be specified.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Customer::AuthModule::Radius::Password'} =   'radiussecret';</pre>

### 2.49.26. Customer::AuthModule::Radius::Die

Description:	If "Radius" was selected for Customer::AuthModule, you can specify if the applications will stop if e. g. a connection to a server can't be established due to network problems.
Group:	Framework
SubGroup:	Frontend::Customer::Auth
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Customer::AuthModule::Radius::Die'} = '1';</code>

## 2.50. Frontend::Customer::ModuleMetaHead

### 2.50.1. CustomerFrontend::HeaderMetaModule###1-Refresh

Description:	Defines the module to generate html refresh headers of html sites, in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleMetaHead
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerFrontend::HeaderMetaModule'}-&gt;{'1-Refresh'} = { 'Module' =&gt; 'Kernel::Output::HTML::HeaderMetaRefresh' };</code>

## 2.51. Frontend::Customer::ModuleNotify

### 2.51.1. CustomerFrontend::NotifyModule###1-ShowAgentOnline

Description:	Defines the module that shows the currently logged in agents in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerFrontend::NotifyModule'}-&gt;{'1-ShowAgentOnline'} = { 'IdleMinutes' =&gt; '60', 'Module' =&gt; 'Kernel::Output::HTML::NotificationAgentOnline', 'ShowEmail' =&gt; '1' };</code>

### 2.51.2. CustomerFrontend::NotifyModule###1-ShowCustomerOnline

Description:	Defines the module that shows the currently logged in customers in the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerFrontend::NotifyModule'}-&gt;{'1-ShowCustomerOnline'} = { 'Module' =&gt; 'Kernel::Output::HTML::NotificationCustomerOnline', 'ShowEmail' =&gt; '1' };</code>

## 2.52. Frontend::Customer::ModuleRegistration

### 2.52.1. CustomerFrontend::Module###Logout

Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'Logout'} = {   'Description' =&gt; 'Logout of customer panel',   'NavBarName' =&gt; '',   'Title' =&gt; '' };</pre>

### 2.52.2. CustomerFrontend::Module###CustomerPreferences

Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerPreferences'} = {   'Description' =&gt; 'Customer preferences',   'NavBarName' =&gt; '',   'Title' =&gt; 'Preferences' };</pre>

### 2.52.3. CustomerFrontend::Module###CustomerAccept

Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerAccept'} = {   'Description' =&gt; 'To accept login information, such as an EULA or   license.',   'NavBarName' =&gt; '',   'Title' =&gt; 'Info' };</pre>

### 2.52.4. CustomerFrontend::Module###PictureUpload

Description:	Frontend module registration for the customer interface.
Group:	Framework
SubGroup:	Frontend::Customer::ModuleRegistration

Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'PictureUpload'} = {   'Description' =&gt; 'Picture upload module',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Picture-Upload' };</pre>

## 2.53. Frontend::Customer::Preferences

### 2.53.1. PreferencesTable

Description:	Defines the name of the table, where the customer preferences are stored.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PreferencesTable'} = 'user_preferences';</pre>

### 2.53.2. PreferencesTableKey

Description:	Defines the column to store the keys for the preferences table.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PreferencesTableKey'} = 'preferences_key';</pre>

### 2.53.3. CustomerPreferences

Description:	Defines the parameters for the customer preferences table.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'CustomerPreferences'} = {   'Module' =&gt; 'Kernel::System::CustomerUser::Preferences::DB',   'Params' =&gt; {     'Table' =&gt; 'customer_preferences',     'TableKey' =&gt; 'preferences_key',     'TableUserID' =&gt; 'user_id',     'TableValue' =&gt; 'preferences_value'   } };</pre>

### 2.53.4. CustomerPreferencesView

Description:	Sets the order of the different items in the customer preferences view.
--------------	---

Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'CustomerPreferencesView'} = [   'User Profile',   'Other Settings' ];</pre>

### 2.53.5. CustomerPreferencesGroups###Password

Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'Password'} = {   'Active' =&gt; '1',   'Area' =&gt; 'Customer',   'Column' =&gt; 'Other Settings',   'Label' =&gt; 'Change password',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesPassword',   'PasswordMin2Characters' =&gt; '0',   'PasswordMin2Lower2UpperCharacters' =&gt; '0',   'PasswordMinSize' =&gt; '0',   'PasswordNeedDigit' =&gt; '0',   'PasswordRegExp' =&gt; '',   'Prio' =&gt; '1000' };</pre>

### 2.53.6. CustomerPreferencesGroups###Language

Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'Language'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Key' =&gt; 'Language',   'Label' =&gt; 'Interface language',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesLanguage',   'PrefKey' =&gt; 'UserLanguage',   'Prio' =&gt; '2000' };</pre>

### 2.53.7. CustomerPreferencesGroups###Theme

Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework

SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'Theme'} = {   'Active' =&gt; '0',   'Column' =&gt; 'User Profile',   'Key' =&gt; 'Select your frontend Theme.',   'Label' =&gt; 'Theme',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesTheme',   'PrefKey' =&gt; 'UserTheme',   'Prio' =&gt; '1000' }; </pre>

### 2.53.8. CustomerPreferencesGroups###TimeZone

Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'TimeZone'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Key' =&gt; 'Time Zone',   'Label' =&gt; 'Time Zone',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesTimeZone',   'PrefKey' =&gt; 'UserTimeZone',   'Prio' =&gt; '5000' }; </pre>

### 2.53.9. CustomerPreferencesGroups###PGP

Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'PGP'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Other Settings',   'Key' =&gt; 'PGP Key Upload',   'Label' =&gt; 'PGP Key',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesPGP',   'PrefKey' =&gt; 'UserPGPKey',   'Prio' =&gt; '10000' }; </pre>

### 2.53.10. CustomerPreferencesGroups###SMIME

Description:	Defines all the parameters for this item in the customer preferences.
Group:	Framework
SubGroup:	Frontend::Customer::Preferences



Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'SMIME'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Other Settings',   'Key' =&gt; 'S/MIME Certificate Upload',   'Label' =&gt; 'S/MIME Certificate',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesSMIME',   'PrefKey' =&gt; 'UserSMIMEKey',   'Prio' =&gt; '11000' };</pre>

## 2.54. Frontend::Public

### 2.54.1. PublicFrontend::CommonParam###Action

Description:	Defines the default value for the action parameter for the public frontend. The action parameter is used in the scripts of the system.
Group:	Framework
SubGroup:	Frontend::Public
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PublicFrontend::CommonParam'}-&gt;{'Action'} =   'PublicDefault';</pre>

## 2.55. Frontend::Public::ModuleRegistration

### 2.55.1. PublicFrontend::Module###PublicDefault

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Public::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PublicFrontend::Module'}-&gt;{'PublicDefault'} = {   'Description' =&gt; 'PublicDefault',   'NavBarName' =&gt; '',   'Title' =&gt; 'PublicDefault' };</pre>

### 2.55.2. PublicFrontend::Module###PublicRepository

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Public::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PublicFrontend::Module'}-&gt;{'PublicRepository'} = {   'Description' =&gt; 'PublicRepository',   'NavBarName' =&gt; '',   'Title' =&gt; 'PublicRepository' };</pre>

### 2.55.3.

## PublicFrontend::Module###PublicSupportDataCollector

Description:	Frontend module registration for the agent interface.
Group:	Framework
SubGroup:	Frontend::Public::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PublicFrontend::Module'}-&gt;{'PublicSupportDataCollector'} = {   'Description' =&gt; 'PublicSupportDataCollector',   'NavBarName' =&gt; '',   'Title' =&gt; 'PublicSupportDataCollector' };</pre>

## 3. GenericInterface

### 3.1. Core::CustomerCompany

#### 3.1.1. CustomerCompany::EventModulePost###1000-GenericInterface

Description:	Performs the configured action for each event (as an Invoker) for each configured Webservice.
Group:	GenericInterface
SubGroup:	Core::CustomerCompany
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerCompany::EventModulePost'}-&gt;{'1000- GenericInterface'} = {   'Event' =&gt; '',   'Module' =&gt; 'Kernel::GenericInterface::Event::Handler',   'Transaction' =&gt; '1' };</pre>

### 3.2. Core::CustomerUser

#### 3.2.1. CustomerUser::EventModulePost###1000-GenericInterface

Description:	Performs the configured action for each event (as an Invoker) for each configured Webservice.
Group:	GenericInterface
SubGroup:	Core::CustomerUser
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerUser::EventModulePost'}-&gt;{'1000-GenericInterface'} = {   'Event' =&gt; '',</pre>

```
'Module' => 'Kernel::GenericInterface::Event::Handler',
'Transaction' => '1'
};
```

## 3.3. Core::Package

### 3.3.1. Package::EventModulePost###1000-GenericInterface

Description:	Performs the configured action for each event (as an Invoker) for each configured Webservice.
Group:	GenericInterface
SubGroup:	Core::Package
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Package::EventModulePost'}-&gt;{'1000-GenericInterface'} = {   'Event' =&gt; '',   'Module' =&gt; 'Kernel::GenericInterface::Event::Handler',   'Transaction' =&gt; '1' };</pre>

## 3.4. Core::Ticket

### 3.4.1. Ticket::EventModulePost###1000-GenericInterface

Description:	Performs the configured action for each event (as an Invoker) for each configured Webservice.
Group:	GenericInterface
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'1000-GenericInterface'} = {   'Event' =&gt; '',   'Module' =&gt; 'Kernel::GenericInterface::Event::Handler',   'Transaction' =&gt; '1' };</pre>

## 3.5. Frontend::Admin::ModuleRegistration

### 3.5.1. Frontend::Module###AdminGenericInterfaceDebugger

Description:	Frontend module registration for the agent interface.
Group:	GenericInterface
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminGenericInterfaceDebugger'} = {</pre>

```
'Description' => 'Admin',
'Group' => [
  'admin'
],
'Loader' => {
  'CSS' => [
    'Core.Agent.Admin.GenericInterface.css'
  ],
  'CSS_IE7' => 'Core.Agent.Admin.GenericInterface.IE7.css',
  'JavaScript' => [
    'Core.Agent.Admin.GenericInterfaceDebugger.js'
  ]
},
'Title' => 'GenericInterface Debugger GUI'
};
```

### 3.5.2. Frontend::Module###AdminGenericInterfaceWebservice

Description:	Frontend module registration for the agent interface.
Group:	GenericInterface
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminGenericInterfaceWebservice'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceWebservice.js'     ]   },   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Create and manage web services.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Web Services',     'Prio' =&gt; '1000'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'GenericInterface Web Service GUI' };</pre>

### 3.5.3. Frontend::Module###AdminGenericInterfaceTransportHTTPSOPA

Description:	Frontend module registration for the agent interface.
Group:	GenericInterface
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminGenericInterfaceTransportHTTPSOPA'} = {   'Description' =&gt; 'Admin',</pre>

	<pre>'Group' =&gt; [   'admin' ], 'Loader' =&gt; {   'CSS' =&gt; [     'Core.Agent.Admin.GenericInterface.css'   ] }, 'Title' =&gt; 'GenericInterface TransporthTTPSOAP GUI' };</pre>
--	---

### 3.5.4. Frontend::Module###AdminGenericInterfaceWebserviceHistory

Description:	Frontend module registration for the agent interface.
Group:	GenericInterface
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AdminGenericInterfaceWebserviceHistory'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceWebserviceHistory.js'     ]   },   'Title' =&gt; 'GenericInterface Webservice History GUI' };</pre>

### 3.5.5. Frontend::Module###AdminGenericInterfaceOperationDefault

Description:	Frontend module registration for the agent interface.
Group:	GenericInterface
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}- &gt;{'AdminGenericInterfaceOperationDefault'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceOperation.js'     ]   },   'Title' =&gt; 'GenericInterface Operation GUI' };</pre>

### 3.5.6. Frontend::Module###AdminGenericInterfaceInvokerDefault

Description:	Frontend module registration for the agent interface.
Group:	GenericInterface
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminGenericInterfaceInvokerDefault'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceInvoker.js'     ]   },   'Title' =&gt; 'GenericInterface Invoker GUI' }; </pre>

### 3.5.7. Frontend::Module###AdminGenericInterfaceMappingSimple

Description:	Frontend module registration for the agent interface.
Group:	GenericInterface
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminGenericInterfaceMappingSimple'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.GenericInterface.css'     ],     'CSS_IE7' =&gt; 'Core.Agent.Admin.GenericInterface.IE7.css',     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericInterfaceMappingSimple.js'     ]   },   'Title' =&gt; 'GenericInterface Webservice Mapping GUI' }; </pre>

## 3.6. GenericInterface::Invoker::ModuleRegistration

### 3.6.1. GenericInterface::Invoker::Module###Test::Test

Description:	GenericInterface module registration for the invoker layer.
--------------	---

Group:	GenericInterface
SubGroup:	GenericInterface::Invoker::ModuleRegistration
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Invoker::Module'}-&gt;{'Test::Test'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceInvokerDefault',   'Controller' =&gt; 'Test',   'Name' =&gt; 'Test' };</pre>

### 3.6.2. GenericInterface::Invoker::Module###Test::TestSimple

Description:	GenericInterface module registration for the invoker layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Invoker::ModuleRegistration
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Invoker::Module'}-&gt;{'Test::TestSimple'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceInvokerDefault',   'Controller' =&gt; 'Test',   'Name' =&gt; 'TestSimple' };</pre>

## 3.7. GenericInterface::Mapping::ModuleRegistration

### 3.7.1. GenericInterface::Mapping::Module###Test

Description:	GenericInterface module registration for the mapping layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Mapping::ModuleRegistration
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Mapping::Module'}-&gt;{'Test'} = {   'ConfigDialog' =&gt; '' };</pre>

### 3.7.2. GenericInterface::Mapping::Module###Simple

Description:	GenericInterface module registration for the mapping layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Mapping::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Mapping::Module'}-&gt;{'Simple'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceMappingSimple' };</pre>

## 3.8. GenericInterface::Operation::ModuleRegistration

### 3.8.1. GenericInterface::Operation::Module###Test::Test

Description:	GenericInterface module registration for the operation layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::ModuleRegistration
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Operation::Module'}-&gt;{'Test::Test'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceOperationDefault',   'Controller' =&gt; 'Test',   'Name' =&gt; 'Test' };</pre>

### 3.8.2. GenericInterface::Operation::Module###Session::SessionCreate

Description:	GenericInterface module registration for the operation layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Operation::Module'}- &gt;{'Session::SessionCreate'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceOperationDefault',   'Controller' =&gt; 'Session',   'Name' =&gt; 'SessionCreate' };</pre>

### 3.8.3. GenericInterface::Operation::Module###Ticket::TicketCreate

Description:	GenericInterface module registration for the operation layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Operation::Module'}- &gt;{'Ticket::TicketCreate'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceOperationDefault',   'Controller' =&gt; 'Ticket',   'Name' =&gt; 'TicketCreate' };</pre>

### 3.8.4. GenericInterface::Operation::Module###Ticket::TicketUpdate

Description:	GenericInterface module registration for the operation layer.
--------------	---



Group:	GenericInterface
SubGroup:	GenericInterface::Operation::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Operation::Module'}- &gt;{'Ticket::TicketUpdate'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceOperationDefault',   'Controller' =&gt; 'Ticket',   'Name' =&gt; 'TicketUpdate' };</pre>

### 3.8.5. GenericInterface::Operation::Module###Ticket::TicketGet

Description:	GenericInterface module registration for the operation layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Operation::Module'}- &gt;{'Ticket::TicketGet'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceOperationDefault',   'Controller' =&gt; 'Ticket',   'Name' =&gt; 'TicketGet' };</pre>

### 3.8.6. GenericInterface::Operation::Module###Ticket::TicketSearch

Description:	GenericInterface module registration for the operation layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Operation::Module'}- &gt;{'Ticket::TicketSearch'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceOperationDefault',   'Controller' =&gt; 'Ticket',   'Name' =&gt; 'TicketGet' };</pre>

## 3.9. GenericInterface::Operation::TicketCreate

### 3.9.1. GenericInterface::Operation::TicketCreate###ArticleType

Description:	Defines the default type of the article for this operation.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketCreate
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketCreate'}-&gt;{'ArticleType'} = 'webrequest';</code>

### 3.9.2. GenericInterface::Operation::TicketCreate###HistoryType

Description:	Defines the history type for this operation, which gets used for ticket history in the agent interface.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketCreate
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketCreate'}-&gt;{'HistoryType'} = 'NewTicket';</code>

### 3.9.3. GenericInterface::Operation::TicketCreate###HistoryComment

Description:	Defines the history comment for this operation, which gets used for ticket history in the agent interface.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketCreate
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketCreate'}-&gt;{'HistoryComment'} = '%GenericInterface Create';</code>

### 3.9.4. GenericInterface::Operation::TicketCreate###AutoResponseType

Description:	Defines the default auto response type of the article for this operation.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketCreate
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketCreate'}-&gt;{'AutoResponseType'} = 'auto reply';</code>

## 3.10. GenericInterface::Operation::TicketSearch

### 3.10.1. GenericInterface::Operation::TicketSearch###SearchLimit

Description:	Maximum number of tickets to be displayed in the result of this operation.
Group:	GenericInterface

SubGroup:	GenericInterface::Operation::TicketSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketSearch'}-&gt;{'SearchLimit'} = '500';</code>

### 3.10.2.

#### GenericInterface::Operation::TicketSearch###SortBy::Default

Description:	Defines the default ticket attribute for ticket sorting of the ticket search result of this operation.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketSearch'}-&gt;{'SortBy::Default'} = 'Age';</code>

### 3.10.3.

#### GenericInterface::Operation::TicketSearch###Order::Default

Description:	Defines the default ticket order in the ticket search result of the this operation. Up: oldest on top. Down: latest on top.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketSearch'}-&gt;{'Order::Default'} = 'Down';</code>

## 3.11.

### GenericInterface::Operation::TicketUpdate

#### 3.11.1.

##### GenericInterface::Operation::TicketUpdate###ArticleType

Description:	Defines the default type of the article for this operation.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketUpdate
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketUpdate'}-&gt;{'ArticleType'} = 'webrequest';</code>

#### 3.11.2.

##### GenericInterface::Operation::TicketUpdate###HistoryType

Description:	Defines the history type for this operation, which gets used for ticket history in the agent interface.
--------------	---

Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketUpdate
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketUpdate'}-&gt;{'HistoryType'} = 'AddNote';</code>

### 3.11.3.

#### GenericInterface::Operation::TicketUpdate###HistoryComment

Description:	Defines the history comment for this operation, which gets used for ticket history in the agent interface.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketUpdate
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketUpdate'}-&gt;{'HistoryComment'} = '%GenericInterface Note';</code>

### 3.11.4.

#### GenericInterface::Operation::TicketUpdate###AutoResponseType

Description:	Defines the default auto response type of the article for this operation.
Group:	GenericInterface
SubGroup:	GenericInterface::Operation::TicketUpdate
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::TicketUpdate'}-&gt;{'AutoResponseType'} = 'auto follow up';</code>

## 3.12.

### GenericInterface::Transport::ModuleRegistration

#### 3.12.1.

##### GenericInterface::Transport::Module###HTTP::SOAP

Description:	GenericInterface module registration for the transport layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Transport::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Transport::Module'}-&gt;{'HTTP::SOAP'} = {        'ConfigDialog' =&gt; 'AdminGenericInterfaceTransportHTTPSOAP',        'Name' =&gt; 'SOAP',        'Protocol' =&gt; 'HTTP'      };</code>

### 3.12.2. GenericInterface::Transport::Module###HTTP::Test

Description:	GenericInterface module registration for the transport layer.
Group:	GenericInterface
SubGroup:	GenericInterface::Transport::ModuleRegistration
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Transport::Module'}-&gt;{'HTTP::Test'} = {   'ConfigDialog' =&gt; 'AdminGenericInterfaceTransportHTTPTest',   'Name' =&gt; 'Test',   'Protocol' =&gt; 'HTTP' };</pre>

## 3.13. GenericInterface::Webservice

### 3.13.1. GenericInterface::WebserviceConfig::CacheTTL

Description:	Cache time in seconds for the web service config backend.
Group:	GenericInterface
SubGroup:	GenericInterface::Webservice
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::WebserviceConfig::CacheTTL'} = '86400';</pre>

### 3.13.2. GenericInterface::Operation::Common::CachedAuth::AgentCache

Description:	Cache time in seconds for agent authentication in the GenericInterface.
Group:	GenericInterface
SubGroup:	GenericInterface::Webservice
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'GenericInterface::Operation::Common::CachedAuth::AgentCacheTTL'} = '300';</pre>

### 3.13.3. GenericInterface::Operation::Common::CachedAuth::CustomerCa

Description:	Cache time in seconds for customer authentication in the GenericInterface.
Group:	GenericInterface
SubGroup:	GenericInterface::Webservice
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Operation::Common::CachedAuth::CustomerCacheTTL'} = '300';</code>
-----------------	--

### 3.13.4. GenericInterface::Webservice::Path::Separator

Description:	Webservice path separator.
Group:	GenericInterface
SubGroup:	GenericInterface::Webservice
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'GenericInterface::Webservice::Path::Separator'} = '&gt;';</code>

## 4. ProcessManagement

### 4.1. Core

#### 4.1.1.

#### Process::DynamicFieldProcessManagementProcessID

Description:	This option defines the dynamic field in which a Process Management process entity id is stored.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::DynamicFieldProcessManagementProcessID'} = 'ProcessManagementProcessID';</code>

#### 4.1.2.

#### Process::DynamicFieldProcessManagementActivityID

Description:	This option defines the dynamic field in which a Process Management activity entity id is stored.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::DynamicFieldProcessManagementActivityID'} = 'ProcessManagementActivityID';</code>

#### 4.1.3. Process::DefaultQueue

Description:	This option defines the process tickets default queue.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Process::DefaultQueue'} = 'Raw';</code>
-----------------	--

#### 4.1.4. Process::DefaultState

Description:	This option defines the process tickets default state.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::DefaultState'} = 'new';</code>

#### 4.1.5. Process::DefaultLock

Description:	This option defines the process tickets default lock.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::DefaultLock'} = 'unlock';</code>

#### 4.1.6. Process::DefaultPriority

Description:	This option defines the process tickets default priority.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::DefaultPriority'} = '3 normal';</code>

#### 4.1.7. Process::Entity::Prefix

Description:	Default ProcessManagement entity prefixes for entity IDs that are automatically generated.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::Entity::Prefix'} = {          'Activity' =&gt; 'A',          'ActivityDialog' =&gt; 'AD',          'Process' =&gt; 'P',          'Transition' =&gt; 'T',          'TransitionAction' =&gt; 'TA'        };</code>

#### 4.1.8. Process::CacheTTL

Description:	Cache time in seconds for the DB process backend.
Group:	ProcessManagement
SubGroup:	Core

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::CacheTTL'} = '3600';</code>

### 4.1.9. Process::NavBarOutput::CacheTTL

Description:	Cache time in seconds for the ticket process navigation bar output module.
Group:	ProcessManagement
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Process::NavBarOutput::CacheTTL'} = '900';</code>

## 4.2. Core::Ticket

### 4.2.1.

#### Ticket::EventModulePost###TicketProcessTransitions

Description:	Event module registration. For more performance you can define a trigger event (e. g. Event => TicketCreate).
Group:	ProcessManagement
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'TicketProcessTransitions'} = {        {          'Event' =&gt; '',          'Module' =&gt;          'Kernel::System::Ticket::Event::TicketProcessTransitions',          'Transaction' =&gt; '1'        }      };</code>

## 4.3. Frontend::Admin::ModuleRegistration

### 4.3.1.

#### Frontend::Module###AdminProcessManagement

Description:	Frontend module registration for the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminProcessManagement'} = {        'Description' =&gt; 'Admin',        'Group' =&gt; [          'admin'        ],        'Loader' =&gt; {          'CSS' =&gt; [          'Core.Agent.Admin.ProcessManagement.css',          'Core.AllocationList.css'        ]      }    };</code>



```

    ],
    'JavaScript' => [
      'thirdparty/jsplumb-1.5.5/jsplumb.js',
      'thirdparty/farahey-0.1/farahey.js',
      'thirdparty/jsplumb-labelspacer/label-spacer.js',
      'Core.Agent.Admin.ProcessManagement.js',
      'Core.Agent.Admin.ProcessManagement.Canvas.js',
      'Core.UI.AllocationList.js'
    ]
  },
  'NavBarModule' => {
    'Block' => 'System',
    'Description' => 'Configure Processes.',
    'Module' => 'Kernel::Output::HTML::NavBarModuleAdmin',
    'Name' => 'Process Management',
    'Prio' => '750'
  },
  'NavBarName' => 'Admin',
  'Title' => 'Process Management'
};

```

### 4.3.2. Frontend::Module###AdminProcessManagementActivity

Description:	Frontend module registration for the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminProcessManagementActivity'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.ProcessManagement.css',       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.ProcessManagement.js',       'Core.UI.AllocationList.js'     ]   },   'Title' =&gt; 'Process Management Activity GUI' }; </pre>

### 4.3.3. Frontend::Module###AdminProcessManagementActivityDialog

Description:	Frontend module registration for the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminProcessManagementActivityDialog'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ] }; </pre>

	<pre> ], 'Loader' =&gt; {   'CSS' =&gt; [     'Core.Agent.Admin.ProcessManagement.css',     'Core.AllocationList.css'   ],   'JavaScript' =&gt; [     'Core.Agent.Admin.ProcessManagement.js',     'Core.UI.AllocationList.js'   ] }, 'Title' =&gt; 'Process Management Activity Dialog GUI' }; </pre>
--	--

#### 4.3.4. Frontend::Module###AdminProcessManagementTransition

Description:	Frontend module registration for the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminProcessManagementTransition'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.ProcessManagement.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.ProcessManagement.js'     ]   },   'Title' =&gt; 'Process Management Transition GUI' }; </pre>

#### 4.3.5. Frontend::Module###AdminProcessManagementTransitionAction

Description:	Frontend module registration for the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminProcessManagementTransitionAction'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.ProcessManagement.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.ProcessManagement.js'     ]   }, }; </pre>

```
'Title' => 'Process Management Transition Action GUI'
};
```

### 4.3.6. Frontend::Module###AdminProcessManagementPath

Description:	Frontend module registration for the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminProcessManagementPath'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.ProcessManagement.css',       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.ProcessManagement.js',       'Core.UI.AllocationList.js'     ]   },   'Title' =&gt; 'Process Management Path GUI' };</pre>

## 4.4. Frontend::Agent::ModuleRegistration

### 4.4.1. Frontend::Module###AgentTicketProcess

Description:	Frontend module registration for the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketProcess'} = {   'Description' =&gt; 'Create new process ticket',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.TicketProcess.css'     ],     'JavaScript' =&gt; [       'Core.Agent.CustomerSearch.js',       'Core.Agent.TicketAction.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'p',       'Block' =&gt; '',       'Description' =&gt; 'Create New process ticket',       'Link' =&gt; 'Action=AgentTicketProcess',       'LinkOption' =&gt; '',       'Name' =&gt; 'New process ticket',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '220',       'Type' =&gt; ''     }   ] };</pre>

```

],
'NavBarName' => 'Ticket',
'Title' => 'New process ticket'
};

```

## 4.5. Frontend::Agent::NavBarModule

### 4.5.1. Frontend::NavBarOutputModule###1-TicketProcesses

Description:	Frontend module registration (disable ticket processes screen if no process available).
Group:	ProcessManagement
SubGroup:	Frontend::Agent::NavBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NavBarOutputModule'}-&gt;{'1-TicketProcesses'} = {   'Module' =&gt;   'Kernel::Output::HTML::NavBarOutputModuleAgentTicketProcess' };</pre>

## 4.6. Frontend::Agent::Ticket::ViewProcess

### 4.6.1. Ticket::Frontend::AgentTicketProcess###StateType

Description:	Determines the next possible ticket states, for process tickets in the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Agent::Ticket::ViewProcess
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketProcess'}-&gt;{'StateType'} = [   'new',   'open',   'pending auto',   'pending reminder',   'closed' ];</pre>

### 4.6.2. Ticket::Frontend::CustomerTicketProcess###StateType

Description:	Determines the next possible ticket states, for process tickets in the agent interface.
Group:	ProcessManagement
SubGroup:	Frontend::Agent::Ticket::ViewProcess
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketProcess'}-&gt;{'StateType'} = [   'new',   'open' ];</pre>

];

## 4.7. Frontend::Agent::Ticket::ViewZoom

### 4.7.1.

#### Ticket::Frontend::AgentTicketZoom###ProcessDisplay

Description:	Display settings to override defaults for Process Tickets.
Group:	ProcessManagement
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketZoom'}-&gt;{'ProcessDisplay'} = {   'NavBarName' =&gt; 'Processes',   'WidgetTitle' =&gt; 'Process Information' };</pre>

### 4.7.2.

#### Ticket::Frontend::AgentTicketZoom###ProcessWidgetDynamicF

Description:	Dynamic fields groups for process widget. The key is the name of the group, the value contains the fields to be shown. Example: 'Key => My Group', 'Content: Name_X, NameY'.
Group:	ProcessManagement
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketZoom'}-&gt;{'ProcessWidgetDynamicFieldGroups'} = {};</pre>

### 4.7.3.

#### Ticket::Frontend::AgentTicketZoom###ProcessWidgetDynamicF

Description:	Dynamic fields shown in the process widget in ticket zoom screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	ProcessManagement
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketZoom'}-&gt;{'ProcessWidgetDynamicField'} = {};</pre>

## 4.8. Frontend::Customer::ModuleRegistration

### 4.8.1.

#### CustomerFrontend::Module###CustomerTicketProcess

Description:	Frontend module registration for the customer interface.
--------------	--

Group:	ProcessManagement
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerTicketProcess'} = {   'Description' =&gt; 'Process Ticket',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Customer.TicketProcess.css'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'o',       'Block' =&gt; '',       'Description' =&gt; 'Create new process ticket',       'Link' =&gt; 'Action=CustomerTicketProcess',       'LinkOption' =&gt; '',       'Name' =&gt; 'New process ticket',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '220',       'Type' =&gt; 'Submenu'     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Process ticket' }; </pre>

## 4.9. Frontend::Customer::NavBarModule

### 4.9.1. CustomerFrontend::NavBarModule###10-CustomerTicketProcesses

Description:	Frontend module registration (disable ticket processes screen if no process available) for Customer.
Group:	ProcessManagement
SubGroup:	Frontend::Customer::NavBarModule
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'CustomerFrontend::NavBarModule'}-&gt;{'10-CustomerTicketProcesses'} = {   'Module' =&gt;   'Kernel::Output::HTML::NavBarOutputModuleCustomerTicketProcess' }; </pre>

## 5. Scheduler

### 5.1. Core

#### 5.1.1. Scheduler::SleepTime

Description:	Defines scheduler sleep time in seconds after processing all available tasks (floating point number).
Group:	Scheduler
SubGroup:	Core

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Scheduler::SleepTime'} = '1.0';</code>

### 5.1.2. Scheduler::PIDUpdateTime

Description:	Defines scheduler PID update time in seconds.
Group:	Scheduler
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Scheduler::PIDUpdateTime'} = '600';</code>

### 5.1.3. Scheduler::RestartAfterSeconds

Description:	Defines the time in seconds after which the Scheduler performs an automatic self-restart.
Group:	Scheduler
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Scheduler::RestartAfterSeconds'} = '86400';</code>

### 5.1.4. Scheduler::TaskDataLength

Description:	Defines the maximum length (in characters) for a scheduler task data. WARNING: Do not modify this setting unless you are sure of the current Database length for 'task_data' filed from 'scheduler_data_list' table.
Group:	Scheduler
SubGroup:	Core
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Scheduler::TaskDataLength'} = '8000';</code>

## 5.2. Core::Log

### 5.2.1. Scheduler::LogPath

Description:	Defines the path for scheduler to store its console output (SchedulerOUT.log and SchedulerERR.log).
Group:	Scheduler
SubGroup:	Core::Log
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Scheduler::LogPath'} = '&lt;OTRS_CONFIG_Home&gt;/var/log';</code>

## 5.2.2. Scheduler::Log::DaysToKeep

Description:	Defines the time in days to keep log backup files.
Group:	Scheduler
SubGroup:	Core::Log
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Scheduler::Log::DaysToKeep'} = '10';</code>

## 5.3. Core::Web

### 5.3.1. Loader::Agent::CommonJS###000-GenericInterface

Description:	List of JS files to always be loaded for the agent interface.
Group:	Scheduler
SubGroup:	Core::Web
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Loader::Agent::CommonJS'}-&gt;{'000-GenericInterface'} = [ 'Core.Agent.Admin.Scheduler.js' ];</code>

## 5.4. Frontend::Admin::ModuleRegistration

### 5.4.1. Frontend::Module###AdminScheduler

Description:	Frontend module registration for the agent interface.
Group:	Scheduler
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminScheduler'} = { 'Description' =&gt; 'Admin', 'Group' =&gt; [ 'admin' ], 'Title' =&gt; 'GenericInterface Webservice Mapping GUI' };</code>

## 5.5. Frontend::Agent::ModuleNotify

### 5.5.1. Frontend::NotifyModule###800-Scheduler-Check

Description:	Defines the module to display a notification in the agent interface if the scheduler is not running.
Group:	Scheduler
SubGroup:	Frontend::Agent::ModuleNotify



Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NotifyModule'}-&gt;{'800-Scheduler-Check'} = {   'Module' =&gt; 'Kernel::Output::HTML::NotificationSchedulerCheck' };</pre>

## 6. Ticket

### 6.1. Core

#### 6.1.1. OTRSEscalationEvents::DecayTime

Description:	The duration in minutes after emitting an event, in which the new escalation notify and start events are suppressed.
Group:	Ticket
SubGroup:	Core
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'OTRSEscalationEvents::DecayTime'} = '1440';</pre>

### 6.2. Core::CustomerCompany

#### 6.2.1. CustomerCompany::EventModulePost###110-UpdateTickets

Description:	Event module that updates tickets after an update of the Customer Company.
Group:	Ticket
SubGroup:	Core::CustomerCompany
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerCompany::EventModulePost'}-&gt;{'110-UpdateTickets'} = {   'Event' =&gt; 'CustomerCompanyUpdate',   'Module' =&gt;   'Kernel::System::CustomerCompany::Event::TicketUpdate',   'Transaction' =&gt; '0' };</pre>

#### 6.2.2. CustomerUser::EventModulePost###120-UpdateTickets

Description:	Event module that updates tickets after an update of the Customer User.
Group:	Ticket
SubGroup:	Core::CustomerCompany
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerUser::EventModulePost'}-&gt;{'120-UpdateTickets'} = {</pre>

```
'Event' => 'CustomerUserUpdate',
'Module' => 'Kernel::System::CustomerUser::Event::TicketUpdate',
'Transaction' => '0'
};
```

## 6.3. Core::FulltextSearch

### 6.3.1. Ticket::SearchIndexModule

Description:	Helps to extend your articles full-text search (From, To, Cc, Subject and Body search). Runtime will do full-text searches on live data (it works fine for up to 50.000 tickets). StaticDB will strip all articles and will build an index after article creation, increasing fulltext searches about 50%. To create an initial index use "bin/otrs.RebuildFulltextIndex.pl".
Group:	Ticket
SubGroup:	Core::FulltextSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::SearchIndexModule'} = 'Kernel::System::Ticket::ArticleSearchIndex::RuntimeDB';</pre>

### 6.3.2. Ticket::SearchIndex::Attribute

Description:	Basic fulltext index settings. Execute "bin/otrs.RebuildFulltextIndex.pl" in order to generate a new index.
Group:	Ticket
SubGroup:	Core::FulltextSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::SearchIndex::Attribute'} = { 'WordCountMax' =&gt; '1000', 'WordLengthMax' =&gt; '30', 'WordLengthMin' =&gt; '3' };</pre>

### 6.3.3. Ticket::SearchIndex::Filters

Description:	Fulltext index regex filters to remove parts of the text.
Group:	Ticket
SubGroup:	Core::FulltextSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::SearchIndex::Filters'} = [ '[,\\&amp;\\&lt;\\&gt;\\?\"\\!\\*\\ \\;\\[\\]\\(\\)\\+\\\$\\^=]', '^[\\':.][\\':.]\$' ];</pre>

### 6.3.4. Ticket::SearchIndex::StopWords

Description:	Stop words for fulltext index. These words will be removed.
Group:	Ticket

SubGroup:	Core::FulltextSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::SearchIndex::StopWords'} = {   'a' =&gt; '1',   'als' =&gt; '1',   'and' =&gt; '1',   'auf' =&gt; '1',   'das' =&gt; '1',   'den' =&gt; '1',   'der' =&gt; '1',   'die' =&gt; '1',   'for' =&gt; '1',   'im' =&gt; '1',   'in' =&gt; '1',   'is' =&gt; '1',   'of' =&gt; '1',   'the' =&gt; '1',   'to' =&gt; '1',   'und' =&gt; '1',   'vom' =&gt; '1',   'zu' =&gt; '1' };</pre>

### 6.3.5. Ticket::EventModulePost###98-ArticleSearchIndex

Description:	Builds an article index right after the article's creation.
Group:	Ticket
SubGroup:	Core::FulltextSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'98-ArticleSearchIndex'} = {   'Event' =&gt; '(ArticleCreate ArticleUpdate)',   'Module' =&gt; 'Kernel::System::Ticket::Event::ArticleSearchIndex' };</pre>

## 6.4. Core::LinkObject

### 6.4.1. LinkObject::PossibleLink###0200

Description:	Links 2 tickets with a "Normal" type link.
Group:	Ticket
SubGroup:	Core::LinkObject
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'LinkObject::PossibleLink'}-&gt;{'0200'} = {   'Object1' =&gt; 'Ticket',   'Object2' =&gt; 'Ticket',   'Type' =&gt; 'Normal' };</pre>

### 6.4.2. LinkObject::PossibleLink###0201

Description:	Links 2 tickets with a "ParentChild" type link.
Group:	Ticket

SubGroup:	Core::LinkObject
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'LinkObject::PossibleLink'}-&gt;{'0201'} = {   'Object1' =&gt; 'Ticket',   'Object2' =&gt; 'Ticket',   'Type' =&gt; 'ParentChild' };</pre>

## 6.5. Core::PostMaster

### 6.5.1. PostmasterMaxEmails

Description:	Maximal auto email responses to own email-address a day (Loop-Protection).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PostmasterMaxEmails'} = '40';</pre>

### 6.5.2. PostMasterMaxEmailSize

Description:	Maximal size in KBytes for mails that can be fetched via POP3/POP3S/IMAP/IMAPS (KBytes).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PostMasterMaxEmailSize'} = '16384';</pre>

### 6.5.3. PostMasterReconnectMessage

Description:	The "bin/PostMasterMailAccount.pl" will reconnect to POP3/POP3S/IMAP/IMAPS host after the specified count of messages.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PostMasterReconnectMessage'} = '20';</pre>

### 6.5.4. LoopProtectionModule

Description:	Default loop protection module.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'LoopProtectionModule'} = 'Kernel::System::PostMaster::LoopProtection::DB';</code>
-----------------	--

### 6.5.5. LoopProtectionLog

Description:	Path for the log file (it only applies if "FS" was selected for LoopProtectionModule and it is mandatory).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'LoopProtectionLog'} = '&lt;OTRS_CONFIG_Home&gt;/var/log/LoopProtection';</code>

### 6.5.6. PostmasterAutoHTML2Text

Description:	Converts HTML mails into text messages.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterAutoHTML2Text'} = '1';</code>

### 6.5.7. PostmasterFollowUpSearchInReferences

Description:	Executes follow up checks on In-Reply-To or References headers for mails that don't have a ticket number in the subject.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpSearchInReferences'} = '0';</code>

### 6.5.8. PostmasterFollowUpSearchInBody

Description:	Executes follow up mail body checks in mails that don't have a ticket number in the subject.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpSearchInBody'} = '0';</code>

### 6.5.9. PostmasterFollowUpSearchInAttachment

Description:	Executes follow up mail attachments checks in mails that don't have a ticket number in the subject.
Group:	Ticket

SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpSearchInAttachment'} = '0';</code>

### 6.5.10. PostmasterFollowUpSearchInRaw

Description:	Executes follow up plain/raw mail checks in mails that don't have a ticket number in the subject.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpSearchInRaw'} = '0';</code>

### 6.5.11. PostmasterUserID

Description:	Specifies user id of the postmaster data base.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterUserID'} = '1';</code>

### 6.5.12. PostmasterDefaultQueue

Description:	Defines the postmaster default queue.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterDefaultQueue'} = 'Raw';</code>

### 6.5.13. PostmasterDefaultPriority

Description:	Defines the default priority of new tickets.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterDefaultPriority'} = '3 normal';</code>

### 6.5.14. PostmasterDefaultState

Description:	Defines the default state of new tickets.
Group:	Ticket

SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterDefaultState'} = 'new';</code>

### 6.5.15. PostmasterFollowUpState

Description:	Defines the state of a ticket if it gets a follow-up.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpState'} = 'open';</code>

### 6.5.16. PostmasterFollowUpStateClosed

Description:	Defines the state of a ticket if it gets a follow-up and the ticket was already closed.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpStateClosed'} = 'open';</code>

### 6.5.17. PostmasterFollowUpOnUnlockAgentNotifyOnlyToOwner

Description:	Sends agent follow-up notification only to the owner, if a ticket is unlocked (the default is to send the notification to all agents).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterFollowUpOnUnlockAgentNotifyOnlyToOwner'} = '0';</code>

### 6.5.18. PostmasterX-Header

Description:	Defines all the X-headers that should be scanned.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostmasterX-Header'} = [       'From',       'To',       'Cc',       'Reply-To',       'ReplyTo',</code>

```

'Subject',
'Message-ID',
'Message-Id',
'Resent-To',
'Resent-From',
'Precedence',
'Mailing-List',
'List-Id',
'List-Archive',
'Errors-To',
'References',
'In-Reply-To',
'Auto-Submitted',
'X-Loop',
'X-Spam-Flag',
'X-Spam-Level',
'X-Spam-Score',
'X-Spam-Status',
'X-No-Loop',
'X-Priority',
'Importance',
'X-Mailer',
'User-Agent',
'Organization',
'X-Original-To',
'Delivered-To',
'Envelope-To',
'Return-Path',
'X-OTRS-Owner',
'X-OTRS-OwnerID',
'X-OTRS-Responsible',
'X-OTRS-ResponsibleID',
'X-OTRS-Loop',
'X-OTRS-Priority',
'X-OTRS-Queue',
'X-OTRS-Lock',
'X-OTRS-Ignore',
'X-OTRS-State',
'X-OTRS-State-PendingTime',
'X-OTRS-Type',
'X-OTRS-Service',
'X-OTRS-SLA',
'X-OTRS-CustomerNo',
'X-OTRS-CustomerUser',
'X-OTRS-SenderType',
'X-OTRS-ArticleType',
'X-OTRS-FollowUp-Priority',
'X-OTRS-FollowUp-Queue',
'X-OTRS-FollowUp-Lock',
'X-OTRS-FollowUp-State',
'X-OTRS-FollowUp-State-PendingTime',
'X-OTRS-FollowUp-Type',
'X-OTRS-FollowUp-Service',
'X-OTRS-FollowUp-SLA',
'X-OTRS-FollowUp-SenderType',
'X-OTRS-FollowUp-ArticleType'
];

```

### 6.5.19. PostMaster::PreFilterModule###1-Match

Description:	Module to filter and manipulate incoming messages. Block/ignore all spam email with From: noreply@ address.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'1-Match'} = {</code>



	<pre>'Match' =&gt; {   'From' =&gt; 'noreply@' }, 'Module' =&gt; 'Kernel::System::PostMaster::Filter::Match', 'Set' =&gt; {   'X-OTRS-Ignore' =&gt; 'yes' }, 'StopAfterMatch' =&gt; '0' };</pre>
--	--

### 6.5.20. PostMaster::PreFilterModule###2-Match

Description:	Module to filter and manipulate incoming messages. Get a 4 digit number to ticket free text, use regex in Match e. g. From => '(.+?)@.+?', and use () as [***] in Set =>.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'2-Match'} = {   'Match' =&gt; {     'Subject' =&gt; 'SomeNumber:(\\d\\d\\d\\d)'   },   'Module' =&gt; 'Kernel::System::PostMaster::Filter::Match',   'Set' =&gt; {     'X-OTRS-DynamicField-TicketFreeKey1' =&gt; 'SomeNumber',     'X-OTRS-DynamicField-TicketFreeText1' =&gt; '[***]'   },   'StopAfterMatch' =&gt; '0' };</pre>

### 6.5.21. PostMaster::PreFilterModule###3-NewTicketReject

Description:	Blocks all the incoming emails that do not have a valid ticket number in subject with From: @example.com address.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'3-NewTicketReject'} = {   'Match' =&gt; {     'From' =&gt; '@example.com'   },   'Module' =&gt; 'Kernel::System::PostMaster::Filter::NewTicketReject',   'Set' =&gt; {     'X-OTRS-Ignore' =&gt; 'yes'   },   'StopAfterMatch' =&gt; '0' };</pre>

### 6.5.22. PostMaster::PreFilterModule::NewTicketReject::Sender

Description:	Defines the sender for rejected emails.
Group:	Ticket
SubGroup:	Core::PostMaster

Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PostMaster::PreFilterModule::NewTicketReject::Sender'} = 'noreply@example.com';</code>

### 6.5.23.

#### PostMaster::PreFilterModule::NewTicketReject::Subject

Description:	Defines the subject for rejected emails.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostMaster::PreFilterModule::NewTicketReject::Subject'} = 'Email Rejected';</code>

### 6.5.24.

#### PostMaster::PreFilterModule::NewTicketReject::Body

Description:	Defines the body text for rejected emails.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'PostMaster::PreFilterModule::NewTicketReject::Body'} = 'Dear Customer,</code>  Unfortunately we could not detect a valid ticket number in your subject, so this email can't be processed.  Please create a new ticket via the customer panel.  Thanks for your help!  Your Helpdesk Team ';

### 6.5.25. PostMaster::PreFilterModule###4-CMD

Description:	CMD example setup. Ignores emails where external CMD returns some output on STDOUT (email will be piped into STDIN of some.bin).
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'4-CMD'} = {   'CMD' =&gt; '/usr/bin/some.bin',   'Module' =&gt; 'Kernel::System::PostMaster::Filter::CMD',   'Set' =&gt; {     'X-OTRS-Ignore' =&gt; 'yes'   } };</code>

## 6.5.26. PostMaster::PreFilterModule###5-SpamAssassin

Description:	Spam Assassin example setup. Ignores emails that are marked with SpamAssassin.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'5-SpamAssassin'} = {   'CMD' =&gt; '/usr/bin/spamassassin   grep -i "X-Spam-Status: yes"',   'Module' =&gt; 'Kernel::System::PostMaster::Filter::CMD',   'Set' =&gt; {     'X-OTRS-Ignore' =&gt; 'yes'   } };</pre>

## 6.5.27. PostMaster::PreFilterModule###6-SpamAssassin

Description:	Spam Assassin example setup. Moves marked mails to spam queue.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'6-SpamAssassin'} = {   'CMD' =&gt; '/usr/bin/spamassassin   grep -i "X-Spam-Status: yes"',   'Module' =&gt; 'Kernel::System::PostMaster::Filter::CMD',   'Set' =&gt; {     'X-OTRS-Queue' =&gt; 'spam'   } };</pre>

## 6.5.28. PostMaster::PreFilterModule###000-MatchDBSource

Description:	Module to use database filter storage.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'000-MatchDBSource'} = {   'Module' =&gt; 'Kernel::System::PostMaster::Filter::MatchDBSource' };</pre>

## 6.5.29. PostMaster::PostFilterModule###000-FollowUpArticleTypeCheck

Description:	Module to check if arrived emails should be marked as email-internal (because of original forwarded internal email). ArticleType and SenderType define the values for the arrived email/article.
--------------	--

Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PostFilterModule'}-&gt;{'000-FollowUpArticleTypeCheck'} = {   'ArticleType' =&gt; 'email-internal',   'Module' =&gt;   'Kernel::System::PostMaster::Filter::FollowUpArticleTypeCheck',   'SenderType' =&gt; 'customer' };</pre>

### 6.5.30. PostMaster::PreFilterModule###000-External-TicketNumberRecognition1

Description:	Recognize if a ticket is a follow up to an existing ticket using an external ticket number.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'000-ExternalTicketNumberRecognition1'} = {   'ArticleType' =&gt; 'note-report',   'DynamicFieldName' =&gt; 'Name_X',   'FromAddressRegExp' =&gt; '\\s*@example.com',   'Module' =&gt;   'Kernel::System::PostMaster::Filter::ExternalTicketNumberRecognition',   'Name' =&gt; 'Some Description',   'NumberRegExp' =&gt; '\\s*Incident-(\\d.*)\\s*',   'SearchInBody' =&gt; '1',   'SearchInSubject' =&gt; '1',   'SenderType' =&gt; 'system',   'TicketStateTypes' =&gt; 'new;open' };</pre>

### 6.5.31. PostMaster::PreFilterModule###000-External-TicketNumberRecognition2

Description:	Recognize if a ticket is a follow up to an existing ticket using an external ticket number.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'000-ExternalTicketNumberRecognition2'} = {   'ArticleType' =&gt; 'note-report',   'DynamicFieldName' =&gt; 'Name_X',   'FromAddressRegExp' =&gt; '\\s*@example.com',   'Module' =&gt;   'Kernel::System::PostMaster::Filter::ExternalTicketNumberRecognition',   'Name' =&gt; 'Some Description',   'NumberRegExp' =&gt; '\\s*Incident-(\\d.*)\\s*',   'SearchInBody' =&gt; '1',   'SearchInSubject' =&gt; '1',   'SenderType' =&gt; 'system', };</pre>

```
'TicketStateTypes' => 'new;open'
};
```

### 6.5.32. PostMaster::PreFilterModule###000-External-TicketNumberRecognition3

Description:	Recognize if a ticket is a follow up to an existing ticket using an external ticket number.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'000-ExternalTicketNumberRecognition3'} = {   'ArticleType' =&gt; 'note-report',   'DynamicFieldName' =&gt; 'Name_X',   'FromAddressRegExp' =&gt; '\\s*@example.com',   'Module' =&gt;   'Kernel::System::PostMaster::Filter::ExternalTicketNumberRecognition',   'Name' =&gt; 'Some Description',   'NumberRegExp' =&gt; '\\s*Incident-(\\d.*)\\s*',   'SearchInBody' =&gt; '1',   'SearchInSubject' =&gt; '1',   'SenderType' =&gt; 'system',   'TicketStateTypes' =&gt; 'new;open' };</pre>

### 6.5.33. PostMaster::PreFilterModule###000-External-TicketNumberRecognition4

Description:	Recognize if a ticket is a follow up to an existing ticket using an external ticket number.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PostMaster::PreFilterModule'}-&gt;{'000-ExternalTicketNumberRecognition4'} = {   'ArticleType' =&gt; 'note-report',   'DynamicFieldName' =&gt; 'Name_X',   'FromAddressRegExp' =&gt; '\\s*@example.com',   'Module' =&gt;   'Kernel::System::PostMaster::Filter::ExternalTicketNumberRecognition',   'Name' =&gt; 'Some Description',   'NumberRegExp' =&gt; '\\s*Incident-(\\d.*)\\s*',   'SearchInBody' =&gt; '1',   'SearchInSubject' =&gt; '1',   'SenderType' =&gt; 'system',   'TicketStateTypes' =&gt; 'new;open' };</pre>

### 6.5.34. SendNoAutoResponseRegExp

Description:	If this regex matches, no message will be send by the autoresponder.
Group:	Ticket

SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'SendNoAutoResponseRegExp'} = '(MAILER-DAEMON postmaster abuse)@.+?\.\.+?';</code>

## 6.5.35. AutoResponseForWebTickets

Description:	If this option is set to 'Yes', tickets created via the web interface, via Customers or Agents, will receive an autoresponse if configured. If this option is set to 'No', no autoresponses will be sent.
Group:	Ticket
SubGroup:	Core::PostMaster
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'AutoResponseForWebTickets'} = '1';</code>

## 6.6. Core::Stats

### 6.6.1. Stats::DynamicObjectRegistration###Ticket

Description:	Module to generate ticket statistics.
Group:	Ticket
SubGroup:	Core::Stats
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Stats::DynamicObjectRegistration'}-&gt;{'Ticket'} = { 'Module' =&gt; 'Kernel::System::Stats::Dynamic::Ticket' };</code>

### 6.6.2. Stats::DynamicObjectRegistration###TicketList

Description:	Determines if the statistics module may generate ticket lists.
Group:	Ticket
SubGroup:	Core::Stats
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Stats::DynamicObjectRegistration'}-&gt;{'TicketList'} = { 'Module' =&gt; 'Kernel::System::Stats::Dynamic::TicketList' };</code>

### 6.6.3.

### Stats::DynamicObjectRegistration###TicketAccountedTime

Description:	Module to generate accounted time ticket statistics.
Group:	Ticket
SubGroup:	Core::Stats

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Stats::DynamicObjectRegistration'}-&gt;{'TicketAccountedTime'} = {   'Module' =&gt; 'Kernel::System::Stats::Dynamic::TicketAccountedTime' };</pre>

## 6.6.4.

### Stats::DynamicObjectRegistration###TicketSolutionResponseTi

Description:	Module to generate ticket solution and response time statistics.
Group:	Ticket
SubGroup:	Core::Stats
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Stats::DynamicObjectRegistration'}-&gt;{'TicketSolutionResponseTime'} = {   'Module' =&gt;   'Kernel::System::Stats::Dynamic::TicketSolutionResponseTime' };</pre>

## 6.7. Core::Ticket

### 6.7.1. Ticket::Hook

Description:	The identifier for a ticket, e.g. Ticket#, Call#, MyTicket#. The default is Ticket#.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Hook'} = 'Ticket#';</pre>

### 6.7.2. Ticket::HookDivider

Description:	The divider between TicketHook and ticket number. E.g ': '.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::HookDivider'} = '';</pre>

### 6.7.3. Ticket::SubjectSize

Description:	Max size of the subjects in an email reply.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::SubjectSize'} = '100';</code>

### 6.7.4. Ticket::SubjectRe

Description:	The text at the beginning of the subject in an email reply, e.g. RE, AW, or AS.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::SubjectRe'} = 'Re';</code>

### 6.7.5. Ticket::SubjectFwd

Description:	The text at the beginning of the subject when an email is forwarded, e.g. FW, Fwd, or WG.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::SubjectFwd'} = 'Fwd';</code>

### 6.7.6. Ticket::SubjectFormat

Description:	The format of the subject. 'Left' means '[TicketHook#:12345] Some Subject', 'Right' means 'Some Subject [TicketHook#:12345]', 'None' means 'Some Subject' and no ticket number. In the last case you should enable PostmasterFollowupSearchInRaw or PostmasterFollowUpSearchInReferences to recognize followups based on email headers and/or body.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::SubjectFormat'} = 'Left';</code>

### 6.7.7. Ticket::CustomQueue

Description:	Name of custom queue. The custom queue is a queue selection of your preferred queues and can be selected in the preferences settings.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::CustomQueue'} = 'My Queues';</code>



## 6.7.8. Ticket::NewArticleIgnoreSystemSender

Description:	Ignore article with system sender type for new article feature (e. g. auto responses or email notifications).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::NewArticleIgnoreSystemSender'} = '0';</code>

## 6.7.9. Ticket::ChangeOwnerToEveryone

Description:	Changes the owner of tickets to everyone (useful for ASP). Normally only agent with rw permissions in the queue of the ticket will be shown.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::ChangeOwnerToEveryone'} = '0';</code>

## 6.7.10. Ticket::Responsible

Description:	Enables ticket responsible feature, to keep track of a specific ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Responsible'} = '0';</code>

## 6.7.11. Ticket::ResponsibleAutoSet

Description:	Automatically sets the owner of a ticket as the responsible for it (if ticket responsible feature is enabled).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::ResponsibleAutoSet'} = '1';</code>

## 6.7.12. Ticket::Type

Description:	Allows defining new types for ticket (if ticket type feature is enabled).
Group:	Ticket

SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Type'} = '0';</code>

### 6.7.13. Ticket::Service

Description:	Allows defining services and SLAs for tickets (e. g. email, desktop, network, ...), and escalation attributes for SLAs (if ticket service/SLA feature is enabled).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Service'} = '0';</code>

### 6.7.14. Ticket::Service::Default::UnknownCustomer

Description:	Allows default services to be selected also for non existing customers.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Service::Default::UnknownCustomer'} = '0';</code>

### 6.7.15. Ticket::ArchiveSystem

Description:	Activates the ticket archive system to have a faster system by moving some tickets out of the daily scope. To search for these tickets, the archive flag has to be enabled in the ticket search.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::ArchiveSystem'} = '0';</code>

### 6.7.16. Ticket::ArchiveSystem::RemoveSeenFlags

Description:	Controls if the ticket and article seen flags are removed when a ticket is archived.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::ArchiveSystem::RemoveSeenFlags'} = '1';</code>

### 6.7.17. Ticket::ArchiveSystem::RemoveTicketWatchers

Description:	Removes the ticket watcher information when a ticket is archived.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::ArchiveSystem::RemoveTicketWatchers'} = '1';</code>

### 6.7.18. Ticket::CustomerArchiveSystem

Description:	Activates the ticket archive system search in the customer interface.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::CustomerArchiveSystem'} = '0';</code>

### 6.7.19. Ticket::NumberGenerator

Description:	Selects the ticket number generator module. "AutoIncrement" increments the ticket number, the SystemID and the counter are used with SystemID.counter format (e.g. 1010138, 1010139). With "Date" the ticket numbers will be generated by the current date, the SystemID and the counter. The format looks like Year.Month.Day.SystemID.counter (e.g. 200206231010138, 200206231010139). With "DateChecksum" the counter will be appended as checksum to the string of date and SystemID. The checksum will be rotated on a daily basis. The format looks like Year.Month.Day.SystemID.Counter.CheckSum (e.g. 2002070110101520, 2002070110101535). "Random" generates randomized ticket numbers in the format "SystemID.Random" (e.g. 100057866352, 103745394596).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::NumberGenerator'} = 'Kernel::System::Ticket::Number::DateChecksum';</code>

### 6.7.20. Ticket::NumberGenerator::CheckSystemID

Description:	Checks the SystemID in ticket number detection for follow-ups (use "No" if SystemID has been changed after using the system).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Ticket::NumberGenerator::CheckSystemID'} = '1';</code>
-----------------	---

### 6.7.21. Ticket::NumberGenerator::MinCounterSize

Description:	Sets the minimal ticket counter size (if "AutoIncrement" was selected as TicketNumberGenerator). Default is 5, this means the counter starts from 10000.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::NumberGenerator::MinCounterSize'} = '5';</code>

### 6.7.22. Ticket::NumberGenerator::Date::UseFormattedCounter

Description:	Enables the minimal ticket counter size (if "Date" was selected as TicketNumberGenerator).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::NumberGenerator::Date::UseFormattedCounter'} = '0';</code>

### 6.7.23. Ticket::CounterLog

Description:	Log file for the ticket counter.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::CounterLog'} = '&lt;OTRS_CONFIG_Home&gt;/var/log/TicketCounter.log';</code>

### 6.7.24. Ticket::IndexModule

Description:	IndexAccelerator: to choose your backend TicketViewAccelerator module. "RuntimeDB" generates each queue view on the fly from ticket table (no performance problems up to approx. 60.000 tickets in total and 6.000 open tickets in the system). "StaticDB" is the most powerful module, it uses an extra ticket-index table that works like a view (recommended if more than 80.000 and 6.000 open tickets are stored in the system). Use the script "bin/otrs.RebuildTicketIndex.pl" for initial index update.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::IndexModule'} = 'Kernel::System::Ticket::IndexAccelerator::RuntimeDB';</code>

## 6.7.25. Ticket::StorageModule

Description:	Saves the attachments of articles. "DB" stores all data in the database (not recommended for storing big attachments). "FS" stores the data on the filesystem; this is faster but the webserver should run under the OTRS user. You can switch between the modules even on a system that is already in production without any loss of data.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::StorageModule'} = 'Kernel::System::Ticket::ArticleStorageDB';</code>

## 6.7.26. ArticleDir

Description:	Specifies the directory to store the data in, if "FS" was selected for TicketStorageModule.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'ArticleDir'} = '&lt;OTRS_CONFIG_Home&gt;/var/article';</code>

## 6.7.27. Ticket::EventModulePost###100-ArchiveRestore

Description:	Restores a ticket from the archive (only if the event is a state change, from closed to any open available state).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'100-ArchiveRestore'} = { 'Event' =&gt; 'TicketStateUpdate', 'Module' =&gt; 'Kernel::System::Ticket::Event::ArchiveRestore' };</code>

## 6.7.28. Ticket::EventModulePost###110-AcceleratorUpdate

Description:	Updates the ticket index accelerator.
Group:	Ticket
SubGroup:	Core::Ticket

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'110-AcceleratorUpdate'} = {   'Event' =&gt; 'TicketStateUpdate TicketQueueUpdate TicketLockUpdate',   'Module' =&gt;   'Kernel::System::Ticket::Event::TicketAcceleratorUpdate' };</pre>

### 6.7.29. Ticket::EventModulePost###120-ForceOwner-ResetOnMove

Description:	Resets and unlocks the owner of a ticket if it was moved to another queue.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'120-ForceOwnerResetOnMove'} = {   'Event' =&gt; 'TicketQueueUpdate',   'Module' =&gt; 'Kernel::System::Ticket::Event::ForceOwnerReset' };</pre>

### 6.7.30. Ticket::EventModulePost###130-ForceStateChangeOnLock

Description:	Forces to choose a different ticket state (from current) after lock action. Define the current state as key, and the next state after lock action as content.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'130-ForceStateChangeOnLock'} = {   'Event' =&gt; 'TicketLockUpdate',   'Module' =&gt; 'Kernel::System::Ticket::Event::ForceState',   'new' =&gt; 'open' };</pre>

### 6.7.31. Ticket::EventModulePost###140-ResponsibleAutoSet

Description:	Automatically sets the responsible of a ticket (if it is not set yet) after the first owner update.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'140-ResponsibleAutoSet'} = {   'Event' =&gt; 'TicketOwnerUpdate',   'Module' =&gt; 'Kernel::System::Ticket::Event::ResponsibleAutoSet' };</pre>

```
};
```

### 6.7.32. Ticket::EventModulePost###150-TicketPendingTimeReset

Description:	Sets the PendingTime of a ticket to 0 if the state is changed to a non-pending state.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'150-TicketPendingTimeReset'} = {   'Event' =&gt; 'TicketStateUpdate',   'Module' =&gt;   'Kernel::System::Ticket::Event::TicketPendingTimeReset' };</pre>

### 6.7.33. Ticket::EventModulePost###500-NotificationEvent

Description:	Sends the notifications which are configured in the admin interface under "Notfication (Event)".
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'500-NotificationEvent'} = {   'Event' =&gt; '',   'Module' =&gt; 'Kernel::System::Ticket::Event::NotificationEvent',   'Transaction' =&gt; '1' };</pre>

### 6.7.34. Ticket::EventModulePost###900-EscalationIndex

Description:	Updates the ticket escalation index after a ticket attribute got updated.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'900-EscalationIndex'} = {   'Event' =&gt; 'TicketSLAUpdate TicketQueueUpdate TicketStateUpdate TicketCreate ArticleCreate',   'Module' =&gt; 'Kernel::System::Ticket::Event::TicketEscalationIndex' };</pre>

### 6.7.35. Ticket::EventModulePost###900-EscalationStopEvents

Description:	Ticket event module that triggers the escalation stop events.
--------------	---

Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'900-EscalationStopEvents'} = {   'Event' =&gt; 'TicketSLAUpdate TicketQueueUpdate TicketStateUpdate  ArticleCreate',   'Module' =&gt;   'Kernel::System::Ticket::Event::TriggerEscalationStopEvents' };</pre>

### 6.7.36. Ticket::EventModulePost###910-ForceUnlockOnMove

Description:	Forces to unlock tickets after being moved to another queue.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'910-ForceUnlockOnMove'} = {   'Event' =&gt; 'TicketQueueUpdate',   'Module' =&gt; 'Kernel::System::Ticket::Event::ForceUnlock' };</pre>

### 6.7.37. Ticket::EventModulePost###920-TicketArticleNewMessageUpdate

Description:	Update Ticket "Seen" flag if every article got seen or a new Article got created.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'920- TicketArticleNewMessageUpdate'} = {   'Event' =&gt; 'ArticleCreate ArticleFlagSet',   'Module' =&gt;   'Kernel::System::Ticket::Event::TicketNewMessageUpdate' };</pre>

### 6.7.38. DynamicFieldFromCustomerUser::Mapping

Description:	Define a mapping between variables of the customer user data (keys) and dynamic fields of a ticket (values). The purpose is to store customer user data in ticket dynamic fields. The dynamic fields must be present in the system and should be enabled for AgentTicketFreeText, so that they can be set/updated manually by the agent. They mustn't be enabled for AgentTicketPhone, AgentTicketEmail and AgentTicketCustomer. If they were, they would have precedence over the automatically set values. To use this mapping, you have to also activate the next setting below.
Group:	Ticket



SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DynamicFieldFromCustomerUser::Mapping'} = {   'UserFirstname' =&gt; 'CustomerFirstname' };</pre>

### 6.7.39. Ticket::EventModulePost###930-DynamicField-FromCustomerUser

Description:	This event module stores attributes from CustomerUser as DynamicFields tickets. Please see the setting above for how to configure the mapping.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'930-DynamicFieldFromCustomerUser'} = {   'Event' =&gt; '(TicketCreate TicketCustomerUpdate)',   'Module' =&gt;   'Kernel::System::Ticket::Event::DynamicFieldFromCustomerUser' };</pre>

### 6.7.40. Ticket::CustomModule###001-CustomModule

Description:	Overloads (redefines) existing functions in Kernel::System::Ticket. Used to easily add customizations.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::CustomModule'}-&gt;{'001-CustomModule'} =   'Kernel::System::Ticket::Custom';</pre>

### 6.7.41. Ticket::ViewableSenderTypes

Description:	Defines the default viewable sender types of a ticket (default: customer).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::ViewableSenderTypes'} = [   '\customer\'' ];</pre>

### 6.7.42. Ticket::ViewableLocks

Description:	Defines the viewable locks of a ticket. Default: unlock, tmp_lock.
--------------	--

Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::ViewableLocks'} = [   '\unlock\'',   '\tmp_lock\' ];</pre>

### 6.7.43. Ticket::ViewableStateType

Description:	Defines the valid state types for a ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::ViewableStateType'} = [   'new',   'open',   'pending reminder',   'pending auto' ];</pre>

### 6.7.44. Ticket::UnlockStateType

Description:	Defines the valid states for unlocked tickets. To unlock tickets the script "bin/otrs.UnlockTickets.pl" can be used.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::UnlockStateType'} = [   'new',   'open' ];</pre>

### 6.7.45. Ticket::PendingNotificationOnlyToOwner

Description:	Sends reminder notifications of unlocked ticket after reaching the reminder date (only sent to ticket owner).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::PendingNotificationOnlyToOwner'} = '0';</pre>

### 6.7.46. Ticket::PendingNotificationNotToResponsible

Description:	Disables sending reminder notifications to the responsible agent of a ticket (Ticket::Responsible needs to be activated).
--------------	---

Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::PendingNotificationNotToResponsible'} = '0';</code>

### 6.7.47. Ticket::PendingReminderStateType

Description:	Defines the state type of the reminder for pending tickets.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::PendingReminderStateType'} = [ 'pending reminder' ];</code>

### 6.7.48. Ticket::PendingAutoStateType

Description:	Determines the possible states for pending tickets that changed state after reaching time limit.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::PendingAutoStateType'} = [ 'pending auto' ];</code>

### 6.7.49. Ticket::StateAfterPending

Description:	Defines which states should be set automatically (Content), after the pending time of state (Key) has been reached.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::StateAfterPending'} = { 'pending auto close+' =&gt; 'closed successful', 'pending auto close-' =&gt; 'closed unsuccessful' };</code>

### 6.7.50. System::Permission

Description:	Standard available permissions for agents within the application. If more permissions are needed, they can be entered here. Permissions must be defined to be effective. Some other good permissions have also been provided built-in: note, close, pending, customer, freetext, move, compose, responsible, forward, and bounce. Make sure that "rw" is always the last registered permission.
--------------	---

Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'System::Permission'} = [     'ro',     'move_into',     'create',     'note',     'owner',     'priority',     'rw' ];</pre>

### 6.7.51. Ticket::Permission###1-OwnerCheck

Description:	Module to check the owner of a ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'1-OwnerCheck'} = {     'Granted' =&gt; '1',     'Module' =&gt; 'Kernel::System::Ticket::Permission::OwnerCheck',     'Required' =&gt; '0' };</pre>

### 6.7.52. Ticket::Permission###2-ResponsibleCheck

Description:	Module to check the agent responsible of a ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'2-ResponsibleCheck'} = {     'Granted' =&gt; '1',     'Module' =&gt;     'Kernel::System::Ticket::Permission::ResponsibleCheck',     'Required' =&gt; '0' };</pre>

### 6.7.53. Ticket::Permission###3-GroupCheck

Description:	Module to check if a user is in a special group. Access is granted, if the user is in the specified group and has ro and rw permissions.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'3-GroupCheck'} = {     'Granted' =&gt; '1',     'Module' =&gt; 'Kernel::System::Ticket::Permission::GroupCheck',     'Required' =&gt; '0' };</pre>

## 6.7.54. Ticket::Permission###4-WatcherCheck

Description:	Module to check the watcher agents of a ticket.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Permission'}-&gt;{'4-WatcherCheck'} = {   'Granted' =&gt; '1',   'Module' =&gt; 'Kernel::System::Ticket::Permission::WatcherCheck',   'Required' =&gt; '0' };</pre>

## 6.7.55. CustomerTicket::Permission###1-GroupCheck

Description:	Module to check the group permissions for the access to customer tickets.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerTicket::Permission'}-&gt;{'1-GroupCheck'} = {   'Granted' =&gt; '0',   'Module' =&gt;   'Kernel::System::Ticket::CustomerPermission::GroupCheck',   'Required' =&gt; '1' };</pre>

## 6.7.56. CustomerTicket::Permission###2-CustomerUserIDCheck

Description:	Grants access, if the customer ID of the ticket matches the customer user's ID and the customer user has group permissions on the queue the ticket is in.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerTicket::Permission'}-&gt;{'2-CustomerUserIDCheck'} = {   'Granted' =&gt; '1',   'Module' =&gt;   'Kernel::System::Ticket::CustomerPermission::CustomerUserIDCheck',   'Required' =&gt; '0' };</pre>

## 6.7.57. CustomerTicket::Permission###3-CustomerID-Check

Description:	Module to check customer permissions.
Group:	Ticket
SubGroup:	Core::Ticket

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerTicket::Permission'}-&gt;{'3-CustomerIDCheck'} = {   'Granted' =&gt; '1',   'Module' =&gt;   'Kernel::System::Ticket::CustomerPermission::CustomerIDCheck',   'Required' =&gt; '0' };</pre>

### 6.7.58. Ticket::DefineEmailFrom

Description:	Defines how the From field from the emails (sent from answers and email tickets) should look like.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::DefineEmailFrom'} = 'SystemAddressName';</pre>

### 6.7.59. Ticket::DefineEmailFromSeparator

Description:	Defines the separator between the agents real name and the given queue email address.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::DefineEmailFromSeparator'} = 'via';</pre>

### 6.7.60. CustomerNotifyJustToRealCustomer

Description:	Sends customer notifications just to the mapped customer. Normally, if no customer is mapped, the latest customer sender gets the notification.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'CustomerNotifyJustToRealCustomer'} = '0';</pre>

### 6.7.61. AgentSelfNotifyOnAction

Description:	Specifies if an agent should receive email notification of his own actions.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'AgentSelfNotifyOnAction'} = '0';</code>
-----------------	--

## 6.7.62. Ticket::EventModulePost###900-GenericAgent

Description:	Event module registration. For more performance you can define a trigger event (e. g. Event => TicketCreate).
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'900-GenericAgent'} = {        'Event' =&gt; '',        'Module' =&gt; 'Kernel::System::Ticket::Event::GenericAgent',        'Transaction' =&gt; '1'      };</code>

## 6.7.63. StandardTemplate::Types

Description:	Defines the list of types for templates.
Group:	Ticket
SubGroup:	Core::Ticket
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'StandardTemplate::Types'} = {        'Answer' =&gt; 'Answer',        'Create' =&gt; 'Create',        'Forward' =&gt; 'Forward',        'PhoneCall' =&gt; 'Phone call'      };</code>

## 6.8. Core::TicketACL

### 6.8.1. Ticket::Acl::Module###1-Ticket::Acl::Module

Description:	ACL module that allows closing parent tickets only if all its children are already closed ("State" shows which states are not available for the parent ticket until all child tickets are closed).
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Acl::Module'}-&gt;{'1-Ticket::Acl::Module'} = {        'Module' =&gt;        'Kernel::System::Ticket::Acl::CloseParentAfterClosedChilds',        'State' =&gt; [          'closed successful',          'closed unsuccessful'        ]      };</code>

### 6.8.2. TicketACL::Default::Action

Description:	Default ACL values for ticket actions.
--------------	--

Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'TicketACL::Default::Action'} = {};</code>

### 6.8.3. ACLKeysLevel1Match

Description:	Defines which items are available in first level of the ACL structure.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'ACLKeysLevel1Match'} = {   'Properties' =&gt; 'Properties',   'PropertiesDatabase' =&gt; 'PropertiesDatabase' };</code>

### 6.8.4. ACLKeysLevel1Change

Description:	Defines which items are available in first level of the ACL structure.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'ACLKeysLevel1Change'} = {   'Possible' =&gt; 'Possible',   'PossibleNot' =&gt; 'PossibleNot' };</code>

### 6.8.5. ACLKeysLevel2::Possible

Description:	Defines which items are available in second level of the ACL structure.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'ACLKeysLevel2::Possible'} = {   'Action' =&gt; 'Action',   'ActivityDialog' =&gt; 'ActivityDialog',   'Process' =&gt; 'Process',   'Ticket' =&gt; 'Ticket' };</code>

### 6.8.6. ACLKeysLevel2::PossibleNot

Description:	Defines which items are available in second level of the ACL structure.
--------------	---



Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'ACLKeysLevel2::PossibleNot'} = {   'ActivityDialog' =&gt; 'ActivityDialog',   'Process' =&gt; 'Process',   'Ticket' =&gt; 'Ticket' };</pre>

### 6.8.7. ACLKeysLevel2::Properties

Description:	Defines which items are available in second level of the ACL structure.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'ACLKeysLevel2::Properties'} = {   'CustomerUser' =&gt; 'CustomerUser',   'DynamicField' =&gt; 'DynamicField',   'Frontend' =&gt; 'Frontend',   'Owner' =&gt; 'Owner',   'Priority' =&gt; 'Priority',   'Process' =&gt; 'Process',   'Queue' =&gt; 'Queue',   'Responsible' =&gt; 'Responsible',   'SLA' =&gt; 'SLA',   'Service' =&gt; 'Service',   'State' =&gt; 'State',   'Ticket' =&gt; 'Ticket',   'Type' =&gt; 'Type',   'User' =&gt; 'User' };</pre>

### 6.8.8. ACLKeysLevel2::PropertiesDatabase

Description:	Defines which items are available in second level of the ACL structure.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'ACLKeysLevel2::PropertiesDatabase'} = {   'CustomerUser' =&gt; 'CustomerUser',   'DynamicField' =&gt; 'DynamicField',   'Owner' =&gt; 'Owner',   'Priority' =&gt; 'Priority',   'Process' =&gt; 'Process',   'Queue' =&gt; 'Queue',   'Responsible' =&gt; 'Responsible',   'SLA' =&gt; 'SLA',   'Service' =&gt; 'Service',   'State' =&gt; 'State',   'Ticket' =&gt; 'Ticket',   'Type' =&gt; 'Type',   'User' =&gt; 'User' };</pre>

## 6.8.9. ACLKeysLevel3::Actions###100-Default

Description:	Defines which items are available for 'Action' in third level of the ACL structure.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'ACLKeysLevel3::Actions'}-&gt;{'100-Default'} = [   'AgentTicketBounce',   'AgentTicketClose',   'AgentTicketCompose',   'AgentTicketCustomer',   'AgentTicketForward',   'AgentTicketFreeText',   'AgentTicketHistory',   'AgentTicketLink',   'AgentTicketLock',   'AgentTicketMerge',   'AgentTicketMove',   'AgentTicketNote',   'AgentTicketOwner',   'AgentTicketPending',   'AgentTicketPhone',   'AgentTicketPhoneInbound',   'AgentTicketPhoneOutbound',   'AgentTicketPrint',   'AgentTicketPriority',   'AgentTicketResponsible',   'AgentTicketWatcher',   'AgentTicketZoom',   'AgentLinkObject',   'CustomerTicketMessage',   'CustomerTicketPrint',   'CustomerTicketProcess',   'CustomerTicketZoom' ]; </pre>

## 6.8.10. ACL::CacheTTL

Description:	Cache time in seconds for the DB ACL backend.
Group:	Ticket
SubGroup:	Core::TicketACL
Valid:	1
Required:	1
Config-Setting:	<pre> \$self-&gt;{'ACL::CacheTTL'} = '3600'; </pre>

## 6.9. Core::TicketBulkAction

### 6.9.1. Ticket::Frontend::BulkFeature

Description:	Enables ticket bulk action feature for the agent frontend to work on more than one ticket at a time.
Group:	Ticket
SubGroup:	Core::TicketBulkAction
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::BulkFeature'} = '1';</code>

## 6.9.2. Ticket::Frontend::BulkFeatureGroup

Description:	Enables ticket bulk action feature only for the listed groups.
Group:	Ticket
SubGroup:	Core::TicketBulkAction
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::BulkFeatureGroup'} = [ 'admin', 'users' ];</code>

## 6.10. Core::TicketDynamicFieldDefault

### 6.10.1.

### Ticket::EventModulePost###TicketDynamicFieldDefault

Description:	Event module registration. For more performance you can define a trigger event (e. g. Event => TicketCreate). This is only possible if all Ticket dynamic fields need the same event.
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::EventModulePost'}-&gt;{'TicketDynamicFieldDefault'} = { 'Module' =&gt; 'Kernel::System::Ticket::Event::TicketDynamicFieldDefault', 'Transaction' =&gt; '1' };</code>

### 6.10.2.

### Ticket::TicketDynamicFieldDefault###Element1

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element1'} = { 'Event' =&gt; 'TicketCreate', 'Name' =&gt; 'Field1', 'Value' =&gt; 'Default' };</code>

### 6.10.3.

#### Ticket::TicketDynamicFieldDefault###Element2

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element2'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.4.

#### Ticket::TicketDynamicFieldDefault###Element3

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element3'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.5.

#### Ticket::TicketDynamicFieldDefault###Element4

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element4'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

```
};
```

### 6.10.6. Ticket::TicketDynamicFieldDefault###Element5

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element5'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.7. Ticket::TicketDynamicFieldDefault###Element6

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element6'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.8. Ticket::TicketDynamicFieldDefault###Element7

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element7'} = {</pre>

	<pre>'Event' =&gt; '', 'Name' =&gt; '', 'Value' =&gt; '' };</pre>
--	---

### 6.10.9. Ticket::TicketDynamicFieldDefault###Element8

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element8'} = { 'Event' =&gt; '', 'Name' =&gt; '', 'Value' =&gt; '' };</pre>

### 6.10.10. Ticket::TicketDynamicFieldDefault###Element9

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element9'} = { 'Event' =&gt; '', 'Name' =&gt; '', 'Value' =&gt; '' };</pre>

### 6.10.11. Ticket::TicketDynamicFieldDefault###Element10

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0

Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element10'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.12.

#### **Ticket::TicketDynamicFieldDefault###Element11**

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element11'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.13.

#### **Ticket::TicketDynamicFieldDefault###Element12**

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element12'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.14.

#### **Ticket::TicketDynamicFieldDefault###Element13**

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket

SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element13'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.15.

#### Ticket::TicketDynamicFieldDefault###Element14

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element14'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.16.

#### Ticket::TicketDynamicFieldDefault###Element15

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element15'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

### 6.10.17.

#### Ticket::TicketDynamicFieldDefault###Element16

Description:	Configures a default TicketDynamicField setting. "Name" defines the dynamic field which should be used, "Value" is the data that will be set, and "Event" defines the trigger event. Please check the developer manual ( <a href="http://doc.otrs.org/">http://doc.otrs.org/</a> ), chapter "Ticket Event Module".
--------------	--



Group:	Ticket
SubGroup:	Core::TicketDynamicFieldDefault
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::TicketDynamicFieldDefault'}-&gt;{'Element16'} = {   'Event' =&gt; '',   'Name' =&gt; '',   'Value' =&gt; '' };</pre>

## 6.11. Core::TicketWatcher

### 6.11.1. Ticket::Watcher

Description:	Enables or disables the ticket watcher feature, to keep track of tickets without being the owner nor the responsible.
Group:	Ticket
SubGroup:	Core::TicketWatcher
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Watcher'} = '0';</pre>

### 6.11.2. Ticket::WatcherGroup

Description:	Enables ticket watcher feature only for the listed groups.
Group:	Ticket
SubGroup:	Core::TicketWatcher
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::WatcherGroup'} = [   'admin',   'users' ];</pre>

## 6.12. Frontend::Admin

### 6.12.1. Events###Ticket

Description:	List of all ticket events to be displayed in the GUI.
Group:	Ticket
SubGroup:	Frontend::Admin
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Events'}-&gt;{'Ticket'} = [   'TicketCreate',   'TicketDelete',   'TicketTitleUpdate',   'TicketUnlockTimeoutUpdate',   'TicketQueueUpdate',   'TicketTypeUpdate',   'TicketServiceUpdate', ];</pre>

```
'TicketSLAUpdate',
'TicketCustomerUpdate',
'TicketPendingTimeUpdate',
'TicketLockUpdate',
'TicketArchiveFlagUpdate',
'TicketStateUpdate',
'TicketOwnerUpdate',
'TicketResponsibleUpdate',
'TicketPriorityUpdate',
'HistoryAdd',
'HistoryDelete',
'TicketAccountTime',
'TicketMerge',
'TicketSubscribe',
'TicketUnsubscribe',
'TicketFlagSet',
'TicketFlagDelete',
'TicketSlaveLinkAdd',
'TicketSlaveLinkDelete',
'TicketMasterLinkDelete',
'EscalationResponseTimeNotifyBefore',
'EscalationUpdateTimeNotifyBefore',
'EscalationSolutionTimeNotifyBefore',
'EscalationResponseTimeStart',
'EscalationUpdateTimeStart',
'EscalationSolutionTimeStart',
'EscalationResponseTimeStop',
'EscalationUpdateTimeStop',
'EscalationSolutionTimeStop'
];
```

## 6.12.2. Events###Article

Description:	List of all article events to be displayed in the GUI.
Group:	Ticket
SubGroup:	Frontend::Admin
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Events'}-&gt;{'Article'} = [ 'ArticleCreate', 'ArticleUpdate', 'ArticleSend', 'ArticleBounce', 'ArticleAgentNotification', 'ArticleCustomerNotification', 'ArticleAutoResponse', 'ArticleFlagSet', 'ArticleFlagDelete', 'ArticleAgentNotification', 'ArticleCustomerNotification' ];</pre>

## 6.13. Frontend::Admin::ModuleRegistration

### 6.13.1. Frontend::Module###AdminACL

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0

Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminACL'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.Admin.ACL.css'     ],     'JavaScript' =&gt; [       'Core.Agent.Admin.ACL.js'     ]   },   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Configure and manage ACLs.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Access Control Lists (ACL)',     'Prio' =&gt; '750'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Access Control Lists (ACL)' }; </pre>
-----------------	--

### 6.13.2. Frontend::Module###AdminQueue

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminQueue'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Queue',     'Description' =&gt; 'Create and manage queues.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Queues',     'Prio' =&gt; '100'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Queues' }; </pre>

### 6.13.3. Frontend::Module###AdminTemplate

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminTemplate'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Queue',     'Description' =&gt; 'Create and manage templates.', </pre>

```
'Module' => 'Kernel::Output::HTML::NavBarModuleAdmin',
'Name' => 'Templates',
'Prio' => '200'
},
'NavBarName' => 'Admin',
'Title' => 'Templates'
};
```

### 6.13.4. Frontend::Module###AdminQueueTemplates

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminQueueTemplates'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Queue',     'Description' =&gt; 'Link templates to queues.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Templates &lt;-&gt; Queues',     'Prio' =&gt; '300'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Templates &lt;-&gt; Queues' };</pre>

### 6.13.5. Frontend::Module###AdminAutoResponse

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminAutoResponse'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Queue',     'Description' =&gt; 'Create and manage responses that are automatically sent.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Auto Responses',     'Prio' =&gt; '400'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Auto Responses' };</pre>

### 6.13.6.

### Frontend::Module###AdminQueueAutoResponse

Description:	Frontend module registration for the agent interface.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminQueueAutoResponse'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Queue',     'Description' =&gt; 'Link queues to auto responses.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Auto Responses &lt;-&gt; Queues',     'Prio' =&gt; '500'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Auto Responses &lt;-&gt; Queues' }; </pre>

### 6.13.7. Frontend::Module###AdminAttachment

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminAttachment'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Queue',     'Description' =&gt; 'Create and manage attachments.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Attachments',     'Prio' =&gt; '600'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Attachments' }; </pre>

### 6.13.8. Frontend::Module###AdminTemplateAttachment

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminTemplateAttachment'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Queue', </pre>

	<pre>'Description' =&gt; 'Link attachments to templates.', 'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'Attachments &lt;-&gt; Templates', 'Prio' =&gt; '700' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Attachments &lt;-&gt; Templates' };</pre>
--	---

### 6.13.9. Frontend::Module###AdminSalutation

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminSalutation'} = { 'Description' =&gt; 'Admin', 'Group' =&gt; [ 'admin' ], 'NavBarModule' =&gt; { 'Block' =&gt; 'Queue', 'Description' =&gt; 'Create and manage salutations.', 'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'Salutations', 'Prio' =&gt; '800' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Salutations' };</pre>

### 6.13.10. Frontend::Module###AdminSignature

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AdminSignature'} = { 'Description' =&gt; 'Admin', 'Group' =&gt; [ 'admin' ], 'NavBarModule' =&gt; { 'Block' =&gt; 'Queue', 'Description' =&gt; 'Create and manage signatures.', 'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', 'Name' =&gt; 'Signatures', 'Prio' =&gt; '900' }, 'NavBarName' =&gt; 'Admin', 'Title' =&gt; 'Signatures' };</pre>

### 6.13.11. Frontend::Module###AdminSystemAddress

Description:	Frontend module registration for the agent interface.
Group:	Ticket

SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminSystemAddress'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Email',     'Description' =&gt; 'Set sender email addresses for this system.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Email Addresses',     'Prio' =&gt; '300'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Email Addresses' }; </pre>

### 6.13.12. Frontend::Module###AdminNotification

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminNotification'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Manage notifications that are sent to agents.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Agent Notifications',     'Prio' =&gt; '400'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Agent Notifications' }; </pre>

### 6.13.13. Frontend::Module###AdminNotificationEvent

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminNotificationEvent'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Create and manage event based notifications.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin', </pre>

	<pre>       'Name' =&gt; 'Notifications (Event)',       'Prio' =&gt; '400'     },     'NavBarName' =&gt; 'Admin',     'Title' =&gt; 'Notifications (Event)'   }; </pre>
--	---

### 6.13.14. Frontend::Module###AdminService

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminService'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Create and manage services.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Services',     'Prio' =&gt; '900'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Services' }; </pre>

### 6.13.15. Frontend::Module###AdminSLA

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminSLA'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Create and manage Service Level Agreements (SLAs).',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Service Level Agreements',     'Prio' =&gt; '1000'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Service Level Agreements' }; </pre>

### 6.13.16. Frontend::Module###AdminType

Description:	Frontend module registration for the agent interface.
Group:	Ticket



SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminType'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Create and manage ticket types.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Types',     'Prio' =&gt; '700'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'Types' }; </pre>

### 6.13.17. Frontend::Module###AdminState

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminState'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Create and manage ticket states.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'States',     'Prio' =&gt; '800'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'States' }; </pre>

### 6.13.18. Frontend::Module###AdminPriority

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AdminPriority'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'NavBarModule' =&gt; {     'Block' =&gt; 'Ticket',     'Description' =&gt; 'Create and manage ticket priorities.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'Priorities',     'Prio' =&gt; '850'   } }; </pre>

```

},
'NavBarName' => 'Admin',
'Title' => 'Priorities'
};

```

## 6.13.19. Frontend::Module###AdminGenericAgent

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Admin::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AdminGenericAgent'} = {   'Description' =&gt; 'Admin',   'Group' =&gt; [     'admin'   ],   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.Admin.GenericAgent.js'     ]   },   'NavBarModule' =&gt; {     'Block' =&gt; 'System',     'Description' =&gt; 'Manage tasks triggered by event or time based execution.',     'Module' =&gt; 'Kernel::Output::HTML::NavBarModuleAdmin',     'Name' =&gt; 'GenericAgent',     'Prio' =&gt; '300'   },   'NavBarName' =&gt; 'Admin',   'Title' =&gt; 'GenericAgent' }; </pre>

## 6.14. Frontend::Agent

### 6.14.1. Ticket::Frontend::PendingDiffTime

Description:	Time in seconds that gets added to the actual time if setting a pending-state (default: 86400 = 1 day).
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$self-&gt;{'Ticket::Frontend::PendingDiffTime'} = '86400';</code>

### 6.14.2. Ticket::Frontend::MaxQueueLevel

Description:	Define the max depth of queues.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$self-&gt;{'Ticket::Frontend::MaxQueueLevel'} = '5';</code>

### 6.14.3. Ticket::Frontend::ListType

Description:	Shows existing parent/child queue lists in the system in the form of a tree or a list.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ListType'} = 'tree';</code>

### 6.14.4. Ticket::Frontend::TextAreaEmail

Description:	Permitted width for compose email windows.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::TextAreaEmail'} = '82';</code>

### 6.14.5. Ticket::Frontend::TextAreaNote

Description:	Permitted width for compose note windows.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::TextAreaNote'} = '78';</code>

### 6.14.6. Ticket::Frontend::InformAgentMaxSize

Description:	Max size (in rows) of the informed agents box in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::InformAgentMaxSize'} = '3';</code>

### 6.14.7. Ticket::Frontend::InvolvedAgentMaxSize

Description:	Max size (in rows) of the involved agents box in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::InvolvedAgentMaxSize'} = '3';</code>
-----------------	---

### 6.14.8. Ticket::Frontend::CustomerInfoCompose

Description:	Shows the customer user information (phone and email) in the compose screen.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerInfoCompose'} = '1';</code>

### 6.14.9.

### Ticket::Frontend::CustomerInfoComposeMaxSize

Description:	Max size (in characters) of the customer information table (phone and email) in the compose screen.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerInfoComposeMaxSize'} = '22';</code>

### 6.14.10. Ticket::Frontend::CustomerInfoZoom

Description:	Shows the customer user's info in the ticket zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerInfoZoom'} = '1';</code>

### 6.14.11. Ticket::Frontend::CustomerInfoZoomMaxSize

Description:	Maximum size (in characters) of the customer information table in the ticket zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerInfoZoomMaxSize'} = '22';</code>

### 6.14.12.

### Ticket::Frontend::DynamicFieldsZoomMaxSizeSidebar

Description:	Maximum length (in characters) of the dynamic field in the sidebar of the ticket zoom view.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::DynamicFieldsZoomMaxSizeSidebar'} = '18';</code>

### 6.14.13.

#### **Ticket::Frontend::DynamicFieldsZoomMaxSizeArticle**

Description:	Maximum length (in characters) of the dynamic field in the article of the ticket zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::DynamicFieldsZoomMaxSizeArticle'} = '160';</code>

### 6.14.14. Ticket::Frontend::AccountTime

Description:	Activates time accounting.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AccountTime'} = '1';</code>

### 6.14.15. Ticket::Frontend::TimeUnits

Description:	Sets the preferred time units (e.g. work units, hours, minutes).
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::TimeUnits'} = '(work units)';</code>

### 6.14.16. Ticket::Frontend::NeedAccountedTime

Description:	Defines if time accounting is mandatory in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::NeedAccountedTime'} = '0';</code>

### 6.14.17. Ticket::Frontend::BulkAccountedTime

Description:	Defines if time accounting must be set to all tickets in bulk action.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::BulkAccountedTime'} = '1';</code>

### 6.14.18. Ticket::Frontend::NeedSpellCheck

Description:	Defines if composed messages have to be spell checked in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::NeedSpellCheck'} = '0';</code>

### 6.14.19. Ticket::Frontend::NewOwnerSelection

Description:	Shows an owner selection in phone and email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::NewOwnerSelection'} = '1';</code>

### 6.14.20. Ticket::Frontend::NewResponsibleSelection

Description:	Show a responsible selection in phone and email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::NewResponsibleSelection'} = '1';</code>

### 6.14.21. Ticket::Frontend::NewQueueSelectionType

Description:	Defines the receipt target of the phone ticket and the sender of the email ticket ("Queue" shows all queues, "SystemAddress" displays all system addresses) in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::NewQueueSelectionType'} = 'Queue';</code>

### 6.14.22. Ticket::Frontend::NewQueueSelectionString

Description:	Determines the strings that will be shown as receipt (To:) of the phone ticket and as sender (From:) of the email ticket in the agent interface. For Queue as NewQueueSelectionType "<Queue>" shows the names of the queues and for SystemAddress "<Realname> <<Email>>" shows the name and email of the receipt.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::NewQueueSelectionString'} = '&lt;Queue&gt;';</code>

### 6.14.23. Ticket::Frontend::NewQueueOwnSelection

Description:	Determines which options will be valid of the receipt (phone ticket) and the sender (email ticket) in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::NewQueueOwnSelection'} = {   '1' =&gt; 'First Queue!',   '2' =&gt; 'Second Queue!' };</code>

### 6.14.24. Ticket::Frontend::ShowCustomerTickets

Description:	Shows customer history tickets in AgentTicketPhone, AgentTicketEmail and AgentTicketCustomer.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ShowCustomerTickets'} = '1';</code>

### 6.14.25. NewTicketInNewWindow::Enabled

Description:	If enabled, TicketPhone and TicketEmail will be open in new windows.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'NewTicketInNewWindow::Enabled'} = '0';</code>
-----------------	--

## 6.14.26. CustomerDBLink

Description:	Defines an external link to the database of the customer (e.g. 'http://yourhost/customer.php?CID=\$Data{"CustomerID"}' or ").
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerDBLink'} = '\$Env{"CGIHandle"}?Action=AgentCustomerInformationCenter;CustomerID=\$LQData{"CustomerID"}';</code>

## 6.14.27. CustomerDBLinkTarget

Description:	Defines the target attribute in the link to external customer database. E.g. 'target="cdb"'.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerDBLinkTarget'} = '';</code>

## 6.14.28. CustomerDBLinkClass

Description:	Defines the target attribute in the link to external customer database. E.g. 'AsPopup PopupType_TicketAction'.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerDBLinkClass'} = '';</code>

## 6.14.29. Frontend::CommonObject###QueueObject

Description:	Path of the file that stores all the settings for the QueueObject object for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::CommonObject'}-&gt;{'QueueObject'} = 'Kernel::System::Queue';</code>

## 6.14.30. Frontend::CommonObject###TicketObject

Description:	Path of the file that stores all the settings for the TicketObject for the agent interface.
--------------	---



Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::CommonObject'}-&gt;{'TicketObject'} = 'Kernel::System::Ticket';</code>

### 6.14.31. Frontend::CommonParam###Action

Description:	Defines the default used Frontend-Module if no Action parameter given in the url on the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::CommonParam'}-&gt;{'Action'} = 'AgentDashboard';</code>

### 6.14.32. Frontend::CommonParam###QueueID

Description:	Default queue ID used by the system in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::CommonParam'}-&gt;{'QueueID'} = '0';</code>

### 6.14.33. Frontend::CommonParam###TicketID

Description:	Default ticket ID used by the system in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Frontend::CommonParam'}-&gt;{'TicketID'} = '';</code>

### 6.14.34. DefaultOverviewColumns

Description:	General ticket data shown in the ticket overviews (fall-back). Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note that TicketNumber can not be disabled, because it is necessary.
Group:	Ticket
SubGroup:	Frontend::Agent
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'DefaultOverviewColumns'} = {   'Age' =&gt; '2',   'Changed' =&gt; '1',</code>

```
'CustomerID' => '2',
'CustomerName' => '1',
'CustomerUserID' => '1',
'EscalationResponseTime' => '1',
'EscalationSolutionTime' => '1',
'EscalationTime' => '1',
'EscalationUpdateTime' => '1',
'Lock' => '2',
'Owner' => '2',
'PendingTime' => '1',
'Priority' => '1',
'Queue' => '2',
'Responsible' => '1',
'SLA' => '1',
'Service' => '1',
'State' => '2',
'TicketNumber' => '2',
'Title' => '2',
'Type' => '1'
};
```

## 6.15. Frontend::Agent::Dashboard

### 6.15.1. DashboardBackend###0100-TicketPendingReminder

Description:	Parameters for the dashboard backend of the ticket pending reminder overview of the agent interface . "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{'0100-TicketPendingReminder'} = {   'Attributes' =&gt; 'TicketPendingTimeOlderMinutes=1;StateType=pending reminder;SortBy=PendingTime;OrderBy=Down;',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'DefaultColumns' =&gt; {     'Age' =&gt; '2',     'Changed' =&gt; '1',     'CustomerID' =&gt; '1',     'CustomerName' =&gt; '1',     'CustomerUserID' =&gt; '1',     'EscalationResponseTime' =&gt; '1',     'EscalationSolutionTime' =&gt; '1',     'EscalationTime' =&gt; '1',     'EscalationUpdateTime' =&gt; '1',     'Lock' =&gt; '1',     'Owner' =&gt; '1',     'PendingTime' =&gt; '1',     'Priority' =&gt; '1',     'Queue' =&gt; '1',     'Responsible' =&gt; '1',     'SLA' =&gt; '1',     'Service' =&gt; '1',     'State' =&gt; '1',</pre>

```

    'TicketNumber' => '2',
    'Title' => '2',
    'Type' => '1'
  },
  'Description' => 'All tickets with a reminder set where the
  reminder date has been reached',
  'Filter' => 'Locked',
  'Group' => '',
  'Limit' => '10',
  'Module' => 'Kernel::Output::HTML::DashboardTicketGeneric',
  'Permission' => 'rw',
  'Time' => 'UntilTime',
  'Title' => 'Reminder Tickets'
};

```

## 6.15.2. DashboardBackend###0110-TicketEscalation

Description:	Parameters for the dashboard backend of the ticket escalation overview of the agent interface . "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'DashboardBackend'}-&gt;{'0110-TicketEscalation'} = {   'Attributes' =&gt;   'TicketEscalationTimeOlderMinutes=1;SortBy=EscalationTime;OrderBy=Down;',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'DefaultColumns' =&gt; {     'Age' =&gt; '2',     'Changed' =&gt; '1',     'CustomerID' =&gt; '1',     'CustomerName' =&gt; '1',     'CustomerUserID' =&gt; '1',     'EscalationResponseTime' =&gt; '1',     'EscalationSolutionTime' =&gt; '1',     'EscalationTime' =&gt; '1',     'EscalationUpdateTime' =&gt; '1',     'Lock' =&gt; '1',     'Owner' =&gt; '1',     'PendingTime' =&gt; '1',     'Priority' =&gt; '1',     'Queue' =&gt; '1',     'Responsible' =&gt; '1',     'SLA' =&gt; '1',     'Service' =&gt; '1',     'State' =&gt; '1',     'TicketNumber' =&gt; '2',     'Title' =&gt; '2',     'Type' =&gt; '1'   },   'Description' =&gt; 'All escalated tickets',   'Filter' =&gt; 'All',   'Group' =&gt; '',   'Limit' =&gt; '10',   'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketGeneric',   'Permission' =&gt; 'rw',   'Time' =&gt; 'EscalationTime', </pre>

```
'Title' => 'Escalated Tickets'
};
```

### 6.15.3. DashboardBackend###0120-TicketNew

Description:	Parameters for the dashboard backend of the new tickets overview of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{'0120-TicketNew'} = {   'Attributes' =&gt; 'StateType=new;',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'DefaultColumns' =&gt; {     'Age' =&gt; '2',     'Changed' =&gt; '1',     'CustomerID' =&gt; '1',     'CustomerName' =&gt; '1',     'CustomerUserID' =&gt; '1',     'EscalationResponseTime' =&gt; '1',     'EscalationSolutionTime' =&gt; '1',     'EscalationTime' =&gt; '1',     'EscalationUpdateTime' =&gt; '1',     'Lock' =&gt; '1',     'Owner' =&gt; '1',     'PendingTime' =&gt; '1',     'Priority' =&gt; '1',     'Queue' =&gt; '1',     'Responsible' =&gt; '1',     'SLA' =&gt; '1',     'Service' =&gt; '1',     'State' =&gt; '1',     'TicketNumber' =&gt; '2',     'Title' =&gt; '2',     'Type' =&gt; '1'   },   'Description' =&gt; 'All new tickets, these tickets have not been worked on yet',   'Filter' =&gt; 'All',   'Group' =&gt; '',   'Limit' =&gt; '10',   'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketGeneric',   'Permission' =&gt; 'rw',   'Time' =&gt; 'Age',   'Title' =&gt; 'New Tickets' };</pre>

### 6.15.4. DashboardBackend###0130-TicketOpen

Description:	Parameters for the dashboard backend of the ticket pending reminder overview of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" deter-
--------------	--

	mines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'DashboardBackend'}-&gt;{'0130-TicketOpen'} = {   'Attributes' =&gt; 'StateType=open;',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'DefaultColumns' =&gt; {     'Age' =&gt; '2',     'Changed' =&gt; '1',     'CustomerID' =&gt; '1',     'CustomerName' =&gt; '1',     'CustomerUserID' =&gt; '1',     'EscalationResponseTime' =&gt; '1',     'EscalationSolutionTime' =&gt; '1',     'EscalationTime' =&gt; '1',     'EscalationUpdateTime' =&gt; '1',     'Lock' =&gt; '1',     'Owner' =&gt; '1',     'PendingTime' =&gt; '1',     'Priority' =&gt; '1',     'Queue' =&gt; '1',     'Responsible' =&gt; '1',     'SLA' =&gt; '1',     'Service' =&gt; '1',     'State' =&gt; '1',     'TicketNumber' =&gt; '2',     'Title' =&gt; '2',     'Type' =&gt; '1'   },   'Description' =&gt; 'All open tickets, these tickets have already been worked on, but need a response',   'Filter' =&gt; 'All',   'Group' =&gt; '',   'Limit' =&gt; '10',   'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketGeneric',   'Permission' =&gt; 'rw',   'Time' =&gt; 'Age',   'Title' =&gt; 'Open Tickets / Need to be answered' }; </pre>

### 6.15.5. DashboardBackend###0250-TicketStats

Description:	Parameters for the dashboard backend of the ticket stats of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'DashboardBackend'}-&gt;{'0250-TicketStats'} = { </pre>

	<pre>'Block' =&gt; 'ContentSmall', 'CacheTTL' =&gt; '30', 'Changed' =&gt; '1', 'Closed' =&gt; '1', 'Default' =&gt; '1', 'Group' =&gt; '', 'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketStatsGeneric', 'Permission' =&gt; 'rw', 'Title' =&gt; '7 Day Stats' };</pre>
--	---

### 6.15.6. DashboardBackend###0260-TicketCalendar

Description:	Parameters for the dashboard backend of the ticket calendar of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{'0260-TicketCalendar'} = { 'Block' =&gt; 'ContentSmall', 'CacheTTL' =&gt; '2', 'Default' =&gt; '1', 'Group' =&gt; '', 'Limit' =&gt; '6', 'Module' =&gt; 'Kernel::Output::HTML::DashboardCalendar', 'OwnerOnly' =&gt; '', 'Permission' =&gt; 'rw', 'Title' =&gt; 'Upcoming Events' };</pre>

### 6.15.7. DashboardBackend###0270-TicketQueueOverview

Description:	Parameters for the dashboard backend of the queue overview widget of the agent interface. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "QueuePermissionGroup" is not mandatory, queues are only listed if they belong to this permission group if you enable it. "States" is a list of states, the key is the sort order of the state in the widget. "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{'0270-TicketQueueOverview'} = { 'Block' =&gt; 'ContentLarge', 'CacheTTLLocal' =&gt; '0.5', 'Default' =&gt; '1', 'Description' =&gt; 'Provides a matrix overview of the tickets per state per queue.', 'Group' =&gt; '',</pre>

	<pre>'Module' =&gt; 'Kernel::Output::HTML::DashboardTicketQueueOverview', 'Permission' =&gt; 'rw', 'QueuePermissionGroup' =&gt; 'users', 'Sort' =&gt; 'SortBy=Age;OrderBy=Up', 'States' =&gt; {   '1' =&gt; 'new',   '4' =&gt; 'open',   '6' =&gt; 'pending reminder' }, 'Title' =&gt; 'Ticket Queue Overview' };</pre>
--	---

### 6.15.8. DashboardBackend###0280-DashboardEventsTicketCalendar

Description:	Parameters for the dashboard backend of the ticket stats of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardBackend'}-&gt;{'0280-DashboardEventsTicketCalendar'} = {   'Block' =&gt; 'ContentLarge',   'CacheTTL' =&gt; '0',   'Default' =&gt; '0',   'Group' =&gt; '',   'Module' =&gt; 'Kernel::Output::HTML::DashboardEventsTicketCalendar',   'Title' =&gt; 'Events Ticket Calendar' };</pre>

### 6.15.9. AgentCustomerInformationCenter::Backend###0100-CIC-TicketPendingReminder

Description:	Parameters for the dashboard backend of the ticket pending reminder overview of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AgentCustomerInformationCenter::Backend'}-&gt;{'0100-CIC-TicketPendingReminder'} = {   'Attributes' =&gt; 'TicketPendingTimeOlderMinutes=1;StateType=pending reminder;SortBy=PendingTime;OrderBy=Down;', </pre>

```

'Block' => 'ContentLarge',
'CacheTTLLocal' => '0.5',
'Default' => '1',
'DefaultColumns' => {
  'Age' => '2',
  'Changed' => '1',
  'CustomerID' => '1',
  'CustomerName' => '1',
  'CustomerUserID' => '1',
  'EscalationResponseTime' => '1',
  'EscalationSolutionTime' => '1',
  'EscalationTime' => '1',
  'EscalationUpdateTime' => '1',
  'Lock' => '1',
  'Owner' => '1',
  'PendingTime' => '1',
  'Priority' => '1',
  'Queue' => '1',
  'Responsible' => '1',
  'SLA' => '1',
  'Service' => '1',
  'State' => '1',
  'TicketNumber' => '2',
  'Title' => '2',
  'Type' => '1'
},
'Description' => 'All tickets with a reminder set where the
reminder date has been reached',
'Filter' => 'Locked',
'Group' => '',
'Limit' => '10',
'Module' => 'Kernel::Output::HTML::DashboardTicketGeneric',
'Permission' => 'ro',
'Time' => 'UntilTime',
'Title' => 'Reminder Tickets'
};

```

### 6.15.10. AgentCustomerInformationCenter::Backend###0110-CIC-TicketEscalation

Description:	Parameters for the dashboard backend of the ticket escalation overview of the agent interface . "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'AgentCustomerInformationCenter::Backend'}-&gt;{'0110-CIC-TicketEscalation'} = {   'Attributes' =&gt;   'TicketEscalationTimeOlderMinutes=1;SortBy=EscalationTime;OrderBy=Down;',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'DefaultColumns' =&gt; {     'Age' =&gt; '2',     'Changed' =&gt; '1', </pre>



```

'CustomerID' => '1',
'CustomerName' => '1',
'CustomerUserID' => '1',
'EscalationResponseTime' => '1',
'EscalationSolutionTime' => '1',
'EscalationTime' => '1',
'EscalationUpdateTime' => '1',
'Lock' => '1',
'Owner' => '1',
'PendingTime' => '1',
'Priority' => '1',
'Queue' => '1',
'Responsible' => '1',
'SLA' => '1',
'Service' => '1',
'State' => '1',
'TicketNumber' => '2',
'Title' => '2',
'Type' => '1'
},
'Description' => 'All escalated tickets',
'Filter' => 'All',
'Group' => '',
'Limit' => '10',
'Module' => 'Kernel::Output::HTML::DashboardTicketGeneric',
'Permission' => 'ro',
'Time' => 'EscalationTime',
'Title' => 'Escalated Tickets'
};

```

### 6.15.11. AgentCustomerInformationCenter::Backend###0120-CIC-TicketNew

Description:	Parameters for the dashboard backend of the new tickets overview of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'AgentCustomerInformationCenter::Backend'}-&gt;{'0120-CIC-TicketNew'} = {   'Attributes' =&gt; 'StateType=new;',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'DefaultColumns' =&gt; {     'Age' =&gt; '2',     'Changed' =&gt; '1',     'CustomerID' =&gt; '1',     'CustomerName' =&gt; '1',     'CustomerUserID' =&gt; '1',     'EscalationResponseTime' =&gt; '1',     'EscalationSolutionTime' =&gt; '1',     'EscalationTime' =&gt; '1',     'EscalationUpdateTime' =&gt; '1',     'Lock' =&gt; '1', </pre>

```

'Owner' => '1',
'PendingTime' => '1',
'Priority' => '1',
'Queue' => '1',
'Responsible' => '1',
'SLA' => '1',
'Service' => '1',
'State' => '1',
'TicketNumber' => '2',
'Title' => '2',
'Type' => '1'
},
'Description' => 'All new tickets, these tickets have not been
worked on yet',
'Filter' => 'All',
'Group' => '',
'Limit' => '10',
'Module' => 'Kernel::Output::HTML::DashboardTicketGeneric',
'Permission' => 'ro',
'Time' => 'Age',
'Title' => 'New Tickets'
};

```

### 6.15.12. AgentCustomerInformationCenter::Backend###0130- CIC-TicketOpen

Description:	Parameters for the dashboard backend of the ticket pending reminder overview of the agent interface. "Limit" is the number of entries shown by default. "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed for DefaultColumns. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'AgentCustomerInformationCenter::Backend'}-&gt;{'0130-CIC- TicketOpen'} = {   'Attributes' =&gt; 'StateType=open;',   'Block' =&gt; 'ContentLarge',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'DefaultColumns' =&gt; {     'Age' =&gt; '2',     'Changed' =&gt; '1',     'CustomerID' =&gt; '1',     'CustomerName' =&gt; '1',     'CustomerUserID' =&gt; '1',     'EscalationResponseTime' =&gt; '1',     'EscalationSolutionTime' =&gt; '1',     'EscalationTime' =&gt; '1',     'EscalationUpdateTime' =&gt; '1',     'Lock' =&gt; '1',     'Owner' =&gt; '1',     'PendingTime' =&gt; '1',     'Priority' =&gt; '1',     'Queue' =&gt; '1',     'Responsible' =&gt; '1',     'SLA' =&gt; '1',     'Service' =&gt; '1', </pre>

```
'State' => '1',
'TicketNumber' => '2',
'Title' => '2',
'Type' => '1'
},
'Description' => 'All open tickets, these tickets have already
been worked on, but need a response',
'Filter' => 'All',
'Group' => '',
'Limit' => '10',
'Module' => 'Kernel::Output::HTML::DashboardTicketGeneric',
'Permission' => 'ro',
'Time' => 'Age',
'Title' => 'Open Tickets / Need to be answered'
};
```

### 6.15.13. AgentCustomerInformationCenter::Backend###0500-CIC-CustomerIDStatus

Description:	Parameters for the dashboard backend of the customer id status widget of the agent interface . "Group" is used to restrict the access to the plugin (e. g. Group: admin;group1;group2;). "Default" determines if the plugin is enabled by default or if the user needs to enable it manually. "CacheTTLLocal" is the cache time in minutes for the plugin.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'AgentCustomerInformationCenter::Backend'}-&gt;{'0500-CIC-CustomerIDStatus'} = {   'Attributes' =&gt; '',   'Block' =&gt; 'ContentSmall',   'CacheTTLLocal' =&gt; '0.5',   'Default' =&gt; '1',   'Description' =&gt; 'Company Status',   'Group' =&gt; '',   'Module' =&gt; 'Kernel::Output::HTML::DashboardCustomerIDStatus',   'Permission' =&gt; 'ro',   'Title' =&gt; 'Company Status' };</pre>

## 6.16. Frontend::Agent::Dashboard::EventsTicketCalendar

### 6.16.1. DashboardEventsTicketCalendar###CalendarWidth

Description:	Defines the calendar width in percent. Default is 95%.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard::EventsTicketCalendar
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'DashboardEventsTicketCalendar'}-&gt;{'CalendarWidth'} = '95';</pre>

## 6.16.2. DashboardEventsTicketCalendar###Queues

Description:	Defines queues that's tickets are used for displaying as calendar events.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard::EventsTicketCalendar
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'DashboardEventsTicketCalendar'}-&gt;{'Queues'} = [   'Raw' ];</pre>

## 6.16.3. DashboardEventsTicketCalendar::DynamicFieldStartTime

Description:	Define dynamic field name for start time. This field has to be manually added to the system as Ticket: "Date / Time" and must be activated in ticket creation screens and/or in any other ticket action screens.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard::EventsTicketCalendar
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardEventsTicketCalendar::DynamicFieldStartTime'} =   'TicketCalendarStartTime';</pre>

## 6.16.4. DashboardEventsTicketCalendar::DynamicFieldEndTime

Description:	Define dynamic field name for end time. This field has to be manually added to the system as Ticket: "Date / Time" and must be activated in ticket creation screens and/or in any other ticket action screens.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard::EventsTicketCalendar
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'DashboardEventsTicketCalendar::DynamicFieldEndTime'} =   'TicketCalendarEndTime';</pre>

## 6.16.5. DashboardEventsTicketCalendar::DynamicFieldsForEvents

Description:	Defines the dynamic fields that are used for displaying on calendar events.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard::EventsTicketCalendar
Valid:	1
Required:	1

Config-Setting:	<pre>\$Self-&gt;{'DashboardEventsTicketCalendar::DynamicFieldsForEvents'} = [ 'TicketCalendarStartTime', 'TicketCalendarEndTime' ];</pre>
-----------------	---

## 6.16.6.

### DashboardEventsTicketCalendar::TicketFieldsForEvents

Description:	Defines the ticket fields that are going to be displayed calendar events. The "Key" defines the field or ticket attribute and the "Content" defines the display name.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard::EventsTicketCalendar
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'DashboardEventsTicketCalendar::TicketFieldsForEvents'} = { 'CustomerID' =&gt; 'Customer ID', 'CustomerUserID' =&gt; 'Customer user', 'Priority' =&gt; 'Priority', 'Queue' =&gt; 'Queue', 'SLA' =&gt; 'SLA', 'Service' =&gt; 'Service', 'State' =&gt; 'State', 'Title' =&gt; 'Title', 'Type' =&gt; 'Type' };</pre>

## 6.17.

### Frontend::Agent::Dashboard::TicketFilters

#### 6.17.1. OnlyValuesOnTicket

Description:	Defines if the list for filters should be retrieve just from current tickets in system. Just for clarification, Customers list will always came from system's tickets.
Group:	Ticket
SubGroup:	Frontend::Agent::Dashboard::TicketFilters
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'OnlyValuesOnTicket'} = '1';</pre>

## 6.18. Frontend::Agent::ModuleMetaHead

### 6.18.1. Frontend::HeaderMetaModule###2-TicketSearch

Description:	Module to generate html OpenSearch profile for short ticket search in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleMetaHead

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::HeaderMetaModule'}-&gt;{'2-TicketSearch'} = {   'Action' =&gt; 'AgentTicketSearch',   'Module' =&gt; 'Kernel::Output::HTML::HeaderMetaTicketSearch' };</pre>

## 6.19. Frontend::Agent::ModuleNotify

### 6.19.1. Frontend::NotifyModule###5-Ticket::TicketEscalation

Description:	Module to show notifications and escalations (ShownMax: max. shown escalations, EscalationInMinutes: Show ticket which will escalation in, CacheTime: Cache of calculated escalations in seconds).
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleNotify
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::NotifyModule'}-&gt;{'5-Ticket::TicketEscalation'} = {   'CacheTime' =&gt; '40',   'EscalationInMinutes' =&gt; '120',   'Module' =&gt;   'Kernel::Output::HTML::NotificationAgentTicketEscalation',   'ShownMax' =&gt; '25' };</pre>

## 6.20. Frontend::Agent::ModuleRegistration

### 6.20.1. Frontend::Module###AgentTicketQueue

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketQueue'} = {   'Description' =&gt; 'Overview of all open Tickets',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.AgentTicketQueue.css',       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'Core.UI.AllocationList.js',       'Core.Agent.TableFilters.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'o',       'Block' =&gt; '',       'Description' =&gt; 'Overview of all open Tickets',       'Link' =&gt; 'Action=AgentTicketQueue',       'LinkOption' =&gt; ''     }   ] };</pre>

```

    'Name' => 'Queue view',
    'NavBar' => 'Ticket',
    'Prio' => '100',
    'Type' => ''
  },
  {
    'AccessKey' => 't',
    'Block' => 'ItemArea',
    'Description' => '',
    'Link' => 'Action=AgentTicketQueue',
    'LinkOption' => '',
    'Name' => 'Tickets',
    'NavBar' => 'Ticket',
    'Prio' => '200',
    'Type' => 'Menu'
  }
],
'NavBarName' => 'Ticket',
'Title' => 'QueueView'
};

```

### 6.20.2. Frontend::Module###AgentTicketPhone

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPhone'} = {   'Description' =&gt; 'Create new phone ticket',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.CustomerSearch.js',       'Core.Agent.TicketAction.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'n',       'Block' =&gt; '',       'Description' =&gt; 'Create new phone ticket (inbound)',       'Link' =&gt; 'Action=AgentTicketPhone',       'LinkOption' =&gt; '',       'Name' =&gt; 'New phone ticket',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '200',       'Type' =&gt; ''     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'New phone ticket' }; </pre>

### 6.20.3. Frontend::Module###AgentTicketPhoneOutbound

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPhoneOutbound'} = { </pre>

```
'Description' => 'Phone Call',
'Loader' => {
  'JavaScript' => [
    'Core.Agent.TicketAction.js'
  ]
},
'NavBarName' => 'Ticket',
'Title' => 'Phone-Ticket'
};
```

## 6.20.4. Frontend::Module###AgentTicketPhoneInbound

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPhoneInbound'} = {   'Description' =&gt; 'Incoming Phone Call',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Phone-Ticket' };</pre>

## 6.20.5. Frontend::Module###AgentTicketEmail

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketEmail'} = {   'Description' =&gt; 'Create new email ticket',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.CustomerSearch.js',       'Core.Agent.TicketAction.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'm',       'Block' =&gt; '',       'Description' =&gt; 'Create new email ticket and send this out (outbound)',       'Link' =&gt; 'Action=AgentTicketEmail',       'LinkOption' =&gt; '',       'Name' =&gt; 'New email ticket',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '210',       'Type' =&gt; ''     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'New email ticket' };</pre>



## 6.20.6. Frontend::Module###AgentTicketSearch

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketSearch'} = {   'Description' =&gt; 'Search Ticket',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.UI.AllocationList.js',       'Core.Agent.TableFilters.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 's',       'Block' =&gt; '',       'Description' =&gt; 'Search Tickets',       'Link' =&gt; 'Action=AgentTicketSearch',       'LinkOption' =&gt; 'onclick="window.setTimeout(function() {Core.Agent.Search.OpenSearchDialog(\'AgentTicketSearch\');}, 0); return false;"',       'Name' =&gt; 'Search',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '300',       'Type' =&gt; ''     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Search' }; </pre>

## 6.20.7. Frontend::Module###AgentTicketLockedView

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketLockedView'} = {   'Description' =&gt; 'Locked Tickets',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.AgentTicketQueue.css',       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'Core.UI.AllocationList.js',       'Core.Agent.TableFilters.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Locked Tickets' }; </pre>

## 6.20.8.

### Frontend::Module###AgentTicketResponsibleView

Description:	Frontend module registration for the agent interface.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketResponsibleView'} = {   'Description' =&gt; 'Responsible Tickets',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'Core.UI.AllocationList.js',       'Core.Agent.TableFilters.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Responsible Tickets' }; </pre>

### 6.20.9. Frontend::Module###AgentTicketWatchView

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketWatchView'} = {   'Description' =&gt; 'Watched Tickets',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.AgentTicketQueue.css',       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'Core.UI.AllocationList.js',       'Core.Agent.TableFilters.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Watched Tickets' }; </pre>

### 6.20.10. Frontend::Module###AgentCustomerSearch

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Frontend::Module'}-&gt;{'AgentCustomerSearch'} = {   'Description' =&gt; 'AgentCustomerSearch',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'AgentCustomerSearch' }; </pre>

### 6.20.11. Frontend::Module###AgentUserSearch

Description:	Frontend module registration for the agent interface.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentUserSearch'} = {   'Description' =&gt; 'AgentUserSearch',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'AgentUserSearch' };</pre>

## 6.20.12. Frontend::Module###AgentTicketStatusView

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketStatusView'} = {   'Description' =&gt; 'Overview of all open tickets',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.AllocationList.css'     ],     'JavaScript' =&gt; [       'Core.UI.AllocationList.js',       'Core.Agent.TableFilters.js'     ]   },   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'v',       'Block' =&gt; '',       'Description' =&gt; 'Overview of all open Tickets.',       'Link' =&gt; 'Action=AgentTicketStatusView',       'LinkOption' =&gt; '',       'Name' =&gt; 'Status view',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '110',       'Type' =&gt; ''     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Status view' };</pre>

## 6.20.13. Frontend::Module###AgentTicketEscalationView

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketEscalationView'} = {   'Description' =&gt; 'Overview of all escalated tickets',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.AllocationList.css'     ], </pre>

```

    'JavaScript' => [
      'Core.UI.AllocationList.js',
      'Core.Agent.TableFilters.js'
    ]
  },
  'NavBar' => [
    {
      'AccessKey' => 'e',
      'Block' => '',
      'Description' => 'Overview Escalated Tickets',
      'Link' => 'Action=AgentTicketEscalationView',
      'LinkOption' => '',
      'Name' => 'Escalation view',
      'NavBar' => 'Ticket',
      'Prio' => '120',
      'Type' => ''
    }
  ],
  'NavBarName' => 'Ticket',
  'Title' => 'Escalation view'
};

```

### 6.20.14. Frontend::Module###AgentZoom

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AgentZoom'} = {   'Description' =&gt; 'compat module for AgentZoom to AgentTicketZoom',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; '' }; </pre>

### 6.20.15. Frontend::Module###AgentTicketZoom

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketZoom'} = {   'Description' =&gt; 'Ticket Zoom',   'Loader' =&gt; {     'CSS' =&gt; [       'Core.Agent.TicketProcess.css'     ],     'JavaScript' =&gt; [       'thirdparty/jquery-tablesorter-2.0.5/jquery.tablesorter.js',       'Core.UI.Table.Sort.js',       'Core.Agent.TicketZoom.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Zoom' }; </pre>

### 6.20.16. Frontend::Module###AgentTicketAttachment

Description:	Frontend module registration for the agent interface.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketAttachment'} = {   'Description' =&gt; 'To download attachments',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; '' };</pre>

### 6.20.17. Frontend::Module###AgentTicketPlain

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPlain'} = {   'Description' =&gt; 'Ticket plain view of an email',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Plain' };</pre>

### 6.20.18. Frontend::Module###AgentTicketNote

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketNote'} = {   'Description' =&gt; 'Ticket Note',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Note' };</pre>

### 6.20.19. Frontend::Module###AgentTicketMerge

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketMerge'} = {   'Description' =&gt; 'Ticket Merge',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Merge' };</pre>

## 6.20.20. Frontend::Module###AgentTicketPending

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPending'} = {   'Description' =&gt; 'Ticket Pending',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Pending' };</pre>

## 6.20.21. Frontend::Module###AgentTicketWatcher

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketWatcher'} = {   'Description' =&gt; 'A TicketWatcher Module',   'NavBarName' =&gt; 'Ticket-Watcher',   'Title' =&gt; 'Ticket-Watcher' };</pre>

## 6.20.22. Frontend::Module###AgentTicketPriority

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPriority'} = {   'Description' =&gt; 'Ticket Priority',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Priority' };</pre>

## 6.20.23. Frontend::Module###AgentTicketLock

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketLock'} = {   'Description' =&gt; 'Ticket Lock',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Lock' };</pre>

## 6.20.24. Frontend::Module###AgentTicketMove

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketMove'} = {   'Description' =&gt; 'Ticket Move',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Move' };</pre>

## 6.20.25. Frontend::Module###AgentTicketHistory

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketHistory'} = {   'Description' =&gt; 'Ticket History',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'History' };</pre>

## 6.20.26. Frontend::Module###AgentTicketOwner

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketOwner'} = {   'Description' =&gt; 'Ticket Owner',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Owner' };</pre>

## 6.20.27. Frontend::Module###AgentTicketResponsible

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketResponsible'} = {   'Description' =&gt; 'Ticket Responsible',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Responsible' };</pre>

## 6.20.28. Frontend::Module###AgentTicketCompose

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketCompose'} = {   'Description' =&gt; 'Ticket Compose email Answer',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.CustomerSearch.js',       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Compose' };</pre>

## 6.20.29. Frontend::Module###AgentTicketBounce

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketBounce'} = {   'Description' =&gt; 'Ticket Compose Bounce Email',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Bounce' };</pre>

## 6.20.30. Frontend::Module###AgentTicketForward

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration



Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketForward'} = {   'Description' =&gt; 'Ticket Forward Email',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.CustomerSearch.js',       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Forward' };</pre>

### 6.20.31. Frontend::Module###AgentTicketCustomer

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketCustomer'} = {   'Description' =&gt; 'Ticket Customer',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.CustomerSearch.js',       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Customer' };</pre>

### 6.20.32. Frontend::Module###AgentTicketClose

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketClose'} = {   'Description' =&gt; 'Ticket Close',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Close' };</pre>

### 6.20.33. Frontend::Module###AgentTicketFreeText

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1

Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketFreeText'} = {   'Description' =&gt; 'Ticket FreeText',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Free Fields' };</pre>

## 6.20.34. Frontend::Module###AgentTicketPrint

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketPrint'} = {   'Description' =&gt; 'Ticket Print',   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Print' };</pre>

## 6.20.35. Frontend::Module###AgentTicketBulk

Description:	Frontend module registration for the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Module'}-&gt;{'AgentTicketBulk'} = {   'Description' =&gt; 'Ticket bulk module',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Agent.TicketAction.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Bulk-Action' };</pre>

## 6.21. Frontend::Agent::Preferences

### 6.21.1. PreferencesGroups###NewTicketNotify

Description:	Parameters for the NewTicketNotify object in the preferences view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'NewTicketNotify'} = {   'Active' =&gt; '1', };</pre>

	<pre>'Column' =&gt; 'Email Settings', 'Data' =&gt; {   '0' =&gt; 'No',   '1' =&gt; 'Yes' }, 'DataSelected' =&gt; '0', 'Desc' =&gt; 'Send me a notification if there is a new ticket in "My Queues".', 'Key' =&gt; 'Send new ticket notifications', 'Label' =&gt; 'New ticket notification', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric', 'PrefKey' =&gt; 'UserSendNewTicketNotification', 'Prio' =&gt; '1000' };</pre>
--	--

## 6.21.2. PreferencesGroups###FollowUpNotify

Description:	Parameters for the FollowUpNotify object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'FollowUpNotify'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Email Settings',   'Data' =&gt; {     '0' =&gt; 'No',     '1' =&gt; 'Yes'   },   'DataSelected' =&gt; '0',   'Desc' =&gt; 'Send me a notification if a customer sends a follow up and I\'m the owner of the ticket or the ticket is unlocked and is in one of my subscribed queues.',   'Key' =&gt; 'Send ticket follow up notifications',   'Label' =&gt; 'Ticket follow up notification',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserSendFollowUpNotification',   'Prio' =&gt; '2000' };</pre>

## 6.21.3. PreferencesGroups###LockTimeoutNotify

Description:	Parameters for the LockTimeoutNotify object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'LockTimeoutNotify'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Email Settings',   'Data' =&gt; {     '0' =&gt; 'No',     '1' =&gt; 'Yes'   },   'DataSelected' =&gt; '0',   'Desc' =&gt; 'Send me a notification if a ticket is unlocked by the system.',   'Key' =&gt; 'Send ticket lock timeout notifications',   'Label' =&gt; 'Ticket lock timeout notification',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',</pre>

	<pre>'PrefKey' =&gt; 'UserSendLockTimeoutNotification', 'Prio' =&gt; '3000' };</pre>
--	--

## 6.21.4. PreferencesGroups###MoveNotify

Description:	Parameters for the MoveNotify object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'MoveNotify'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Email Settings',   'Data' =&gt; {     '0' =&gt; 'No',     '1' =&gt; 'Yes'   },   'DataSelected' =&gt; '0',   'Desc' =&gt; 'Send me a notification if a ticket is moved into one of "My Queues".',   'Key' =&gt; 'Send ticket move notifications',   'Label' =&gt; 'Ticket move notification',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserSendMoveNotification',   'Prio' =&gt; '4000' };</pre>

## 6.21.5. PreferencesGroups###WatcherNotify

Description:	Parameters for the WatcherNotify object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'WatcherNotify'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Email Settings',   'Data' =&gt; {     '0' =&gt; 'No',     '1' =&gt; 'Yes'   },   'DataSelected' =&gt; '0',   'Desc' =&gt; 'Send me the same notifications for my watched tickets that the ticket owners will get.',   'Key' =&gt; 'Send ticket watch notifications',   'Label' =&gt; 'Ticket watch notification',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesTicketWatcher',   'PrefKey' =&gt; 'UserSendWatcherNotification',   'Prio' =&gt; '5000' };</pre>

## 6.21.6. PreferencesGroups###CustomQueue

Description:	Parameters for the CustomQueue object in the preference view of the agent interface.
Group:	Ticket

SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'PreferencesGroups'}-&gt;{'CustomQueue'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Other Settings',   'Desc' =&gt; 'Your queue selection of your favorite queues. You also get notified about those queues via email if enabled.',   'Key' =&gt; 'My Queues',   'Label' =&gt; 'My Queues',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesCustomQueue',   'Permission' =&gt; 'ro',   'Prio' =&gt; '1000' }; </pre>

### 6.21.7. PreferencesGroups###RefreshTime

Description:	Parameters for the RefreshTime object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'PreferencesGroups'}-&gt;{'RefreshTime'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Other Settings',   'Data' =&gt; {     '0' =&gt; 'off',     '10' =&gt; '10 minutes',     '15' =&gt; '15 minutes',     '2' =&gt; ' 2 minutes',     '5' =&gt; ' 5 minutes',     '7' =&gt; ' 7 minutes'   },   'DataSelected' =&gt; '0',   'Desc' =&gt; 'If enabled, the different overviews (Dashboard, LockedView, QueueView) will automatically refresh after the specified time.',   'Key' =&gt; 'Refresh Overviews after',   'Label' =&gt; 'Overview Refresh Time',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserRefreshTime',   'Prio' =&gt; '2000' }; </pre>

### 6.21.8. PreferencesGroups###TicketOverviewSmallPageShown

Description:	Parameters for the pages (in which the tickets are shown) of the small ticket overview.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$self-&gt;{'PreferencesGroups'}-&gt;{'TicketOverviewSmallPageShown'} = {   'Active' =&gt; '0',   'Column' =&gt; 'Other Settings',   'Data' =&gt; {     '10' =&gt; '10', </pre>

	<pre>'15' =&gt; '15', '20' =&gt; '20', '25' =&gt; '25', '30' =&gt; '30', '35' =&gt; '35' }, 'DataSelected' =&gt; '25', 'Key' =&gt; 'Ticket limit per page for Ticket Overview "Small"', 'Label' =&gt; 'Ticket Overview "Small" Limit', 'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric', 'PrefKey' =&gt; 'UserTicketOverviewSmallPageShown', 'Prio' =&gt; '8000' };</pre>
--	--

## 6.21.9. PreferencesGroups###TicketOverviewFilterSettings

Description:	Parameters for .
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'TicketOverviewFilterSettings'} = {   'Active' =&gt; '0',   'Column' =&gt; 'Other Settings',   'Key' =&gt; 'Column ticket filters for Ticket Overviews type "Small".',   'Label' =&gt; 'Enabled filters.',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesColumnFilters',   'PrefKey' =&gt; 'UserFilterColumnsEnabled',   'Prio' =&gt; '8100' };</pre>

## 6.21.10. PreferencesGroups###TicketOverviewMediumPageShown

Description:	Parameters for the pages (in which the tickets are shown) of the medium ticket overview.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'PreferencesGroups'}-&gt;{'TicketOverviewMediumPageShown'} = {   'Active' =&gt; '0',   'Column' =&gt; 'Other Settings',   'Data' =&gt; {     '10' =&gt; '10',     '15' =&gt; '15',     '20' =&gt; '20',     '25' =&gt; '25',     '30' =&gt; '30',     '35' =&gt; '35'   },   'DataSelected' =&gt; '20',   'Key' =&gt; 'Ticket limit per page for Ticket Overview "Medium"',   'Label' =&gt; 'Ticket Overview "Medium" Limit',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserTicketOverviewMediumPageShown',   'Prio' =&gt; '8100' };</pre>

## 6.21.11.

### PreferencesGroups###TicketOverviewPreviewPageShown

Description:	Parameters for the pages (in which the tickets are shown) of the ticket preview overview.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'PreferencesGroups'}-&gt;{'TicketOverviewPreviewPageShown'} = {   'Active' =&gt; '0',   'Column' =&gt; 'Other Settings',   'Data' =&gt; {     '10' =&gt; '10',     '15' =&gt; '15',     '20' =&gt; '20',     '25' =&gt; '25',     '30' =&gt; '30',     '35' =&gt; '35'   },   'DataSelected' =&gt; '15',   'Key' =&gt; 'Ticket limit per page for Ticket Overview "Preview"',   'Label' =&gt; 'Ticket Overview "Preview" Limit',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserTicketOverviewPreviewPageShown',   'Prio' =&gt; '8200' }; </pre>

## 6.21.12. PreferencesGroups###CreateNextMask

Description:	Parameters for the CreateNextMask object in the preference view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'PreferencesGroups'}-&gt;{'CreateNextMask'} = {   'Active' =&gt; '1',   'Column' =&gt; 'Other Settings',   'Data' =&gt; {     '' =&gt; 'CreateTicket',     'AgentTicketZoom' =&gt; 'TicketZoom'   },   'DataSelected' =&gt; '',   'Key' =&gt; 'Show this screen after I created a new ticket',   'Label' =&gt; 'Screen after new ticket',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserCreateNextMask',   'Prio' =&gt; '3000' }; </pre>

## 6.22. Frontend::Agent::SearchRouter

### 6.22.1.

#### Frontend::Search###AgentCustomerInformationCenter

Description:	Search backend router.
--------------	------------------------

Group:	Ticket
SubGroup:	Frontend::Agent::SearchRouter
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Search'}-&gt;{'AgentCustomerInformationCenter'} = { '^AgentCustomerInformationCenter' =&gt; 'Action=AgentCustomerInformationCenterSearch' };</pre>

## 6.22.2. Frontend::Search###Ticket

Description:	Search backend router.
Group:	Ticket
SubGroup:	Frontend::Agent::SearchRouter
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::Search'}-&gt;{'Ticket'} = { '^AgentTicket' =&gt; 'Action=AgentTicketSearch;Subaction=AJAX' };</pre>

## 6.23. Frontend::Agent::Ticket::ArticleAttachmentModule

### 6.23.1. Ticket::Frontend::ArticleAttachmentModule###1-Download

Description:	Shows a link to download article attachments in the zoom view of the article in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleAttachmentModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticleAttachmentModule'}-&gt;{'1-Download'} = { 'Module' =&gt; 'Kernel::Output::HTML::ArticleAttachmentDownload' };</pre>

### 6.23.2. Ticket::Frontend::ArticleAttachmentModule###2-HTML-Viewer

Description:	Shows a link to access article attachments via a html online viewer in the zoom view of the article in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleAttachmentModule
Valid:	1



Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticleAttachmentModule'}-&gt;{'2-HTML-Viewer'} = {   'Module' =&gt; 'Kernel::Output::HTML::ArticleAttachmentHTMLViewer' };</pre>

## 6.24.

### Frontend::Agent::Ticket::ArticleComposeModule

#### 6.24.1. Ticket::Frontend::ArticleComposeModule###1-SignEmail

Description:	Module to compose signed messages (PGP or S/MIME).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleComposeModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticleComposeModule'}-&gt;{'1-SignEmail'} = {   'Module' =&gt; 'Kernel::Output::HTML::ArticleComposeSign' };</pre>

#### 6.24.2. Ticket::Frontend::ArticleComposeModule###2-CryptEmail

Description:	Module to crypt composed messages (PGP or S/MIME).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleComposeModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticleComposeModule'}-&gt;{'2-CryptEmail'} = {   'Module' =&gt; 'Kernel::Output::HTML::ArticleComposeCrypt' };</pre>

## 6.25.

### Frontend::Agent::Ticket::ArticleViewModule

#### 6.25.1. Ticket::Frontend::ArticleViewModule###1-PGP

Description:	Agent interface article notification module to check PGP.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticleViewModule'}-&gt;{'1-PGP'} = {   'Module' =&gt; 'Kernel::Output::HTML::ArticleCheckPGP' };</pre>

## 6.25.2. Ticket::Frontend::ArticleViewModule###1-SMIME

Description:	Agent interface module to check incoming emails in the Ticket-Zoom-View if the S/MIME-key is available and true.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModule
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticleViewModule'}-&gt;{'1-SMIME'} = {   'Module' =&gt; 'Kernel::Output::HTML::ArticleCheckSMIME' };</pre>

## 6.26. Frontend::Agent::Ticket::ArticleViewModulePre

### 6.26.1. Ticket::Frontend::ArticlePreViewModule###1-PGP

Description:	Agent interface article notification module to check PGP.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModulePre
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticlePreViewModule'}-&gt;{'1-PGP'} = {   'Module' =&gt; 'Kernel::Output::HTML::ArticleCheckPGP' };</pre>

### 6.26.2. Ticket::Frontend::ArticlePreViewModule###1-SMIME

Description:	Agent interface article notification module to check S/MIME.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ArticleViewModulePre
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ArticlePreViewModule'}-&gt;{'1-SMIME'} = {   'Module' =&gt; 'Kernel::Output::HTML::ArticleCheckSMIME' };</pre>

## 6.27. Frontend::Agent::Ticket::MenuModule

### 6.27.1. Ticket::Frontend::MenuModule###000-Back

Description:	Shows a link in the menu to go back in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'000-Back'} = {   'Action' =&gt; '',   'Description' =&gt; 'Back',   'Link' =&gt; '\$Env{"LastScreenOverview"};TicketID= \$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Back',   'PopupType' =&gt; '',   'Target' =&gt; '' };</pre>

### 6.27.2. Ticket::Frontend::MenuModule###100-Lock

Description:	Shows a link in the menu to lock/unlock tickets in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'100-Lock'} = {   'Action' =&gt; 'AgentTicketLock',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuLock',   'Name' =&gt; 'Lock',   'Target' =&gt; '' };</pre>

### 6.27.3. Ticket::Frontend::MenuModule###200-History

Description:	Shows a link in the menu to access the history of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'200-History'} = {   'Action' =&gt; 'AgentTicketHistory',   'Description' =&gt; 'Show the ticket history',   'Link' =&gt; 'Action=AgentTicketHistory;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'History',   'PopupType' =&gt; 'TicketHistory',   'Target' =&gt; '' };</pre>

### 6.27.4. Ticket::Frontend::MenuModule###210-Print

Description:	Shows a link in the menu to print a ticket or an article in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'210-Print'} = {</pre>

	<pre>'Action' =&gt; 'AgentTicketPrint', 'Description' =&gt; 'Print this ticket', 'Link' =&gt; 'Action=AgentTicketPrint;TicketID=\$QData{"TicketID"}', 'LinkParam' =&gt; 'target="print"', 'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric', 'Name' =&gt; 'Print', 'PopupType' =&gt; 'TicketAction', 'Target' =&gt; '' };</pre>
--	--

### 6.27.5. Ticket::Frontend::MenuModule###300-Priority

Description:	Shows a link in the menu to see the priority of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'300-Priority'} = { 'Action' =&gt; 'AgentTicketPriority', 'Description' =&gt; 'Change the ticket priority', 'Link' =&gt; 'Action=AgentTicketPriority;TicketID= \$QData{"TicketID"}', 'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric', 'Name' =&gt; 'Priority', 'PopupType' =&gt; 'TicketAction', 'Target' =&gt; '' };</pre>

### 6.27.6. Ticket::Frontend::MenuModule###310-Free-Text

Description:	Shows a link in the menu to add a free text field in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'310-FreeText'} = { 'Action' =&gt; 'AgentTicketFreeText', 'Description' =&gt; 'Change the free fields for this ticket', 'Link' =&gt; 'Action=AgentTicketFreeText;TicketID= \$QData{"TicketID"}', 'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric', 'Name' =&gt; 'Free Fields', 'PopupType' =&gt; 'TicketAction', 'Target' =&gt; '' };</pre>

### 6.27.7. Ticket::Frontend::MenuModule###320-Link

Description:	Shows a link in the menu that allows linking a ticket with another object in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0

Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'320-Link'} = {   'Action' =&gt; 'AgentLinkObject',   'Description' =&gt; 'Link this ticket to other objects',   'Link' =&gt; 'Action=AgentLinkObject;SourceObject=Ticket;SourceKey=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Link',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>
-----------------	---

## 6.27.8. Ticket::Frontend::MenuModule###400-Owner

Description:	Shows a link in the menu to see the owner of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'400-Owner'} = {   'Action' =&gt; 'AgentTicketOwner',   'Description' =&gt; 'Change the owner for this ticket',   'Link' =&gt; 'Action=AgentTicketOwner;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Owner',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

## 6.27.9. Ticket::Frontend::MenuModule###410-Responsible

Description:	Shows a link in the menu to see the responsible agent of a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'410-Responsible'} = {   'Action' =&gt; 'AgentTicketResponsible',   'Description' =&gt; 'Change the responsible person for this ticket',   'Link' =&gt; 'Action=AgentTicketResponsible;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuResponsible',   'Name' =&gt; 'Responsible',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

## 6.27.10. Ticket::Frontend::MenuModule###420-Customer

Description:	Shows a link in the menu to see the customer who requested the ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule

Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'420-Customer'} = {   'Action' =&gt; 'AgentTicketCustomer',   'Description' =&gt; 'Change the customer for this ticket',   'Link' =&gt; 'Action=AgentTicketCustomer;TicketID= \$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Customer',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

### 6.27.11. Ticket::Frontend::MenuModule###420-Note

Description:	Shows a link in the menu to add a note in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'420-Note'} = {   'Action' =&gt; 'AgentTicketNote',   'Description' =&gt; 'Add a note to this ticket',   'Link' =&gt; 'Action=AgentTicketNote;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Note',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

### 6.27.12. Ticket::Frontend::MenuModule###425-Phone Call Outbound

Description:	Shows a link in the menu to add a note in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'425-Phone Call Outbound'} = {   'Action' =&gt; 'AgentTicketPhoneOutbound',   'Description' =&gt; 'Phone Call Outbound',   'Link' =&gt; 'Action=AgentTicketPhoneOutbound;TicketID= \$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Phone Call Outbound',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

### 6.27.13. Ticket::Frontend::MenuModule###426-Phone Call Inbound

Description:	Shows a link in the menu to add a note in the ticket zoom view of the agent interface.
--------------	--

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'426-Phone Call Inbound'} = {   'Action' =&gt; 'AgentTicketPhoneInbound',   'Description' =&gt; 'Phone Call Inbound',   'Link' =&gt; 'Action=AgentTicketPhoneInbound;TicketID= \$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Phone Call Inbound',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' }; </pre>

### 6.27.14. Ticket::Frontend::MenuModule###430-Merge

Description:	Shows a link in the menu that allows merging tickets in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'430-Merge'} = {   'Action' =&gt; 'AgentTicketMerge',   'Description' =&gt; 'Merge into a different ticket',   'Link' =&gt; 'Action=AgentTicketMerge;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Merge',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' }; </pre>

### 6.27.15. Ticket::Frontend::MenuModule###440-Pending

Description:	Shows a link in the menu to set a ticket as pending in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'440-Pending'} = {   'Action' =&gt; 'AgentTicketPending',   'Description' =&gt; 'Set this ticket to pending',   'Link' =&gt; 'Action=AgentTicketPending;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Pending',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' }; </pre>

### 6.27.16. Ticket::Frontend::MenuModule###448-Watch

Description:	Shows a link in the menu for subscribing / unsubscribing from a ticket in the ticket zoom view of the agent interface.
--------------	--

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'448-Watch'} = {   'Action' =&gt; 'AgentTicketWatcher',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuTicketWatcher',   'Name' =&gt; 'Watch',   'Target' =&gt; '' };</pre>

### 6.27.17. Ticket::Frontend::MenuModule###450-Close

Description:	Shows a link in the menu to close a ticket in the ticket zoom view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'450-Close'} = {   'Action' =&gt; 'AgentTicketClose',   'Description' =&gt; 'Close this ticket',   'Link' =&gt; 'Action=AgentTicketClose;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Close',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

### 6.27.18. Ticket::Frontend::MenuModule###460-Delete

Description:	Shows a link in the menu to delete a ticket in the ticket zoom view of the agent interface. Additional access control to show or not show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'460-Delete'} = {   'Action' =&gt; 'AgentTicketMove',   'Description' =&gt; 'Delete this ticket',   'Link' =&gt; 'Action=AgentTicketMove;TicketID=\$Data{"TicketID"};DestQueue=Delete',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Delete',   'PopupType' =&gt; '',   'Target' =&gt; '' };</pre>

### 6.27.19. Ticket::Frontend::MenuModule###470-Spam

Description:	Shows a link to set a ticket as spam in the ticket zoom view of the agent interface. Additional access control to show or not
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	show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModule
Valid:	0
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::MenuModule'}-&gt;{'470-Spam'} = {   'Action' =&gt; 'AgentTicketMove',   'Description' =&gt; 'Mark as Spam!',   'Link' =&gt; 'Action=AgentTicketMove;TicketID= \$Data{"TicketID"};DestQueue=Delete',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Spam',   'PopupType' =&gt; '',   'Target' =&gt; '' }; </pre>

## 6.28.

### Frontend::Agent::Ticket::MenuModulePre

#### 6.28.1. Ticket::Frontend::PreMenuModule###100-Lock

Description:	Shows a link in the menu to lock / unlock a ticket in the ticket overviews of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'100-Lock'} = {   'Action' =&gt; 'AgentTicketLock',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuLock',   'Name' =&gt; 'Lock',   'PopupType' =&gt; '',   'Target' =&gt; '' }; </pre>

#### 6.28.2. Ticket::Frontend::PreMenuModule###200-Zoom

Description:	Shows a link in the menu to zoom a ticket in the ticket overviews of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'200-Zoom'} = {   'Action' =&gt; 'AgentTicketZoom',   'Description' =&gt; 'Look into a ticket!',   'Link' =&gt; 'Action=AgentTicketZoom;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Zoom',   'PopupType' =&gt; '',   'Target' =&gt; '' }; </pre>

### 6.28.3. Ticket::Frontend::PreMenuModule###210-History

Description:	Shows a link in the menu to see the history of a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'210-History'} = {   'Action' =&gt; 'AgentTicketHistory',   'Description' =&gt; 'Show the ticket history',   'Link' =&gt; 'Action=AgentTicketHistory;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'History',   'PopupType' =&gt; 'TicketHistory',   'Target' =&gt; '' };</pre>

### 6.28.4. Ticket::Frontend::PreMenuModule###300-Priority

Description:	Shows a link in the menu to set the priority of a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'300-Priority'} = {   'Action' =&gt; 'AgentTicketPriority',   'Description' =&gt; 'Change the priority for this ticket',   'Link' =&gt; 'Action=AgentTicketPriority;TicketID= \$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Priority',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

### 6.28.5. Ticket::Frontend::PreMenuModule###420-Note

Description:	Shows a link in the menu to add a note to a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'420-Note'} = {   'Action' =&gt; 'AgentTicketNote',   'Description' =&gt; 'Add a note to this ticket',   'Link' =&gt; 'Action=AgentTicketNote;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Note',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

## 6.28.6. Ticket::Frontend::PreMenuModule###440-Close

Description:	Shows a link in the menu to close a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'440-Close'} = {   'Action' =&gt; 'AgentTicketClose',   'Description' =&gt; 'Close this ticket',   'Link' =&gt; 'Action=AgentTicketClose;TicketID=\$QData{"TicketID"}',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Close',   'PopupType' =&gt; 'TicketAction',   'Target' =&gt; '' };</pre>

## 6.28.7. Ticket::Frontend::PreMenuModule###445-Move

Description:	Shows a link in the menu to move a ticket in every ticket overview of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'445-Move'} = {   'Action' =&gt; 'AgentTicketMove',   'Description' =&gt; 'Change queue!',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuMove',   'Name' =&gt; 'Move' };</pre>

## 6.28.8. Ticket::Frontend::PreMenuModule###450-Delete

Description:	Shows a link in the menu to delete a ticket in every ticket overview of the agent interface. Additional access control to show or not show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'450-Delete'} = {   'Action' =&gt; 'AgentTicketMove',   'Description' =&gt; 'Delete this ticket',   'Link' =&gt; 'Action=AgentTicketMove;TicketID= \$Data{"TicketID"};DestQueue=Delete',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Delete',   'PopupType' =&gt; '',   'Target' =&gt; '' };</pre>

```
};
```

## 6.28.9. Ticket::Frontend::PreMenuModule###460-Spam

Description:	Shows a link in the menu to set a ticket as spam in every ticket overview of the agent interface. Additional access control to show or not show this link can be done by using Key "Group" and Content like "rw:group1;move_into:group2".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::MenuModulePre
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::PreMenuModule'}-&gt;{'460-Spam'} = {   'Action' =&gt; 'AgentTicketMove',   'Description' =&gt; 'Mark as Spam!',   'Link' =&gt; 'Action=AgentTicketMove;TicketID= \$Data{"TicketID"};DestQueue=Delete',   'Module' =&gt; 'Kernel::Output::HTML::TicketMenuGeneric',   'Name' =&gt; 'Spam',   'PopupType' =&gt; '',   'Target' =&gt; '' };</pre>

## 6.29. Frontend::Agent::Ticket::OverviewMenuModule

### 6.29.1. Ticket::Frontend::OverviewMenuModule###001-Sort

Description:	Shows a select of ticket attributes to order the queue view ticket list. The possible selections can be configured via 'TicketOverviewMenuSort###SortAttributes'.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::OverviewMenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::OverviewMenuModule'}-&gt;{'001-Sort'} = {   'Module' =&gt; 'Kernel::Output::HTML::TicketOverviewMenuSort' };</pre>

### 6.29.2. TicketOverviewMenuSort###SortAttributes

Description:	Defines from which ticket attributes the agent can select the result order.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::OverviewMenuModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'TicketOverviewMenuSort'}-&gt;{'SortAttributes'} = {   'Age' =&gt; '1',   'Title' =&gt; '1' };</pre>

## 6.30. Frontend::Agent::Ticket::ViewBounce

### 6.30.1.

#### Ticket::Frontend::AgentTicketBounce###Permission

Description:	Required permissions to use the ticket bounce screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'Permission'} = 'bounce';</code>

### 6.30.2.

#### Ticket::Frontend::AgentTicketBounce###RequiredLock

Description:	Defines if a ticket lock is required in the ticket bounce screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'RequiredLock'} = '1';</code>

### 6.30.3.

#### Ticket::Frontend::AgentTicketBounce###StateDefault

Description:	Defines the default next state of a ticket after being bounced, in the ticket bounce screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'StateDefault'} = 'closed successful';</code>

### 6.30.4.

#### Ticket::Frontend::AgentTicketBounce###StateType

Description:	Defines the next state of a ticket after being bounced, in the ticket bounce screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	1

Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBounce'}-&gt;{'StateType'} = [   'open',   'closed' ];</pre>
-----------------	---

### 6.30.5. Ticket::Frontend::BounceText

Description:	Defines the default ticket bounced notification for customer/sender in the ticket bounce screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBounce
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::BounceText'} = 'Your email with ticket number "&lt;OTRS_TICKET&gt;" is bounced to "&lt;OTRS_BOUNCE_TO&gt;". Contact this address for further information.';</pre>

## 6.31. Frontend::Agent::Ticket::ViewBulk

### 6.31.1.

#### Ticket::Frontend::AgentTicketBulk###RequiredLock

Description:	Automatically lock and set owner to current Agent after selecting for an Bulk Action.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'RequiredLock'} = '1';</pre>

### 6.31.2.

#### Ticket::Frontend::AgentTicketBulk###TicketType

Description:	Sets the ticket type in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'TicketType'} = '1';</pre>

### 6.31.3. Ticket::Frontend::AgentTicketBulk###Owner

Description:	Sets the ticket owner in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'Owner'} = '1';</code>
-----------------	--

### 6.31.4. Ticket::Frontend::AgentTicketBulk###Responsible

Description:	Sets the responsible agent of the ticket in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'Responsible'} = '1';</code>

### 6.31.5. Ticket::Frontend::AgentTicketBulk###State

Description:	If a note is added by an agent, sets the state of a ticket in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'State'} = '1';</code>

### 6.31.6. Ticket::Frontend::AgentTicketBulk###StateType

Description:	Defines the next state of a ticket after adding a note, in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'StateType'} = [ 'open', 'closed', 'pending reminder', 'pending auto' ];</code>

### 6.31.7. Ticket::Frontend::AgentTicketBulk###StateDefault

Description:	Defines the default next state of a ticket after adding a note, in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	0
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'StateDefault'} = 'open';</code>
-----------------	--

### 6.31.8. Ticket::Frontend::AgentTicketBulk###Priority

Description:	Shows the ticket priority options in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'Priority'} = '1';</code>

### 6.31.9. Ticket::Frontend::AgentTicketBulk###PriorityDefault

Description:	Defines the default ticket priority in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.31.10. Ticket::Frontend::AgentTicketBulk###ArticleTypeDefault

Description:	Defines the default type of the note in the ticket bulk screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.31.11. Ticket::Frontend::AgentTicketBulk###ArticleTypes

Description:	Specifies the different note types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewBulk
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketBulk'}-&gt;{'ArticleTypes'} = { 'note-external' =&gt; '1', 'note-internal' =&gt; '1', 'note-report' =&gt; '0' }</code>



```
};
```

## 6.32. Frontend::Agent::Ticket::ViewClose

### 6.32.1.

#### Ticket::Frontend::AgentTicketClose###Permission

Description:	Required permissions to use the close ticket screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Permission'} = 'close';</code>

### 6.32.2.

#### Ticket::Frontend::AgentTicketClose###RequiredLock

Description:	Defines if a ticket lock is required in the close ticket screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'RequiredLock'} = '1';</code>

### 6.32.3.

#### Ticket::Frontend::AgentTicketClose###TicketType

Description:	Sets the ticket type in the close ticket screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'TicketType'} = '0';</code>

### 6.32.4. Ticket::Frontend::AgentTicketClose###Service

Description:	Sets the service in the close ticket screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Service'} = '0';</code>
-----------------	---

### 6.32.5.

#### **Ticket::Frontend::AgentTicketClose###ServiceMandatory**

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.32.6.

#### **Ticket::Frontend::AgentTicketClose###SLAMandatory**

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.32.7. Ticket::Frontend::AgentTicketClose###Queue

Description:	Sets the queue in the ticket close screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Queue'} = '0';</code>

### 6.32.8. Ticket::Frontend::AgentTicketClose###Owner

Description:	Sets the ticket owner in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Owner'} = '0';</code>

### 6.32.9.

#### **Ticket::Frontend::AgentTicketClose###OwnerMandatory**

Description:	Sets if ticket owner must be selected by the agent.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'OwnerMandatory'} = '0';</code>

### 6.32.10. Ticket::Frontend::AgentTicketClose###Responsible

Description:	Sets the responsible agent of the ticket in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Responsible'} = '0';</code>

### 6.32.11. Ticket::Frontend::AgentTicketClose###State

Description:	If a note is added by an agent, sets the state of a ticket in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'State'} = '1';</code>

### 6.32.12. Ticket::Frontend::AgentTicketClose###StateType

Description:	Defines the next state of a ticket after adding a note, in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'StateType'} = [ 'closed' ];</code>

### 6.32.13. Ticket::Frontend::AgentTicketClose###StateDefault

Description:	Defines the default next state of a ticket after adding a note, in the close ticket screen of the agent interface.
Group:	Ticket

SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'StateDefault'} = 'closed successful';</code>

### 6.32.14. Ticket::Frontend::AgentTicketClose###Note

Description:	Allows adding notes in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Note'} = '1';</code>

### 6.32.15. Ticket::Frontend::AgentTicketClose###NoteMandatory

Description:	Sets if note must be filled in by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'NoteMandatory'} = '1';</code>

### 6.32.16. Ticket::Frontend::AgentTicketClose###Subject

Description:	Sets the default subject for notes added in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Subject'} = '\$Text{"Close"}';</code>

### 6.32.17. Ticket::Frontend::AgentTicketClose###Body

Description:	Sets the default body text for notes added in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Body'} = '';</code>
-----------------	---

### 6.32.18. Ticket::Frontend::AgentTicketClose###InvolvedAgent

Description:	Shows a list of all the involved agents on this ticket, in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'InvolvedAgent'} = '0';</code>

### 6.32.19. Ticket::Frontend::AgentTicketClose###InformAgent

Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'InformAgent'} = '0';</code>

### 6.32.20. Ticket::Frontend::AgentTicketClose###ArticleTypeDefault

Description:	Defines the default type of the note in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.32.21. Ticket::Frontend::AgentTicketClose###ArticleTypes

Description:	Specifies the available note types for this ticket mask. If the option is deselected, ArticleTypeDefault is used and the option is removed from the mask.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1

Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'ArticleTypes'} = { 'note-external' =&gt; '0', 'note-internal' =&gt; '1', 'note-report' =&gt; '0' };</pre>

### 6.32.22.

#### **Ticket::Frontend::AgentTicketClose###Priority**

Description:	Shows the ticket priority options in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Priority'} = '0';</pre>

### 6.32.23.

#### **Ticket::Frontend::AgentTicketClose###PriorityDefault**

Description:	Defines the default ticket priority in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'PriorityDefault'} = '3 normal';</pre>

### 6.32.24. Ticket::Frontend::AgentTicketClose###Title

Description:	Shows the title fields in the close ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'Title'} = '0';</pre>

### 6.32.25.

#### **Ticket::Frontend::AgentTicketClose###HistoryType**

Description:	Defines the history type for the close ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'HistoryType'} = 'AddNote';</code>

### 6.32.26.

#### **Ticket::Frontend::AgentTicketClose###HistoryComment**

Description:	Defines the history comment for the close ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'HistoryComment'} = '%Close';</code>

### 6.32.27.

#### **Ticket::Frontend::AgentTicketClose###DynamicField**

Description:	Dynamic fields shown in the ticket close screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'DynamicField'} = {};</code>

### 6.32.28.

#### **Ticket::Frontend::AgentTicketClose###RichTextWidth**

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'RichTextWidth'} = '620';</code>

### 6.32.29.

#### **Ticket::Frontend::AgentTicketClose###RichTextHeight**

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewClose
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketClose'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.33. Frontend::Agent::Ticket::ViewCompose

### 6.33.1.

#### Ticket::Frontend::AgentTicketCompose###Permission

Description:	Required permissions to use the ticket compose screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketCompose'}-&gt;{'Permission'} = 'compose';</code>

### 6.33.2.

#### Ticket::Frontend::AgentTicketCompose###RequiredLock

Description:	Defines if a ticket lock is required in the ticket compose screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketCompose'}-&gt;{'RequiredLock'} = '1';</code>

### 6.33.3.

#### Ticket::Frontend::AgentTicketCompose###StateDefault

Description:	Defines the default next state of a ticket if it is composed / answered in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketCompose'}-&gt;{'StateDefault'} = 'open';</code>

### 6.33.4.

#### Ticket::Frontend::AgentTicketCompose###StateType

Description:	Defines the next possible states after composing / answering a ticket in the ticket compose screen of the agent interface.
--------------	--



Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketCompose'}-&gt;{'StateType'} = [   'open',   'closed',   'pending auto',   'pending reminder' ];</pre>

### 6.33.5. Ticket::Frontend::AgentTicketCompose###ArticleTypes

Description:	Specifies the different article types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketCompose'}-&gt;{'ArticleTypes'} = [   'email-external',   'email-internal' ];</pre>

### 6.33.6. Ticket::Frontend::AgentTicketCompose###DefaultArticleType

Description:	Specifies the default article type for the ticket compose screen in the agent interface if the article type cannot be automatically detected.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketCompose'}-&gt;{'DefaultArticleType'} = 'email-external';</pre>

### 6.33.7. Ticket::Frontend::ResponseFormat

Description:	Defines the format of responses in the ticket compose screen of the agent interface (\$QData{"OrigFrom"} is From 1:1, \$QData{"OrigFromName"} is only realname of From).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::ResponseFormat'} =   '\$QData{"Salutation"}   \$QData{"StdResponse"}   \$QData{"Signature"}'</pre>

	<pre>\$TimeShort{"\$QData{"Created"}} - \$QData{"OrigFromName"} \$Text{"wrote"}: \$QData{"Body"} ';</pre>
--	---

### 6.33.8. Ticket::Frontend::Quote

Description:	Defines the used character for plaintext email quotes in the ticket compose screen of the agent interface. If this is empty or inactive, original emails will not be quoted but appended to the response.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::Quote'} = '&gt;';</code>

### 6.33.9. Ticket::Frontend::ResponseQuoteMaxLines

Description:	Defines the maximum number of quoted lines to be added to responses.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ResponseQuoteMaxLines'} = '99';</code>

### 6.33.10.

#### Ticket::Frontend::ComposeAddCustomerAddress

Description:	Adds customers email addresses to recipients in the ticket compose screen of the agent interface. The customers email address won't be added if the article type is email-internal.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ComposeAddCustomerAddress'} = '1';</code>

### 6.33.11.

#### Ticket::Frontend::ComposeReplaceSenderAddress

Description:	Replaces the original sender with current customer's email address on compose answer in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ComposeReplaceSenderAddress'} = '0';</code>

### 6.33.12.

#### **Ticket::Frontend::ComposeExcludeCcRecipients**

Description:	Uses Cc recipients in reply Cc list on compose an email answer in the ticket compose screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ComposeExcludeCcRecipients'} = '0';</code>

### 6.33.13.

#### **Ticket::Frontend::AgentTicketCompose###DynamicField**

Description:	Dynamic fields shown in the ticket compose screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCompose
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketCompose'}-&gt;{'DynamicField'} = {};</code>

## 6.34. Frontend::Agent::Ticket::ViewCustomer

### 6.34.1.

#### **Ticket::Frontend::AgentTicketCustomer###Permission**

Description:	Required permissions to change the customer of a ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCustomer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketCustomer'}-&gt;{'Permission'} = 'customer';</code>

### 6.34.2.

#### **Ticket::Frontend::AgentTicketCustomer###RequiredLock**

Description:	Defines if a ticket lock is required to change the customer of a ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewCustomer
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketCustomer'}-&gt;{'RequiredLock'} = '0';</code>

## 6.35. Frontend::Agent::Ticket::ViewEmailNew

### 6.35.1. Ticket::Frontend::AgentTicketEmail###Priority

Description:	Sets the default priority for new email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'Priority'} = '3 normal';</code>

### 6.35.2.

### Ticket::Frontend::AgentTicketEmail###ArticleType

Description:	Sets the default article type for new email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'ArticleType'} = 'email-external';</code>

### 6.35.3.

### Ticket::Frontend::AgentTicketEmail###SenderType

Description:	Sets the default sender type for new email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'SenderType'} = 'agent';</code>

### 6.35.4. Ticket::Frontend::AgentTicketEmail###Subject

Description:	Sets the default subject for new email tickets (e.g. 'email Outbound') in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'Subject'} = '';</code>

### 6.35.5. Ticket::Frontend::AgentTicketEmail###Body

Description:	Sets the default text for new email tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'Body'} = '';</code>

### 6.35.6. Ticket::Frontend::AgentTicketEmail###StateDefault

Description:	Sets the default next ticket state, after the creation of an email ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'StateDefault'} = 'open';</code>

### 6.35.7. Ticket::Frontend::AgentTicketEmail###StateType

Description:	Determines the next possible ticket states, after the creation of a new email ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'StateType'} = [ 'open', 'pending auto', 'pending reminder', 'closed' ];</code>

### 6.35.8. Ticket::Frontend::AgentTicketEmail###HistoryType

Description:	Defines the history type for the email ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'HistoryType'} = 'EmailAgent';</code>

### 6.35.9. Ticket::Frontend::AgentTicketEmail###HistoryComment

Description:	Defines the history comment for the email ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'HistoryComment'} = '';</code>

### 6.35.10. Ticket::Frontend::AgentTicketEmail###ServiceMandatory

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.35.11. Ticket::Frontend::AgentTicketEmail###SLAMandatory

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.35.12. Ticket::Frontend::AgentTicketEmail###DynamicField

Description:	Dynamic fields shown in the ticket email screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'DynamicField'} = {};</code>
-----------------	---

### 6.35.13.

#### **Ticket::Frontend::AgentTicketEmail###RichTextWidth**

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'RichTextWidth'} = '620';</code>

### 6.35.14.

#### **Ticket::Frontend::AgentTicketEmail###RichTextHeight**

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEmailNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEmail'}-&gt;{'RichTextHeight'} = '320';</code>

## 6.36. Frontend::Agent::Ticket::ViewEscalation

### 6.36.1.

#### **Ticket::Frontend::AgentTicketEscalationView###TicketPermission**

Description:	Defines the required permission to show a ticket in the escalation view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEscalationView'}-&gt;{'TicketPermission'} = 'rw';</code>

### 6.36.2.

#### **Ticket::Frontend::AgentTicketEscalationView###ViewableTicket**

Description:	Shows all open tickets (even if they are locked) in the escalation view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEscalationView'}-&gt;{'ViewableTicketsPage'} = '50';</code>

### 6.36.3.

#### **Ticket::Frontend::AgentTicketEscalationView###SortBy::Default**

Description:	Defines the default ticket attribute for ticket sorting in the escalation view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEscalationView'}-&gt;{'SortBy::Default'} = 'EscalationTime';</code>

### 6.36.4.

#### **Ticket::Frontend::AgentTicketEscalationView###Order::Default**

Description:	Defines the default ticket order (after priority sort) in the escalation view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEscalationView'}-&gt;{'Order::Default'} = 'Up';</code>

### 6.36.5.

#### **Ticket::Frontend::AgentTicketEscalationView###DefaultColumns**

Description:	Columns that can be filtered in the escalation view of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewEscalation
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketEscalationView'}-&gt;{'DefaultColumns'} = {        'Age' =&gt; '2',        'Changed' =&gt; '1',        'CustomerID' =&gt; '2',        'CustomerName' =&gt; '1',        'CustomerUserID' =&gt; '1',        'EscalationResponseTime' =&gt; '1',        'EscalationSolutionTime' =&gt; '1',        'EscalationTime' =&gt; '2',        'EscalationUpdateTime' =&gt; '1',</code>



```
'Lock' => '2',
'Owner' => '2',
'PendingTime' => '1',
'Priority' => '1',
'Queue' => '2',
'Responsible' => '1',
'SLA' => '1',
'Service' => '1',
'State' => '2',
'TicketNumber' => '2',
'Title' => '2',
'Type' => '1'
};
```

## 6.37. Frontend::Agent::Ticket::ViewForward

### 6.37.1.

#### Ticket::Frontend::AgentTicketForward###Permission

Description:	Required permissions to use the ticket forward screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'Permission'} = 'forward';</code>

### 6.37.2.

#### Ticket::Frontend::AgentTicketForward###RequiredLock

Description:	Defines if a ticket lock is required in the ticket forward screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'RequiredLock'} = '1';</code>

### 6.37.3.

#### Ticket::Frontend::AgentTicketForward###StateDefault

Description:	Defines the default next state of a ticket after being forwarded, in the ticket forward screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'StateDefault'} = 'closed successful';</code>

### 6.37.4.

#### Ticket::Frontend::AgentTicketForward###StateType

Description:	Defines the next possible states after forwarding a ticket in the ticket forward screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'StateType'} = [   'open',   'closed',   'pending reminder',   'pending auto' ];</pre>

### 6.37.5.

#### Ticket::Frontend::AgentTicketForward###ArticleTypeDefault

Description:	Defines the default type of forwarded message in the ticket forward screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'ArticleTypeDefault'} = 'email-external';</pre>

### 6.37.6.

#### Ticket::Frontend::AgentTicketForward###ArticleTypes

Description:	Specifies the different article types that will be used in the system.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'ArticleTypes'} = [   'email-external',   'email-internal' ];</pre>

### 6.37.7.

#### Ticket::Frontend::AgentTicketForward###DynamicField

Description:	Dynamic fields shown in the ticket forward screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'DynamicField'} = {};</code>

### 6.37.8.

#### **Ticket::Frontend::AgentTicketForward###RichTextWidth**

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'RichTextWidth'} = '620';</code>

### 6.37.9.

#### **Ticket::Frontend::AgentTicketForward###RichTextHeight**

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewForward
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketForward'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.38. Frontend::Agent::Ticket::ViewFreeText

### 6.38.1.

#### **Ticket::Frontend::AgentTicketFreeText###Permission**

Description:	Required permissions to use the ticket free text screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Permission'} = 'rw';</code>

### 6.38.2.

#### **Ticket::Frontend::AgentTicketFreeText###RequiredLock**

Description:	Defines if a ticket lock is required in the ticket free text screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'RequiredLock'} = '0';</code>

### 6.38.3. Ticket::Frontend::AgentTicketFreeText###TicketType

Description:	Sets the ticket type in the ticket free text screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'TicketType'} = '1';</code>

### 6.38.4. Ticket::Frontend::AgentTicketFreeText###Service

Description:	Sets the service in the ticket free text screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Service'} = '1';</code>

### 6.38.5. Ticket::Frontend::AgentTicketFreeText###ServiceMandatory

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.38.6. Ticket::Frontend::AgentTicketFreeText###SLAMandatory

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText

Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.38.7.

#### **Ticket::Frontend::AgentTicketFreeText###Queue**

Description:	Sets the queue in the ticket free text screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Queue'} = '0';</code>

### 6.38.8.

#### **Ticket::Frontend::AgentTicketFreeText###Owner**

Description:	Sets the ticket owner in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Owner'} = '0';</code>

### 6.38.9.

#### **Ticket::Frontend::AgentTicketFreeText###OwnerMandatory**

Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'OwnerMandatory'} = '0';</code>

### 6.38.10.

#### **Ticket::Frontend::AgentTicketFreeText###Responsible**

Description:	Sets the responsible agent of the ticket in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Responsible'} = '0';</code>
-----------------	--

### 6.38.11.

#### **Ticket::Frontend::AgentTicketFreeText###State**

Description:	If a note is added by an agent, sets the state of a ticket in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'State'} = '0';</code>

### 6.38.12.

#### **Ticket::Frontend::AgentTicketFreeText###StateType**

Description:	Defines the next state of a ticket after adding a note, in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'StateType'} = [ 'open', 'closed', 'pending reminder', 'pending auto' ];</code>

### 6.38.13.

#### **Ticket::Frontend::AgentTicketFreeText###StateDefault**

Description:	Defines the default next state of a ticket after adding a note, in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'StateDefault'} = 'open';</code>

### 6.38.14.

#### **Ticket::Frontend::AgentTicketFreeText###Note**

Description:	Allows adding notes in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText

Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Note'} = '0';</code>

### 6.38.15.

#### **Ticket::Frontend::AgentTicketFreeText###NoteMandatory**

Description:	Sets if note must be filled in by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'NoteMandatory'} = '0';</code>

### 6.38.16.

#### **Ticket::Frontend::AgentTicketFreeText###Subject**

Description:	Defines the default subject of a note in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Subject'} = '\$Text{"Note"}';</code>

### 6.38.17.

#### **Ticket::Frontend::AgentTicketFreeText###Body**

Description:	Defines the default body of a note in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Body'} = '';</code>

### 6.38.18.

#### **Ticket::Frontend::AgentTicketFreeText###InvolvedAgent**

Description:	Shows a list of all the involved agents on this ticket, in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'InvolvedAgent'} = '0';</code>
-----------------	--

### 6.38.19.

#### **Ticket::Frontend::AgentTicketFreeText###InformAgent**

Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'InformAgent'} = '0';</code>

### 6.38.20.

#### **Ticket::Frontend::AgentTicketFreeText###ArticleTypeDefault**

Description:	Defines the default type of the note in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.38.21.

#### **Ticket::Frontend::AgentTicketFreeText###ArticleTypes**

Description:	Specifies the available note types for this ticket mask. If the option is deselected, ArticleTypeDefault is used and the option is removed from the mask.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'ArticleTypes'} = {          'note-external' =&gt; '1',          'note-internal' =&gt; '1',          'note-report' =&gt; '0'        };</code>

### 6.38.22.

#### **Ticket::Frontend::AgentTicketFreeText###Priority**

Description:	Shows the ticket priority options in the ticket free text screen of the agent interface.
--------------	--



Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Priority'} = '0';</code>

### 6.38.23. Ticket::Frontend::AgentTicketFreeText###PriorityDefault

Description:	Defines the default ticket priority in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.38.24. Ticket::Frontend::AgentTicketFreeText###Title

Description:	Shows the title fields in the ticket free text screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'Title'} = '1';</code>

### 6.38.25. Ticket::Frontend::AgentTicketFreeText###HistoryType

Description:	Defines the history type for the ticket free text screen action, which gets used for ticket history.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'HistoryType'} = 'AddNote';</code>

### 6.38.26. Ticket::Frontend::AgentTicketFreeText###HistoryComment

Description:	Defines the history comment for the ticket free text screen action, which gets used for ticket history.
Group:	Ticket

SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'HistoryComment'} = '%FreeText';</code>

### 6.38.27.

#### **Ticket::Frontend::AgentTicketFreeText###DynamicField**

Description:	Dynamic fields shown in the ticket free text screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'DynamicField'} = {};</code>

### 6.38.28.

#### **Ticket::Frontend::AgentTicketFreeText###RichTextWidth**

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'RichTextWidth'} = '620';</code>

### 6.38.29.

#### **Ticket::Frontend::AgentTicketFreeText###RichTextHeight**

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewFreeText
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketFreeText'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.39. Frontend::Agent::Ticket::ViewHistory

### 6.39.1. Ticket::Frontend::HistoryOrder

Description:	Shows the ticket history (reverse ordered) in the agent interface.
--------------	--

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewHistory
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::HistoryOrder'} = 'normal';</code>

## 6.40. Frontend::Agent::Ticket::ViewLocked

### 6.40.1.

#### Ticket::Frontend::AgentTicketLockedView###SortBy::Default

Description:	Defines the default ticket attribute for ticket sorting in the locked ticket view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewLocked
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketLockedView'}-&gt;{'SortBy::Default'} = 'Age';</code>

### 6.40.2.

#### Ticket::Frontend::AgentTicketLockedView###Order::Default

Description:	Defines the default ticket order in the ticket locked view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewLocked
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketLockedView'}-&gt;{'Order::Default'} = 'Up';</code>

### 6.40.3.

#### Ticket::Frontend::AgentTicketLockedView###DefaultColumns

Description:	Columns that can be filtered in the locked view of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewLocked
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketLockedView'}-&gt;{'DefaultColumns'} = { 'Age' =&gt; '2', 'Changed' =&gt; '1', 'CustomerID' =&gt; '2', 'CustomerName' =&gt; '1',</code>

```
'CustomerUserID' => '1',
'EscalationResponseTime' => '1',
'EscalationSolutionTime' => '1',
'EscalationTime' => '1',
'EscalationUpdateTime' => '1',
'Lock' => '2',
'Owner' => '2',
'PendingTime' => '1',
'Priority' => '1',
'Queue' => '2',
'Responsible' => '1',
'SLA' => '1',
'Service' => '1',
'State' => '2',
'TicketNumber' => '2',
'Title' => '2',
'Type' => '1'
};
```

## 6.41. Frontend::Agent::Ticket::ViewMerge

### 6.41.1.

#### Ticket::Frontend::AgentTicketMerge###Permission

Description:	Required permissions to use the ticket merge screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMerge'}-&gt;{'Permission'} = 'rw';</code>

### 6.41.2.

#### Ticket::Frontend::AgentTicketMerge###RequiredLock

Description:	Defines if a ticket lock is required in the ticket merge screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMerge'}-&gt;{'RequiredLock'} = '1';</code>

### 6.41.3. Ticket::Frontend::MergeText

Description:	When tickets are merged, the customer can be informed per email by setting the check box "Inform Sender". In this text area, you can define a pre-formatted text which can later be modified by the agents.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::MergeText'} = 'Your email with ticket number "&lt;OTRS_TICKET&gt;" is merged to "&lt;OTRS_MERGE_TO_TICKET&gt;";</code>

#### 6.41.4. Ticket::Frontend::AutomaticMergeSubject

Description:	When tickets are merged, a note will be added automatically to the ticket which is no longer active. Here you can define the subject of this note (this subject cannot be changed by the agent).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AutomaticMergeSubject'} = 'Ticket Merged';</code>

#### 6.41.5. Ticket::Frontend::AutomaticMergeText

Description:	When tickets are merged, a note will be added automatically to the ticket which is no longer active. Here you can define the body of this note (this text cannot be changed by the agent).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AutomaticMergeText'} = 'Merged Ticket &lt;OTRS_TICKET&gt; to &lt;OTRS_MERGE_TO_TICKET&gt;.';</code>

#### 6.41.6. Ticket::Frontend::AgentTicketMerge###RichTextWidth

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMerge'}-&gt;{'RichTextWidth'} = '620';</code>

#### 6.41.7. Ticket::Frontend::AgentTicketMerge###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMerge
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMerge'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.42. Frontend::Agent::Ticket::ViewMove

### 6.42.1. Ticket::Frontend::MoveType

Description:	Determines if the list of possible queues to move to ticket into should be displayed in a dropdown list or in a new window in the agent interface. If "New Window" is set you can add a move note to the ticket.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::MoveType'} = 'form';</code>

### 6.42.2. Ticket::Frontend::AgentTicketMove###State

Description:	Allows to set a new ticket state in the move ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'State'} = '1';</code>

### 6.42.3.

### Ticket::Frontend::AgentTicketMove###StateType

Description:	Defines the next state of a ticket after being moved to another queue, in the move ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'StateType'} = [ 'open', 'closed' ];</code>

### 6.42.4. Ticket::Frontend::AgentTicketMove###Priority

Description:	Shows the ticket priority options in the move ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	0

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'Priority'} = '0';</code>

### 6.42.5. Ticket::Frontend::AgentTicketMove###RequiredLock

Description:	Automatically lock and set owner to current Agent after opening the move ticket screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'RequiredLock'} = '1';</code>

### 6.42.6. Ticket::Frontend::AgentTicketMove###NextScreen

Description:	Determines the next screen after the ticket is moved. LastScreenOverview will return the last overview screen (e.g. search results, queueview, dashboard). TicketZoom will return to the TicketZoom.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'NextScreen'} = 'TicketZoom';</code>

### 6.42.7. Ticket::Frontend::AgentTicketMove###Subject

Description:	Sets the default subject for notes added in the ticket move screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'Subject'} = '\$Text{"Change Queue"}';</code>

### 6.42.8. Ticket::Frontend::AgentTicketMove###Body

Description:	Sets the default body text for notes added in the ticket move screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'Body'} = '';</code>

## 6.42.9.

### Ticket::Frontend::AgentTicketMove###RichTextWidth

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'RichTextWidth'} = '620';</code>

## 6.42.10.

### Ticket::Frontend::AgentTicketMove###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.42.11.

### Ticket::Frontend::AgentTicketMove###DynamicField

Description:	Dynamic fields shown in the ticket move screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewMove
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketMove'}-&gt;{'DynamicField'} = {};</code>

## 6.43. Frontend::Agent::Ticket::ViewNote

### 6.43.1.

#### Ticket::Frontend::AgentTicketNote###Permission

Description:	Required permissions to use the ticket note screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	1



Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Permission'} = 'note';</code>
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### 6.43.2.

#### **Ticket::Frontend::AgentTicketNote###RequiredLock**

Description:	Defines if a ticket lock is required in the ticket note screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'RequiredLock'} = '0';</code>

### 6.43.3.

#### **Ticket::Frontend::AgentTicketNote###TicketType**

Description:	Sets the ticket type in the ticket note screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'TicketType'} = '0';</code>

### 6.43.4. Ticket::Frontend::AgentTicketNote###Service

Description:	Sets the service in the ticket note screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Service'} = '0';</code>

### 6.43.5.

#### **Ticket::Frontend::AgentTicketNote###ServiceMandatory**

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.43.6. Ticket::Frontend::AgentTicketNote###SLAMandatory

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.43.7. Ticket::Frontend::AgentTicketNote###Queue

Description:	Sets the queue in the ticket note screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Queue'} = '0';</code>

### 6.43.8. Ticket::Frontend::AgentTicketNote###Owner

Description:	Sets the ticket owner in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Owner'} = '0';</code>

### 6.43.9. Ticket::Frontend::AgentTicketNote###OwnerMandatory

Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'OwnerMandatory'} = '0';</code>

### 6.43.10. Ticket::Frontend::AgentTicketNote###Responsible

Description:	Sets the responsible agent of the ticket in the ticket note screen of the agent interface.
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Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Responsible'} = '0';</code>

### 6.43.11. Ticket::Frontend::AgentTicketNote###State

Description:	If a note is added by an agent, sets the state of a ticket in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'State'} = '0';</code>

### 6.43.12. Ticket::Frontend::AgentTicketNote###StateType

Description:	Defines the next state of a ticket after adding a note, in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'StateType'} = [ 'open', 'closed', 'pending reminder', 'pending auto' ];</code>

### 6.43.13. Ticket::Frontend::AgentTicketNote###StateDefault

Description:	Defines the default next state of a ticket after adding a note, in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'StateDefault'} = 'open';</code>

### 6.43.14. Ticket::Frontend::AgentTicketNote###Note

Description:	Allows adding notes in the ticket note screen of the agent interface.
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Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Note'} = '1';</code>

### 6.43.15.

#### **Ticket::Frontend::AgentTicketNote###NoteMandatory**

Description:	Sets if note must be filled in by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'NoteMandatory'} = '1';</code>

### 6.43.16. Ticket::Frontend::AgentTicketNote###Subject

Description:	Sets the default subject for notes added in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Subject'} = '\$Text{"Note"}';</code>

### 6.43.17. Ticket::Frontend::AgentTicketNote###Body

Description:	Sets the default body text for notes added in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Body'} = '';</code>

### 6.43.18.

#### **Ticket::Frontend::AgentTicketNote###InvolvedAgent**

Description:	Shows a list of all the involved agents on this ticket, in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'InvolvedAgent'} = '0';</code>
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### 6.43.19.

#### **Ticket::Frontend::AgentTicketNote###InformAgent**

Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'InformAgent'} = '0';</code>

### 6.43.20.

#### **Ticket::Frontend::AgentTicketNote###ArticleTypeDefault**

Description:	Defines the default type of the note in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.43.21.

#### **Ticket::Frontend::AgentTicketNote###ArticleTypes**

Description:	Specifies the available note types for this ticket mask. If the option is deselected, ArticleTypeDefault is used and the option is removed from the mask.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'ArticleTypes'} = {        'note-external' =&gt; '1',        'note-internal' =&gt; '1',        'note-report' =&gt; '0'      };</code>

### 6.43.22. Ticket::Frontend::AgentTicketNote###Priority

Description:	Shows the ticket priority options in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote

Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Priority'} = '0';</code>

### 6.43.23.

#### **Ticket::Frontend::AgentTicketNote###PriorityDefault**

Description:	Defines the default ticket priority in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.43.24. Ticket::Frontend::AgentTicketNote###Title

Description:	Shows the title fields in the ticket note screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'Title'} = '0';</code>

### 6.43.25.

#### **Ticket::Frontend::AgentTicketNote###HistoryType**

Description:	Defines the history type for the ticket note screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'HistoryType'} = 'AddNote';</code>

### 6.43.26.

#### **Ticket::Frontend::AgentTicketNote###HistoryComment**

Description:	Defines the history comment for the ticket note screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'HistoryComment'} = '%%Note';</code>
-----------------	--

## 6.43.27.

### **Ticket::Frontend::AgentTicketNote###DynamicField**

Description:	Dynamic fields shown in the ticket note screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'DynamicField'} = {};</code>

## 6.43.28.

### **Ticket::Frontend::AgentTicketNote###RichTextWidth**

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'RichTextWidth'} = '620';</code>

## 6.43.29.

### **Ticket::Frontend::AgentTicketNote###RichTextHeight**

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewNote
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketNote'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.44. Frontend::Agent::Ticket::ViewOwner

### 6.44.1.

#### **Ticket::Frontend::AgentTicketOwner###Permission**

Description:	Required permissions to use the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket

SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Permission'} = 'owner';</code>

### 6.44.2.

#### **Ticket::Frontend::AgentTicketOwner###RequiredLock**

Description:	Defines if a ticket lock is required in the ticket owner screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'RequiredLock'} = '0';</code>

### 6.44.3.

#### **Ticket::Frontend::AgentTicketOwner###TicketType**

Description:	Sets the ticket type in the ticket owner screen of a zoomed ticket in the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'TicketType'} = '0';</code>

### 6.44.4.

#### **Ticket::Frontend::AgentTicketOwner###Service**

Description:	Sets the service in the ticket owner screen of a zoomed ticket in the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Service'} = '0';</code>

### 6.44.5.

#### **Ticket::Frontend::AgentTicketOwner###ServiceMandatory**

Description:	Sets if service must be selected by the agent.
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Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.44.6. Ticket::Frontend::AgentTicketOwner###SLAMandatory

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.44.7. Ticket::Frontend::AgentTicketOwner###Queue

Description:	Sets the queue in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Queue'} = '0';</code>

### 6.44.8. Ticket::Frontend::AgentTicketOwner###Owner

Description:	Sets the ticket owner in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Owner'} = '1';</code>

### 6.44.9. Ticket::Frontend::AgentTicketOwner###OwnerMandatory

Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'OwnerMandatory'} = '1';</code>
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### 6.44.10. Ticket::Frontend::AgentTicketOwner###Responsible

Description:	Sets the responsible agent of the ticket in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Responsible'} = '0';</code>

### 6.44.11. Ticket::Frontend::AgentTicketOwner###State

Description:	If a note is added by an agent, sets the state of the ticket in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'State'} = '0';</code>

### 6.44.12. Ticket::Frontend::AgentTicketOwner###StateType

Description:	Defines the next state of a ticket after adding a note, in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'StateType'} = [ 'open', 'pending reminder', 'pending auto' ];</code>

### 6.44.13. Ticket::Frontend::AgentTicketOwner###StateDefault

Description:	Defines the default next state of a ticket after adding a note, in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'StateDefault'} = 'open';</code>

#### 6.44.14. Ticket::Frontend::AgentTicketOwner###Note

Description:	Allows adding notes in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Note'} = '1';</code>

#### 6.44.15.

#### Ticket::Frontend::AgentTicketOwner###NoteMandatory

Description:	Sets if note must be filled in by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'NoteMandatory'} = '1';</code>

#### 6.44.16.

#### Ticket::Frontend::AgentTicketOwner###Subject

Description:	Sets the default subject for notes added in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Subject'} = '\$Text{"Owner Update"}!';</code>

#### 6.44.17. Ticket::Frontend::AgentTicketOwner###Body

Description:	Sets the default body text for notes added in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Body'} = '';</code>

### 6.44.18.

#### Ticket::Frontend::AgentTicketOwner###InvolvedAgent

Description:	Shows a list of all the involved agents on this ticket, in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'InvolvedAgent'} = '0';</code>

### 6.44.19.

#### Ticket::Frontend::AgentTicketOwner###InformAgent

Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'InformAgent'} = '0';</code>

### 6.44.20.

#### Ticket::Frontend::AgentTicketOwner###ArticleTypeDefault

Description:	Defines the default type of the note in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.44.21.

#### Ticket::Frontend::AgentTicketOwner###ArticleTypes

Description:	Specifies the available note types for this ticket mask. If the option is deselected, ArticleTypeDefault is used and the option is removed from the mask.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0

Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'ArticleTypes'} = {   'note-external' =&gt; '0',   'note-internal' =&gt; '1',   'note-report' =&gt; '0' };</pre>
-----------------	--

### 6.44.22.

#### **Ticket::Frontend::AgentTicketOwner###Priority**

Description:	Shows the ticket priority options in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Priority'} = '0';</pre>

### 6.44.23.

#### **Ticket::Frontend::AgentTicketOwner###PriorityDefault**

Description:	Defines the default ticket priority in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'PriorityDefault'} = '3 normal';</pre>

### 6.44.24. Ticket::Frontend::AgentTicketOwner###Title

Description:	Shows the title fields in the ticket owner screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'Title'} = '0';</pre>

### 6.44.25.

#### **Ticket::Frontend::AgentTicketOwner###HistoryType**

Description:	Defines the history type for the ticket owner screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'HistoryType'} = 'AddNote';</code>
-----------------	---

### 6.44.26.

## Ticket::Frontend::AgentTicketOwner###HistoryComment

Description:	Defines the history comment for the ticket owner screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'HistoryComment'} = '%0owner';</code>

### 6.44.27.

## Ticket::Frontend::AgentTicketOwner###DynamicField

Description:	Dynamic fields shown in the ticket owner screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'DynamicField'} = {};</code>

### 6.44.28.

## Ticket::Frontend::AgentTicketOwner###RichTextWidth

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'RichTextWidth'} = '620';</code>

### 6.44.29.

## Ticket::Frontend::AgentTicketOwner###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewOwner
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketOwner'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.45. Frontend::Agent::Ticket::ViewPending

### 6.45.1.

#### Ticket::Frontend::AgentTicketPending###Permission

Description:	Required permissions to use the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Permission'} = 'pending';</code>

### 6.45.2.

#### Ticket::Frontend::AgentTicketPending###RequiredLock

Description:	Defines if a ticket lock is required in the ticket pending screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'RequiredLock'} = '1';</code>

### 6.45.3.

#### Ticket::Frontend::AgentTicketPending###TicketType

Description:	Sets the ticket type in the ticket pending screen of a zoomed ticket in the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'TicketType'} = '0';</code>

### 6.45.4.

#### Ticket::Frontend::AgentTicketPending###Service

Description:	Sets the service in the ticket pending screen of a zoomed ticket in the agent interface (Ticket::Service needs to be activated).
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Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Service'} = '0';</code>

### 6.45.5. Ticket::Frontend::AgentTicketPending###ServiceMandatory

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.45.6. Ticket::Frontend::AgentTicketPending###SLAMandatory

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.45.7. Ticket::Frontend::AgentTicketPending###Queue

Description:	Sets the queue in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Queue'} = '0';</code>

### 6.45.8. Ticket::Frontend::AgentTicketPending###Owner

Description:	Sets the ticket owner in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending



Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Owner'} = '0';</code>

### 6.45.9.

#### **Ticket::Frontend::AgentTicketPending###OwnerMandatory**

Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'OwnerMandatory'} = '0';</code>

### 6.45.10.

#### **Ticket::Frontend::AgentTicketPending###Responsible**

Description:	Sets the responsible agent of the ticket in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Responsible'} = '0';</code>

### 6.45.11.

#### **Ticket::Frontend::AgentTicketPending###State**

Description:	If a note is added by an agent, sets the state of the ticket in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'State'} = '1';</code>

### 6.45.12.

#### **Ticket::Frontend::AgentTicketPending###StateType**

Description:	Defines the next state of a ticket after adding a note, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	1

Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'StateType'} = [   'pending reminder',   'pending auto' ];</pre>
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### 6.45.13. Ticket::Frontend::AgentTicketPending###StateDefault

Description:	Defines the default next state of a ticket after adding a note, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'StateDefault'} =   'pending reminder';</pre>

### 6.45.14. Ticket::Frontend::AgentTicketPending###Note

Description:	Allows adding notes in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Note'} = '1';</pre>

### 6.45.15. Ticket::Frontend::AgentTicketPending###NoteMandatory

Description:	Sets if note must be filled in by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'NoteMandatory'}   = '1';</pre>

### 6.45.16. Ticket::Frontend::AgentTicketPending###Subject

Description:	Sets the default subject for notes added in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Subject'} = '\$Text{"Pending"}!';</code>
-----------------	--

### 6.45.17.

#### **Ticket::Frontend::AgentTicketPending###Body**

Description:	Sets the default body text for notes added in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Body'} = '';</code>

### 6.45.18.

#### **Ticket::Frontend::AgentTicketPending###InvolvedAgent**

Description:	Shows a list of all the involved agents on this ticket, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'InvolvedAgent'} = '0';</code>

### 6.45.19.

#### **Ticket::Frontend::AgentTicketPending###InformAgent**

Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'InformAgent'} = '0';</code>

### 6.45.20.

#### **Ticket::Frontend::AgentTicketPending###ArticleTypeDefault**

Description:	Defines the default type of the note in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.45.21.

#### **Ticket::Frontend::AgentTicketPending###ArticleTypes**

Description:	Specifies the available note types for this ticket mask. If the option is deselected, ArticleTypeDefault is used and the option is removed from the mask.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'ArticleTypes'} = {   'note-external' =&gt; '0',   'note-internal' =&gt; '1',   'note-report' =&gt; '0' };</code>

### 6.45.22.

#### **Ticket::Frontend::AgentTicketPending###Priority**

Description:	Shows the ticket priority options in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Priority'} = '0';</code>

### 6.45.23.

#### **Ticket::Frontend::AgentTicketPending###PriorityDefault**

Description:	Defines the default ticket priority in the ticket pending screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.45.24.

#### **Ticket::Frontend::AgentTicketPending###Title**

Description:	Shows the title fields in the ticket pending screen of a zoomed ticket in the agent interface.
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Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'Title'} = '0';</code>

### 6.45.25.

#### **Ticket::Frontend::AgentTicketPending###HistoryType**

Description:	Defines the history type for the ticket pending screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'HistoryType'} = 'AddNote';</code>

### 6.45.26.

#### **Ticket::Frontend::AgentTicketPending###HistoryComment**

Description:	Defines the history comment for the ticket pending screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'HistoryComment'} = '%Pending';</code>

### 6.45.27.

#### **Ticket::Frontend::AgentTicketPending###DynamicField**

Description:	Dynamic fields shown in the ticket pending screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'DynamicField'} = {};</code>

### 6.45.28.

#### **Ticket::Frontend::AgentTicketPending###RichTextWidth**

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
--------------	--

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'RichTextWidth'} = '620';</code>

## 6.45.29.

### Ticket::Frontend::AgentTicketPending###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPending
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPending'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.46.

### Frontend::Agent::Ticket::ViewPhoneInbound

#### 6.46.1.

#### Ticket::Frontend::AgentTicketPhoneInbound###Permission

Description:	Required permissions to use the ticket phone inbound screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'Permission'} = 'phone';</code>

#### 6.46.2.

#### Ticket::Frontend::AgentTicketPhoneInbound###RequiredLock

Description:	Defines if a ticket lock is required in the ticket phone inbound screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'RequiredLock'} = '0';</code>

### 6.46.3.

## Ticket::Frontend::AgentTicketPhoneInbound###ArticleType

Description:	Defines the default type of the note in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'ArticleType'} = 'phone';</code>

### 6.46.4.

## Ticket::Frontend::AgentTicketPhoneInbound###SenderType

Description:	Defines the default sender type for phone tickets in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'SenderType'} = 'customer';</code>

### 6.46.5.

## Ticket::Frontend::AgentTicketPhoneInbound###Subject

Description:	Defines the default subject for phone tickets in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'Subject'} = '\$Text{"Phone call"}!';</code>

### 6.46.6.

## Ticket::Frontend::AgentTicketPhoneInbound###Body

Description:	Defines the default note body text for phone tickets in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'Body'} = '';</code>

### 6.46.7.

#### Ticket::Frontend::AgentTicketPhoneInbound###State

Description:	Defines the default ticket next state after adding a phone note in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'State'} = 'open';</code>

### 6.46.8.

#### Ticket::Frontend::AgentTicketPhoneInbound###StateType

Description:	Next possible ticket states after adding a phone note in the ticket phone inbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'StateType'} = [ 'open', 'pending auto', 'pending reminder', 'closed' ];</code>

### 6.46.9.

#### Ticket::Frontend::AgentTicketPhoneInbound###HistoryType

Description:	Defines the history type for the ticket phone inbound screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'HistoryType'} = 'PhoneCallCustomer';</code>

### 6.46.10.

#### Ticket::Frontend::AgentTicketPhoneInbound###HistoryComment

Description:	Defines the history comment for the ticket phone inbound screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	1



Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'HistoryComment'} = '';</code>
-----------------	--

### 6.46.11.

## Ticket::Frontend::AgentTicketPhoneInbound###DynamicField

Description:	Dynamic fields shown in the ticket phone inbound screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'DynamicField'} = {};</code>

### 6.46.12.

## Ticket::Frontend::AgentTicketPhoneInbound###RichTextWidth

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'RichTextWidth'} = '475';</code>

### 6.46.13.

## Ticket::Frontend::AgentTicketPhoneInbound###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneInbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneInbound'}-&gt;{'RichTextHeight'} = '200';</code>

## 6.47. Frontend::Agent::Ticket::ViewPhoneNew

### 6.47.1.

## Ticket::Frontend::AgentTicketPhone###Priority

Description:	Sets the default priority for new phone tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'Priority'} = '3 normal';</code>

### 6.47.2.

#### **Ticket::Frontend::AgentTicketPhone###ArticleType**

Description:	Sets the default article type for new phone tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'ArticleType'} = 'phone';</code>

### 6.47.3.

#### **Ticket::Frontend::AgentTicketPhone###SenderType**

Description:	Sets the default sender type for new phone ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'SenderType'} = 'customer';</code>

### 6.47.4.

#### **Ticket::Frontend::AgentTicketPhone::AllowMultipleFrom**

Description:	Controls if more than one from entry can be set in the new phone ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone::AllowMultipleFrom'} = '1';</code>

### 6.47.5.

#### **Ticket::Frontend::AgentTicketPhone###Subject**

Description:	Sets the default subject for new phone tickets (e.g. 'Phone call') in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'Subject'} = '';</code>

### 6.47.6. Ticket::Frontend::AgentTicketPhone###Body

Description:	Sets the default note text for new telephone tickets. E.g 'New ticket via call' in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'Body'} = '';</code>

### 6.47.7. Ticket::Frontend::AgentTicketPhone###StateDefault

Description:	Sets the default next state for new phone tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'StateDefault'} = 'open';</code>

### 6.47.8. Ticket::Frontend::AgentTicketPhone###StateType

Description:	Determines the next possible ticket states, after the creation of a new phone ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'StateType'} = [ 'open', 'pending auto', 'pending reminder', 'closed' ];</code>

### 6.47.9. Ticket::Frontend::AgentTicketPhone###HistoryType

Description:	Defines the history type for the phone ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'HistoryType'} = 'PhoneCallCustomer';</code>
-----------------	---

### 6.47.10.

## Ticket::Frontend::AgentTicketPhone###HistoryComment

Description:	Defines the history comment for the phone ticket screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'HistoryComment'} = '';</code>

### 6.47.11.

## Ticket::Frontend::AgentTicketPhone###SplitLinkType

Description:	Sets the default link type of splitted tickets in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'SplitLinkType'} = { 'Direction' =&gt; 'Target', 'LinkType' =&gt; 'ParentChild' };</code>

### 6.47.12.

## Ticket::Frontend::AgentTicketPhone###ServiceMandatory

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.47.13.

## Ticket::Frontend::AgentTicketPhone###SLAMandatory

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'SLAMandatory'} = '0';</code>

## 6.47.14.

### Ticket::Frontend::AgentTicketPhone###DynamicField

Description:	Dynamic fields shown in the ticket phone screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'DynamicField'} = {};</code>

## 6.47.15.

### Ticket::Frontend::AgentTicketPhone###RichTextWidth

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'RichTextWidth'} = '620';</code>

## 6.47.16.

### Ticket::Frontend::AgentTicketPhone###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhone'}-&gt;{'RichTextHeight'} = '320';</code>

## 6.48.

### Frontend::Agent::Ticket::ViewPhoneOutbound

#### 6.48.1.

### Ticket::Frontend::AgentTicketPhoneOutbound###Permission

Description:	Required permissions to use the ticket phone outbound screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'Permission'} = 'phone';</code>

### 6.48.2.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###RequiredLock**

Description:	Defines if a ticket lock is required in the ticket phone outbound screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'RequiredLock'} = '1';</code>

### 6.48.3.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###ArticleType**

Description:	Defines the default type of the note in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'ArticleType'} = 'phone';</code>

### 6.48.4.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###SenderType**

Description:	Defines the default sender type for phone tickets in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'SenderType'} = 'agent';</code>

### 6.48.5.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###Subject**

Description:	Defines the default subject for phone tickets in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound

Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'Subject'} = '\$Text{"Phone call"}!';</code>

### 6.48.6.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###Body**

Description:	Defines the default note body text for phone tickets in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'Body'} = '';</code>

### 6.48.7.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###State**

Description:	Defines the default ticket next state after adding a phone note in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'State'} = 'closed successful';</code>

### 6.48.8.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###StateType**

Description:	Next possible ticket states after adding a phone note in the ticket phone outbound screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'StateType'} = [     'open',     'pending auto',     'pending reminder',     'closed'   ];</code>

### 6.48.9.

#### **Ticket::Frontend::AgentTicketPhoneOutbound###HistoryType**

Description:	Defines the history type for the ticket phone outbound screen action, which gets used for ticket history in the agent interface.
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Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'HistoryType'} = 'PhoneCallAgent';</code>

### 6.48.10.

#### Ticket::Frontend::AgentTicketPhoneOutbound###HistoryComment

Description:	Defines the history comment for the ticket phone outbound screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'HistoryComment'} = '';</code>

### 6.48.11.

#### Ticket::Frontend::AgentTicketPhoneOutbound###DynamicField

Description:	Dynamic fields shown in the ticket phone outbound screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'DynamicField'} = {};</code>

### 6.48.12.

#### Ticket::Frontend::AgentTicketPhoneOutbound###RichTextWidth

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'RichTextWidth'} = '475';</code>

### 6.48.13.

#### Ticket::Frontend::AgentTicketPhoneOutbound###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
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Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPhoneOutbound
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPhoneOutbound'}-&gt;{'RichTextHeight'} = '200';</code>

## 6.49. Frontend::Agent::Ticket::ViewPrint

### 6.49.1.

#### Ticket::Frontend::AgentTicketPrint###DynamicField

Description:	Dynamic fields shown in the ticket print screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPrint
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPrint'}-&gt;{'DynamicField'} = {};</code>

## 6.50. Frontend::Agent::Ticket::ViewPriority

### 6.50.1.

#### Ticket::Frontend::AgentTicketPriority###Permission

Description:	Required permissions to use the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Permission'} = 'priority';</code>

### 6.50.2.

#### Ticket::Frontend::AgentTicketPriority###RequiredLock

Description:	Defines if a ticket lock is required in the ticket priority screen of a zoomed ticket in the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'RequiredLock'} = '1';</code>
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### 6.50.3.

#### **Ticket::Frontend::AgentTicketPriority###TicketType**

Description:	Sets the ticket type in the ticket priority screen of a zoomed ticket in the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'TicketType'} = '0';</code>

### 6.50.4.

#### **Ticket::Frontend::AgentTicketPriority###Service**

Description:	Sets the service in the ticket priority screen of a zoomed ticket in the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Service'} = '0';</code>

### 6.50.5.

#### **Ticket::Frontend::AgentTicketPriority###ServiceMandatory**

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.50.6.

#### **Ticket::Frontend::AgentTicketPriority###SLAMandatory**

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'SLAMandatory'} = '0';</code>
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### 6.50.7.

#### **Ticket::Frontend::AgentTicketPriority###Queue**

Description:	Sets the queue in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Queue'} = '0';</code>

### 6.50.8.

#### **Ticket::Frontend::AgentTicketPriority###Owner**

Description:	Sets the ticket owner in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Owner'} = '0';</code>

### 6.50.9.

#### **Ticket::Frontend::AgentTicketPriority###OwnerMandatory**

Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'OwnerMandatory'} = '0';</code>

### 6.50.10.

#### **Ticket::Frontend::AgentTicketPriority###Responsible**

Description:	Sets the responsible agent of the ticket in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Responsible'} = '0';</code>

### 6.50.11.

#### Ticket::Frontend::AgentTicketPriority###State

Description:	If a note is added by an agent, sets the state of the ticket in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'State'} = '0';</code>

### 6.50.12.

#### Ticket::Frontend::AgentTicketPriority###StateType

Description:	Defines the next state of a ticket after adding a note, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'StateType'} = [ 'open', 'pending reminder', 'pending auto' ];</code>

### 6.50.13.

#### Ticket::Frontend::AgentTicketPriority###StateDefault

Description:	Defines the default next state of a ticket after adding a note, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'StateDefault'} = 'open';</code>

### 6.50.14. Ticket::Frontend::AgentTicketPriority###Note

Description:	Allows adding notes in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Note'} = '1';</code>
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### 6.50.15. Ticket::Frontend::AgentTicketPriority###NoteMandatory

Description:	Sets if note must be filled in by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'NoteMandatory'} = '1';</code>

### 6.50.16. Ticket::Frontend::AgentTicketPriority###Subject

Description:	Sets the default subject for notes added in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Subject'} = '\$Text{"Priority Update"}!';</code>

### 6.50.17. Ticket::Frontend::AgentTicketPriority###Body

Description:	Sets the default body text for notes added in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Body'} = '';</code>

### 6.50.18. Ticket::Frontend::AgentTicketPriority###InvolvedAgent

Description:	Shows a list of all the involved agents on this ticket, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'InvolvedAgent'} = '0';</code>

### 6.50.19.

#### Ticket::Frontend::AgentTicketPriority###InformAgent

Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'InformAgent'} = '0';</code>

### 6.50.20.

#### Ticket::Frontend::AgentTicketPriority###ArticleTypeDefault

Description:	Defines the default type of the note in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.50.21.

#### Ticket::Frontend::AgentTicketPriority###ArticleTypes

Description:	Specifies the available note types for this ticket mask. If the option is deselected, ArticleTypeDefault is used and the option is removed from the mask.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'ArticleTypes'} = {          'note-external' =&gt; '0',          'note-internal' =&gt; '1',          'note-report' =&gt; '0'      };</code>

### 6.50.22.

#### Ticket::Frontend::AgentTicketPriority###Priority

Description:	Shows the ticket priority options in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority

Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Priority'} = '1';</code>

### 6.50.23.

#### **Ticket::Frontend::AgentTicketPriority###PriorityDefault**

Description:	Defines the default ticket priority in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.50.24. Ticket::Frontend::AgentTicketPriority###Title

Description:	Shows the title fields in the ticket priority screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'Title'} = '0';</code>

### 6.50.25.

#### **Ticket::Frontend::AgentTicketPriority###HistoryType**

Description:	Defines the history type for the ticket priority screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'HistoryType'} = 'AddNote';</code>

### 6.50.26.

#### **Ticket::Frontend::AgentTicketPriority###HistoryComment**

Description:	Defines the history comment for the ticket priority screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'HistoryComment'} = '%Priority';</code>

## 6.50.27.

### Ticket::Frontend::AgentTicketPriority###DynamicField

Description:	Dynamic fields shown in the ticket priority screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'DynamicField'} = {};</code>

## 6.50.28.

### Ticket::Frontend::AgentTicketPriority###RichTextWidth

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'RichTextWidth'} = '620';</code>

## 6.50.29.

### Ticket::Frontend::AgentTicketPriority###RichTextHeight

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewPriority
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketPriority'}-&gt;{'RichTextHeight'} = '100';</code>

## 6.51. Frontend::Agent::Ticket::ViewQueue

### 6.51.1.

#### Ticket::Frontend::AgentTicketQueue###StripEmptyLines

Description:	Strips empty lines on the ticket preview in the queue view.
Group:	Ticket



SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'StripEmptyLines'} = '0';</code>

### 6.51.2.

#### **Ticket::Frontend::AgentTicketQueue###ViewAllPossibleTickets**

Description:	Shows all both ro and rw queues in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'ViewAllPossibleTickets'} = '0';</code>

### 6.51.3.

#### **Ticket::Frontend::AgentTicketQueue###HighlightAge1**

Description:	Sets the age in minutes (first level) for highlighting queues that contain untouched tickets.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'HighlightAge1'} = '1440';</code>

### 6.51.4.

#### **Ticket::Frontend::AgentTicketQueue###HighlightAge2**

Description:	Sets the age in minutes (second level) for highlighting queues that contain untouched tickets.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'HighlightAge2'} = '2880';</code>

### 6.51.5. Ticket::Frontend::AgentTicketQueue###Blink

Description:	Activates a blinking mechanism of the queue that contains the oldest ticket.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'Blink'} = '1';</code>

### 6.51.6.

#### **Ticket::Frontend::AgentTicketQueue###QueueSort**

Description:	Sorts the tickets (ascendingly or descendingly) when a single queue is selected in the queue view and after the tickets are sorted by priority. Values: 0 = ascending (oldest on top, default), 1 = descending (youngest on top). Use the QueueID for the key and 0 or 1 for value.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'QueueSort'} = { '3' =&gt; '0', '7' =&gt; '1' };</code>

### 6.51.7.

#### **Ticket::Frontend::AgentTicketQueue###SortBy::Default**

Description:	Defines the default sort criteria for all queues displayed in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'SortBy::Default'} = 'Age';</code>

### 6.51.8.

#### **Ticket::Frontend::AgentTicketQueue###PreSort::ByPriority**

Description:	Defines if a pre-sorting by priority should be done in the queue view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'PreSort::ByPriority'} = '1';</code>

### 6.51.9.

#### **Ticket::Frontend::AgentTicketQueue###Order::Default**

Description:	Defines the default sort order for all queues in the queue view, after priority sort.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'Order::Default'} = 'Up';</code>

## 6.51.10.

### Ticket::Frontend::AgentTicketQueue###DefaultColumns

Description:	Columns that can be filtered in the queue view of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewQueue
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketQueue'}-&gt;{'DefaultColumns'} = {        'Age' =&gt; '2',        'Changed' =&gt; '1',        'CustomerID' =&gt; '2',        'CustomerName' =&gt; '1',        'CustomerUserID' =&gt; '1',        'EscalationResponseTime' =&gt; '1',        'EscalationSolutionTime' =&gt; '1',        'EscalationTime' =&gt; '1',        'EscalationUpdateTime' =&gt; '1',        'Lock' =&gt; '2',        'Owner' =&gt; '2',        'PendingTime' =&gt; '1',        'Priority' =&gt; '1',        'Queue' =&gt; '2',        'Responsible' =&gt; '1',        'SLA' =&gt; '1',        'Service' =&gt; '1',        'State' =&gt; '2',        'TicketNumber' =&gt; '2',        'Title' =&gt; '2',        'Type' =&gt; '1'      };</code>

## 6.52.

### Frontend::Agent::Ticket::ViewResponsible

#### 6.52.1.

### Ticket::Frontend::AgentTicketResponsibleView###SortBy::Default

Description:	Defines the default ticket attribute for ticket sorting in the responsible view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsibleView'}-&gt;{'SortBy::Default'} = 'Age';</code>
-----------------	---

### 6.52.2.

#### **Ticket::Frontend::AgentTicketResponsibleView###Order::Default**

Description:	Defines the default ticket order in the responsible view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsibleView'}-&gt;{'Order::Default'} = 'Up';</code>

### 6.52.3.

#### **Ticket::Frontend::AgentTicketResponsible###Permission**

Description:	Required permissions to use the ticket responsible screen in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Permission'} = 'responsible';</code>

### 6.52.4.

#### **Ticket::Frontend::AgentTicketResponsible###RequiredLock**

Description:	Defines if a ticket lock is required in the ticket responsible screen of the agent interface (if the ticket isn't locked yet, the ticket gets locked and the current agent will be set automatically as its owner).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'RequiredLock'} = '0';</code>

### 6.52.5.

#### **Ticket::Frontend::AgentTicketResponsible###TicketType**

Description:	Sets the ticket type in the ticket responsible screen of the agent interface (Ticket::Type needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'TicketType'} = '0';</code>

### 6.52.6. Ticket::Frontend::AgentTicketResponsible###Service

Description:	Sets the service in the ticket responsible screen of the agent interface (Ticket::Service needs to be activated).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Service'} = '0';</code>

### 6.52.7. Ticket::Frontend::AgentTicketResponsible###ServiceMandatory

Description:	Sets if service must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.52.8. Ticket::Frontend::AgentTicketResponsible###SLAMandatory

Description:	Sets if SLA must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.52.9. Ticket::Frontend::AgentTicketResponsible###Queue

Description:	Sets the queue in the ticket responsible screen of a zoomed ticket in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Queue'} = '0';</code>
-----------------	---

### 6.52.10.

#### **Ticket::Frontend::AgentTicketResponsible###Owner**

Description:	Sets the ticket owner in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Owner'} = '0';</code>

### 6.52.11.

#### **Ticket::Frontend::AgentTicketResponsible###OwnerMandatory**

Description:	Sets if ticket owner must be selected by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'OwnerMandatory'} = '0';</code>

### 6.52.12.

#### **Ticket::Frontend::AgentTicketResponsible###Responsible**

Description:	Sets the responsible agent of the ticket in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Responsible'} = '1';</code>

### 6.52.13.

#### **Ticket::Frontend::AgentTicketResponsible###State**

Description:	If a note is added by an agent, sets the state of a ticket in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'State'} = '0';</code>

### 6.52.14.

#### **Ticket::Frontend::AgentTicketResponsible###StateType**

Description:	Defines the next state of a ticket after adding a note, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'StateType'} = [   'open',   'pending reminder',   'pending auto' ];</pre>

### 6.52.15.

#### **Ticket::Frontend::AgentTicketResponsible###StateDefault**

Description:	Defines the default next state of a ticket after adding a note, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'StateDefault'} = 'open';</pre>

### 6.52.16.

#### **Ticket::Frontend::AgentTicketResponsible###Note**

Description:	Allows adding notes in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Note'} = '1';</pre>

### 6.52.17.

#### **Ticket::Frontend::AgentTicketResponsible###NoteMandatory**

Description:	Sets if note must be filled in by the agent.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'NoteMandatory'} = '1';</code>
-----------------	---

### 6.52.18.

#### **Ticket::Frontend::AgentTicketResponsible###Subject**

Description:	Sets the default subject for notes added in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Subject'} = '\$Text{"Responsible Update"}!';</code>

### 6.52.19.

#### **Ticket::Frontend::AgentTicketResponsible###Body**

Description:	Sets the default body text for notes added in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Body'} = '';</code>

### 6.52.20.

#### **Ticket::Frontend::AgentTicketResponsible###InvolvedAgent**

Description:	Shows a list of all the involved agents on this ticket, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'InvolvedAgent'} = '0';</code>

### 6.52.21.

#### **Ticket::Frontend::AgentTicketResponsible###InformAgent**

Description:	Shows a list of all the possible agents (all agents with note permissions on the queue/ticket) to determine who should be informed about this note, in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0



Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'InformAgent'} = '0';</code>

### 6.52.22.

#### **Ticket::Frontend::AgentTicketResponsible###ArticleTypeDefault**

Description:	Defines the default type of the note in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'ArticleTypeDefault'} = 'note-internal';</code>

### 6.52.23.

#### **Ticket::Frontend::AgentTicketResponsible###ArticleTypes**

Description:	Specifies the available note types for this ticket mask. If the option is deselected, ArticleTypeDefault is used and the option is removed from the mask.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'ArticleTypes'} = { 'note-external' =&gt; '0', 'note-internal' =&gt; '1', 'note-report' =&gt; '0' };</code>

### 6.52.24.

#### **Ticket::Frontend::AgentTicketResponsible###Priority**

Description:	Shows the ticket priority options in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Priority'} = '0';</code>

### 6.52.25.

#### **Ticket::Frontend::AgentTicketResponsible###PriorityDefault**

Description:	Defines the default ticket priority in the ticket responsible screen of the agent interface.
Group:	Ticket

SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.52.26.

#### **Ticket::Frontend::AgentTicketResponsible###Title**

Description:	Shows the title fields in the ticket responsible screen of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'Title'} = '1';</code>

### 6.52.27.

#### **Ticket::Frontend::AgentTicketResponsible###HistoryType**

Description:	Defines the history type for the ticket responsible screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'HistoryType'} = 'AddNote';</code>

### 6.52.28.

#### **Ticket::Frontend::AgentTicketResponsible###HistoryComment**

Description:	Defines the history comment for the ticket responsible screen action, which gets used for ticket history in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'HistoryComment'} = '%%Responsible';</code>

### 6.52.29.

#### **Ticket::Frontend::AgentTicketResponsible###DynamicField**

Description:	Dynamic fields shown in the ticket responsible screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket

SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'DynamicField'} = {};</code>

### 6.52.30.

#### **Ticket::Frontend::AgentTicketResponsible###RichTextWidth**

Description:	Defines the width for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'RichTextWidth'} = '620';</code>

### 6.52.31.

#### **Ticket::Frontend::AgentTicketResponsible###RichTextHeight**

Description:	Defines the height for the rich text editor component for this screen. Enter number (pixels) or percent value (relative).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsible'}-&gt;{'RichTextHeight'} = '100';</code>

### 6.52.32.

#### **Ticket::Frontend::AgentTicketResponsibleView###DefaultColumns**

Description:	Columns that can be filtered in the responsible view of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewResponsible
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketResponsibleView'}-&gt;{'DefaultColumns'} = {        'Age' =&gt; '2',        'Changed' =&gt; '1',        'CustomerID' =&gt; '2',        'CustomerName' =&gt; '1',        'CustomerUserID' =&gt; '1',        'EscalationResponseTime' =&gt; '1',        'EscalationSolutionTime' =&gt; '1',        'EscalationTime' =&gt; '1',</code>

```
'EscalationUpdateTime' => '1',
'Lock' => '2',
'Owner' => '2',
'PendingTime' => '1',
'Priority' => '1',
'Queue' => '2',
'Responsible' => '1',
'SLA' => '1',
'Service' => '1',
'State' => '2',
'TicketNumber' => '2',
'Title' => '2',
'Type' => '1'
};
```

## 6.53. Frontend::Agent::Ticket::ViewSearch

### 6.53.1.

#### Ticket::Frontend::AgentTicketSearch###ExtendedSearchCondition

Description:	Allows extended search conditions in ticket search of the agent interface. With this feature you can search e. g. with this kind of conditions like "(key1&&key2)" or "(key1  key2)".
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'ExtendedSearchCondition'} = '1';</code>

### 6.53.2.

#### Ticket::Frontend::AgentTicketSearch###SearchLimit

Description:	Maximum number of tickets to be displayed in the result of a search in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SearchLimit'} = '2000';</code>

### 6.53.3.

#### Ticket::Frontend::AgentTicketSearch###SearchPageShown

Description:	Number of tickets to be displayed in each page of a search result in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SearchPageShown'} = '40';</code>

### 6.53.4.

## Ticket::Frontend::AgentTicketSearch###SearchViewableTicketLines

Description:	Number of lines (per ticket) that are shown by the search utility in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SearchViewableTicketLines'} = '10';</code>

### 6.53.5.

## Ticket::Frontend::AgentTicketSearch###SortBy::Default

Description:	Defines the default ticket attribute for ticket sorting of the ticket search result of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SortBy::Default'} = 'Age';</code>

### 6.53.6.

## Ticket::Frontend::AgentTicketSearch###Order::Default

Description:	Defines the default ticket order in the ticket search result of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Order::Default'} = 'Down';</code>

### 6.53.7.

## Ticket::Frontend::AgentTicketSearch###SearchArticleCSVTree

Description:	Exports the whole article tree in search result (it can affect the system performance).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SearchArticleCSVTree'} = '0';</code>

### 6.53.8.

## Ticket::Frontend::AgentTicketSearch###SearchCSVData

Description:	Data used to export the search result in CSV format.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SearchCSVData'} = [   'TicketNumber',   'Age',   'Created',   'Closed',   'FirstLock',   'FirstResponse',   'State',   'Priority',   'Queue',   'Lock',   'Owner',   'UserFirstname',   'UserLastname',   'CustomerID',   'CustomerName',   'From',   'Subject',   'AccountedTime',   'ArticleTree',   'SolutionInMin',   'SolutionDiffInMin',   'FirstResponseInMin',   'FirstResponseDiffInMin' ];</pre>

### 6.53.9.

## Ticket::Frontend::AgentTicketSearch###ArticleCreateTime

Description:	Includes article create times in the ticket search of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'ArticleCreateTime'} = '0';</pre>

### 6.53.10.

## Ticket::Frontend::AgentTicketSearch###Defaults###Fulltext

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'Fulltext'} = '';</code>
-----------------	---

### 6.53.11.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###TicketNum**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketNumber'} = '';</code>

### 6.53.12.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###Title**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'Title'} = '';</code>

### 6.53.13.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###From**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'From'} = '';</code>

### 6.53.14.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###To**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'To'} = '';</code>
-----------------	---

### 6.53.15.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###Cc**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'Cc'} = '';</code>

### 6.53.16.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###Subject**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'Subject'} = '';</code>

### 6.53.17.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###Body**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'Body'} = '';</code>

### 6.53.18.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###CustomerID**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'CustomerID'} = '';</code>



### 6.53.19.

#### Ticket::Frontend::AgentTicketSearch###Defaults###CustomerUserLogin

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'CustomerUserLogin'} = '';</code>

### 6.53.20.

#### Ticket::Frontend::AgentTicketSearch###Defaults###StateIDs

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'StateIDs'} = [];</code>

### 6.53.21.

#### Ticket::Frontend::AgentTicketSearch###Defaults###QueueIDs

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'QueueIDs'} = [];</code>

### 6.53.22.

#### Ticket::Frontend::AgentTicketSearch###Defaults###TicketCreateTimePointFormat

Description:	Default data to use on attribute for ticket search screen. Example: "TicketCreateTimePointFormat=year;TicketCreateTimePointStart=Last;TicketCreateTimePointEnd=Next"
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketCreateTimePoint'} = '';</code>

### 6.53.23.

#### Ticket::Frontend::AgentTicketSearch###Defaults###TicketCreate

Description:	Default data to use on attribute for ticket search screen. Example: "TicketCreateTimeStartYear=2010;TicketCreateTimeStartMonth=10;TicketCreate
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketCreateTimeSlot'} = '';</code>

### 6.53.24.

#### Ticket::Frontend::AgentTicketSearch###Defaults###TicketChar

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketChangeTimePoint'} = '';</code>

### 6.53.25.

#### Ticket::Frontend::AgentTicketSearch###Defaults###TicketChar

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketChangeTimeSlot'} = '';</code>

### 6.53.26.

#### Ticket::Frontend::AgentTicketSearch###Defaults###TicketClos

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketCloseTimePoint'} = '';</code>

### 6.53.27.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###TicketClose**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketCloseTimeSlot'} = '';</code>

### 6.53.28.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###TicketEscal**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketEscalationTimePoint'} = '';</code>

### 6.53.29.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###TicketEscal**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'TicketEscalationTimeSlot'} = '';</code>

### 6.53.30.

#### **Ticket::Frontend::AgentTicketSearch###Defaults###ArticleCrea**

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'ArticleCreateTimePoint'} = '';</code>

### 6.53.31.

#### Ticket::Frontend::AgentTicketSearch###Defaults###ArticleCreateTimeSlot

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'ArticleCreateTimeSlot'} = '';</code>

### 6.53.32.

#### Ticket::Frontend::AgentTicketSearch###Defaults###SearchInArchive

Description:	Defines the default shown ticket search attribute for ticket search screen.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'SearchInArchive'} = '';</code>

### 6.53.33.

#### Ticket::Frontend::CustomerTicketSearch###SearchArticleCSVTree

Description:	Exports the whole article tree in search result (it can affect the system performance).
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketSearch'}-&gt;{'SearchArticleCSVTree'} = '0';</code>

### 6.53.34.

#### Ticket::Frontend::AgentTicketSearch###DynamicField

Description:	Dynamic fields shown in the ticket search screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and shown by default.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'DynamicField'} = {};</code>

### 6.53.35.

## Ticket::Frontend::AgentTicketSearch###Defaults###DynamicFi

Description:	Defines the default shown ticket search attribute for ticket search screen. Example: "Key" must have the name of the Dynamic Field in this case 'X', "Content" must have the value of the Dynamic Field depending on the Dynamic Field type, Text: 'a text', Dropdown: '1', Date/Time: 'Search_DynamicField_XTimeSlotStartYear=1974; Search_DynamicField_XTimeSlotStartMonth=01; Search_DynamicField_XTimeSlotStartDay=26; Search_DynamicField_XTimeSlotStartHour=00; Search_DynamicField_XTimeSlotStartMinute=00; Search_DynamicField_XTimeSlotStartSecond=00; Search_DynamicField_XTimeSlotStopYear=2013; Search_DynamicField_XTimeSlotStopMonth=01; Search_DynamicField_XTimeSlotStopDay=26; Search_DynamicField_XTimeSlotStopHour=23; Search_DynamicField_XTimeSlotStopMinute=59; Search_DynamicField_XTimeSlotStopSecond=59;' and or 'Search_DynamicField_XTimePointFormat=week; Search_DynamicField_XTimePointStart=Before; Search_DynamicField_XTimePointValue=7';.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'Defaults'}-&gt;{'DynamicField'} = {};</code>

### 6.53.36.

## Ticket::Frontend::AgentTicketSearch###SearchCSVDynamicField

Description:	Dynamic Fields used to export the search result in CSV format.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'SearchCSVDynamicField'} = {};</code>

### 6.53.37.

## Ticket::Frontend::AgentTicketSearch###DefaultColumns

Description:	Columns that can be filtered in the ticket search result view of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewSearch
Valid:	1
Required:	0

Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::AgentTicketSearch'}-&gt;{'DefaultColumns'} = {   'Age' =&gt; '2',   'Changed' =&gt; '1',   'CustomerID' =&gt; '2',   'CustomerName' =&gt; '1',   'CustomerUserID' =&gt; '1',   'EscalationResponseTime' =&gt; '1',   'EscalationSolutionTime' =&gt; '1',   'EscalationTime' =&gt; '1',   'EscalationUpdateTime' =&gt; '1',   'Lock' =&gt; '2',   'Owner' =&gt; '2',   'PendingTime' =&gt; '1',   'Priority' =&gt; '1',   'Queue' =&gt; '2',   'Responsible' =&gt; '1',   'SLA' =&gt; '1',   'Service' =&gt; '1',   'State' =&gt; '2',   'TicketNumber' =&gt; '2',   'Title' =&gt; '2',   'Type' =&gt; '1' }; </pre>
-----------------	--

## 6.54. Frontend::Agent::Ticket::ViewStatus

### 6.54.1.

#### Ticket::Frontend::AgentTicketStatusView###ViewableTicketsPage

Description:	Shows all open tickets (even if they are locked) in the status view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewStatus
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::AgentTicketStatusView'}- &gt;{'ViewableTicketsPage'} = '50'; </pre>

### 6.54.2.

#### Ticket::Frontend::AgentTicketStatusView###SortBy::Default

Description:	Defines the default ticket attribute for ticket sorting in the status view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewStatus
Valid:	1
Required:	1
Config-Setting:	<pre> \$Self-&gt;{'Ticket::Frontend::AgentTicketStatusView'}- &gt;{'SortBy::Default'} = 'Age'; </pre>

### 6.54.3.

#### Ticket::Frontend::AgentTicketStatusView###Order::Default

Description:	Defines the default ticket order (after priority sort) in the status view of the agent interface. Up: oldest on top. Down: latest on top.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewStatus
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketStatusView'}-&gt;{'Order::Default'} = 'Down';</code>

#### 6.54.4.

### Ticket::Frontend::AgentTicketStatusView###DefaultColumns

Description:	Columns that can be filtered in the status view of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewStatus
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketStatusView'}-&gt;{'DefaultColumns'} = {        'Age' =&gt; '2',        'Changed' =&gt; '1',        'CustomerID' =&gt; '2',        'CustomerName' =&gt; '1',        'CustomerUserID' =&gt; '1',        'EscalationResponseTime' =&gt; '1',        'EscalationSolutionTime' =&gt; '1',        'EscalationTime' =&gt; '1',        'EscalationUpdateTime' =&gt; '1',        'Lock' =&gt; '2',        'Owner' =&gt; '2',        'PendingTime' =&gt; '1',        'Priority' =&gt; '1',        'Queue' =&gt; '2',        'Responsible' =&gt; '1',        'SLA' =&gt; '1',        'Service' =&gt; '1',        'State' =&gt; '2',        'TicketNumber' =&gt; '2',        'Title' =&gt; '2',        'Type' =&gt; '1'      };</code>

## 6.55. Frontend::Agent::Ticket::ViewWatch

### 6.55.1.

### Ticket::Frontend::AgentTicketWatchView###SortBy::Default

Description:	Defines the default ticket attribute for ticket sorting in the watch view of the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewWatch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketWatchView'}-&gt;{'SortBy::Default'} = 'Age';</code>

## 6.55.2.

### Ticket::Frontend::AgentTicketWatchView###Order::Default

Description:	Defines the default ticket order in the watch view of the agent interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewWatch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketWatchView'}-&gt;{'Order::Default'} = 'Up';</code>

## 6.55.3.

### Ticket::Frontend::AgentTicketWatchView###DefaultColumns

Description:	Columns that can be filtered in the watch view of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default. Note: Only Ticket attributes and Dynamic Fields (DynamicField_NameX) are allowed.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewWatch
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketWatchView'}-&gt;{'DefaultColumns'} = {        'Age' =&gt; '2',        'Changed' =&gt; '1',        'CustomerID' =&gt; '2',        'CustomerName' =&gt; '1',        'CustomerUserID' =&gt; '1',        'EscalationResponseTime' =&gt; '1',        'EscalationSolutionTime' =&gt; '1',        'EscalationTime' =&gt; '1',        'EscalationUpdateTime' =&gt; '1',        'Lock' =&gt; '2',        'Owner' =&gt; '2',        'PendingTime' =&gt; '1',        'Priority' =&gt; '1',        'Queue' =&gt; '2',        'Responsible' =&gt; '1',        'SLA' =&gt; '1',        'Service' =&gt; '1',        'State' =&gt; '2',        'TicketNumber' =&gt; '2',        'Title' =&gt; '2',        'Type' =&gt; '1'      };</code>

## 6.56. Frontend::Agent::Ticket::ViewZoom

### 6.56.1. Ticket::Frontend::PlainView

Description:	Shows a link to see a zoomed email ticket in plain text.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1



Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::PlainView'} = '0';</code>

### 6.56.2. Ticket::Frontend::ZoomExpand

Description:	Shows all the articles of the ticket (expanded) in the zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ZoomExpand'} = '0';</code>

### 6.56.3. Ticket::Frontend::ZoomExpandSort

Description:	Shows the articles sorted normally or in reverse, under ticket zoom in the agent interface.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ZoomExpandSort'} = 'normal';</code>

### 6.56.4. Ticket::ZoomAttachmentDisplayCount

Description:	Shows a count of icons in the ticket zoom, if the article has attachments.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::ZoomAttachmentDisplayCount'} = '20';</code>

### 6.56.5. Ticket::ZoomTimeDisplay

Description:	Displays the accounted time for an article in the ticket zoom view.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::ZoomTimeDisplay'} = '0';</code>

### 6.56.6. Ticket::UseArticleColors

Description:	Shows colors for different article types in the article table.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::UseArticleColors'} = '0';</code>

### 6.56.7. Ticket::Frontend::TicketArticleFilter

Description:	Activates the article filter in the zoom view to specify which articles should be shown.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::TicketArticleFilter'} = '0';</code>

### 6.56.8. Ticket::Frontend::HTMLArticleHeightDefault

Description:	Set the default height (in pixels) of inline HTML articles in Agent-TicketZoom.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::HTMLArticleHeightDefault'} = '100';</code>

### 6.56.9. Ticket::Frontend::HTMLArticleHeightMax

Description:	Set the maximum height (in pixels) of inline HTML articles in Agent-TicketZoom.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::HTMLArticleHeightMax'} = '2500';</code>

### 6.56.10. Ticket::Frontend::ZoomRichTextForce

Description:	Show article as rich text even if rich text writing is disabled.
Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::ZoomRichTextForce'} = '1';</code>

### 6.56.11. Ticket::Frontend::AgentTicketZoom###DynamicField

Description:	Dynamic fields shown in the sidebar of the ticket zoom screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Agent::Ticket::ViewZoom
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::AgentTicketZoom'}-&gt;{'DynamicField'} = {};</code>

## 6.57. Frontend::Agent::TicketOverview

### 6.57.1. Ticket::Frontend::Overview###Small

Description:	Allows having a small format ticket overview (CustomerInfo => 1 - shows also the customer information).
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::Overview'}-&gt;{'Small'} = {        'CustomerInfo' =&gt; '1',        'Module' =&gt; 'Kernel::Output::HTML::TicketOverviewSmall',        'ModulePriority' =&gt; '100',        'Name' =&gt; 'Small',        'NameShort' =&gt; 'S'      };</code>

### 6.57.2.

### Ticket::Frontend::OverviewSmall###ColumnHeader

Description:	Shows either the last customer article's subject or the ticket title in the small format overview.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::OverviewSmall'}-&gt;{'ColumnHeader'} = 'LastCustomerSubject';</code>

### 6.57.3. Ticket::Frontend::Overview###Medium

Description:	Allows having a medium format ticket overview (CustomerInfo => 1 - shows also the customer information).
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::Overview'}-&gt;{'Medium'} = {        'CustomerInfo' =&gt; '0',        'Module' =&gt; 'Kernel::Output::HTML::TicketOverviewMedium',        'ModulePriority' =&gt; '200',        'Name' =&gt; 'Medium',        'NameShort' =&gt; 'M',      };</code>

```
'OverviewMenuModules' => '1',
'TicketActionsPerTicket' => '0'
};
```

### 6.57.4. Ticket::Frontend::Overview###Preview

Description:	Shows a preview of the ticket overview (CustomerInfo => 1 - shows also Customer-Info, CustomerInfoMaxSize max. size in characters of Customer-Info).
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::Overview'}-&gt;{'Preview'} = {   'CustomerInfo' =&gt; '0',   'CustomerInfoMaxSize' =&gt; '18',   'DefaultPreViewLines' =&gt; '25',   'DefaultViewNewLine' =&gt; '90',   'Module' =&gt; 'Kernel::Output::HTML::TicketOverviewPreview',   'ModulePriority' =&gt; '300',   'Name' =&gt; 'Large',   'NameShort' =&gt; 'L',   'OverviewMenuModules' =&gt; '1',   'StripEmptyLines' =&gt; '0',   'TicketActionsPerTicket' =&gt; '0' };</pre>

### 6.57.5. Ticket::Frontend::Overview::PreviewArticleSenderTypes

Description:	Defines which article sender types should be shown in the preview of a ticket.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::Overview::PreviewArticleSenderTypes'} = {   'agent' =&gt; '1',   'customer' =&gt; '1',   'system' =&gt; '1' };</pre>

### 6.57.6. Ticket::Frontend::Overview::PreviewArticleLimit

Description:	Sets the count of articles visible in preview mode of ticket overviews.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::Overview::PreviewArticleLimit'} = '5';</pre>

### 6.57.7.

#### Ticket::Frontend::Overview::PreviewArticleTypeExpanded

Description:	Defines wich article type should be expanded when entering the overview. If nothing defined, latest article will be expanded.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::Overview::PreviewArticleTypeExpanded'} = '';</code>

### 6.57.8.

#### Ticket::Frontend::OverviewSmall###DynamicField

Description:	Dynamic fields shown in the ticket small format overview screen of the agent interface. Possible settings: 0 = Disabled, 1 = Available, 2 = Enabled by default.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::OverviewSmall'}-&gt;{'DynamicField'} = {};</code>

### 6.57.9.

#### Ticket::Frontend::OverviewMedium###DynamicField

Description:	Dynamic fields shown in the ticket medium format overview screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::OverviewMedium'}-&gt;{'DynamicField'} = {};</code>

### 6.57.10.

#### Ticket::Frontend::OverviewPreview###DynamicField

Description:	Dynamic fields shown in the ticket preview format overview screen of the agent interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Agent::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::OverviewPreview'}-&gt;{'DynamicField'} = {};</code>

## 6.58. Frontend::Agent::ToolBarModule

### 6.58.1. Frontend::ToolBarModule###1-Ticket::AgentTicketQueue

Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'1-Ticket::AgentTicketQueue'} = {   'AccessKey' =&gt; 'q',   'Action' =&gt; 'AgentTicketQueue',   'CssClass' =&gt; 'QueueView',   'Icon' =&gt; 'icon-folder-close',   'Link' =&gt; 'Action=AgentTicketQueue',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',   'Name' =&gt; 'Queue view',   'Priority' =&gt; '1010010' };</pre>

### 6.58.2. Frontend::ToolBarModule###2-Ticket::AgentTicketStatus

Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'2-Ticket::AgentTicketStatus'} = {   'AccessKey' =&gt; 'o',   'Action' =&gt; 'AgentTicketStatusView',   'CssClass' =&gt; 'StatusView',   'Icon' =&gt; 'icon-list-ol',   'Link' =&gt; 'Action=AgentTicketStatusView',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',   'Name' =&gt; 'Status view',   'Priority' =&gt; '1010020' };</pre>

### 6.58.3. Frontend::ToolBarModule###3-Ticket::AgentTicketEscalation

Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'3-Ticket::AgentTicketEscalation'} = {   'AccessKey' =&gt; 'w',   'Action' =&gt; 'AgentTicketEscalationView',</pre>

```
'CssClass' => 'EscalationView',
'Icon' => 'icon-exclamation',
'Link' => 'Action=AgentTicketEscalationView',
'Module' => 'Kernel::Output::HTML::ToolBarLink',
'Name' => 'Escalation view',
'Priority' => '1010030'
};
```

#### 6.58.4. Frontend::ToolBarModule###4-Ticket::AgentTicketPhone

Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'4-Ticket::AgentTicketPhone'} = {   'AccessKey' =&gt; 'l',   'Action' =&gt; 'AgentTicketPhone',   'CssClass' =&gt; 'PhoneTicket',   'Icon' =&gt; 'icon-phone',   'Link' =&gt; 'Action=AgentTicketPhone',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',   'Name' =&gt; 'New phone ticket',   'Priority' =&gt; '1020010' };</pre>

#### 6.58.5. Frontend::ToolBarModule###5-Ticket::AgentTicketEmail

Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'5-Ticket::AgentTicketEmail'} = {   'AccessKey' =&gt; 'e',   'Action' =&gt; 'AgentTicketEmail',   'CssClass' =&gt; 'EmailTicket',   'Icon' =&gt; 'icon-envelope',   'Link' =&gt; 'Action=AgentTicketEmail',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',   'Name' =&gt; 'New email ticket',   'Priority' =&gt; '1020020' };</pre>

#### 6.58.6. Frontend::ToolBarModule###6-Ticket::AgentTicketProcess

Description:	Toolbar Item for a shortcut.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0

Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'6-Ticket::AgentTicketProcess'} = {   'AccessKey' =&gt; 'p',   'Action' =&gt; 'AgentTicketProcess',   'CssClass' =&gt; 'ProcessTicket',   'Icon' =&gt; 'icon-th-large',   'Link' =&gt; 'Action=AgentTicketProcess',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarLink',   'Name' =&gt; 'New process ticket',   'Priority' =&gt; '1020030' };</pre>
-----------------	---

### 6.58.7. Frontend::ToolBarModule###6-Ticket::TicketResponsible

Description:	Agent interface notification module to see the number of tickets an agent is responsible for.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'6-Ticket::TicketResponsible'} = {   'CssClass' =&gt; 'Responsible',   'CssClassNew' =&gt; 'Responsible New',   'CssClassReached' =&gt; 'Responsible Reached',   'Icon' =&gt; 'icon-user',   'IconNew' =&gt; 'icon-user',   'IconReached' =&gt; 'icon-user',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarTicketResponsible',   'Priority' =&gt; '1030010' };</pre>

### 6.58.8. Frontend::ToolBarModule###7-Ticket::TicketWatcher

Description:	Agent interface notification module to see the number of watched tickets.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'7-Ticket::TicketWatcher'} = {   'CssClass' =&gt; 'Watcher',   'CssClassNew' =&gt; 'Watcher New',   'CssClassReached' =&gt; 'Watcher Reached',   'Icon' =&gt; 'icon-eye-open',   'IconNew' =&gt; 'icon-eye-open',   'IconReached' =&gt; 'icon-eye-open',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarTicketWatcher',   'Priority' =&gt; '1030020' };</pre>

### 6.58.9. Frontend::ToolBarModule###8-Ticket::TicketLocked

Description:	Agent interface notification module to check the used charset.
--------------	--



Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'8-Ticket::TicketLocked'} = {   'CssClass' =&gt; 'Locked',   'CssClassNew' =&gt; 'Locked New',   'CssClassReached' =&gt; 'Locked Reached',   'Icon' =&gt; 'icon-lock',   'IconNew' =&gt; 'icon-lock',   'IconReached' =&gt; 'icon-lock',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarTicketLocked',   'Priority' =&gt; '1030030' };</pre>

### 6.58.10. Frontend::ToolBarModule###9-Ticket::TicketSearchProfile

Description:	Agent interface module to access search profiles via nav bar.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'9-Ticket::TicketSearchProfile'} = {   'Block' =&gt; 'ToolBarSearchProfile',   'Description' =&gt; 'Search-Template',   'MaxWidth' =&gt; '40',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarTicketSearchProfile',   'Name' =&gt; 'Search-Template',   'Priority' =&gt; '1990010' };</pre>

### 6.58.11. Frontend::ToolBarModule###10-Ticket::TicketSearchFulltext

Description:	Agent interface module to access fulltext search via nav bar.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'10-Ticket::TicketSearchFulltext'} = {   'Block' =&gt; 'ToolBarSearchFulltext',   'CSS' =&gt; 'Core.Agent.Toolbar.FulltextSearch.css',   'Description' =&gt; 'Fulltext search',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarGeneric',   'Name' =&gt; 'Fulltext-Search',   'Priority' =&gt; '1990020',   'Size' =&gt; '10' };</pre>

### 6.58.12. Frontend::ToolBarModule###11-CICSearch-CustomerID

Description:	Agent interface module to access CIC search via nav bar.
--------------	--

Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'11-CICSearchCustomerID'} = {   'Block' =&gt; 'ToolBarCICSearchCustomerID',   'CSS' =&gt; 'Core.Agent.Toolbar.CICSearch.css',   'Description' =&gt; 'CustomerID Search',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarGeneric',   'Name' =&gt; 'CustomerID search',   'Priority' =&gt; '1990030',   'Size' =&gt; '10' };</pre>

### 6.58.13. Frontend::ToolBarModule###11-CICSearch-CustomerUser

Description:	Agent interface module to access CIC search via nav bar.
Group:	Ticket
SubGroup:	Frontend::Agent::ToolBarModule
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::ToolBarModule'}-&gt;{'11-CICSearchCustomerUser'} = {   'Block' =&gt; 'ToolBarCICSearchCustomerUser',   'CSS' =&gt; 'Core.Agent.Toolbar.CICSearch.css',   'Description' =&gt; 'CustomerUser Search',   'Module' =&gt; 'Kernel::Output::HTML::ToolBarGeneric',   'Name' =&gt; 'Customer user search',   'Priority' =&gt; '1990040',   'Size' =&gt; '10' };</pre>

## 6.59. Frontend::Customer

### 6.59.1.

#### Ticket::Frontend::CustomerDisableCompanyTicketAccess

Description:	This option will deny the access to customer company tickets, which are not created by the customer user.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerDisableCompanyTicketAccess'} = '0';</pre>

### 6.59.2.

#### Ticket::Frontend::CustomerTicketOverviewCustomEmptyText

Description:	Custom text for the page shown to customers that have no tickets yet.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketOverviewCustomEmptyText'} = {   'Button' =&gt; 'Create your first ticket',   'Text' =&gt; 'Please click the button below to create your first ticket.',   'Title' =&gt; 'Welcome!' };</pre>

### 6.59.3. Frontend::CustomerUser::Item###15-OpenTickets

Description:	Customer item (icon) which shows the open tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'15-OpenTickets'} = {   'Action' =&gt; 'AgentTicketSearch',   'Attributes' =&gt; 'StateType=Open;',   'CSS' =&gt; 'Core.Agent.CustomerUser.OpenTicket.css',   'CSSClassNoOpenTicket' =&gt; 'NoOpenTicket',   'CSSClassOpenTicket' =&gt; 'OpenTicket',   'CustomerUserLogin' =&gt; '0',   'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGenericTicket',   'Subaction' =&gt; 'Search',   'Target' =&gt; '_blank',   'Text' =&gt; 'Open tickets' };</pre>

### 6.59.4. Frontend::CustomerUser::Item###16-OpenTicketsForCustomerUserLogin

Description:	Customer item (icon) which shows the open tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'16-OpenTicketsForCustomerUserLogin'} = {   'Action' =&gt; 'AgentTicketSearch',   'Attributes' =&gt; 'StateType=Open;',   'CSS' =&gt; 'Core.Agent.CustomerUser.OpenTicket.css',   'CSSClassNoOpenTicket' =&gt; 'NoOpenTicket',   'CSSClassOpenTicket' =&gt; 'OpenTicket',   'CustomerUserLogin' =&gt; '1',   'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGenericTicket',   'Subaction' =&gt; 'Search',   'Target' =&gt; '_blank', };</pre>

	<pre>'Text' =&gt; 'Open tickets of customer' };</pre>
--	---

### 6.59.5. Frontend::CustomerUser::Item###17-ClosedTickets

Description:	Customer item (icon) which shows the closed tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'17-ClosedTickets'} = {   'Action' =&gt; 'AgentTicketSearch',   'Attributes' =&gt; 'StateType=Closed;',   'CSS' =&gt; 'Core.Agent.CustomerUser.OpenTicket.css',   'CSSClassNoOpenTicket' =&gt; 'NoOpenTicket',   'CSSClassOpenTicket' =&gt; 'OpenTicket',   'CustomerUserLogin' =&gt; '0',   'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGenericTicket',   'Subaction' =&gt; 'Search',   'Target' =&gt; '_blank',   'Text' =&gt; 'Closed tickets' };</pre>

### 6.59.6. Frontend::CustomerUser::Item###18-ClosedTicketsForCustomerUserLogin

Description:	Customer item (icon) which shows the closed tickets of this customer as info block. Setting CustomerUserLogin to 1 searches for tickets based on login name rather than CustomerID.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	0
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Frontend::CustomerUser::Item'}-&gt;{'18-ClosedTicketsForCustomerUserLogin'} = {   'Action' =&gt; 'AgentTicketSearch',   'Attributes' =&gt; 'StateType=Closed;',   'CSS' =&gt; 'Core.Agent.CustomerUser.OpenTicket.css',   'CSSClassNoOpenTicket' =&gt; 'NoOpenTicket',   'CSSClassOpenTicket' =&gt; 'OpenTicket',   'CustomerUserLogin' =&gt; '1',   'Module' =&gt; 'Kernel::Output::HTML::CustomerUserGenericTicket',   'Subaction' =&gt; 'Search',   'Target' =&gt; '_blank',   'Text' =&gt; 'Closed tickets of customer' };</pre>

### 6.59.7. CustomerFrontend::CommonObject###QueueObject

Description:	Path of the file that stores all the settings for the QueueObject object for the customer interface.
Group:	Ticket

SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerFrontend::CommonObject'}-&gt;{'QueueObject'} = 'Kernel::System::Queue';</code>

## 6.59.8. CustomerFrontend::CommonObject###TicketObject

Description:	Path of the file that stores all the settings for the TicketObject for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerFrontend::CommonObject'}-&gt;{'TicketObject'} = 'Kernel::System::Ticket';</code>

## 6.59.9. CustomerFrontend::CommonParam###Action

Description:	Defines the default used Frontend-Module if no Action parameter given in the url on the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerFrontend::CommonParam'}-&gt;{'Action'} = 'CustomerTicketOverview';</code>

## 6.59.10. CustomerFrontend::CommonParam###TicketID

Description:	Default ticket ID used by the system in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerFrontend::CommonParam'}-&gt;{'TicketID'} = '';</code>

## 6.60. Frontend::Customer::ModuleMetaHead

### 6.60.1. CustomerFrontend::HeaderMetaModule###2-TicketSearch

Description:	Module to generate html OpenSearch profile for short ticket search in the customer interface.
Group:	Ticket

SubGroup:	Frontend::Customer::ModuleMetaHead
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::HeaderMetaModule'}-&gt;{'2-TicketSearch'} = {   'Action' =&gt; 'CustomerTicketSearch',   'Module' =&gt; 'Kernel::Output::HTML::CustomerHeaderMetaTicketSearch' };</pre>

## 6.61.

### Frontend::Customer::ModuleRegistration

#### 6.61.1.

#### CustomerFrontend::Module###CustomerTicketOverview

Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerTicketOverview'} = {   'Description' =&gt; 'Overview of customer tickets',   'NavBar' =&gt; [     {       'AccessKey' =&gt; 't',       'Block' =&gt; '',       'Description' =&gt; 'Tickets',       'Link' =&gt; 'Action=CustomerTicketOverview;Subaction=MyTickets',       'LinkOption' =&gt; '',       'Name' =&gt; 'Tickets',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '100',       'Type' =&gt; 'Menu'     },     {       'AccessKey' =&gt; 'm',       'Block' =&gt; '',       'Description' =&gt; 'My Tickets',       'Link' =&gt; 'Action=CustomerTicketOverview;Subaction=MyTickets',       'LinkOption' =&gt; '',       'Name' =&gt; 'My Tickets',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '110',       'Type' =&gt; 'Submenu'     },     {       'AccessKey' =&gt; 'c',       'Block' =&gt; '',       'Description' =&gt; 'Company Tickets',       'Link' =&gt;       'Action=CustomerTicketOverview;Subaction=CompanyTickets',       'LinkOption' =&gt; '',       'Name' =&gt; 'Company Tickets',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '120',       'Type' =&gt; 'Submenu'     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Overview' };</pre>

## 6.61.2. CustomerFrontend::Module###CustomerTicketMessage

Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerTicketMessage'} = {   'Description' =&gt; 'Create tickets',   'NavBar' =&gt; [     {       'AccessKey' =&gt; 'n',       'Block' =&gt; '',       'Description' =&gt; 'Create new Ticket',       'Link' =&gt; 'Action=CustomerTicketMessage',       'LinkOption' =&gt; '',       'Name' =&gt; 'New Ticket',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '100',       'Type' =&gt; 'Submenu'     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'New Ticket' };</pre>

## 6.61.3. CustomerFrontend::Module###CustomerTicketZoom

Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerTicketZoom'} = {   'Description' =&gt; 'Ticket zoom view',   'Loader' =&gt; {     'JavaScript' =&gt; [       'Core.Customer.TicketZoom.js',       'Core.UI.Popup.js'     ]   },   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Zoom' };</pre>

## 6.61.4. CustomerFrontend::Module###CustomerTicketPrint

Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0

Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerTicketPrint'} = {   'Description' =&gt; 'Customer Ticket Print Module',   'NavBarName' =&gt; '',   'Title' =&gt; 'Print' };</pre>
-----------------	--

## 6.61.5. CustomerFrontend::Module###CustomerTicketAttachment

Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerTicketAttachment'} = {   'Description' =&gt; 'To download attachments',   'NavBarName' =&gt; '',   'Title' =&gt; '' };</pre>

## 6.61.6. CustomerFrontend::Module###CustomerTicketSearch

Description:	Frontend module registration for the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::ModuleRegistration
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'CustomerFrontend::Module'}-&gt;{'CustomerTicketSearch'} = {   'Description' =&gt; 'Customer ticket search',   'NavBar' =&gt; [     {       'AccessKey' =&gt; 's',       'Block' =&gt; '',       'Description' =&gt; 'Search',       'Link' =&gt; 'Action=CustomerTicketSearch',       'LinkOption' =&gt; '',       'Name' =&gt; 'Search',       'NavBar' =&gt; 'Ticket',       'Prio' =&gt; '300',       'Type' =&gt; 'Submenu'     }   ],   'NavBarName' =&gt; 'Ticket',   'Title' =&gt; 'Search' };</pre>

## 6.62. Frontend::Customer::Preferences

### 6.62.1. CustomerPreferencesGroups###ShownTickets

Description:	Defines all the parameters for the ShownTickets object in the customer preferences of the customer interface.
Group:	Ticket



SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'ShownTickets'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Data' =&gt; {     '15' =&gt; '15',     '20' =&gt; '20',     '25' =&gt; '25',     '30' =&gt; '30'   },   'DataSelected' =&gt; '25',   'Key' =&gt; 'Tickets per page',   'Label' =&gt; 'Number of displayed tickets',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserShowTickets',   'Prio' =&gt; '4000' }; </pre>

## 6.62.2. CustomerPreferencesGroups###RefreshTime

Description:	Defines all the parameters for the RefreshTime object in the customer preferences of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Preferences
Valid:	1
Required:	0
Config-Setting:	<pre> \$Self-&gt;{'CustomerPreferencesGroups'}-&gt;{'RefreshTime'} = {   'Active' =&gt; '1',   'Column' =&gt; 'User Profile',   'Data' =&gt; {     '' =&gt; 'off',     '10' =&gt; '10 minutes',     '15' =&gt; '15 minutes',     '2' =&gt; ' 2 minutes',     '5' =&gt; ' 5 minutes',     '7' =&gt; ' 7 minutes'   },   'DataSelected' =&gt; '',   'Key' =&gt; 'Refresh interval',   'Label' =&gt; 'Ticket overview',   'Module' =&gt; 'Kernel::Output::HTML::PreferencesGeneric',   'PrefKey' =&gt; 'UserRefreshTime',   'Prio' =&gt; '4000' }; </pre>

## 6.63. Frontend::Customer::Ticket::ViewNew

### 6.63.1.

### Ticket::Frontend::CustomerTicketMessage###NextScreenAfterNew

Description:	Determines the next screen after new customer ticket in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'NextScreenAfterNewTicket'} = 'CustomerTicketOverview';</code>
-----------------	--

### 6.63.2.

#### **Ticket::Frontend::CustomerTicketMessage###Priority**

Description:	Allows customers to set the ticket priority in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'Priority'} = '1';</code>

### 6.63.3.

#### **Ticket::Frontend::CustomerTicketMessage###PriorityDefault**

Description:	Defines the default priority of new customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.63.4.

#### **Ticket::Frontend::CustomerTicketMessage###Queue**

Description:	Allows customers to set the ticket queue in the customer interface. If this is set to 'No', QueueDefault should be configured.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'Queue'} = '1';</code>

### 6.63.5.

#### **Ticket::Frontend::CustomerTicketMessage###QueueDefault**

Description:	Defines the default queue for new customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	0

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'QueueDefault'} = 'Postmaster';</code>

### 6.63.6.

#### **Ticket::Frontend::CustomerTicketMessage###TicketType**

Description:	Allows customers to set the ticket type in the customer interface. If this is set to 'No', TicketTypeDefault should be configured.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'TicketType'} = '1';</code>

### 6.63.7.

#### **Ticket::Frontend::CustomerTicketMessage###TicketTypeDefault**

Description:	Defines the default ticket type for new customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'TicketTypeDefault'} = 'default';</code>

### 6.63.8.

#### **Ticket::Frontend::CustomerTicketMessage###Service**

Description:	Allows customers to set the ticket service in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'Service'} = '1';</code>

### 6.63.9.

#### **Ticket::Frontend::CustomerTicketMessage###SLA**

Description:	Allows customers to set the ticket SLA in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1

Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'SLA'} = '1';</code>

### 6.63.10.

#### **Ticket::Frontend::CustomerTicketMessage###ServiceMandatory**

Description:	Sets if service must be selected by the customer.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'ServiceMandatory'} = '0';</code>

### 6.63.11.

#### **Ticket::Frontend::CustomerTicketMessage###SLAMandatory**

Description:	Sets if SLA must be selected by the customer.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'SLAMandatory'} = '0';</code>

### 6.63.12.

#### **Ticket::Frontend::CustomerTicketMessage###StateDefault**

Description:	Defines the default state of new customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'StateDefault'} = 'new';</code>

### 6.63.13.

#### **Ticket::Frontend::CustomerTicketMessage###ArticleType**

Description:	Defines the default type for article in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'ArticleType'} = 'webrequest';</code>

### 6.63.14.

#### **Ticket::Frontend::CustomerTicketMessage###SenderType**

Description:	Sender type for new tickets from the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'SenderType'} = 'customer';</code>

### 6.63.15.

#### **Ticket::Frontend::CustomerTicketMessage###HistoryType**

Description:	Defines the default history type in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'HistoryType'} = 'WebRequestCustomer';</code>

### 6.63.16.

#### **Ticket::Frontend::CustomerTicketMessage###HistoryComment**

Description:	Comment for new history entries in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'HistoryComment'} = '';</code>

### 6.63.17. CustomerPanelSelectionType

Description:	Defines the receipt target of the tickets ("Queue" shows all queues, "SystemAddress" displays all system addresses) in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelSelectionType'} = 'Queue';</code>

### 6.63.18. CustomerPanelSelectionString

Description:	Determines the strings that will be shown as receipt (To:) of the ticket in the customer interface. For Queue as CustomerPa-
--------------	--

	nelSelectionType, "<Queue>" shows the names of the queues, and for SystemAddress, "<Realname> <<Email>>" shows the name and email of the receipt.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelSelectionString'} = '&lt;Queue&gt;';</code>

### 6.63.19. CustomerPanelOwnSelection

Description:	Determines which queues will be valid for ticket's recipients in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'CustomerPanelOwnSelection'} = {   'Junk' =&gt; 'First Queue',   'Misc' =&gt; 'Second Queue' };</code>

### 6.63.20. CustomerPanel::NewTicketQueueSelectionModule

Description:	Module for To-selection in new ticket screen in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'CustomerPanel::NewTicketQueueSelectionModule'} =   'Kernel::Output::HTML::CustomerNewTicketQueueSelectionGeneric';</code>

### 6.63.21. Ticket::Frontend::CustomerTicketMessage###DynamicField

Description:	Dynamic fields options shown in the ticket message screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required. NOTE. If you want to display these fields also in the ticket zoom of the customer interface, you have to enable them in CustomerTicketZoom###DynamicField.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewNew
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketMessage'}-&gt;{'DynamicField'} = {};</code>

## 6.64. Frontend::Customer::Ticket::ViewPrint

### 6.64.1.

#### Ticket::Frontend::CustomerTicketPrint###DynamicField

Description:	Dynamic fields shown in the ticket print screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewPrint
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketPrint'}-&gt;{'DynamicField'} = {};</code>

## 6.65. Frontend::Customer::Ticket::ViewSearch

### 6.65.1. Ticket::CustomerTicketSearch::SearchLimit

Description:	Maximum number of tickets to be displayed in the result of a search in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::CustomerTicketSearch::SearchLimit'} = '5000';</code>

### 6.65.2.

#### Ticket::CustomerTicketSearch::SearchPageShown

Description:	Number of tickets to be displayed in each page of a search result in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::CustomerTicketSearch::SearchPageShown'} = '40';</code>

### 6.65.3. Ticket::CustomerTicketSearch::SortBy::Default

Description:	Defines the default ticket attribute for ticket sorting in a ticket search of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::CustomerTicketSearch::SortBy::Default'} = 'Age';</code>

### 6.65.4. Ticket::CustomerTicketSearch::Order::Default

Description:	Defines the default ticket order of a search result in the customer interface. Up: oldest on top. Down: latest on top.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::CustomerTicketSearch::Order::Default'} = 'Down';</code>

### 6.65.5.

### Ticket::Frontend::CustomerTicketSearch###ExtendedSearchCondition

Description:	Allows extended search conditions in ticket search of the customer interface. With this feature you can search w. g. with this kind of conditions like "(key1&&key2)" or "(key1  key2)".
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketSearch'}-&gt;{'ExtendedSearchCondition'} = '1';</code>

### 6.65.6.

### Ticket::Frontend::CustomerTicketSearch###SearchCSVData

Description:	Data used to export the search result in CSV format.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketSearch'}-&gt;{'SearchCSVData'} = [     'TicketNumber',     'Age',     'Created',     'Closed',     'State',     'Priority',     'Lock',     'CustomerID',     'CustomerName',     'From',     'Subject'   ];</code>

### 6.65.7.

### Ticket::Frontend::CustomerTicketSearch###DynamicField

Description:	Dynamic fields shown in the ticket search screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket



SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketSearch'}-&gt;{'DynamicField'} = {};</code>

### 6.65.8.

#### **Ticket::Frontend::CustomerTicketSearch###SearchOverviewDyna**

Description:	Dynamic fields shown in the ticket search overview results screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketSearch'}-&gt;{'SearchOverviewDynamicField'} = {};</code>

### 6.65.9.

#### **Ticket::Frontend::CustomerTicketSearch###SearchCSVDynamic**

Description:	Dynamic Fields used to export the search result in CSV format.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewSearch
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketSearch'}-&gt;{'SearchCSVDynamicField'} = {};</code>

## 6.66. Frontend::Customer::Ticket::ViewZoom

### 6.66.1.

#### **Ticket::Frontend::CustomerTicketZoom###NextScreenAfterFollo**

Description:	Determines the next screen after the follow up screen of a zoomed ticket in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'NextScreenAfterFollowUp'} = 'CustomerTicketOverview';</code>

### 6.66.2.

#### **Ticket::Frontend::CustomerTicketZoom###ArticleType**

Description:	Defines the default type of the note in the ticket zoom screen of the customer interface.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'ArticleType'} = 'webrequest';</code>

### 6.66.3. Ticket::Frontend::CustomerTicketZoom###SenderType

Description:	Defines the default sender type for tickets in the ticket zoom screen of the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'SenderType'} = 'customer';</code>

### 6.66.4. Ticket::Frontend::CustomerTicketZoom###HistoryType

Description:	Defines the history type for the ticket zoom action, which gets used for ticket history in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'HistoryType'} = 'FollowUp';</code>

### 6.66.5. Ticket::Frontend::CustomerTicketZoom###HistoryComment

Description:	Defines the history comment for the ticket zoom action, which gets used for ticket history in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'HistoryComment'} = '';</code>

### 6.66.6. Ticket::Frontend::CustomerTicketZoom###Priority

Description:	Allows customers to change the ticket priority in the customer interface.
--------------	---

Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'Priority'} = '1';</code>

### 6.66.7.

#### **Ticket::Frontend::CustomerTicketZoom###PriorityDefault**

Description:	Defines the default priority of follow up customer tickets in the ticket zoom screen in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'PriorityDefault'} = '3 normal';</code>

### 6.66.8.

#### **Ticket::Frontend::CustomerTicketZoom###State**

Description:	Allows choosing the next compose state for customer tickets in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'State'} = '1';</code>

### 6.66.9.

#### **Ticket::Frontend::CustomerTicketZoom###StateDefault**

Description:	Defines the default next state for a ticket after customer follow up in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'StateDefault'} = 'open';</code>

### 6.66.10.

#### **Ticket::Frontend::CustomerTicketZoom###StateType**

Description:	Defines the next possible states for customer tickets in the customer interface.
--------------	--

Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'StateType'} = [   'open',   'closed' ];</pre>

### 6.66.11.

#### **Ticket::Frontend::CustomerTicketZoom###AttributesView**

Description:	Shows the activated ticket attributes in the customer interface (0 = Disabled and 1 = Enabled).
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	1
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'AttributesView'} = {   'Owner' =&gt; '0',   'Priority' =&gt; '1',   'Queue' =&gt; '1',   'Responsible' =&gt; '0',   'SLA' =&gt; '0',   'Service' =&gt; '0',   'State' =&gt; '1',   'Type' =&gt; '0' };</pre>

### 6.66.12.

#### **Ticket::Frontend::CustomerTicketZoom###DynamicField**

Description:	Dynamic fields shown in the ticket zoom screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1
Required:	0
Config-Setting:	<pre>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'DynamicField'} = {};</pre>

### 6.66.13.

#### **Ticket::Frontend::CustomerTicketZoom###FollowUpDynamicField**

Description:	Dynamic fields options shown in the ticket reply section in the ticket zoom screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Customer::Ticket::ViewZoom
Valid:	1

Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketZoom'}-&gt;{'FollowUpDynamicField'} = {};</code>

## 6.67. Frontend::Customer::TicketOverview

### 6.67.1.

#### Ticket::Frontend::CustomerTicketOverviewSortable

Description:	Controls if customers have the ability to sort their tickets.
Group:	Ticket
SubGroup:	Frontend::Customer::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketOverviewSortable'} = '';</code>

### 6.67.2.

#### Ticket::Frontend::CustomerTicketOverview###ColumnHeader

Description:	Shows either the last customer article's subject or the ticket title in the small format overview.
Group:	Ticket
SubGroup:	Frontend::Customer::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketOverview'}-&gt;{'ColumnHeader'} = 'TicketTitle';</code>

### 6.67.3.

#### Ticket::Frontend::CustomerTicketOverview###Owner

Description:	Show the current owner in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::TicketOverview
Valid:	1
Required:	1
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketOverview'}-&gt;{'Owner'} = '0';</code>

### 6.67.4.

#### Ticket::Frontend::CustomerTicketOverview###Queue

Description:	Show the current queue in the customer interface.
Group:	Ticket
SubGroup:	Frontend::Customer::TicketOverview
Valid:	1
Required:	1

Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketOverview'}-&gt;{'Queue'} = '0';</code>
-----------------	---

## 6.67.5.

### Ticket::Frontend::CustomerTicketOverview###DynamicField

Description:	Dynamic fields shown in the ticket overview screen of the customer interface. Possible settings: 0 = Disabled, 1 = Enabled, 2 = Enabled and required.
Group:	Ticket
SubGroup:	Frontend::Customer::TicketOverview
Valid:	1
Required:	0
Config-Setting:	<code>\$Self-&gt;{'Ticket::Frontend::CustomerTicketOverview'}-&gt;{'DynamicField'} = {};</code>

## 6.68. Frontend::Queue::Preferences

### 6.68.1. QueuePreferences###Comment2

Description:	Parameters of the example queue attribute Comment2.
Group:	Ticket
SubGroup:	Frontend::Queue::Preferences
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'QueuePreferences'}-&gt;{'Comment2'} = {        'Block' =&gt; 'TextArea',        'Cols' =&gt; '50',        'Desc' =&gt; 'Define the queue comment 2.',        'Label' =&gt; 'Comment2',        'Module' =&gt; 'Kernel::Output::HTML::QueuePreferencesGeneric',        'PrefKey' =&gt; 'Comment2',        'Rows' =&gt; '5'      };</code>

## 6.69. Frontend::SLA::Preferences

### 6.69.1. SLAPreferences###Comment2

Description:	Parameters of the example SLA attribute Comment2.
Group:	Ticket
SubGroup:	Frontend::SLA::Preferences
Valid:	0
Required:	0
Config-Setting:	<code>\$Self-&gt;{'SLAPreferences'}-&gt;{'Comment2'} = {        'Block' =&gt; 'TextArea',        'Cols' =&gt; '50',        'Desc' =&gt; 'Define the sla comment 2.',        'Label' =&gt; 'Comment2',        'Module' =&gt; 'Kernel::Output::HTML::SLAPreferencesGeneric',        'PrefKey' =&gt; 'Comment2',        'Rows' =&gt; '5'      };</code>

## 6.70. Frontend::Service::Preferences

### 6.70.1. ServicePreferences###Comment2

Description:	Parameters of the example service attribute Comment2.
Group:	Ticket
SubGroup:	Frontend::Service::Preferences
Valid:	0
Required:	0
Config-Setting:	<pre> \$self-&gt;{'ServicePreferences'}-&gt;{'Comment2'} = {   'Block' =&gt; 'TextArea',   'Cols' =&gt; '50',   'Desc' =&gt; 'Define the service comment 2.',   'Label' =&gt; 'Comment2',   'Module' =&gt; 'Kernel::Output::HTML::ServicePreferencesGeneric',   'PrefKey' =&gt; 'Comment2',   'Rows' =&gt; '5' }; </pre>

# Anhang C. Danksagungen

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