OTRS
Open Technology
Real Services

Documentation

OTRS::ITSM 4

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OTRS::ITSM 4

Inhaltsverzeichnis

Tabellenverzeichnis

Vorwort

Dieses Handbuch richtet sich an OTRS::ITSM Benutzer und Administratoren. Es vermittelt Informationen für die grundlegende Benutzung von OTRS::ITSM durch IT Service Manager, IT Servicemitarbeiter (Agents) und Benutzer (Kunden). Informationen in Bezug auf die Installation, Konfiguration oder Administration von OTRS::ITSM werden nur erwähnt, wenn es Abweichungen zum OTRS Hauptprodukt gibt, oder wenn es um Funktionen geht, die in OTRS::ITSM nicht existieren.

Trotz der unendlich vielen Arbeitsstunden, den noch viel mehr Tassen Kaffee und doch immerhin unzähligen Würsten und Bretzeln, die im Verlaufe der Entsstehung der folgenden Kapitel verspeist und getrunken wurden, erhebt dieses Handbuch keinesfalls den Anspruch auf Vollständigkeit. Die Kapitel werden regelmässig überarbeitet und/oder ergänzt, um eine kontinuierliche Verbesserung zu gewährleisten.

Um die Qualität der folgenden Kapitel und des Produktes so hoch wie möglich zu halten, sind wir auf Ihr Feedback angewiesen. Bitte teilen Sie uns mit, wenn Sie Vorschläge haben, Abschnitte in diesem Buch vermissen oder wenn Aspekte unverständlich erscheinen. Jede Art von Rückmeldung *http://otrs.com* ist ausdrücklich erwünscht.

Wir sind auf das gegenwärtige Produkt sehr stolz und wir möchten den ITIL-Experten von Enterprise Consulting GmbH und unseren erstklassigen OTRS Entwicklern danken. Ihre gemeinsamen Anstrengungen haben massgeblich zur erfolgreichen Entwicklung von OTRS::ITSM beigetragen.

WIr möchten Ihnen, -den Benutzern und der OTRS::ITSM Gemeinschaft, im Voraus für jede Art von Hilfe und Feedback danken und wir hoffen, Sie haben Freude bei Arbeiten mit OTRS::ITSM.

André Mindermann, Managing Partner OTRS AG

Bad Homburg, May 2007

((enjoy))

Kapitel 1. OTRS::ITSM - OTRS für das IT Service-Management

Es wird erwartet, dass die IT beständig qualitativ hochwertige Dienstleistungen in einem zunehmend komplexer werdenden Umfeld erbringt. In diesem Zusammenhang ist ein leistungsfähiges und wirkungsvolles Incident- und Problem Management erforderlich. IT Service Management ist jedoch eine beinahe unlösbare Aufgabe, wenn keine aktuelle und konsistente Datenbank vorhanden ist, in der Informationen über den Status und die Konfiguration der IT-Infrastruktur gepflegt werden.

Die IT Infrastructure Library®, kurz ITIL®, ist eine Buchreihe, herausgegeben vom United Kingdom's Office of Government Commerce (OGC), die generisch Best-Practice-Ansätze für das Design, die Bereitstellung, den Betrieb und das Management von IT Dienstleistungen beschreibt. ITIL® fokussiert nicht auf die Technologie selbst, sondern auf die Dienstleistungen der IT und umfasst Informationen über Prozesse, Rollen, Verantwortlichkeiten, potenzielle Problembereiche/Lösungsansätze und Definitionen von Ausdrucksweisen.

ITIL® hat sich in den vergangenen Jahre als de facto Standard durchgesetzt. Die Verbreitung in IT Organisationen hat zur Entwicklung einer kollektiven Wahrnehmung des IT Service Management und zur Schaffung einer einheitlichen Terminologie beigetragen. ITIL® beschreibt jedoch lediglich "wer etwas tun sollte und was er tun sollte" und was man während dieser Tätigkeit bedenken sollte. Um so viele Benutzergruppen wie möglich abzudecken, geht es nicht, oder meistens nur zu einem geringen Anteil, darum, zu beschreiben, was im Einzelfall getan werden muss. Aus diesem Grund gibt es keine direkt anwendbaren Informationen für spezielle Branchen, Firmen oder Hersteller.

Im Dezember 2005 wurde der ITIL®-basierte ISO/IEC 20000 Industriestandard veröffentlicht. IT-Organisationen können sich zur ISO/IEC 20000 Zertifizierung anmelden und ihre Konformität unter Beweis stellen.

Die ständige Weiterverbreitung verursachte eine Nachfrage nach IT Service Management Lösungen, die in der Lage waren, die ITIL®-basierten Prozesse abzubilden. Bis dahin gabe es lediglich proprietäre Lösungen, die sich, aufgrund ihrer ausserordentlichen Komplexität, nur grosse Unternehmungen leisten konnten, und die nur in grossen Abteilungen wirkungsvoll einsetzbar waren.

Die Entwicklung von OTRS::ITSM wurde aufgrund des grossen Erfolges des OTRS Frameworks gestartet, um die global anerkannten, öffentlichen ITIL®-Empfehlungen mit den Vorzügen von Open-Source Software zu vereinigen.

OTRS::ITSM 1.0 war die erste wirklich ITIL®-konforme Lösung für IT Service Management, die auf Open-Source basierte, aufgebaut auf Basis des stabilen OTRS mit seinen 55'000 bekannten Installationen und seiner Benutzergemeinschaft (Informationsstand: April 2007). OTRS::ITSM wird aktiv weiterentwickelt und es werden fortlaufend neue Funktionen hinzugefügt.

OTRS::ITSM ist praxisorientiert. Die Entwicklung findet unter Teilnahme von ITIL®-Beratern und einigen Kunden aus OTRS-Gruppen statt.

Die Service-Desk und Ticket System Lösung OTRS ist die Basis für die ITIL®-konforme IT Service Management Lösung OTRS::ITSM, deren Incident Management, Problem Management, Service Level Management, Change- und Configuration Management Modulen und der integrierten CMDB.

OTRS::ITSM und OTRS sind frei verfügbar (frei von Lizenzgebühren) und sind Gegenstand der GNU Affero General Public License (AGPL).

1. Features

OTRS::ITSM 4 basiert auf OTRS 4. Alle von OTRS bekannten Funktionen sind weiterhin verfügbar. Funktionen, welche die ITIL®-Prozesse repräsentieren, können als Paket installiert werden.

1.1. Neue OTRS::ITSM 4 Features

OTRS::ITSM 4 bringt:

- Portierten Code für das OTRS 4 Framework.
- Einen neuen leistungsfähigen Template-Generator, basierend auf Template::Toolkit
- Ein zentraler Objekt-Manager erleichtert das Erstellen und Nutzen von globalen Objekten.
- OTRS::ITSM 4 beinhaltet viele andere kleinere Bugfixes und Verbesserungen.
- Alle OTRS::ITSM 4 Übersetzungen werden zukünftig ausschliesslich über Transifex gemanaged: https://www.transifex.com/projects/p/OTRS/resources/. Melden Sie sich für ein kostenloses Übersetzer-Login an: http://www.transifex.com und treten Sie einem Sprachteam bei, wenn Sie OTRS::ITSM unterstützen wollen.
- Verbesserte und flexiblere Propagierung der Incident-Statuslinks. Es ist jetzt möglich, mehr als einen Link-Typ für die Incident-Statusberechnung hinzuzufügen und ebenfalls die Link-Direction pro Linktyp festzulegen. (Siehe Sysconfig Option "ITSM::Core::IncidentLinkTypeDirection").
- GenericInterface für ITSM Configuration Management. Dieses Feature beinhaltet Funktionsweisen, um CIs über das GenericInterface zu erstellen, zu ändern, zu suchen und abzurufen.
- Massen-Aktionen für ITSM Configuration Management. Dieses Feature bietet ein Raster, um ausgewählte Aktionen bei der Auswahl mehrerer ITSM Configuration Items durchzuführen.
- Neue farbliche Kennzeichnung im ITSM Configuration Management. Dieses Feature fügt eine Kennzeichnungs-Kolumne in die Configuration-Item Übersicht ein, mit der man die Farbe jedes Bereitstellungs-Status definieren kann.
- Dynamische Felder für ITSM Change Management. Die Freitext-Felder für Changes und Workorder wurden in flexiblere dynamische Felder umgewandelt.
- Verbesserte und einfachere Handhabung von Templates für Changes, Workorders und Change Advisory Boards (CAB). Ein Template kann einfach editiert werden, indem man es in der Template-Übersicht selektiert. Dadurch wird ein neuer Change oder eine Workorder erstellt, die dann editiert werden und in dasselbe Template zurückgespeichert werden kann, während der Change oder die Workorder gelöscht wird, sobald sie gespeichert werden.

1.2. Neue OTRS::ITSM 3.3 Features

OTRS::ITSM 3.3 bringt:

- Portierten Code für das OTRS 3.3 Framework.
- Feature AddOn "OTRSServiceIncidentState" in OTRS::ITSM integriert. Es zeigt den aktuellen Incident-Status eines ausgewählten Services im Ticket-Zoom und bei allen Agenten in den Frontends in denen Services selektiert werden können (kann pro Monitor deaktiviert werden).

- Feature AddOn "OTRSCIColumns" in OTRS::ITSM integriert. Dieses Feature ermöglicht es, die angezeigten CI-Attribute individuell für jede ConfigItem-Class zu konfigurieren. Dies funktioniert im CI-Overview, CI-Search-Overview und in der Linked-CI Ansicht im Interface der Agenten.
- Feature AddOn "OTRSWorkOrderTimeDependency" in OTRS::ITSM integriert. Ist dieses Feature aktiviert, dann kann das geplante Enddatum einer Workorder geändert werden. Alle nachfolgenden Workorders werden ebenfalls entsprechend angepasst, sodass die Zeitabstände zwischen den Workorders gleich bleiben.
- Feature AddOn "OTRSCIAttributeSyntaxCheck" in OTRS::ITSM integriert. Dieses Feature ermöglicht es, den Syntax von CI-Attributen mit einem regulären Ausdruck zu kontrollieren, während man über das Agenten-Interface CIs hinzufügt oder editiert (funktioniert nicht bei Importieren von CIs mit dem Import/Export Modul). Die CI-Attribute vom Typ "Text" und "TextArea" sowie der CI-Name können mit regulären, individuellen Ausdrücken überprüft werden. Eine individuelle Fehlermeldung wird angezeigt, wenn das Attribut nicht dem abgefragten Ausdruck entspricht. Mit diesem Feature kann z.B. erzwungen werden, dass das Attribut eines CIs mit "ABC" starten und/oder mit einer Nummer enden muss.
- Neues Feature "WorkOrder Report Attachments" zu OTRS::ITSM hinzugefügt. Dieses Feature unterstützt den Upload von Anhängen im Workorder Report Screen.
- Die Icons der Toolbar benutzen jetzt einen Icon-Font, der das Erstellen eigener Skins mit verschiedenen Basisfarben vereinfacht.
- Die Werte von ITSMCriticality und ITSMImpact wurden vom generellen Katalog zu dynamischen Feldern migriert. Den ITSM-bezogenen Feldern wurden verständlichere Namen gegeben, die zudem mit dem Prefix ITSM beginnen.
- In ITSMChangeManagement wurden die Frontends, die dazu dienen Changes oder Workorders zu erstellen, je in 2 Screens aufgeteilt. Ein Screen dient zum Erstellen von neuen Changes/Workorders, der andere, um sie von einem Template zu erstellen.

1.3. Neue OTRS::ITSM 3.2 Features

OTRS::ITSM 3.2 bringt:

- Portierten Code für das OTRS 3.2 Framework.
- Erweiterter Import/Export-Screen zum Anzeigen einer Zusammenfassung nach Abschluss des Imports.
- Unterstützung für Anhänge an ITSM CIs.
- Added new optional sysconfig option to check if config item names are unique.

1.4. Neue OTRS::ITSM 3.1 Funktionen

OTRS::ITSM 3.1 bringt:

- Portierten Code für das OTRS 3.1 Framework.
- Added caching to speed up the condition / action backends in change management.
- Added possibility to use a mirror database for change and workorder searches in change management.

1.5. Neue OTRS::ITSM 3.0 Funktionen

OTRS::ITSM 3.0 bringt:

- Brand New Interface - OTRS 3.0 Look & Feel
- Portierten Code für das OTRS 3.0 Framework.
- New Generic Search Dialogs.
- Neue Suchergebnis Typen (Drucken, PDF und CSV).

1.6. Neue OTRS::ITSM 2.1 Funktionen

OTRS::ITSM 2.1 bringt:

- Change Management

  Improved speed of Change Management and GeneralCatalog by implementing caching technology.

  New powerful FreeText fields for Changes and Workorders in Change Management.

  Implemented an option to reset the change and workorder states while saving as template.

  New alternative checksum generator for the change number.

  New option to show workorder title and workorder state in the change zoom timeline.

1.7. Neue OTRS::ITSM 2.0 Funktionen

OTRS::ITSM 2.0 bringt:

- Change Management

  The new OTRS::ITSM package "ITSMChangeManagement" implements the ITIL discipline Change Management.

1.8. Neue OTRS::ITSM 1.3 Funktionen

OTRS::ITSM 1.3 basiert auf OTRS 2.4

It offers the same features as OTRS::ITSM 1.2, but runs on the OTRS 2.4 framework.

1.9. Neue OTRS::ITSM 1.2 Funktionen

OTRS::ITSM 1.2 basiert auf OTRS 2.3

OTRS::ITSM 1.2 bringt:

- Modularisierung

  From now on the additional ITSM packages covering single ITIL disciplines like incident management / problem management, configuration management, service level management, can be installed independently from one another. To you as a user, that means that you neither have to install the packages in a certain installation order nor do you have to install them all in order to use OTRS::ITSM.

- Reduced reloads

  ITSM functionalities (e. g. priority calculation based on a tickets impact) have been reimplemented in AJAX technology to reduce necessary reloads. This leads to an increased speed using OTRS::ITSM.

- Joint Link-Object mechanism

OTRS::ITSM 1.1 and lower releases were designed based on an own extended Object-Link mechanism. As a consequence, the Object-Link functionality of OTRS couldn't be used in OTRS::ITSM. A joint Object-Link mechanism has now been implemented, which covers all of the features from both former Link object mechanisms.

- Verbesserte Geschwindigkeit

  Changing database access technology to using SQL bind parameters made it possible to access the Configuration Items (CI) database faster than previously.

- Standorte

  Locations are no longer a separate menu item. They are now integrated into the Configuration Items, which will bring a sustainable gain in flexibility.

- SLA-Service multi-assignments

  It is now possible to assign a SLA to multiple Services.

- SLA-Übersicht

  In the service menu, there is now a new SLA overwiew mask.

- Refresh-Mechanism

  A refresh mechanism was added to refresh the service overview and the config item overview screens automatically.

1.10. Neue OTRS::ITSM 1.1 Funktionen

OTRS::ITSM 1.1 bringt:

- Berechtigungskonzept

  Each object like Service/SLA, Location, CI, Linkobject now creates a corresponding group, so the agents rights can be assigned with more granularity.

- Allocation of services to customers

  Services can be assigned to authorized customers. Further more, services may be assigned as general 'default services' which are valid to use for each customer.

- Dienst/CI-Ansicht

  A view on services and CIs, including information on each object's current state, allows you to analyze an incident and calculate the incident's impact on affected services and customers. As an enhancement of the service view, now SLAs and linked CIs are also displayed. For each CI, the current incident state is shown. In addition, the incident state will be propagated for dependent SLAs and CIs. If a service is selected, the service details will be shown, now with the additional 'current incident state', which is calculated from the incident states of dependent services and CIs.

  CIs are now enhanced with a 'current incident state', which includes two state types:

  - Operativ
  - Vorfall

  For each state type, any number of states can be registered. The state of a CI affects the service state, which will be dynamically calculated, and can have one of the following three values:

- Operativ (grün)
- Warnung (gelb)
- Vorfall (rot)

The propagation of the incident state will be carried out if CIs are linked with the link type 'depend on'. Here the following rules apply:

- If a CI is dependent on another CI, which is in the state 'Incident', the dependent CI gets the state 'Warning'.
- If a service is dependent on CIs, and one of these CIs has a state 'Incident', the service will also get the state 'Incident'.
- If a service is dependent on CIs, and one of these CIs has the state 'Warning', the service will also get the state 'Warning'.
- If a service has sub-services, and one of these services has the state 'Incident', the parent service will get the state 'Warning'.
- If a service has sub-services, and one of these services has the state 'Warning', the parent service will get the state 'Warning'.

The states of the respective services, sub-services, and CIs will be shown in the view.

- CI search and linking from agent interface

  A service agent may search, select, and assign any of a customer's configuration items (CIs) or existing tickets while recording a new incident ticket.

- CMDB-Import/Export (CSV und API)

  This feature offers the possibility to import or update data from CSV files into the CMBD of OTRS::ITSM, and to export data from the CMDB to CSV files. Each line of the CSV file describes one CI, with the data of the CI in the columns.

  The import and export is controlled with ImEx definitions. These definitions map the columns of the CSV file to the fields in the CMDB. You can create an ImEx definition via the admin interface in OTRS. For each available field in the CMDB, the corresponding column in the CSV file needs to be defined. This is done in a form, which represents the current CI definition. Also, a filter can be applied, to limit the number of the exported CIs. Any number of ImEx definitions can be stored in the system, and each definition can be used for import and for export.

  To start an import (exports work the same way), two possibilities exist: interactive with the web interface, or automatically with a script. Using the interactive way, the desired ImEx definition is selected, and then the CSV file is uploaded to the system. During the interactive export, the CSV file will be offered for download respectively.

  The automatic import is carried out via a script, which requires the name of the ImEx definition and the name of the CSV file as arguments. During the script based export, the CIs that were given the script as arguments will be saved in a CSV file. Before the execution of the import or export, the selected ImEx definition will be compared with the current CI definition. If inconsistencies are found, the process will be cancelled. Also, during import, restrictions in the CI definition (e.g. mandatory fields) will be checked. If applicable, the data record is rejected, but the import process continues. An import protocol can be found in the syslog. Via the API the CSV based import/export can be replaced or enhanced by other formats/transports, like direct database access or XML. The implementation of the CSV interface can be used as a reference.

- A huge variety of additional reports has been created, e.g.:

  Basic reports for tickets and configuration items (CIs):

  - Total of all tickets ever created per ticket-type and priority (state, queue, service).
  - Monthly overview of all tickets ever created of a previous month per ticket-type (priority, state, queue, service).
  - Total of created tickets in a defined period per ticket-type and priority (state, queue, service).
  - Total of all open tickets per ticket-type and priority (queue, service).
  - Total of all configuration items (CIs) created per class (per state).
  - Total of all configuration items (CIs) created in a previous month per class (per state).
  - Total of all configuration items (CIs) created in a defined period per class (per state).

  Many more reports have been added which provide specific data regarding first time solution rate and average resolution time:

  - First time solution rate of all tickets ever created per ticket-type and priority (queue, service).
  - First time solution rate in a previous month per ticket-type (priority, queue, service).
  - First time solution rate in a defined period per ticket-type and priority (queue, service).
  - Average resolution time of all tickets ever created per ticket-type and priority (queue, service).
  - Average resolution time in a previous month per ticket-type and priority (queue, service).
  - Average resolution time in a defined period per ticket-type and priority (queue, service).

- Added print function for CIs, Services, SLAs, Locations.

1.11. OTRS::ITSM 1.0 Funktionen

OTRS::ITSM 1.0 bringt:

- ITIL compliant representation of "service support" processes
  - Vorfallsverwaltung
  - Problemverwaltung
  - Konfigurationsverwaltung
- an integrated, individually extensible configuration management database (CMDB)
- ITIL compliant names for new functions
- ITIL compliant role, responsibility, and permission model
- cross-process communication management: within the IT service organization, with customers/users/management and suppliers/providers

- flexible stats functions for (trend) analyses; reporting, planning, and controlling based on performance figures
- flexible configuration, customization, and upgrade to meet individual requirements
- native ticket types are supported (integrated in OTRS): Various ticket types can be managed in the admin interface. Free-text fields are therefore no longer needed to specify ticket types. Installations using free-text fields for ticket type classification do not have to be migrated. The new feature is also shown in the ticket content and in the print view for agents and customers and can be adjusted in the agent interface.

Configuration management & integrated CMDB:

OTRS::ITSM is based on an integrated configuration management data base (CMDB), which serves as the foundation for the comprehensive control of the service management processes. It represents the configuration items (CI), their complex relationships, and interdependencies with each other and with other components of the service chain.

- Comprehensive recording and management of ITSM relevant configuration items (CIs) such as computers, hardware, software, networks, documents and services, SLAs, and organizational structures.
- Illustration of the IT service catalog and agreements in force (SLA, OLA, UC)
- Recording, management, and illustration of technical and service related relationships and interdependences among CMDB data, e.g. a service with all necessary, alternative or relevant CIs
- Management of historic, current, and future CI states, e.g. for problem diagnosis, server maintenance or planned changes
- Analysis of the potential impact of service failures or configuration changes
- Display of virtualized IT infrastructures, e.g. server / memory virtualization
- Software license management, e.g. licenses available / in use (third party products required)
- Chronological life cycle management for CIs, from acquisition to disposal
- Reporting of all configuration changes performed on CMDB data
- Interface to company directories (e.g. LDAP, eDirectory, Active Directory)

Vorfallsverwaltung:

- Services and SLAs (integrated in OTRS): The new attributes "service" and "service level agreements (SLA)" were integrated in OTRS 2.2 on its way to becoming an IT service management tool. When creating a ticket, the customer can select a service (e.g. e-mail service) and a corresponding SLA. SLA attributes are "response time", "update time" and "solution time". IT service can use these attributes for notifications or ticket escalation in order to meet existing SLAs. Service and SLA specific information in the header of new e-mails can be analyzed as usual with the PostMaster filter module.
- Comprehensive support of IT service support organization processes with incident recording, classification, prioritization, direct help (1st level support), diagnosis, coordination (2nd/3rd level support, external partners etc.), service recovery, resolution, closure and documentation
- Incidents and service requests can be recorded quickly and intuitively by service desk staff and users (web self-service)

- Rule-based ticket generation and/or notification, e.g. in interaction with IT monitoring systems
- Classification and prioritization options (priority, impact, urgency)
- Complete CMDB coverage, e.g. services affected by the incident, configuration items concerned, FAQ database, link-up between tickets and CIs for analyses and reporting
- (Automatic) recording of "articles" for tickets (activity record)
- Constant monitoring and evaluation of the ticket processing progress
- Complete integration of OTRS role, group, and queue mechanisms for incident ticket allocation, tracking, escalation, and interpretation
- Provision and storage of relevant time data, e.g. for service level management
- Practical ticket handling (merge, split), allows to merge similar incidents and/or split complicated ones
- Planning, proactive control, and monitoring of service request activities (work packages, work plans, service lead times, due dates)
- Generation and tracking of problem tickets from incidents

Problemverwaltung:

- Comprehensive support of IT organization processes in problem identification, recording, classification, prioritization, problem origin diagnosis, resolution coordination, e.g. workaround or request for change, closure, and documentation
- Provision of relevant information for subprocesses
  - Problem control (trouble-shooting),
  - Error control (error processing),
  - Proactive problem management (e.g. ticket trend analyses) and
  - Management information (on incidents, problems and known errors)
- Current/historic incidents, knowledge base (FAQs), and CMDB are constantly available
- Complete integration of OTRS role, group and queue mechanisms to allocate, track, escalate, and evaluate incident tickets
- Systematic automated notifications on the problem resolution progress for users (user groups) concerned or the management
- Incident management receives ready signal for resolved problems

Tickets are central information containers for IT service process management: They transport multiple possible underlying data such as:

- Personen, Organisationen
- Zeitstempel
- Priorität, Auswirkung, Härte
- Associations to IT service catalog and projects

- Activities, e.g. note about a call with time accounting
- Objects, e.g. CIs, including relations
- (Sub)Tickets, e.g. a problem with the underlying incidents
- Notes and attachments, e.g. scanned service request forms
- Work packages, i.e. planned, allocated tasks
- SLA-Information
- Thresholds and escalation data
- Ticketchronik (alle Änderungen)
- Accounting information (time accounting).

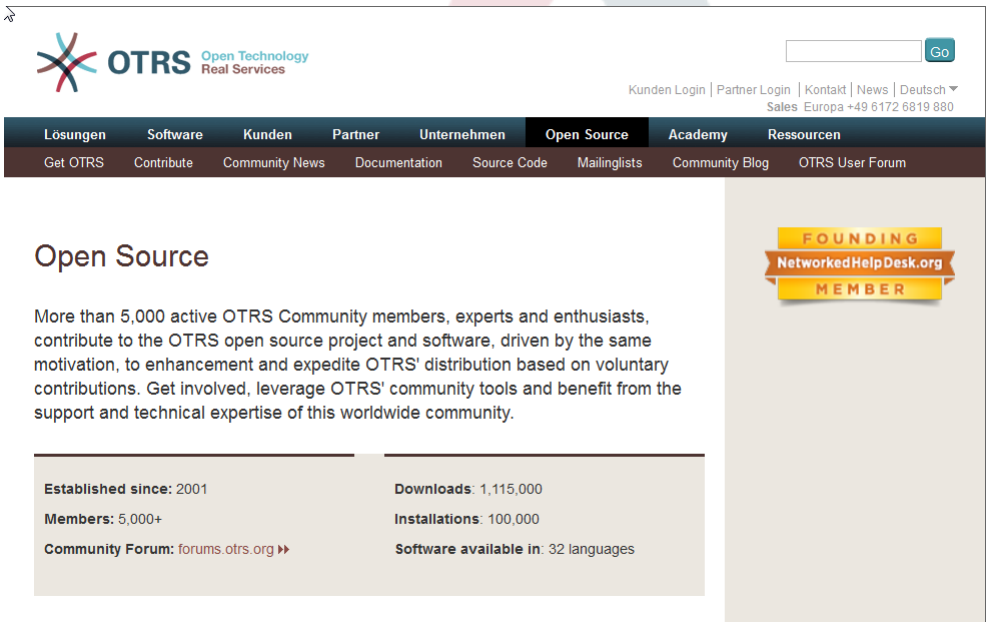
2. Hardware und Software-Anforderungen

The requirements for OTRS::ITSM are the same as for OTRS. More information can be found in the OTRS Admin Manual.

3. Community

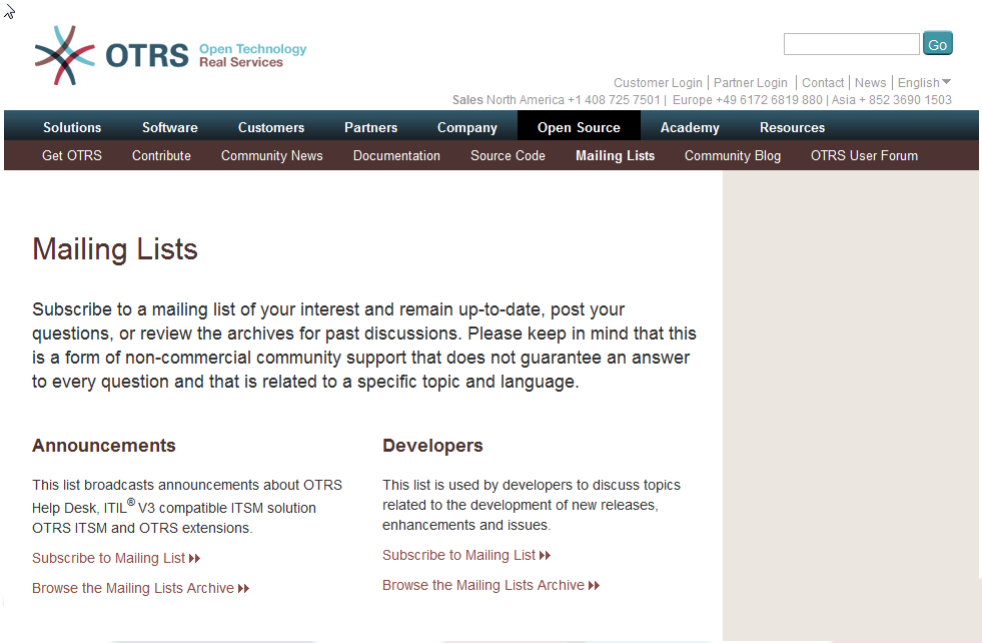
A large community has evolved around OTRS throughout the past years. Users and developers use mailing lists to share their insights about a wide variety of issues connected with the trouble ticket system. They address questions about installation, configuration, use, localization, and development. Bugs can be reported using the bug tracking system at http://bugs.otrs.org (http://bugs.otrs.org/). They directly reach the developers responsible and fixes can be provided quickly.

The above mentioned community channels are open for OTRS::ITSM users also, to constantly improve the product's quality. You can join the community at our homepage http://otrs.org (http://otrs.org/).



4. Mailinglisten

Separate mailing lists have been set up for OTRS::ITSM. Please visit http://lists.otrs.org (http://lists.otrs.org/):



Kapitel 2. Kommerzielle Dienste für OTRS::ITSM

OTRS AG is the manufacturer and source code owner of OTRS and all modules based upon it (e.g. OTRS::ITSM) and a professional service provider. Unlike those of proprietary software providers, OTRS AG's business model is not based on license fees: OTRS and OTRS::ITSM are available free of cost and we offer commercial services associated with the software applications instead.

As your capable partner, we provide optimal support in all phases of your OTRS project design, realization, and operation. Our staff are highly skilled experts and we believe in deploying the most modern methods. This philosophy guarantees credit for powerful business applications and happy customers lauding our service quality (http://www.otrs.com/en/references/).

1. OTRS::ITSM consulting and implementation

Are you planning to use OTRS::ITSM or have you found out about OTRS::ITSM in a new product screening and want to assess the system's eligibility for your requirements? Or is your OTRS::ITSM evaluation completed and you want to make use of our consulting services to efficiently lead your project towards success?

We offer extensive practical expertise in IT process consulting, software engineering, development, and ITIL compliant IT operations and support. Security and quality management for your project complement our service portfolio. You benefit from an extensive and quick knowledge transfer.

Unsere Dienste beinhalten:

- Identification of your requirements and assistance with product evaluation
- Guidance on design and implementation of ITSM process and organizational structures
- ITIL assessments and support with ISO 20000 certification
- ITIL trainings and coaching
- ITIL-Implementation
- Compilation of IT service catalogs
- CMDB design
- Installation & configuration of OTRS::ITSM including integration with your existing system environment
- Review & optimization of existing OTRS::ITSM installations
- Process and data migration from predecessor systems
- Release updates
- Specification of business and IT requirements and features, which exceed the given functional range of OTRS::ITSM

- Design and realization of project complimentary administrator and service agent trainings
- Advisory services regarding managed operations (ASP/SaaS) of OTRS::ITSM and application support

2. Softwareentwicklung

One significant advantage of the open-source software OTRS::ITSM is its flexibility regarding potential extensions of the functional range. No "vendor lock-in", a typical risk of proprietary systems and protracted negotiations with the manufacturer about expanding the functional range or building interfaces apply with OTRS::ITSM.

Experienced project managers and developers are at your disposal at any time to translate your requirements exceeding the functional range of OTRS::ITSM into business and IT specifications. We develop your features, program interfaces, or upgrade existent functionalities according to your conception.

Extensions, which are useful for other customers too, will be added to the standard in later releases. All parties involved benefit: OTRS::ITSM is even more powerful with the features "born" by you and other customers, and you save the cost of porting your features to new releases.

3. Anwendungsunterstützung

The decision for an IT service management solution is an investment into the future which should not be underestimated, even if you opt for open-source software. A competent consulting partner is critical for the success of such an implementation project. Just as important, however, is a planned and successful porting of the solution to the life system and the lasting support of a reliable partner guaranteeing a faultless operating application service.

We provide this continuous support and our service packages are tailored flexibly to meet your requirements. They offer differentiated response times for the various service level agreements with up to 24/7/365 support, 24/7/365 access to our support portal, and optional phone support. Please visit http://www.otrs.com/en/support/ for all details or contact our sales team at sales@otrs.com.

You will only pay for the services you absolutely need. Optional add-on packages, e.g. support via remote control or an extension of the application support services to other OTRS::ITSM instances can be booked if required.

Our ITIL compliant operating Application Support Team is continually optimizing its processes and performance. Therefore, our service manager will contact you regularly to discuss your wishes and requirements regarding our services. The monthly service reporting in the service package of your choice serves as a base for these conversations.

4. Managed application services (ASP/SaaS)

You do not have to operate OTRS and/or OTRS::ITSM yourself. The products can be rented via the so called "ASP" (application service provisioning) resp. "SaaS" (software as a service) model from specialized companies.

The customers (software users) are permitted internet access to exclusively rented OTRS systems and, where required, functional application support (see section above) at a fixed

monthly price and can employ the application in their business to the contracted extent. No additional license fees apply as only open-source products are used.

The application service provider operates IT infrastructure, systems and software ITIL compliantly and guarantees service quality according to the agreed service levels. The provider maintains the application system, (e.g. patches, backup, monitoring), and supports the customer with incidents and/or service requests such as consultation requests, software extensions, or configuration requests.

Kapitel 3. OTRS::ITSM installieren

Please note that the OTRS framework 3.3 must be installed prior to the installation of OTRS::ITSM. All necessary information, options, and installation procedures are depicted in the OTRS Admin Manual.

1. Installation

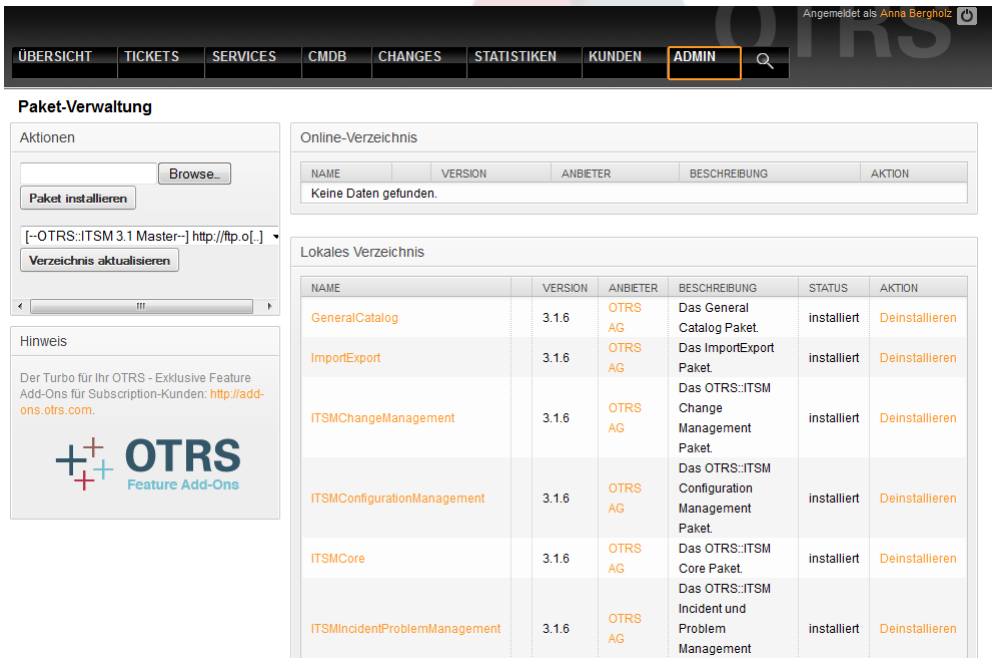
After successfully insstalling OTRS 3.3 or a later version, proceed to sign on as administrator. Using the package manager in the admin area or via ftp://ftp.otrs.org/pub/otrs/itsm/packages33/ obtain the ITSM packages and install them in the following order:

- GeneralCatalog
- ITSMCore

If your machine running OTRS has internet access, use the following online repository [--OTRS::ITSM 3.3 Master--] to install the packages below. Otherwise download the packages below and use the package manager to install them:

- ITSMVorfallProblemVerwaltung
- ITSMKonfigurationsVerwaltung
- ITSMChangeManagement
- ITSMServiceLevelManagement
- ImportExport

You can find further information about the installation process here: INSTALL-32.ITSM



2. Erneuern

If you are using a version older than OTRS::ITSM 1.1, please update the system to the latest version 1.1 first.

If OTRS::ITSM 1.1 has already been installed, update your OTRS 2.2 framework to version 2.3 BEFORE you update OTRS:ITSM. To do so, download the latest OTRS 2.3 framework and follow the instructions in the file named UPGRADING. After that, log in to your system and use the package manager to install the package ITSMUpgradeTo12. You can download it manually or use the online repository. Ignore all error messages about not correctly installed old ITSM packages. This package will install all needed packages to update your system to an OTRS::ITSM 1.2 version, and it will migrate all of your data.

Note: The upgrade can take several minutes! Please do not stop the upgrade process once it is running!

If OTRS::ITSM 1.2 is already installed, update your OTRS 2.3 framework to version 2.4 BEFORE you update OTRS:ITSM. To do so, download the latest OTRS 2.4 framework and follow the instructions in the file UPGRADING. After that, log in to your system and use the package manager to install the packages as described in the section "Installation".

To upgrade an already installed OTRS::ITSM 1.3, use the package manager in the admin area. If you have internet access from OTRS, use the online repository [--OTRS::ITSM 1.3 Master--] to install newer packages. An 'upgrade' link next to the package name indicates if a newer package is available.

Otherwise, download the packages and use the package manager to install the packages. WARNING: Do not uninstall your current packages, or you will lose data!

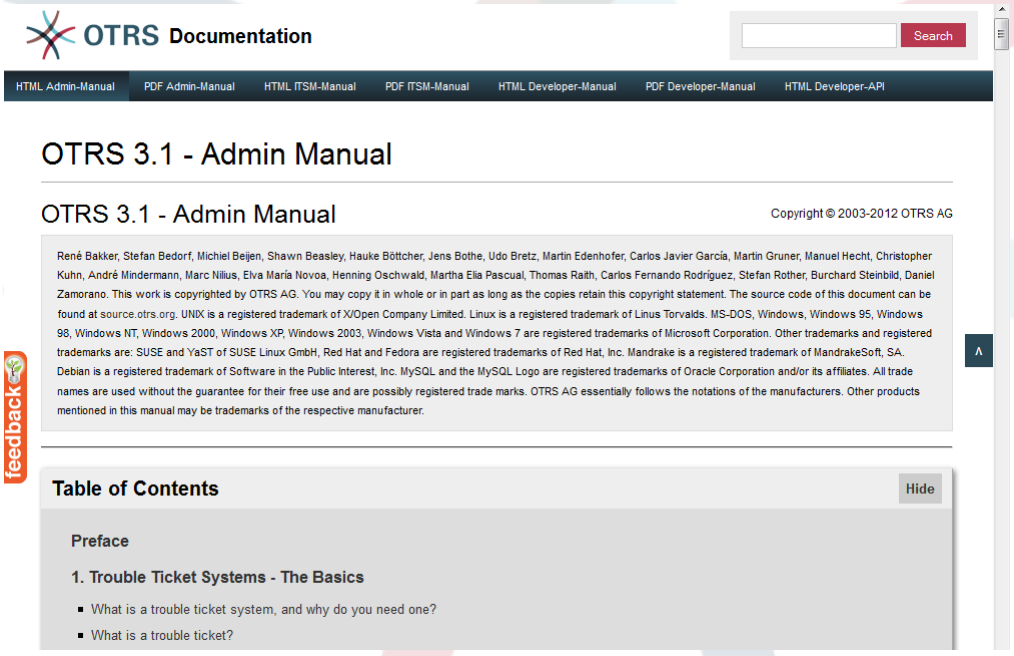
Kapitel 4. Erste Schritte in OTRS::ITSM

The first thing that you might notice is that OTRS::ITSM completely uses the agent and customer interfaces (customer frontend) implemented in OTRS. If OTRS has been used before, all features and steps such as login, queue configuration, user preferences, filters, rules, user permissions, etc. can continue to be used without any modifications.

The manual at hand will therefore only discuss differences between OTRS and new aspects of OTRS::ITSM, while paying particular attention to the following:

- IT Services und SLAs
- Die CMDB
- Neue Ticketfelder und Funktionen
- ITIL konforme Terminologie

Detailed information on the settings and proceedings that are identical in both OTRS and OTRS::ITSM are provided at http://doc.otrs.org/3.3/en/html/ in the OTRS Admin Manual, which is cotinuously being revised.



Kapitel 5. ITIL aligned service support with OTRS::ITSM

Just like ITIL, OTRS::ITSM does not claim to be an "out-of-the-box" solution for all tasks and questions arising in IT service management. It is, in fact, supposed to serve as a flexible, stable and easy to understand information platform that can be adapted to meet the requirements of virtually every organization.

Therefore, please excuse us for bringing the following to your attention: The use of an ITIL aligned tool such as OTRS::ITSM only makes sense if processes, people, and products (IT services) are truly ITIL aligned.

Without the thoughtful tailoring of generic ITIL processes to meet the requirements of the specific business scenario, OTRS::ITSM will not achieve a discernible improvement of the key performance indicators of IT service management.

You should also be aware of the fact that successful ITIL implementation projects typically take up to a year and longer. Their scope and impact on the organization is not to be underestimated. However, we would like to mention that a neatly implemented ITIL aligned ITSM tool can help to save time and money, as the process support of the tool aids and accelerates the process of organizational realignment.

Since version 2.0 , OTRS::ITSM supports the following features and processes, which are usually designed during the first phase of an ITIL implementation: Incident Management, Problem Management, Service Level Management, Change Management and the Configuration Management Database. A more detailed description of use and adaptation of the system can be found in the following sections. Please note that the each OTRS::ITSM package can be installed independently and that their names correspond to their respective ITIL topics.

The implementation of OTRS::ITSM is based on ITIL v3.

Kapitel 6. The CMDB - the central IT repository

The configuration management database (CMDB) is not a database in the technical sense, but a conceptual IT model, which is indispensable for efficient IT service management. All IT components and inventories are managed in the CMDB. Configuration management exceeds asset management, often incorrectly used as a synonym, as it does not only document assets from a financial point of view, but captures information regarding the relationship between components, specifications, or their location. Thus IT support can quickly access information on the interdependence of IT services and the IT components (= configuration items = CIs) necessary for them.

According to ITIL, a CMDB must feature the following functionalities:

- Manual and, where applicable, automatic recording and modification of configuration items
- Description of the relationship and/or interdependence between CIs
- Change of CI attributes (e.g. serial numbers)
- Location and user management for CIs
- Integration via the ITIL processes represented in the system

OTRS::ITSM meets all requirements stated above and offers numerous additional IT support functions in the CMDB.

1. Das OTRS::ITSM-Datenbankmodell

The modular architecture of OTRS::ITSM and the ability to install single OTRS::ITSM packages independently makes it difficult to display a complete database model in a single graphic. For this reason, separate graphics will be provided for the OTRS framework and for ITSM packages which change or extend the database scheme.

1.1. OTRS Framework

For better readability, the diagram can be found at: https://github.com/OTRS/otrs/blob/master/development/diagrams/Database/OTRSDatabaseDiagram.png

1.2. GeneralCatalog

For better readability, this diagram can be found at: https://github.com/OTRS/GeneralCatalog/blob/master/doc/general-catalog-database.png

1.3. ITSMCore

For better readability, this diagram can be found at: https://github.com/OTRS/ITSMCore/blob/master/doc/itsm-core-database.png

1.4. ITSMKonfigurationsVerwaltung

For better readability, this diagram can be found at: https://github.com/OTRS/ITSMConfigurationManagement/blob/master/doc/itsm-configuration-management-database.png

1.5. ITSMChangeManagement

For better readability, this diagram can be found at: https://github.com/OTRS/ITSMChangeManagement/blob/master/doc/itsm-change-management-database.png

1.6. ImportExport

For better readability, this diagram can be found at: https://github.com/OTRS/ImportExport/blob/master/doc/import-export-database.png

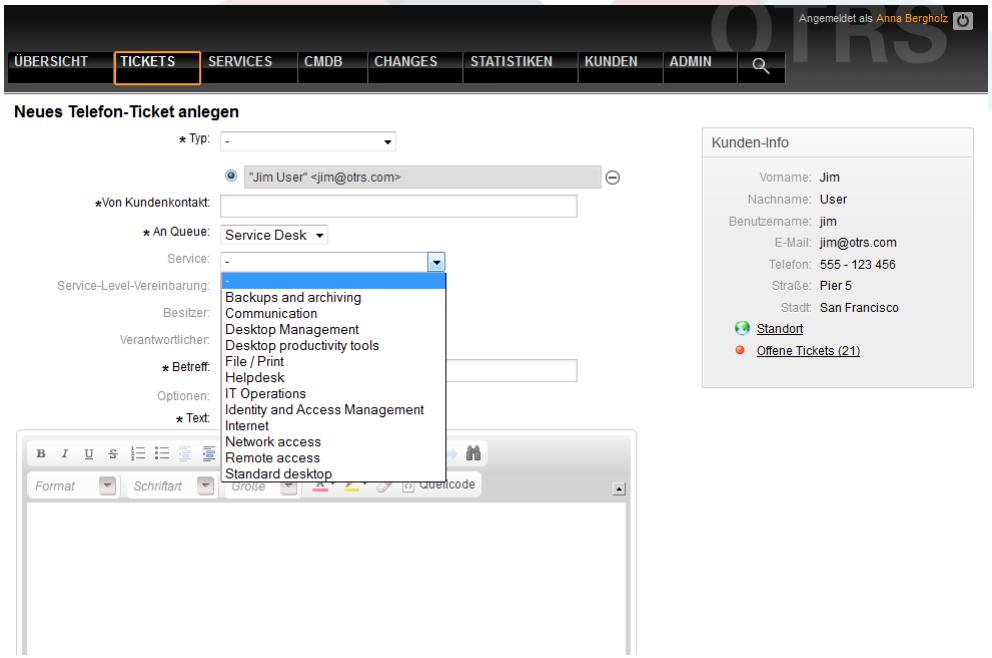
2. Services, at the core of everything

Services such as "standard IT workstation", "e-mail" or "web access" are IT products and should be compiled in a "IT service catalog" prior to the adoption of OTRS::ITSM. Such a service catalog is usually customer or company specific and can be structured hierarchically. Furthermore, it should be formulated in a user friendly, meaning easily understood, language, as both IT personnel (agents) and IT users (customers) are among its audience.

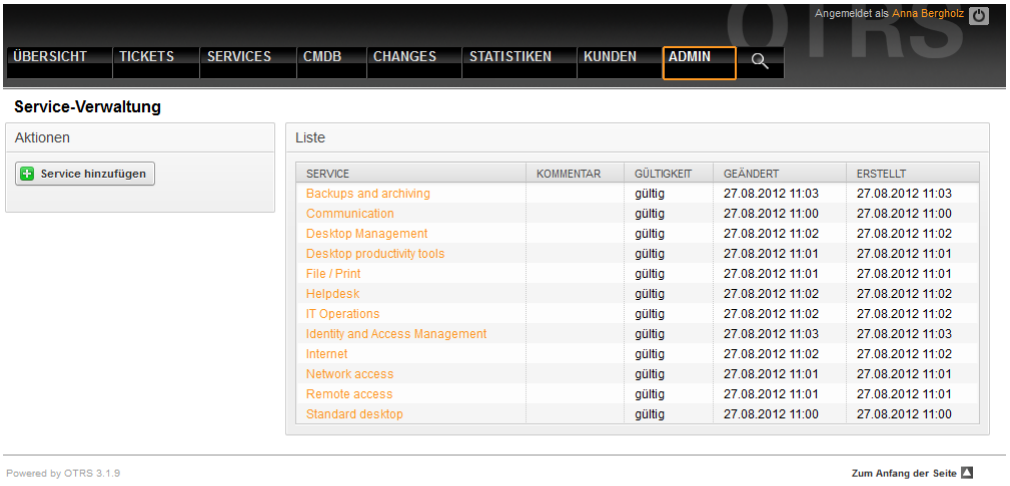
Warnung

Service catalog design is a task which should not be underestimated. Our experience shows that it is highly recommendable to validate conceptual thoughts in a dry run first and to transfer the service structures to OTRS::ITSM in a second step. It has proven of value to resort to external assistance, e.g. of ITIL practice experts.

Example of (part of) a hierarchic IT service catalog specified in OTRS::ITSM as shown when a ticket is created

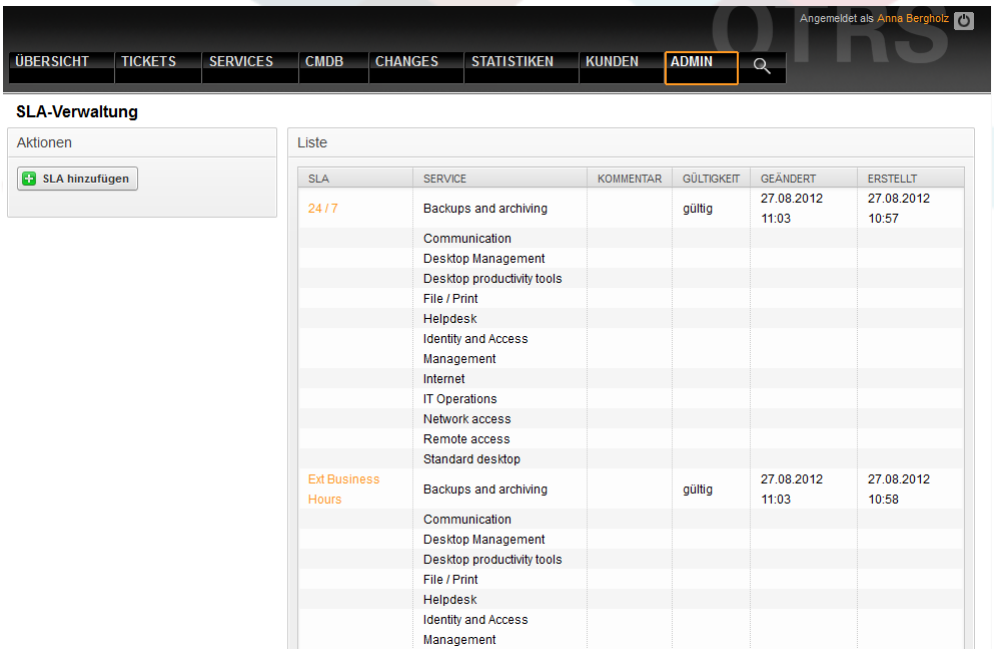


and in the administration area.

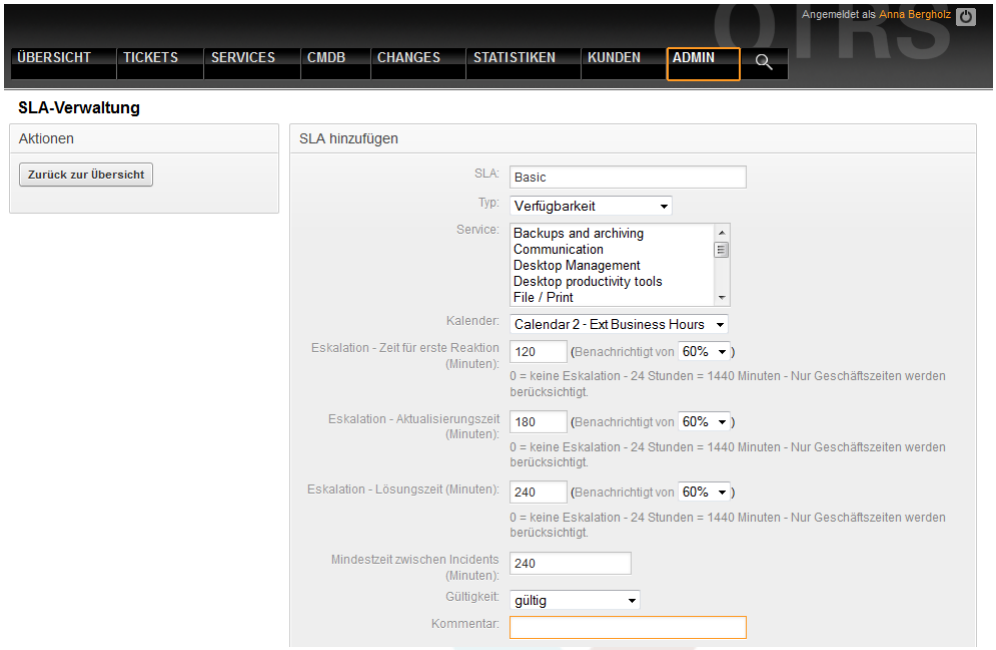


3. Service levels and service level agreements

Service levels and the respective agreements (service level agreements, SLAs) document quality pledges for IT services. SLAs are recorded and administered in the admin interface.



The following parameters can be recorded with every SLA:



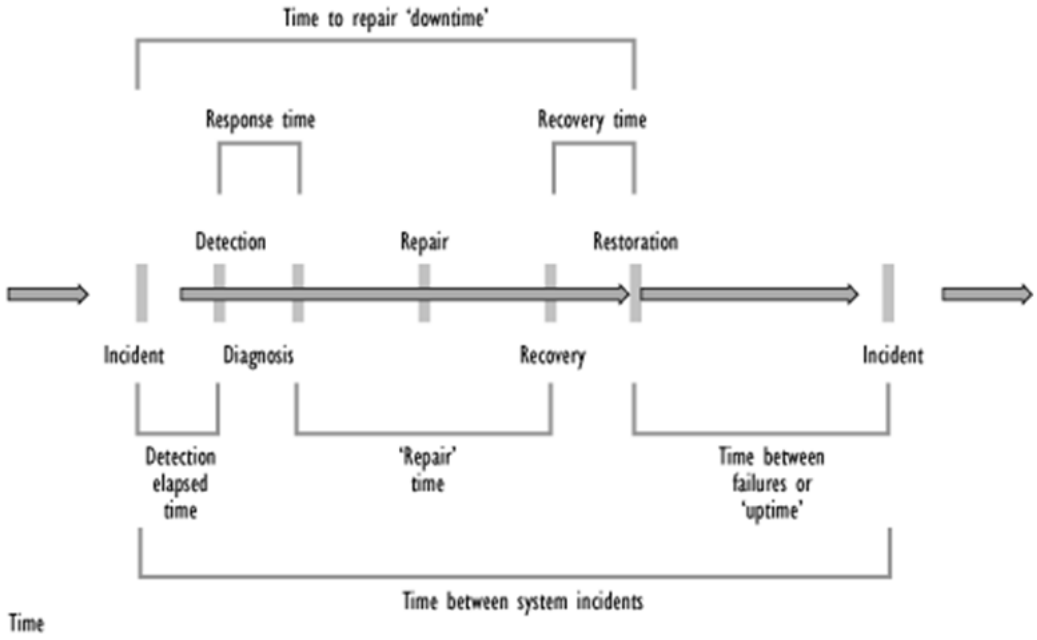
OTRS::ITSM offers by default up to 99 different calendars to describe the various time zones for work or service times. The SLAs can be allocated to them ("service level window"). Various time spans can be entered (in minutes) which OTRS::ITSM uses to control notification and escalation:

- [Antwortzeit]
  - = Reaktionszeit mit Vorfällen
  - = start of service request procession ("service request lead time")
- [Aktualisierungszeit]
  - = Benachrichtigungszeit
- [Lösungszeit]
  - = time elapsed until incidents are resolved ("maximum time to repair", "MTTR")
  - = delivery time for service requests ("delivery time")
- [Min. Time Between Incidents]
  - = "MTBI": minimal time between closure of the last incident ticket and recurrence of an incident for which the same SLA applies.

Warnung

If no values for the above-named times are entered in the SLAs, escalation is affected according to the time fields "response time", "update time" and "solution time" assigned to all queues!

Important time values of OTRS::ITSM are based on the "ITIL incident lifecycle":

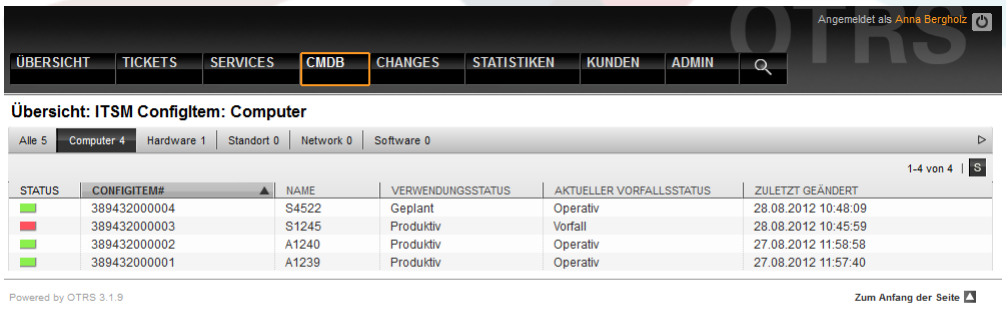


Quelle: OGC, ITIL Service Support Documentation

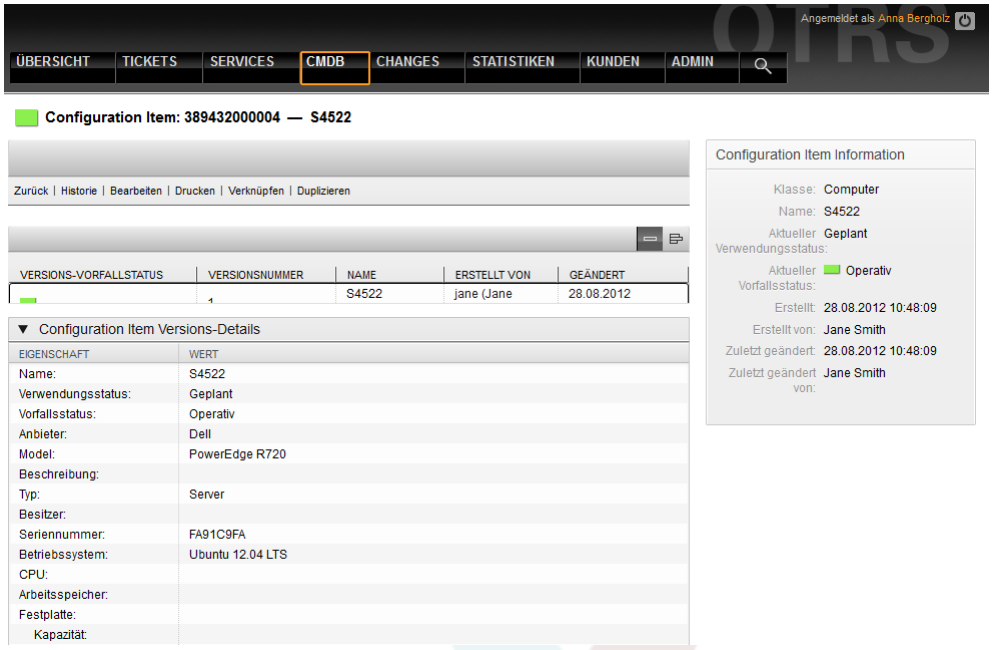
The OTRS stats framework facilitates, among other things, the definition of the actual availability of a service from recorded incidents, which often serves as a performance figure in system-oriented SLAs.

4. Konfigurationselemente

Exemplary overview of recorded computer CIs (part) with current CI state:

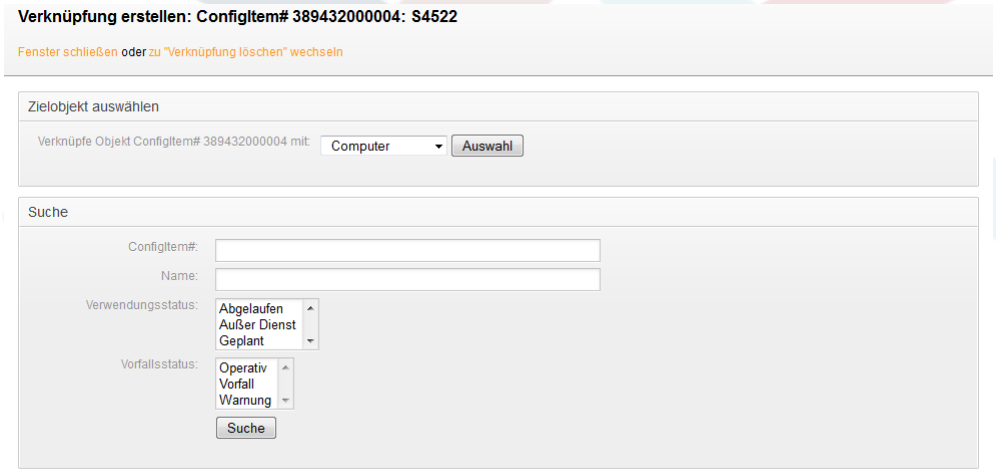


Beispiel einer individuellen CI-Ansicht:



The graphic exemplifies the links between CIs. OTRS differentiates between bidirectional and nondirectional links. Whenever a CI is linked to another CMDB object, OTRS::ITSM automatically creates the respective reverse link.

The OTRS::ITSM standard offers seven link types:



To link objects, the source object is chosen first, then the link type is defined and the target object chosen. The target object can be searched for using various criteria:

5. Dokumente und Wissensdatenbank

Using the FAQ system, which is an independent external module since OTRS 2.1, a knowledge database can be designed and managed, e.g. for suggestions and/or procedures related to the resolution of known errors.

Entries can be provided for internal use only, for all customers or the public. They can be created and sorted according to language or categories. The quality of FAQ articles can be evaluated by agents. The number of articles last created or last revised to be displayed can be configured without any limitations. All articles can be indexed for an efficient search.

6. Changes and amendments to the data model

The data model can be adapted flexibly and can be extended with data types, attributes and even classes. Detailed information can be found in the section "The admin area of OTRS::ITSM" in this document or in "The admin area of OTRS" in the OTRS Admin Manual.

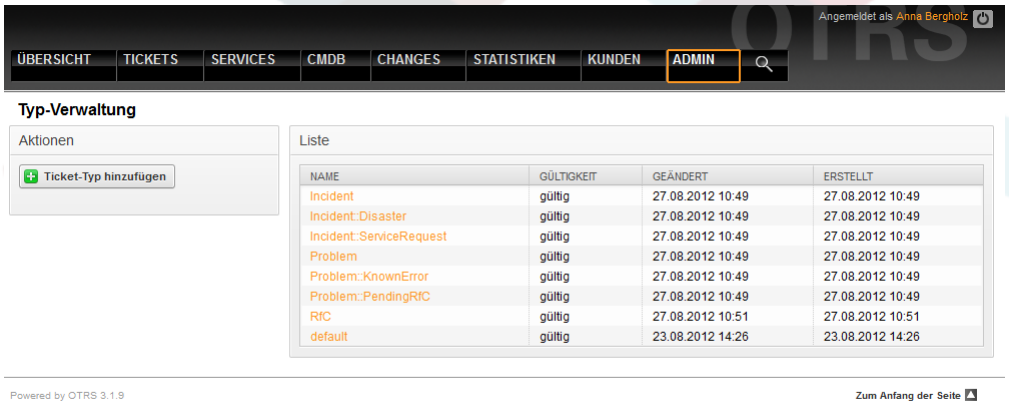
Warnung

The design of a CMDB data model and the CIs to be managed within it, is a task which should not be underestimated. Our experience shows that it is highly recommendable to validate conceptual thoughts in a dry run against the existing IT infrastructure first and to change the OTRS::ITSM default data model and CI classes only afterwards. It has proven of value to resort to external assistance, e.g. of ITIL practice experts for CMDB design.

7. Tickettypen und Attribute

With OTRS 2.2, native ticket types were introduced, which are used in OTRS::ITSM, too. In the ITIL sub-processes, which can be structured in queues, tickets are classified by their ticket types.

All ITIL processes to be implemented in later versions of OTRS::ITSM, e.g. change management, will be implemented in such a way. Ticket types such as RfC ("Request for Change") could be created.



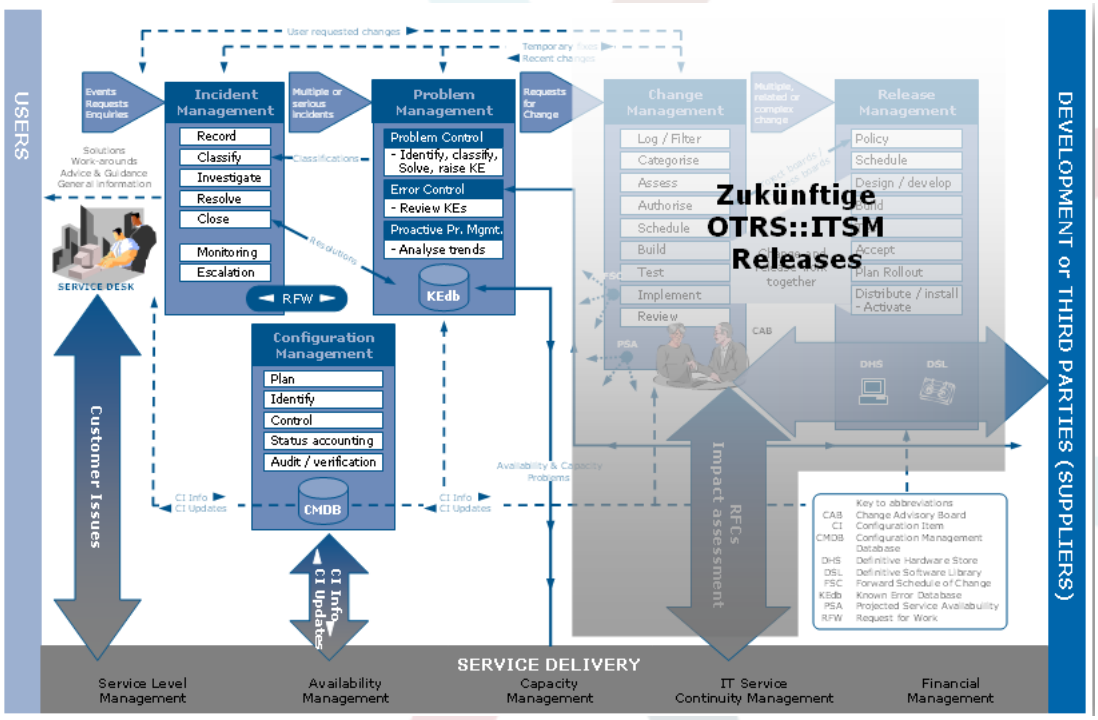
Warnung

In order to assure the consistency of the data managed in OTRS::ITSM, information created in the admin area of the system cannot be deleted as a general rule. If you want to deactivate such information, change the value in the respective listbox settings from "valid" to "invalid" or "invalid-temporarily".

Kapitel 7. Service desk, incident, & problem management

The service desk (which, according to ITIL, is not a process but a function) is usually the ticket system's main field of application. All user messages and notifications from system monitoring and internal IT organization converge here. The ITIL service management process, closely interweaved with the service desk, describes which work steps, information, escalations, and/or interfaces are relevant in connection with the processing of incidents or service requests.

The incident and problem management processes within OTRS::ITSM are based on ITIL recommendations and ITIL terminology. At the same time, user comfort was a main consideration, and terms known from OTRS have been retained as much as possible.



Quelle: ILX Group (www.ilxgroup.com)

1. Ticketerstellung, Klassifizierung und Priorisierung

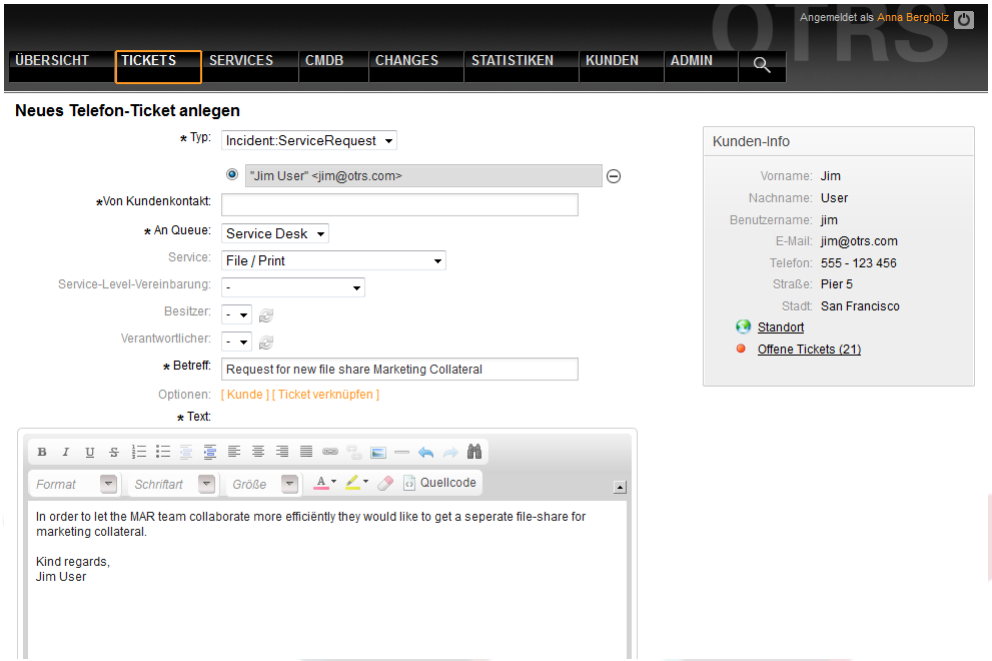
At ticket creation -in our case a phone ticket- the following information can be registered in addition to the information implemented in OTRS:

- Tickettyp
- relevanter Dienst
- SLA
- Auswirkung

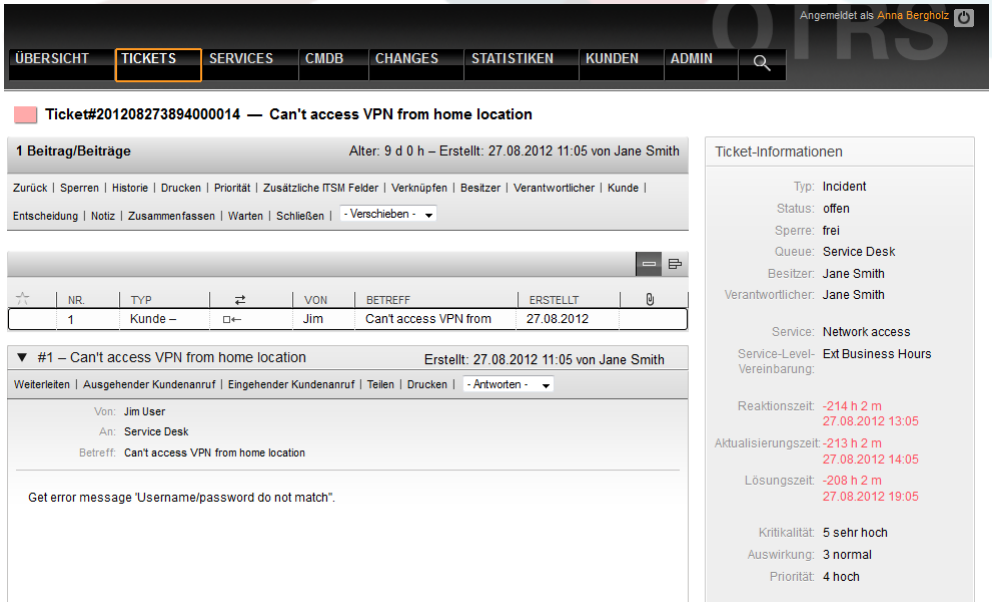
- Priorität

Depending on the service selected, impact and priority are automatically submitted from the criticality impact priority matrix. However, every IT service staff member knows a "VIP" customer requires special consideration.

In order to meet this requirement of day-to-day Service Operations, we also allow you to manually adjust the priority of a request.

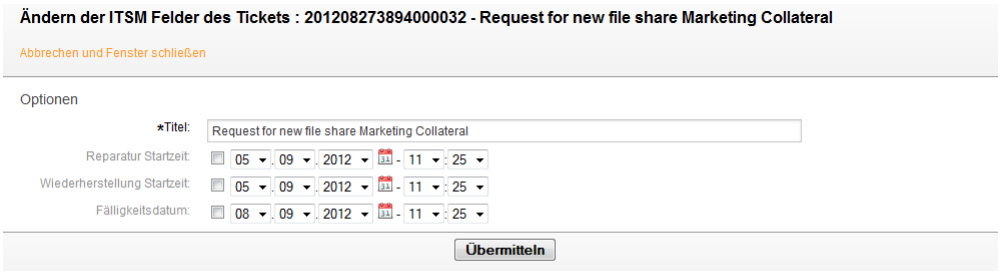


By following the ticket content (zoom) link, detailed information about the ticket can be accessed. All data relevant for IT support is consolidated in the right hand section:



2. SLA relevant time information

With the additional ITSM fields link, time information additional to the response, update, and solution time provided in the SLA can be recorded and existing information can be changed:

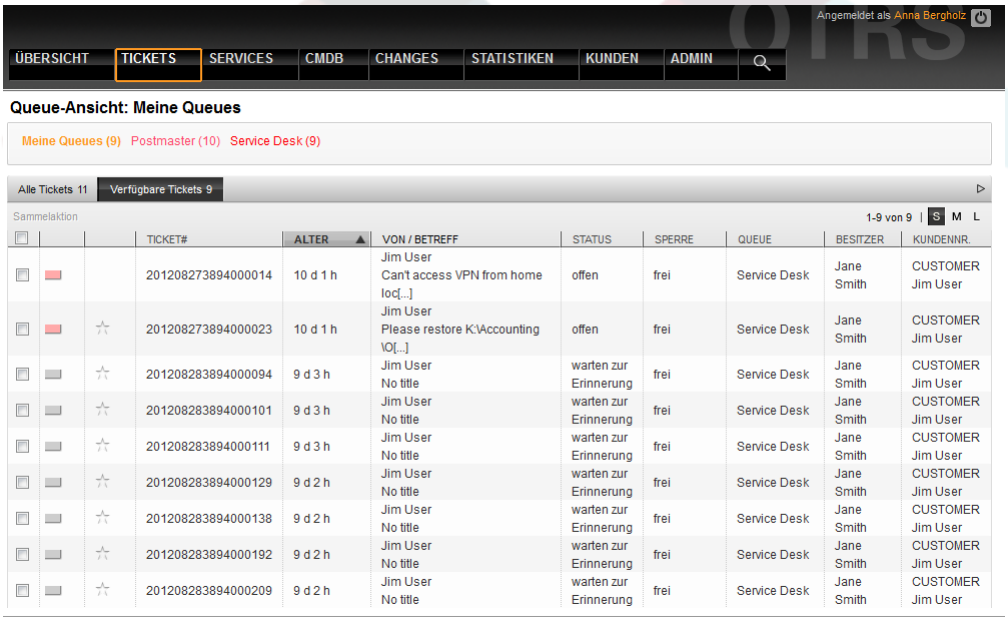


3. Allocate tickets (queues)

Designed with flexibility in mind, the OTRS::ITSM queues can be tailored to your organizational structures. They can follow the vertical scheme of service desk, first, second, and third level support (as often used in IT service support) or be configured in a process oriented manner based on the ticket life cycle of generation, processing, closure and post-processing.

Contrary to OTRS versions prior to version 2.2, ticket escalation in OTRS::ITSM is based first of all on the response, update and recovery times provided in the SLA. If no values are provided in the SLA, escalation is effected based on the queues and time information stored in them.

Tickets can be moved by choosing a new queue in the bottom right corner of the ticket view.

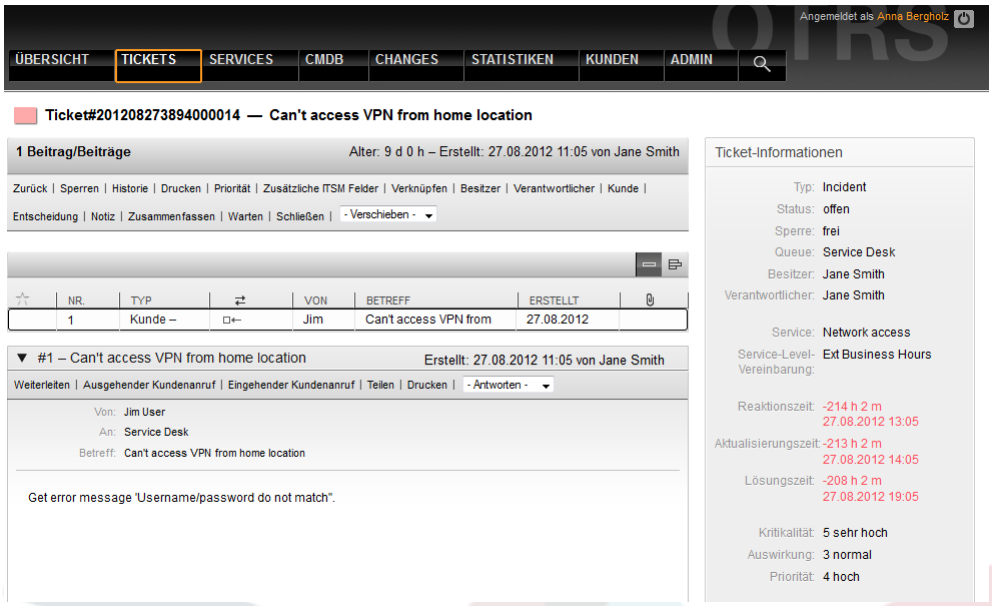


Warnung

The design of a queue structure is a task which should not be underestimated. Our experience shows that it is highly recommendable to validate conceptual thoughts in a dry run against the existing IT infrastructure before configuring OTRS::ITSM. It has proven of value to resort to external assistance, e.g. of OTRS or ITIL practice experts for the queue design.

4. Ticketdaten ändern

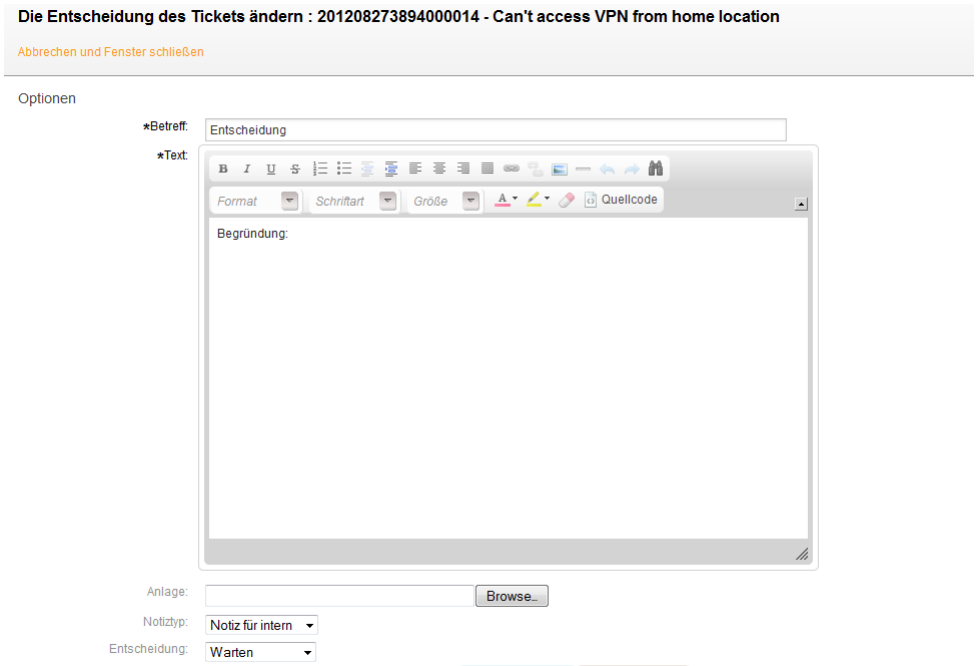
All changes to the ticket can be effected just as in OTRS using the links below the navigation bar.



5. Genehmigungen und Entscheidungen

In many cases, especially with service requests, decisions have to be taken before requests can be implemented. Depending on the competence framework, decisions are either taken directly by the service staff (standard changes) or by the approval of a supervising manager must be obtained first. This is primarily the case with permission changes (a user wants to access a restricted file system directory) or cost generating requests (new laptop).

In OTRS::ITSM approvals and refusals are shown via the decision link and are permanently saved with the ticket:



6. Generation of problem tickets from incidents

To generate a problem ticket from one or more incidents, generate a new ticket and link it with the relevant incident tickets. This way, the underlying incidents can be processed individually, can be closed with a workaround if necessary, and later be substituted with a permanent solution.

A merging of incident and problem tickets obscures the reporting and complicates controlling and the continuous improvement of the IT services.

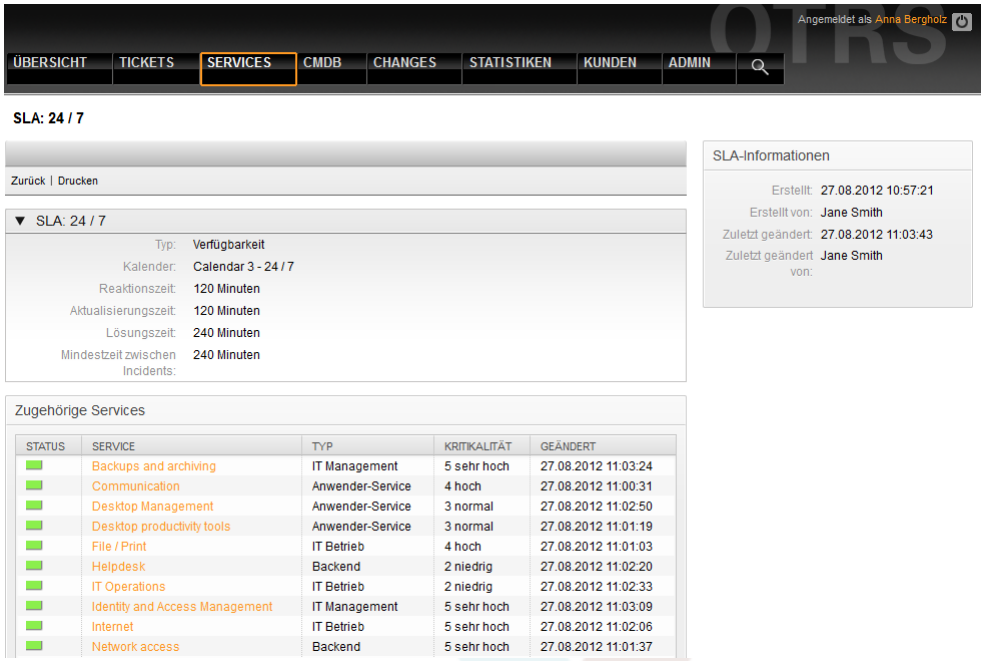
7. Ticket closure

Unlike the OTRS standard, OTRS::ITSM facilitates ITIL compliant ticket closure with a workaround.

8. Processing of service requests

Within OTRS, service requests and incidents are both regarded as tickets and intially processed equally. They are distinguishable from disruptions because of the ticket type Incident::Service Request.

Another difference, the SLA relevant times, is explained in greater detail in the service levels and service level agreements section.


Angemeldet als Anna Bergholz
ÜBERSICHT
TICKETS
SERVICES
CMDB
CHANGES
STATISTIKEN
KUNDEN
ADMIN
SLA: 24 / 7
Zurück | Drucken
SLA: 24 / 7
Typ: Verfügbarkeit
Kalender: Calendar 3 - 24 / 7
Reaktionszeit: 120 Minuten
Aktualisierungszeit: 120 Minuten
Lösungszeit: 240 Minuten
Mindestzeit zwischen Incidents: 240 Minuten
SLA-Informationen
Erstellt: 27.08.2012 10:57:21
Erstellt von: Jane Smith
Zuletzt geändert: 27.08.2012 11:03:43
Zuletzt geändert von: Jane Smith
Zugehörige Services
STATUS SERVICE TYP KRITIKALITÄT GEÄNDERT
Backups and archiving IT Management 5 sehr hoch 27.08.2012 11:03:24
Communication Anwender-Service 4 hoch 27.08.2012 11:00:31
Desktop Management Anwender-Service 3 normal 27.08.2012 11:02:50
Desktop productivity tools Anwender-Service 3 normal 27.08.2012 11:01:19
File / Print IT Betrieb 4 hoch 27.08.2012 11:01:03
Helpdesk Backend 2 niedrig 27.08.2012 11:02:20
IT Operations IT Betrieb 2 niedrig 27.08.2012 11:02:33
Identity and Access Management IT Management 5 sehr hoch 27.08.2012 11:03:09
Internet IT Betrieb 5 sehr hoch 27.08.2012 11:02:06
Network access Backend 5 sehr hoch 27.08.2012 11:01:37

Kapitel 8. Change Management

Change Management, according to ITIL, is a Service Transition process whose purpose is to manage IT changes, including planning, documentation, and implementation upon approval and clearance. The objective is to minimize negative effects on the IT infrastructure, particularly on critical services, resulting from ad-hoc or poorly-managed changes or amendments.

1. Change Management Module Requirements

1.1. Required Expertise

The implementation of OTRS::ITSM requires significant technical specification and preparation. Prior to a technical implementation, key elements of the Change Management process, such as required workflows, metrics, or reports, must be defined.

1.2. Technische Anforderungen

The software below is necessary to implement the Change Management module:

1. OTRS Framework, Version 3.3. oder höher

2. ITSM "GeneralCatalog" package, version 3.3

3. ITSM "ITSMCore" package, version 3.3

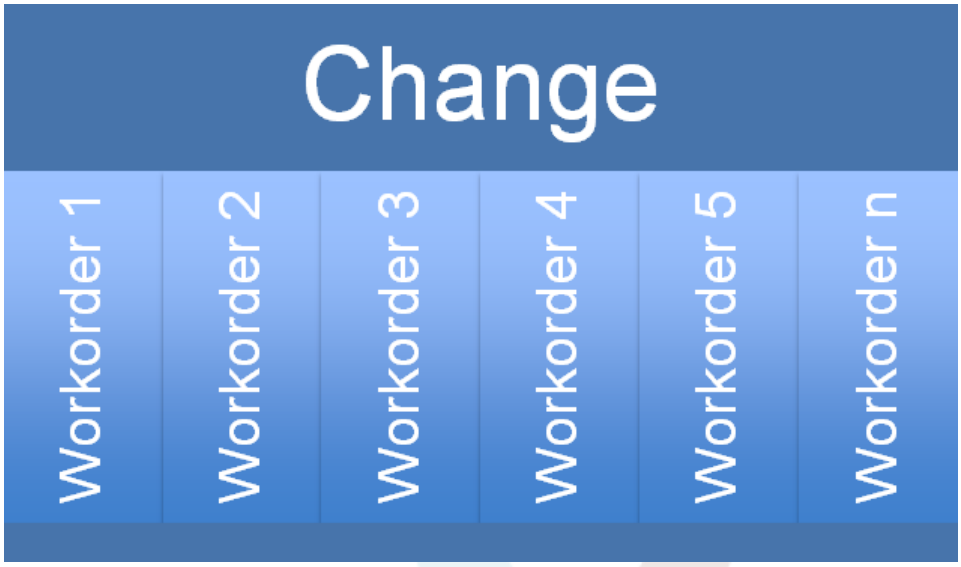
The following packages are recommended, but from a technical perspective they are not completely necessary:

- ITSM "ITSMIncidentProblemManagement" package, version 3.3
- ITSM "ITSMServiceLevelManagement" package, version 3.3
- ITSM "ITSMConfigurationManagement" package, version 3.3
- ITSM "ImportExport" package, version 3.3

2. Digramm des Change Managements in ITRS::ITSM

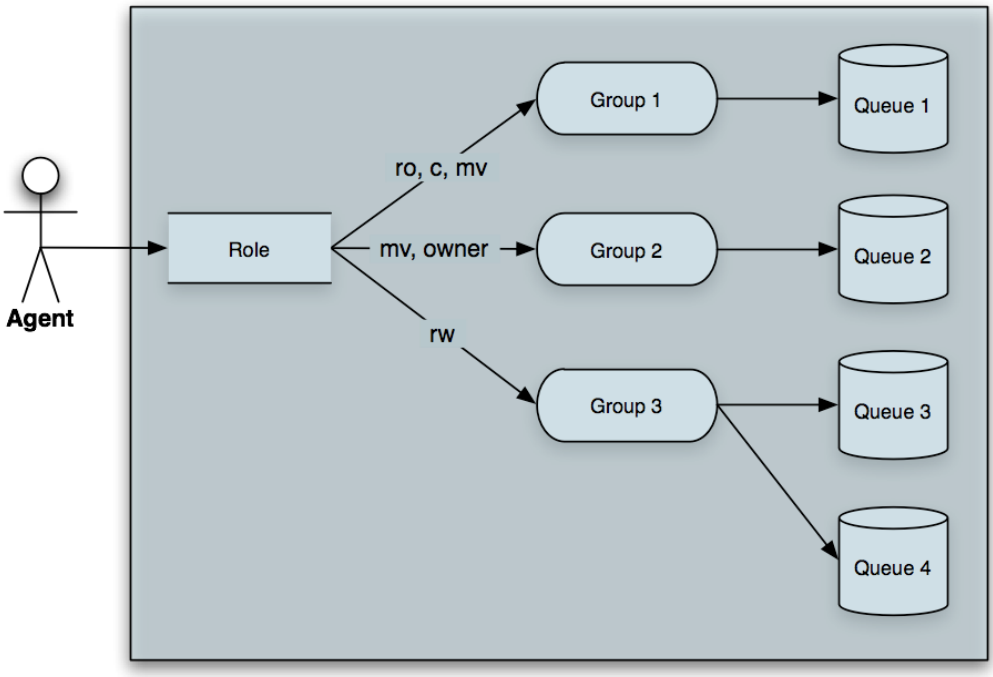
The Change Management implementation in OTRS::ITSM defines a Change as an alteration of the existing IT landscape, such as the installation of a new mail server.

As Changes typically consist of several sub-tasks, OTRS::ITSM allows any number of sub-tasks to be defined per change. These are known as Work Orders.



3. Verfügbare Benutzer-Rollen

Access to the Change Management module is managed on a role-based access concept. The required user roles are created via the OTRS Administrator, according to corresponding user group permissions in the Change Management module.



By installing the OPMs listed under "Technical Requirements", the user groups in the table below will be created:

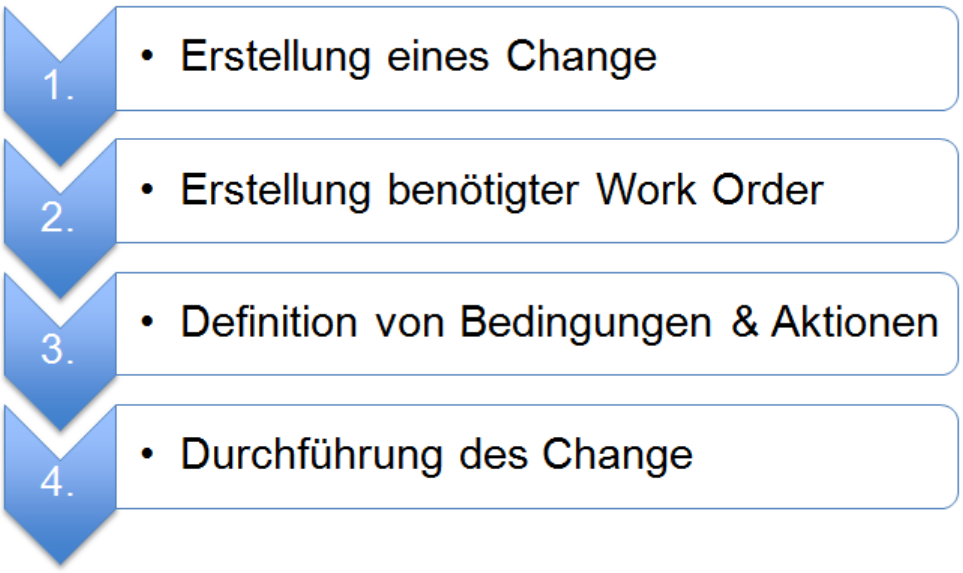
Tabelle 8.1. Benutzer-Rollen

Benutzer-Rolle	Zugriff und Privilegien
itsm-change	Members of this user group have access to the Change Management module. All poten-

Benutzer-Rolle	Zugriff und Privilegien
	tial Work Order Agents should be assigned to this group. All Changes and Work Orders can be viewed by these users.
itsm-change-builder	Members of this user group can create new Changes and Work Orders in the system. All Changes and Work Orders can be viewed by this group. Changes and Work Orders created by the Change Builder, or that have been defined as accessible to the Change Builder, may be edited by these users.
itsm-change-manager	Members of this user group can create new Changes and Work Orders in the system. All Changes and Work Orders can be viewed by this group. These users can edit all Changes and Work Orders.

4. Underlying Workflow

The implementation of a change, including all required Work Orders, follows the underlying workflow shown below.



5. Einen neuen Change erstellen

5.1. Attribute eines Changes

To create a new Change, the following attributes must be entered.

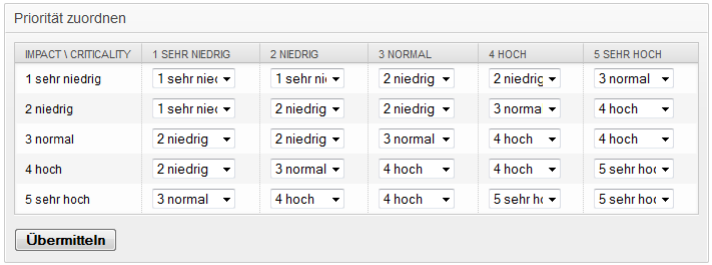
Tabelle 8.2. Attribute eines Changes

Attribut	Erforderliches Feld	Details
Titel	Ja	Kurzbeschreibung / Name des Changes
Beschreibung	Nein	Längere Beschreibung des Changes
Begründung	Nein	Text explanation of the reasons behind the Change; answer to the question: "What is the likely consequence if the Change is not implemented?"
Kategorie	Ja	Defines the type of Change, e.g "3 normal" etc.
Auswirkung	Ja	Defines the effects or impact the Change will have, eg. "4 high", etc.
Priorität	Ja	Defines the priority of the Change, eg. "5 very high", "3 normal", etc. .
Status	Ja	When creating a new Change, the status is automatically set. When modifying an existing Change, the Change Builder and Change Manager can manually set the status. Available status and result status are defined by the integrated State Machine, see Abschnitt 5.3, „ Change State Machine “ [37] .
Requested (by customer) Date	Nein	If required, this attribute can be deactivated via SysConfig for the 'ChangeEdit', 'ChangeAdd' and 'ChangeZoom' templates, and display the customer's desired implementation date.
Anhang	Nein	Enables related files and documents to be attached

5.2. Kategorie - Auswirkung - Prioritäts-Matrix

To determine the priority of a Change, OTRS::ITSM supports the Change Builder through an integrated matrix which suggests a priority for selection, based on the chosen category and change impact entered in the system. This suggested priority can always be overridden by the Change Builder.

The category, impact and priority values given upon installation can be customized in the General Catalog by the administrator.



Here, the menu item "General Catalog" should be selected in the OTRS::ITSM Administration interface.

5.2.1. ITSM::Change Management::Category

Upon installation, OTRS::ITSM Change Management generates the following values for the Category selection field:

- 1 sehr gering
- 2 gering
- 3 normal
- 4 hoch
- 5 sehr hoch

5.2.2. ITSM::Change Management::Impact

Upon installation, OTRS::ITSM Change Management generates the following values for the Impact selection field:

- 1 sehr gering
- 2 gering
- 3 normal
- 4 hoch
- 5 sehr hoch

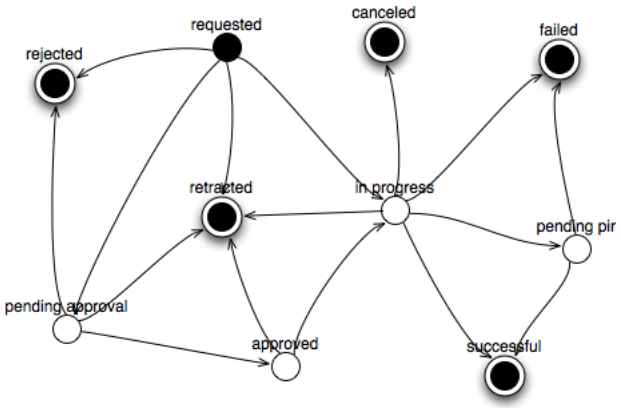
5.2.3. ITSM::Change Management::Priority

Upon installation, OTRS::ITSM Change Management generates the following values for the Priority selection field:

- 1 sehr gering
- 2 gering
- 3 normal
- 4 hoch
- 5 sehr hoch

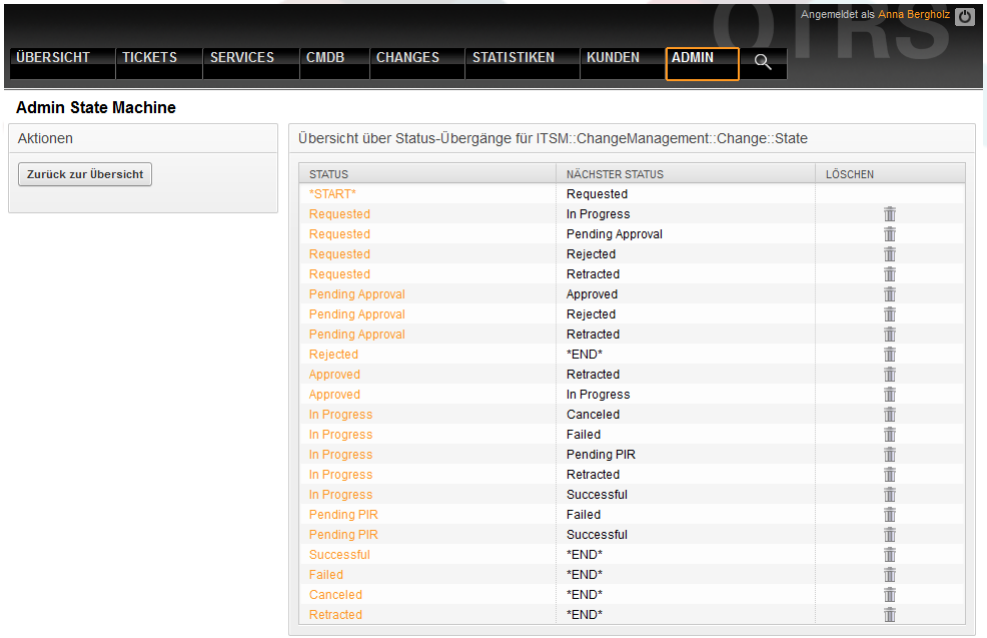
5.3. Change State Machine

OTRS::ITSM features a State Machine which defines valid statuses and possible result statuses for a Change. The standard installation generates suggestions based on the following logic model:



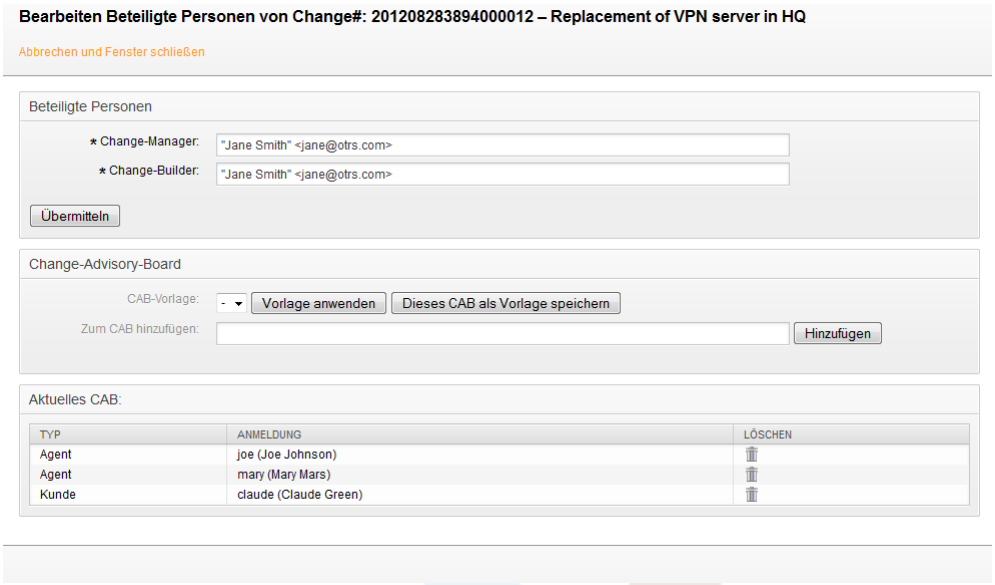
Adjustments to the State Machine can be made by the system administrator in the administration front end, under menu option "State Machine". The statuses and possible result statuses should be defined here.

Where necessary, additional statuses can be defined under the menu option "General Catalog" -> "ITSM::Change Management::Change::State". In OTRS::ITSM, this is illustrated as a table:



5.4. Defining Participant Roles / Persons Related to a Change

After entering the basic data of the Change, the persons participating in implementation can be defined in the Involved Persons feature.



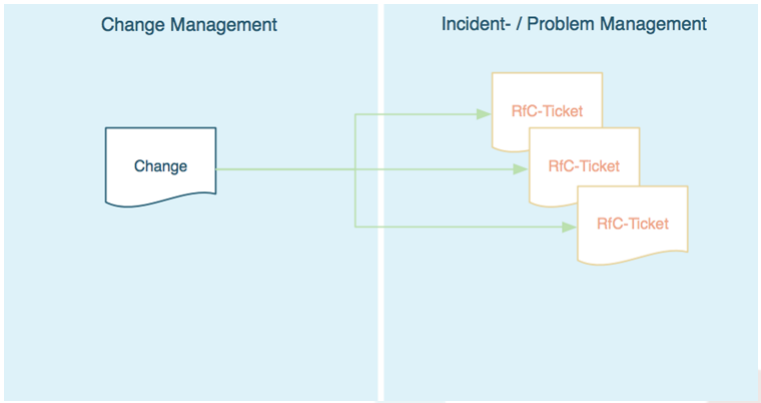
Here, the system offers convenient access to all connected client backends and agent backends, such as SQL databases or LDAP directory services. If specified, the CAB can be defined according to an existing CAB template.

Tabelle 8.3. Beteiligte Personen

Attribut	Erforderliches Feld	Details
Change Manager	Ja	Assigns Change Manager privileges to an agent, for the current Change.
Change-Builder	Ja	Defines the agent who processes and defines the current Change. When creating a new Change, the current agent is automatically entered as the Change Builder.
Change Advisory Board	Nein	Defines a group of people which can include agents and customers.

5.5. Verlinkt einen Change mit einem Change Request

Through the OTRS Framework's renowned linking mechanism, the system allows a change to be linked to a ticket. In this way, the origin of a change ie. the Request for Change or problem can be easily identified.



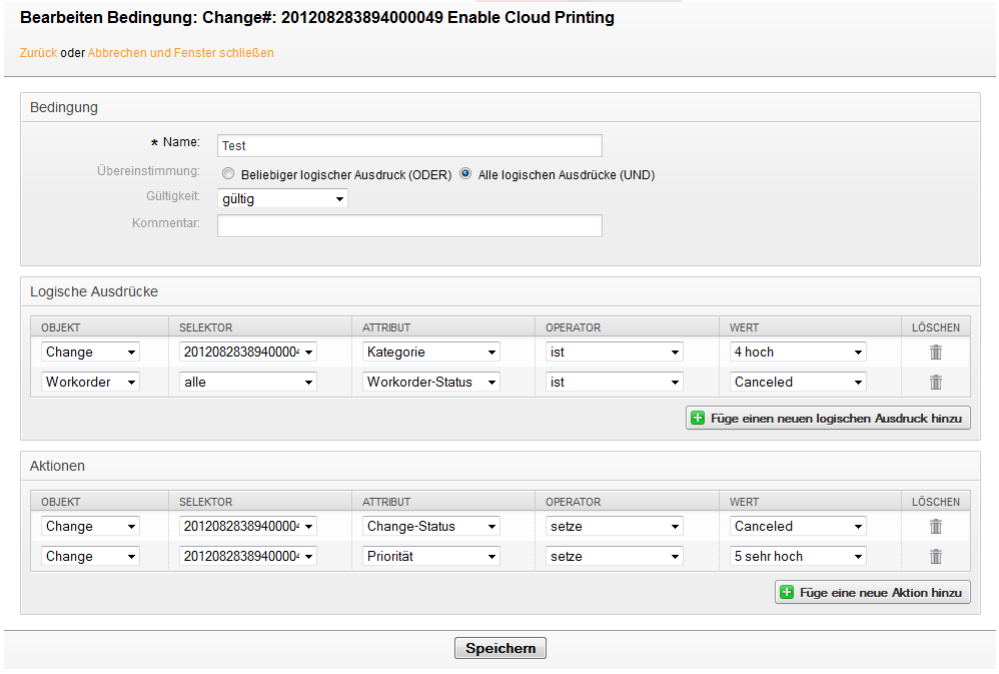
Furthermore, it is possible to open the corresponding Change directly from a ticket within the Incident or Problem Management process i.e., the ticket system from which it originated. In this case, the system creates a transparent link between the ticket and Change. In the configuration, this feature can be restricted to only those agents who are permitted to create Changes. It is also possible to resctrict the usage of the ticket type "RfC" to only those agents who have access to the Change Management area. Please have a look at the following sysconfig options:

- Ticket -> Core::TicketACL - Ticket::Acl::Module###200-Ticket::Acl::Module
- ITSM Change Management -> Core::ITSMChange - ITSMChange::AddChangeLinkTicketTypes
- ITSM Change Management -> Core::ITSMChange - ITSMChange::RestrictTicketTypes::Groups

5.6. Bedingungen definieren

OTRS::ITSM allows conditions and actions to be defined based on the attributes of a Change and/or Work Order. Through the administration front-end, these attributes can be activated or deactivated for the Change Builder.

Workflows can be defined here. For example, a workflow to set the entire Change to "canceled" or request review / approval clearance when a Work Order is canceled.



It should be noted that the defined conditions are not executed in a certain order; rather, actions are processed in the order they were set.

5.6.1. Conditions Available at the Change Level

The following attributes can be used to define Conditions at the Change level

Tabelle 8.4. Conditions available at the Change level

Change Attribute	Logischer Operator
Erfasste Zeit Geplanter Aufwand	ist ist nicht ist leer ist nicht leer ist grösser als ist kleiner als
Kategorie Change-Builder Change-Status Auswirkung Priorität	ist ist nicht
Change-Manager	ist ist nicht ist leer ist nicht leer
Change-Titel	beginnt mit endet mit enthält enthält nicht ist ist nicht ist leer ist nicht leer

5.6.2. Conditions Available at the Work Order Level

The following attributes can be used to define conditions at the Work Order level.

Tabelle 8.5. Conditions available at the Work Order level

Work Order Attribute	Logischer Operator
Erfasste Zeit Geplanter Aufwand	ist ist nicht ist leer ist nicht leer ist grösser als ist kleiner als
Workorder Nummer	ist ist nicht ist grösser als ist kleiner als
Workorder-Status Workorder-Typ Workorder-Agent	ist ist nicht
Workorder-Titel	beginnt mit endet mit enthält enthält nicht ist ist nicht ist leer ist nicht leer

5.7. Defining Actions

After the conditions have been established, OTRS::ITSM allows you to define any number of actions to be executed on the current Change or all / one of the Work Orders of the current change.

5.7.1. Actions Available at the Change Level

The following actions can be performed for Change objects. The operator "set" enables the selected attribute to be set at a specific value, if the defined condition is true. On the other hand, the operator "lock" freezes the selected attribute, for as long as the defined condition is true ie. a manual change is not possible.

Tabelle 8.6. Actions available at the Change level

Change Attribute	Aktion
Kategorie	setze

Change Attribute	Aktion
Auswirkung Priorität	
Change-Status	setze gesperrt

5.7.2. Actions Available at the Work Order Level

The following actions can be performed for Work Order objects. The operator "set" enables the selected attribute to be set at a specific value, if the defined condition is true. On the other hand, the operator "lock" freezes the selected attribute, for as long as the defined condition is true ie. a manual change is not possible.

Tabelle 8.7. Actions available at the Work Order level

Work Order Attribute	Aktion
Workorder-Status	setze gesperrt

5.8. Rescheduling (Postponing) the Start / End Time of a Change

In practice, the planned start or end time of a Change may need to be revised. The system allows the Change Builder to do this with the "Move Time Slot" feature.

Through selector fields, the Change Builder has the ability to shift the planned Change implementation timeframe.

6. Creating a Work Order

Within a Change, the system offers a "Add Work Order" feature which enables any number of sub-tasks (Work Orders) related to a selected Change to be entered.

6.1. Attribute einer Workorder

Once a Change is created, it effectively serves as a container for the definition of sub-tasks, ie. Work Orders, and these Work Orders can now be defined by the Change Builder.

Tabelle 8.8. Attribute einer Workorder

Attribut	Erforderliches Feld	Details
Titel	Ja	Kurzbeschreibung / Name der WorkOrder.
Anweisung	Nein	Längere Beschreibung der WorkOrder.

Attribut	Erforderliches Feld	Details
WorkOrder-Typ	Ja	Selection list to define the type of Work Order, eg. approval, work order, PIR, etc.
Kategorie	Ja	Defines the type of Change, e.g "3 normal" etc.
Auswirkung	Ja	Defines the effects or impact of the Change, eg. "4 high", etc.
Priorität	Ja	Defines the priority of the Change, eg. "5 very high", "3 normal", etc.
Status	Ja	When creating a new Change, the status is automatically set. When modifying an existing Change the Change Builder and Change Manager can manually set the status. Available statuses and result statuses are defined by the integrated State Machine, see Abschnitt 5.3, „ Change State Machine “ [37] .
Requested (by customer) Date	Nein	If required, this attribute can be deactivated via SysConfig for the 'ChangeEdit', 'ChangeAdd' and 'ChangeZoom' templates, and display the customer's desired implementation date.
Anhang	Nein	Enables related files and documents to be attached

In addition to these attributes, the assigned Work Order agent can collect attributes through the "Report" feature, which is explained in detail in the "Work Order Agent Report" chapter.

6.2. WorkOrder-Typ

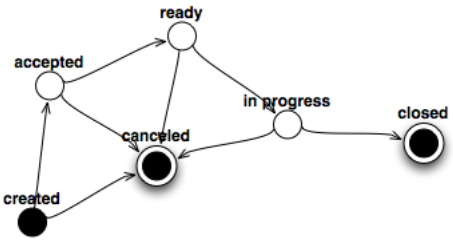
The following entries for the "Work Order Type" attribute are available in the standard installation of OTRS::ITSM Change Management:

- Freigabe
- WorkOrder
- Backout
- Entscheidung
- PIR (Post Implementation Review)

The administrator can freely define and specify Work Order types, as well as add new types.

6.3. Work Order State Machine

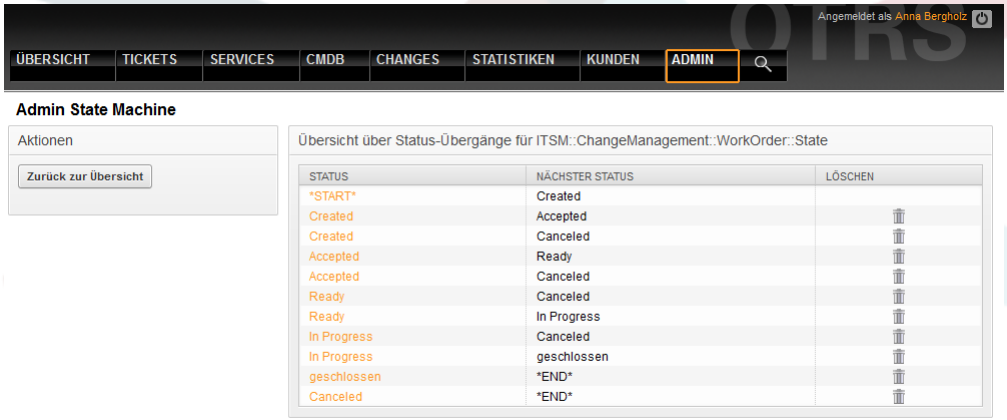
OTRS::ITSM features a State Machine which defines valid statuses and possible result statuses for a Work Order. The standard installation generates suggestions based on the following logic model:



Adjustments to the State Machine can be made by the system administrator in the administration front end, under menu option State Machine. The statuses and possible result statuses should be defined here.

Where necessary, additional statuses can be defined under the menu option "General Catalog" -> "ITSM::ChangeManagement::WorkOrder::State".

In OTRS::ITSM, this is illustrated as a table:



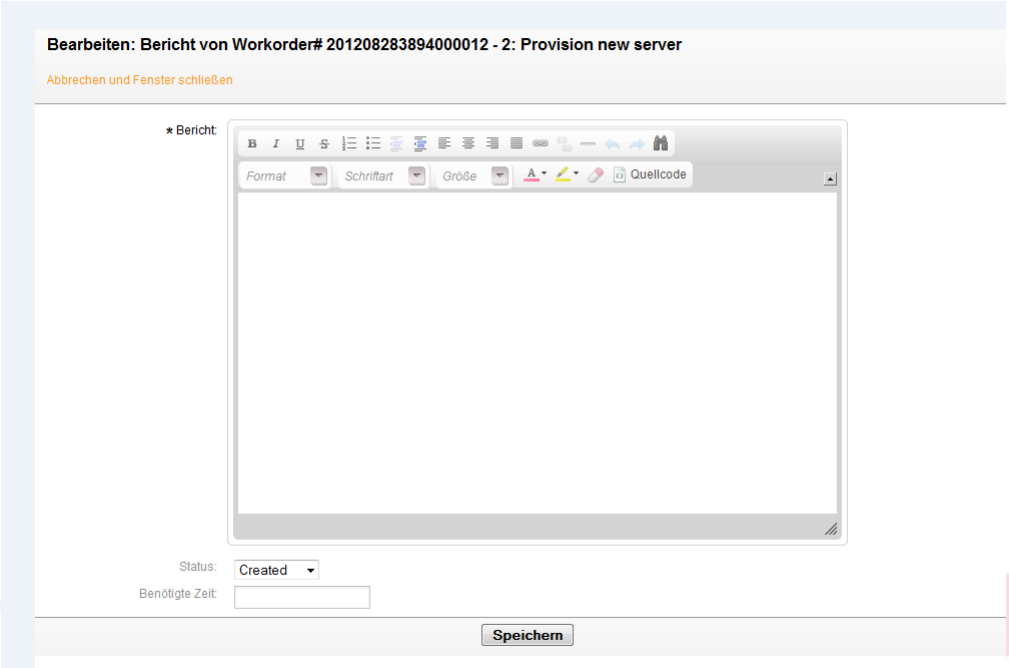
6.4. Defining the Work Order Agent

Each Work Order can be assigned to a "Work Order agent", i.e. a person responsible for the execution of the Work Order.

The system offers access to all connected agent back-ends here. It is important to note that only agents who have full access rights to the user group "have itsm-change" are displayed.

6.5. Work Order Agent Report

The assigned Work Order agent can document related information such as comments, the actual Work Order start and end times, required processing time and status.



6.6. Linking Work Orders to Configuration Items / Services

Within a Work Order, OTRS::ITSM allows linking to other objects.

In the standard installation, a Work Order can be linked to the following objects:

- CIs
  - CI-Klasse Computer
  - CI-Klasse Hardware
  - CI-Klasse Standort
  - CI-Klasse Netzwerk
  - CI-Klasse Software
- Services
- Tickets

These settings are defined via SysConfig under "Framework -> Core::LinkObject" and can be extended when desired.

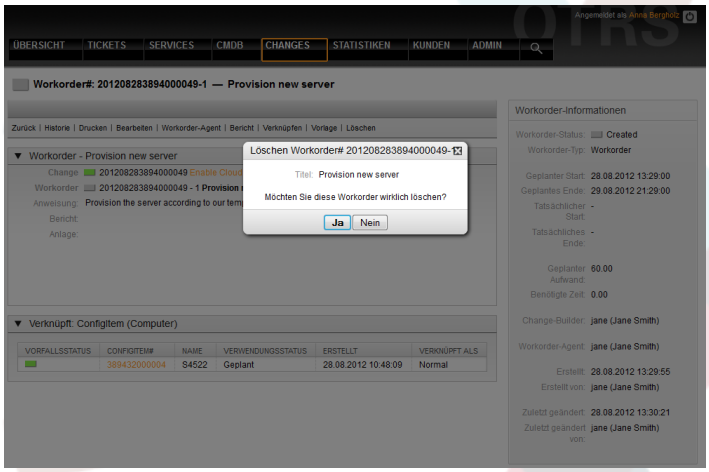
6.7. Eine WorkOrder als Vorlage speichern

A Work Order can be saved as a template through the "Template" feature, within the Work Order itself.

The dialog box requires the Change Builder to give the template a name and an optional comment. Once the user leaves the dialog box by clicking the "Add" button, the Work Order will be available as a template when a new Work Order is being created.

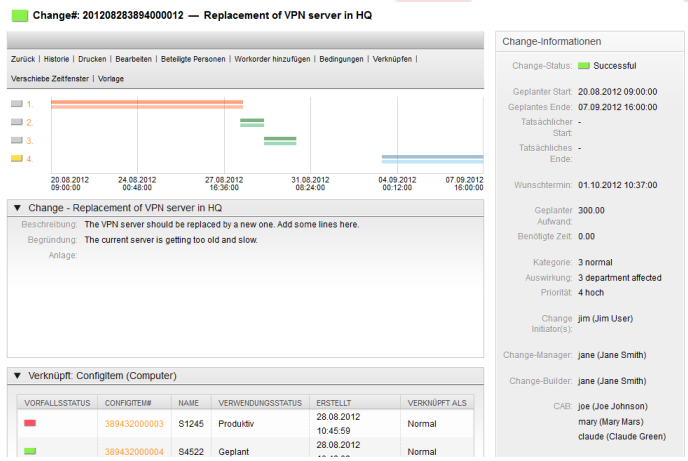
6.8. Eine WorkOrder löschen

The Change Builder can delete a Work Order as long as it is not referred to in a Condition (see the "Defining conditions" section).



7. Viewing the Content of a Change

After creating a Change and its associated Work Order, the system has the capability to display other information related to the Change, including corresponding Work Orders, linked tickets and CIs.

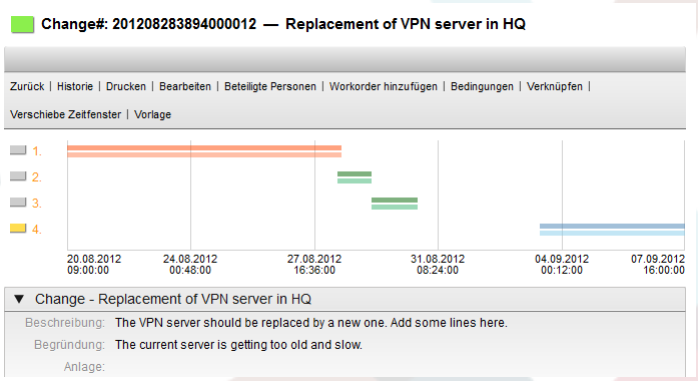


The defined Work Orders are numbered in order of their planned execution and displayed in a timeline. The color of the displayed Work Order in the timeline reflects their type, and can be customized via SysConfig "ITSM Change Management -> Frontend::Agent::ViewChangeZoom" as required.

The system generates two bars per Work Order in the Change timeline. The upper, darker bar represents the planned Work Order implementation time, while the lower, lighter bar displays the actual Work Order implementation time.

The status of each Work Order is represented by traffic lights, as seen in the following view:

- Grau - Workorder wurde "erstellt"
- Gelb - WorkOrder "wartet auf Genehmigung"
- Grün - WorkOrder ist "geschlossen"
- Rot - WorkOrder wurde "abgebrochen"

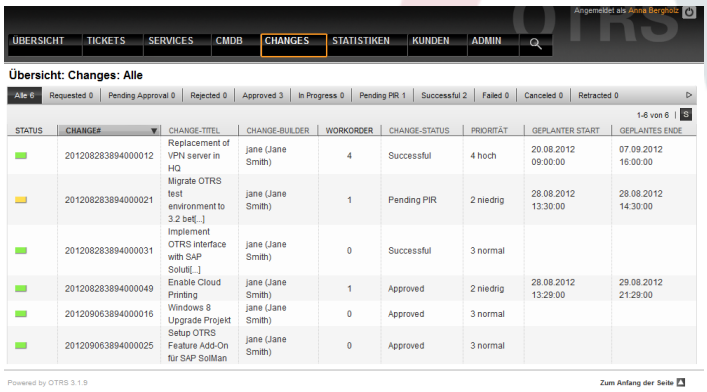


8. Änderungsansichten

OTRS::ITSM offers a variety of ways to view the Changes saved in the system. Access to these views can be disabled where desired.

8.1. Änderungsübersicht

All Changes are displayed in an overview screen, which can be sorted in ascending or descending order per column.



The columns can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewChangeOverview" with the following available attributes:

Tabelle 8.9. Änderungsübersicht

Attribut	Aktiv	Details
Tatsächlicher Start	Nein	Date and time at which the Change implementation began
Tatsächliches Ende	Nein	Date and time at which the Change implementation ended
Kategorie	Nein	Category or type of Change
Change-Builder	Ja	Change Builder's name
Change-Manager	Ja	Change Manager's name
Change Nummer	Ja	System generated Change number
Change-Status	Ja	Änderungsstatus
ChangeStateSignal	Ja	Change status indicator, shown as traffic light
Change-Titel	Ja	Name der Änderung
Erstellzeit	Nein	Date and time at which the Change was created
Auswirkung	Nein	Expected effect of the Change
Geplanter Start	Ja	Planned Change implementation start date and time
Geplantes Ende	Ja	Projected Change implementation end date and time
Priorität	Ja	Priority level of the Change
Wunschtermin	Nein	Customer's desired implementation date
Services	Ja	Services affected by the Change
WorkOrderCount	Ja	Number of Work Orders related to the Change

Additionally, the Change Overview can filter and display changes according to various attributes. The following filters are available and can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewChangeOverview":

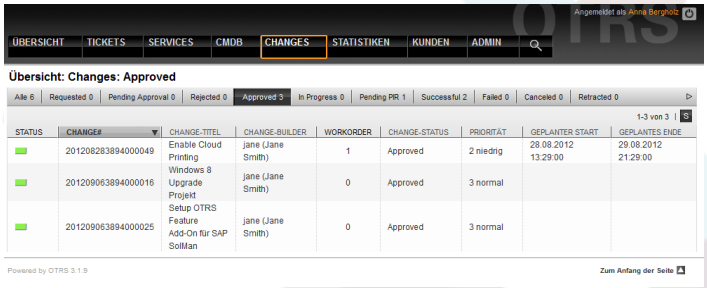
Tabelle 8.10. Change Overview Filters

Attribut	Details
Requested	Displays all changes that have the status "requested"
Pending Approval	Displays all changes that have the status "pending approval"
Rejected	Displays all changes that have the status "rejected"
Approved	Displays all changes that have the status "approved"

Attribut	Details
In Progress	Displays all changes that have the status "in progress"
Successful	Displays all changes that have the status "successful"
Failed	Displays all changes that have the status "failed"
Canceled	Displays all changes that have the status "canceled"
Retracted	Displays all changes that have the status "retracted"

8.2. Change Schedule

In the Change Schedule view, all Changes which have the status "approved" ie. are in the queue for implementation, are displayed. The column titles can be sorted by the following attributes in ascending or descending order:



The displayed attributes can be defined via SysConfig "ITSM Change Management -> Frontend:: Agent:: ViewChangeScheduleOverview":

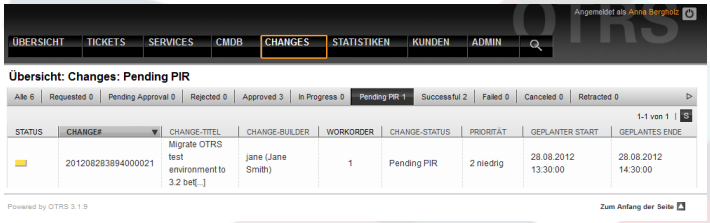
Tabelle 8.11. Change Schedule

Attribut	Aktiv	Details
Tatsächlicher Start	Nein	Date and time at which the Change implementation began
Tatsächliches Ende	Nein	Date and time at which the Change implementation was completed
Kategorie	Nein	Category or type of Change
Change-Builder	Ja	Change Builder's name
Change-Manager	Ja	Change Manager's name
Change Nummer	Ja	System generated Change number
Change-Status	Ja	Änderungsstatus
ChangeStateSignal	Ja	Change status indicator; shown as traffic light
Change-Titel	Ja	Name der Änderung
Erstellzeit	Nein	Date and time at which the Change was created

Attribut	Aktiv	Details
Auswirkung	Nein	Expected effect of the Change
Geplanter Start	Ja	Planned Change implementation start date and time
Geplantes Ende	Ja	Projected Change implementation completion date and time
Priorität	Ja	Priority level of the Change
Wunschtermin	Nein	Customer's desired implementation date
Services	Ja	Services affected by the Change
WorkOrderCount	Ja	Number of Work Orders related to the Change

8.3. PIR - Post Implementation Review

This view displays work orders of the "PIR" type, which can be sorted in ascending or descending order by the given column headings.



The columns to be displayed can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewPIROverview":

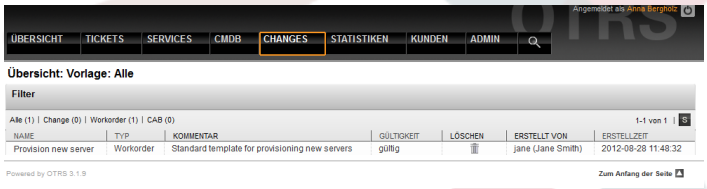
Tabelle 8.12. PIR - Post Implementation Review

Attribut	Aktiv	Details
Tatsächlicher Start	Nein	Date and time at which the Change implementation began
Tatsächliches Ende	Nein	Date and time at which the Change implementation was completed
Kategorie	Nein	Category or type of Change
Change-Builder	Ja	Change Builder's name
Change-Manager	Ja	Change Manager's name
Change Nummer	Nein	System generated Change number
Change-Status	Nein	Änderungsstatus
ChangeStateSignal	Nein	Change status indicator; shown as traffic light
Change-Titel	Ja	Name der Änderung
Erstellzeit	Nein	Date and time at which the Change was created

Attribut	Aktiv	Details
Auswirkung	Nein	Expected effect of the Change
Geplanter Start	Ja	Planned Change implementation start date and time
Geplantes Ende	Ja	Projected Change implementation completion date and time
Priorität	Ja	Priority level of the Change
Wunschtermin	Nein	Customer's desired implementation date
Services	Ja	Services affected by the Change
Workorder-Agent	Ja	Agent assigned to the PIR
Workorder Nummer	Ja	Work Order number
Workorder-Status	Ja	Number of Work Orders related to the Change
WorkOrderStateSignal	Nein	Work Order status indicator to be shown as traffic light
Workorder-Titel	Ja	Name of the Work Order
Workorder-Typ	Nein	The type of Work Order

8.4. Vorlage

This view displays all the defined templates in the system. The agent can sort the displayed information in ascending or descending order by the given column headings.



The columns to be displayed can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewTemplateOverview":

Tabelle 8.13. Vorlage

Attribut	Aktiv	Details
Geändert von	Nein	Username of the agent who last modified the template
Geändert	Nein	Date and time of the last modification
Kommentar	Ja	Comments / description of the template
Erstellt von	Ja	Username of the agent who created the template
Erstellzeit	Ja	Date and time at which the template was created

Attribut	Aktiv	Details
Löschen	Ja	Option to delete a chosen template
Name	Ja	Name der Vorlage
TemplateID	Nein	The template's internal database identity
Typ	Ja	Template-Typ
Gültig	Ja	Defines the validity of the template (valid, invalid, and temporarily invalid). Invalid / temporarily invalid templates cannot be used by Change Builders.

After installing the Change Management module, the following template types are available in the system. These can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewTemplateOverview":

Tabelle 8.14. Vorlagentypen

Attribut	Details	
Change	Vorlagen für Änderungen	
Workorder	Vorlagen für Arbeitsaufträge	
CAB	Templates for Change Advisory Boards	

8.5. Suche

To find Changes or Work Orders which meet specific search criteria, the system is equipped with a separate search function based on the following search query attributes:

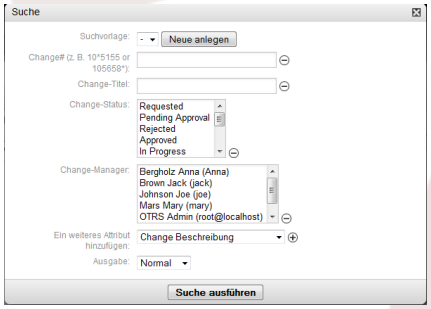


Tabelle 8.15. Vorlage

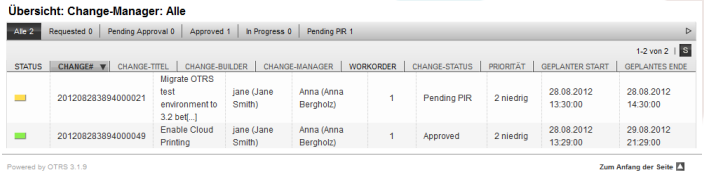
Attribut	Details
Change#	Search by Change number; an asterisk ("*") may be used as a wildcard
Change-Titel	Search by Change title or name
Work Order Title	Search by the title/name of a Work Order
CAB Agent	Search by CAB member, defined in the system as an agent
CAB Kunde	Search by CAB member, defined in the system as a customer. Here, the auto-complete

Attribut	Details
	function can offer suggestions when typing in the CAB customer field
Änderungsbeschreibung	Search in the Change description text
Change Justification	Search in the reason / justification for the Change
Work Order Instruction	Search in Work Order instructions
Work Order Report	Search in a Work Order report
Änderungspriorität	Search by Change priority level
Change Impact	Search by Change effect / impact level
Change-Kategorie	Search by Change category or type
Änderungsstatus	Search by Change status
Change Manager	Search by Change Manager
Change-Builder	Search by Change Builder
Created by Agent	Search by agent user name who created the Change
Work Order State	Search by the status of a Work Order
Work Order Agent	Search by the entered Work Order agent
Requested (by customer) Date	Search by the customer requested Change implementation date. Search can be performed using absolute time values (eg. from date 1 to date 2) or in relative time values (eg. Changes created in the last x days / weeks).
Geplante Startzeit	Search by the planned start date and time of a Change implementation. Search can be performed using absolute time values (eg. from date 1 to date 2) or in relative time values (eg. Changes created in the last x days / weeks).
Geplante Endzeit	Search by the projected end date and time of a Change implementation. Search can be performed using absolute time values (eg. from date 1 to date 2) or in relative time values (eg. Changes created in the last x days / weeks).
Tatsächliche Startzeit	Search by the actual start date and time of a Change implementation. Search can be performed using absolute time values (eg. from date 1 to date 2) or in relative time values (eg. Changes created in the last x days / weeks).
Tatsächliche Endzeit	Search by the actual end date and time of a Change implementation. Search can be performed using absolute time values (eg. from date 1 to date 2) or in relative time values (eg. Changes created in the last x days / weeks).
Erstellzeit	Search by the Change creation date and time. Search can be performed using abso-

Attribut	Details
	lute time values (eg. from date 1 to date 2) or in relative time values (eg. Changes created in the last x days / weeks).
Change Time	Search by the date and time a Change was modified. Search can be performed using absolute time values (eg. from date 1 to date 2) or in relative time values (eg. Changes created in the last x days / weeks).

8.6. Change Manager

OTRS::ITSM offers a separate view to currently logged in agents, which displays the Changes for which they are registered as the Change Manager.



The displayed column headings can be sorted according the following attributes in ascending or descending order. The columns to be displayed can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewChangeManagerOverview":

Tabelle 8.16. Change Manager

Attribut	Aktiv	Details
Tatsächlicher Start	Nein	Date and time at which the Change implementation began
Tatsächliches Ende	Nein	Date and time at which the Change implementation was completed
Kategorie	Nein	Category or type of Change
Change-Builder	Ja	Change Builder's name
Change-Manager	Ja	Change Manager's name
Change Nummer	Ja	System generated Change number
Change-Status	Ja	Änderungsstatus
ChangeStateSignal	Ja	Change status indicator to be shown as traffic light
Change-Titel	Ja	Name der Änderung
Erstellzeit	Nein	Date and time at which the Change was created
Auswirkung	Nein	Expected effect of the Change
Geplanter Start	Ja	Planned Change implementation start date and time
Geplantes Ende	Ja	Projected Change implementation completion date and time

Attribut	Aktiv	Details
Priorität	Ja	Priority level of the Change
Wunschtermin	Nein	Customer's desired implementation date
Services	Ja	Services affected by the Change
WorkOrderCount	Ja	Number of Work Orders related to the Change

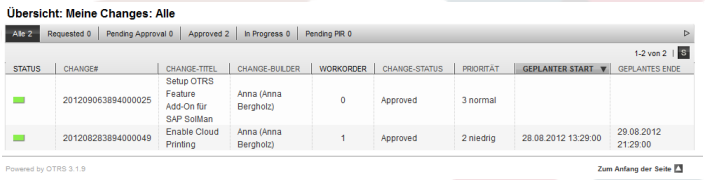
In addition, the Change Manager Overview can filter the displayed Changes by various attributes as follows These can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewChangeManagerOverview" if desired:

Tabelle 8.17. Change Manager Filter

Attribut	Details
Requested	Displays all Changes which have status "requested"
Pending Approval	Displays all Changes which have status "pending approval"
Approved	Displays all Changes which have status "approved"
In Progress	Displays all Changes which have status "in progress"

8.7. Meine Changes

The "My Changes" view displays all Changes created by the agent currently logged in, where the agent is registered as the Change Builder.



The display can be sorted by the column headings in ascending or descending order. The attributes can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewMyChangesOverview":

Tabelle 8.18. Meine Changes

Attribut	Aktiv	Details
Tatsächlicher Start	Nein	Date and time at which the Change implementation began
Tatsächliches Ende	Nein	Date and time at which the Change was completed
Kategorie	Nein	Category or type of Change
Change-Builder	Ja	Change Builder's name
Change-Manager	Ja	Change Manager's name
Change Nummer	Ja	System generated Change number

Attribut	Aktiv	Details
Change-Status	Ja	Änderungsstatus
ChangeStateSignal	Ja	Change status indicator to be shown as traffic light
Change-Titel	Ja	Name der Änderung
Erstellzeit	Nein	Date and time at which the Change was created
Auswirkung	Nein	Expected effect the Change will have
Geplanter Start	Ja	Planned Change implementation start date and time
Geplantes Ende	Ja	Projected Change completion date and time
Priorität	Ja	Priority level of the Change
Wunschtermin	Nein	Customer's desired implementation date
Services	Ja	Services affected by the Change
WorkOrderCount	Ja	Number of Work Orders related to the Change

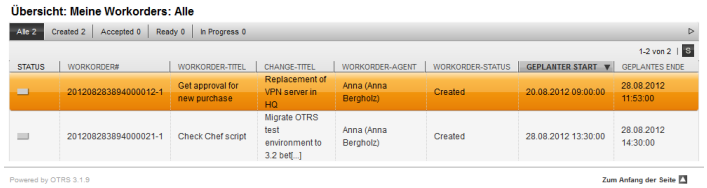
In addition, the My Changes Overview can filter the displayed Changes by various attributes as below. These can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewMyChangesOverview":

Tabelle 8.19. Mein Änderungsfilter

Attribut	Details
Requested	Displays all Changes which have status"requested"
Pending Approval	Displays all Changes which have status"pending approval"
Approved	Displays all Changes which have status"approved"
In Progress	Displays all Changes which have status"in progress"

8.8. Meine Arbeitsaufträge

Similar to the OTRS Ticket Engine's "Locked Tickets" view, OTRS::ITSM offers the currently logged-in agent a separate view of the Work Orders assigned to him / her.



The displayed information can be sorted by column heading in ascending or descending order. The attributes used can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewMyWorkOrdersOverview":

Tabelle 8.20. Meine Arbeitsaufträge

Attribut	Aktiv	Details
Tatsächlicher Start	Nein	Date and time at which the Change implementation began
Tatsächliches Ende	Nein	Date and time at which the Change implementation was completed
Kategorie	Nein	Category or type of Change
Change-Builder	Nein	Change Builder's name
Change-Manager	Nein	Change Manager's name
Change Nummer	Nein	System generated Change number
Change-Status	Nein	Änderungsstatus
ChangeStateSignal	Nein	Change status indicator to be shown as traffic light
Change-Titel	Ja	Name der Änderung
Erstellzeit	Nein	Date and time at which the Change was created
Auswirkung	Nein	Expected effect the Change will have
Geplanter Start	Ja	Planned Change implementation start date and time
Geplantes Ende	Ja	Projected Change completion date and time
Priorität	Nein	Priority level of the Change
Wunschtermin	Nein	Customer's desired implementation date
Services	Ja	Services affected by the Change
Workorder-Agent	Ja	Agent assigned to the PIR
Workorder Nummer	Ja	Work Order number
Workorder-Status	Ja	Number of Work Orders related to the Change
WorkOrderStateSignal	Nein	Work Order status indicator to be shown as traffic light
Workorder-Titel	Ja	Name of the Work Order
Workorder-Typ	Nein	The type of Work Order

In addition, the My Work Orders Overview can filter the displayed Work Orders by various attributes as below, which can be defined via SysConfig "ITSM Change Management -> Frontend::Agent::ViewMyWorkOrdersOverview":

Tabelle 8.21. My Work Orders Filter

Attribut	Details
Created	Displays all Work Orders which have the status "created"

Attribut	Details
Accepted	Displays all Work Orders which have the status "accepted"
Ready	Displays all Work Orders which have the status "ready"
In Progress	Displays all Work Orders which have the status "in progress"

9. Change Management Statistics

OTRS::ITSM provides the following reports for the evaluation of key indicators in supervising Change Management. All reports can be accessed through the integrated report generator.

9.1. Number of Changes Within a Defined Period

The report allows the definition of a relative (eg. Changes within the last x days) or absolute time period (eg. Changes from date1 to date 2). In addition, it is also possible to define the Change status to be reported.

Reports are available in "CSV" or "Print" (PDF) output formats.

9.2. Number of Changes by Change Category

The report allows the definition of a relative (eg. Changes within the last x days) or absolute time period (eg. Changes from date1 to date 2). In addition, it is also possible to define the Change status to be reported.

Reports are available in "CSV" or "Print" (PDF) output formats.

9.3. Number of Rejected Changes

The report allows the definition of a relative (eg. Changes within the last x days) or absolute time period (eg. Changes from date1 to date 2). In addition, it is also possible to define the Change status to be reported.

Reports are available in "CSV" or "Print" (PDF) output formats.

9.4. Number of Withdrawn Changes

The report allows the definition of a relative (eg. Changes within the last x days) or absolute time period (eg. Changes from date1 to date 2). In addition, it is also possible to define the Change status to be reported.

Reports are available in "CSV" or "Print" (PDF) output formats.

9.5. Ratio of Changes to Incidents

The report allows the definition of a relative (eg. Changes within the last x days) or absolute time period (eg. Changes from date1 to date 2). In addition, it is also possible to define the Change status to be reported.

Reports are available in "CSV" or "Print" (PDF) output formats.

9.6. RFCs Per Requester

The report allows the definition of a relative (eg. Changes within the last x days) or absolute time period (eg. Changes from date1 to date 2). In addition, it is also possible to define the RFC Requester to be reported.

Reports are available in "CSV" or "Print" (PDF) output formats.

Kapitel 9. Release Management

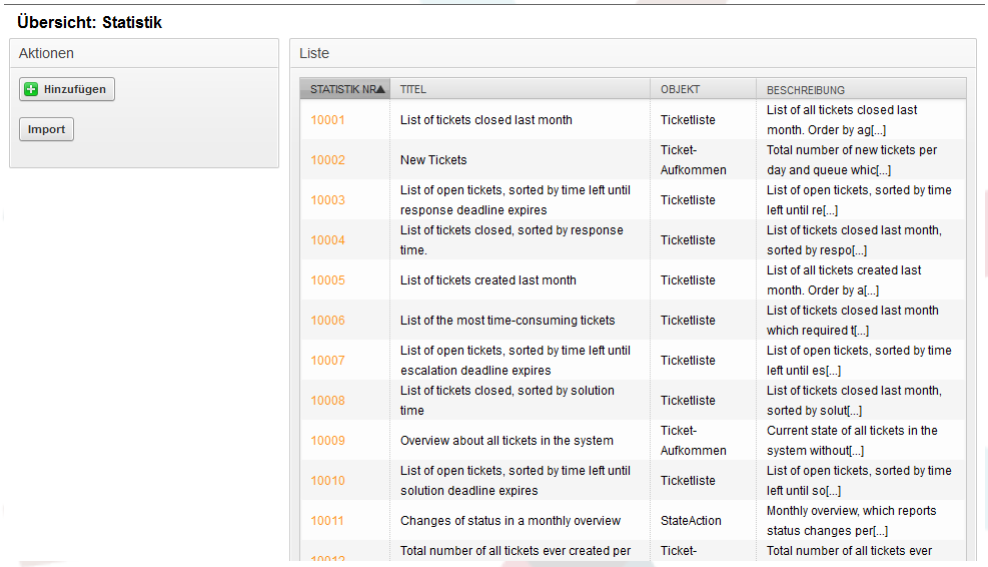
Please note that the we are planning to introduce the release management process with a future OTRS::ITSM version. Basic information, however, can be configured, captured and controlled as of version 1.0.

As an example, approval rules or overviews from DSL (Definitive Software Library) can be configured and used.

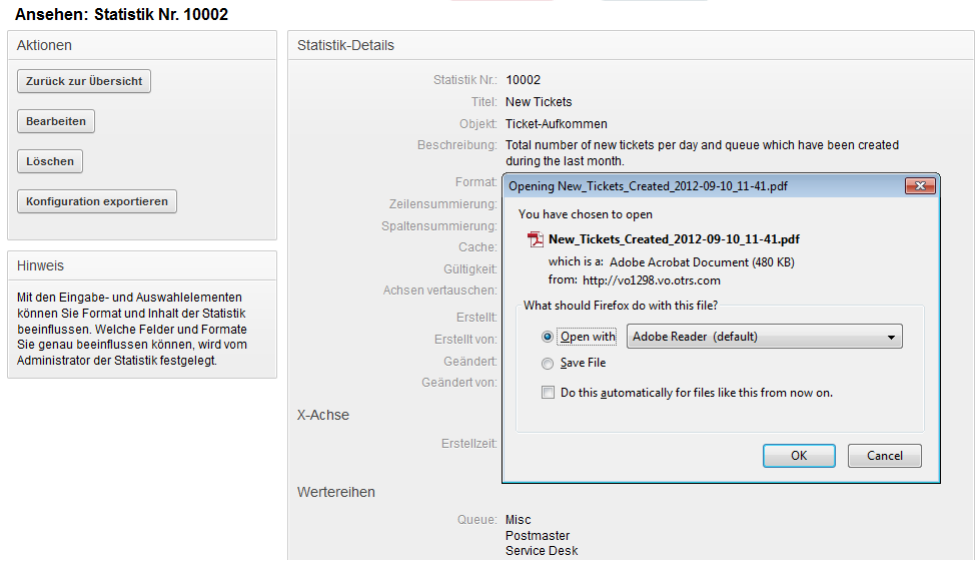
Kapitel 10. Service Level Management

The introduction of OTRS version 2.1 marked a complete revision of the internal statistics framework by allowing the creation of nearly every imaginable ticket-based report via the web interface, as well as the export or import thereof. In addition to that, by making use of OTRS existing access conrol features, administrators were allowed to restrict the generation and display of statistics and charts to specific users, groups, and/or roles. During the development, special care was given to ensure cross-version compatibility, meaning that statistics modules generated by previous OTRS versions could continue to be used. When used in combination with OTRS::ITSM, additional statistics relevant to ITSM become available with the installation of the ITSMServiceLevelManagement package.

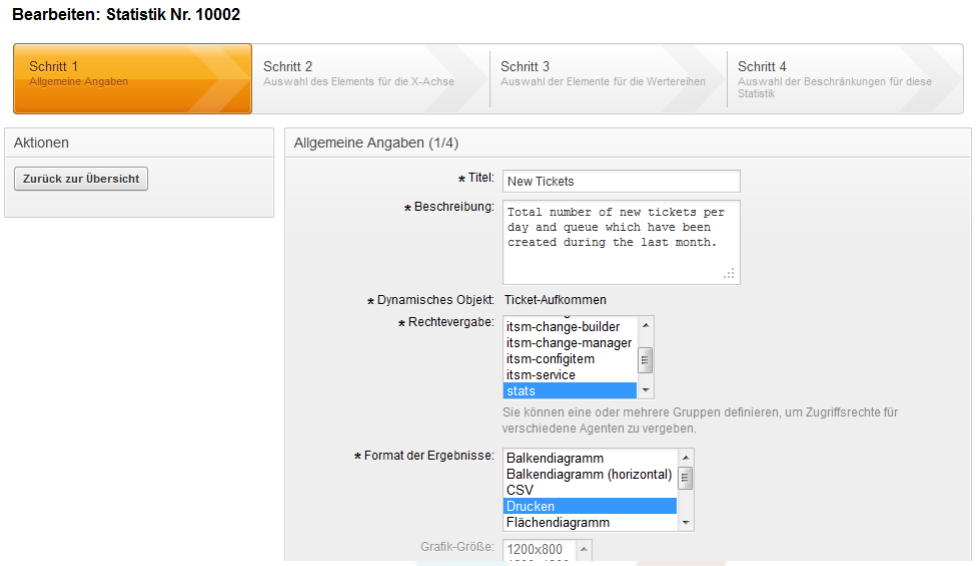
Beispiel einer Berichtsübersicht:



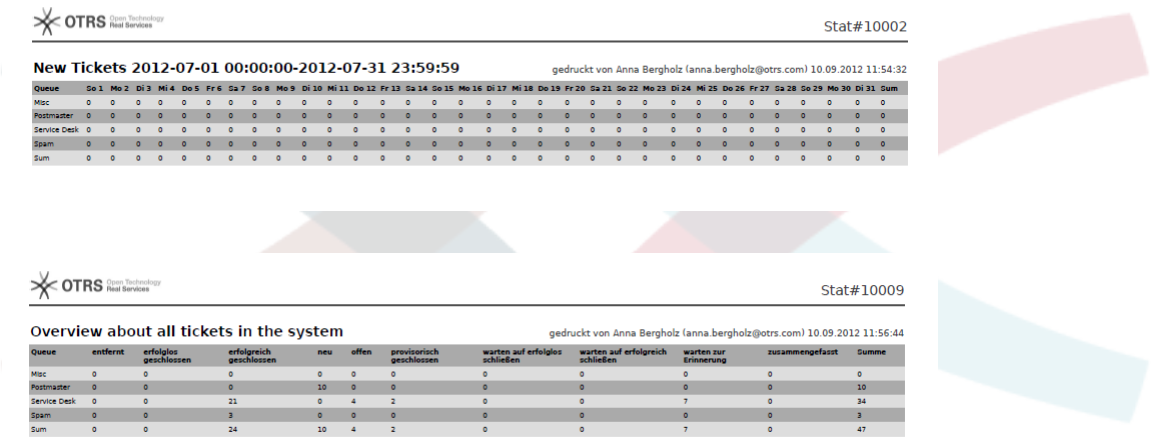
XML export of report settings:



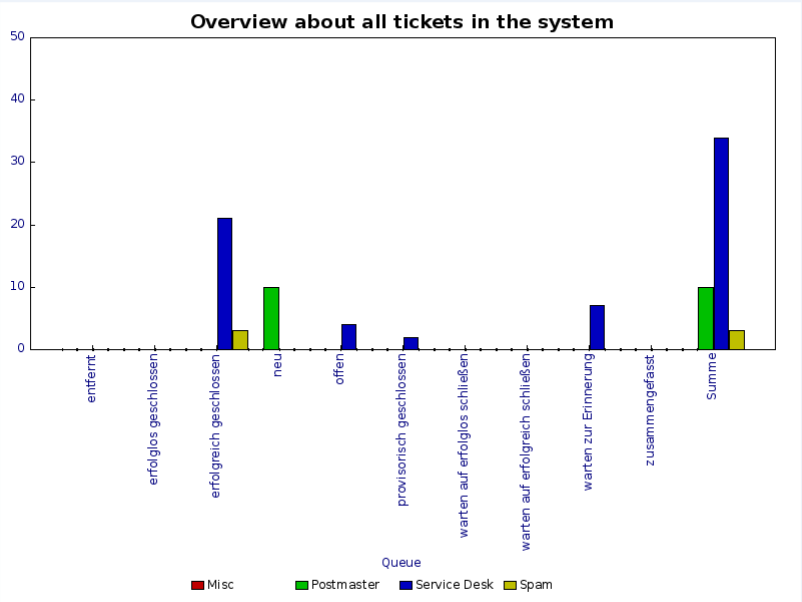
Dialog-based creation of a new report template:



A PDF generator is incorporated as well, which enables you to export the print view of your previously generated tickets, stats, and search results in PDF format:



Beispiel einer grafischen Ticketübersicht:


Overview about all tickets in the system
50
40
30
20
10
0
entfernt
erfolglos geschlossen
erfolgreich geschlossen
neu
offen
provisorisch geschlossen
warten auf erfolglos schließen
warten auf erfolgreich schließen
warten zur Erinnerung
zusammengefasst
Summe
Queue
Misc
Postmaster
Service Desk
Spam

Kapitel 11. The admin area of OTRS::ITSM

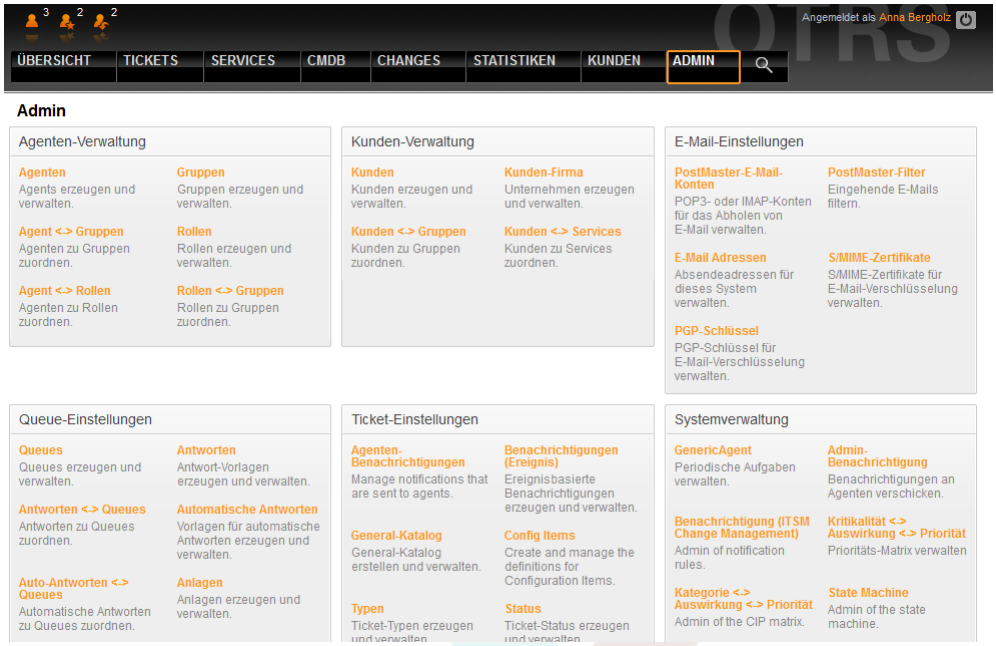
The admin area is the central interface for the administrator of the ticket system. All important settings of the system configuration can be checked and/or changed here, and the system can be customized to suit individual needs.

The admin area can be accessed via the "admin" link in the agent interface navigation bar. The link is only shown to users logged on to the system that have been granted administrator priviliges. After the completion of a default installation you can log on to the system as OTRS admin using the user name "root@localhost" and the password "root".

Warnung

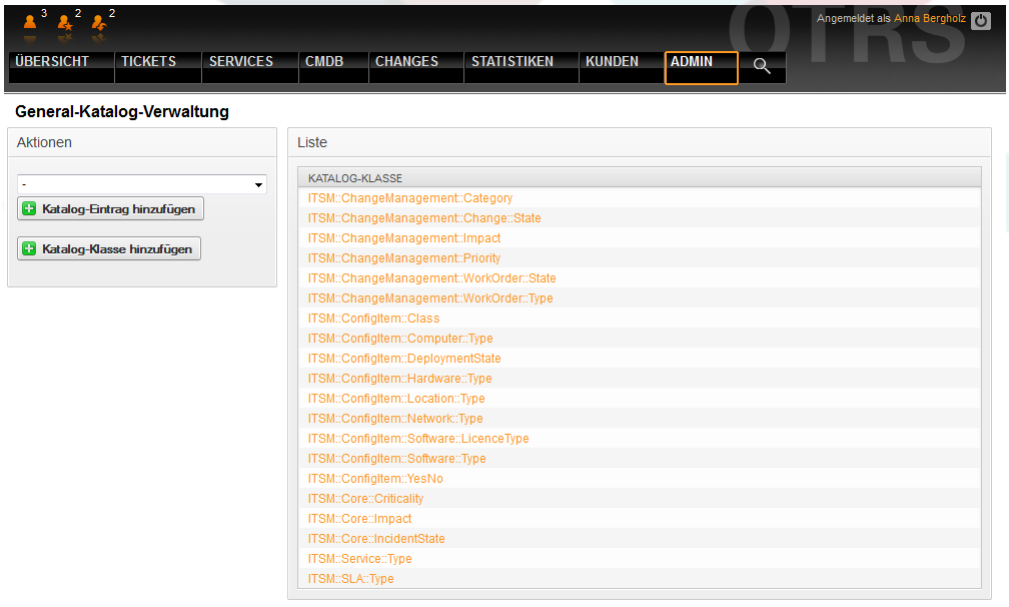
WARNING: Make sure to change the password of root@localhost in the user preferences as quickly as possible. Using the widely known default password is not recommended!

- von OTRS::ITSM 1.0 auf
  - [Allgemeiner Katalog]
  - [Criticality - Impact - Priority]
  - [ConfigItem]
- von OTRS::ITSM 1.1 auf
  - [Import/Export]
- von OTRS::ITSM 2.0 auf
  - [Notification (ITSM Change Management)]
  - [Category - Impact - Priority]
  - [State Machine]
- von OTRS 2.2 auf
  - [Typ]
  - [Status]
  - [Dienst]
  - [SLA]
- von OTRS 2.3 auf
  - [Priorität]

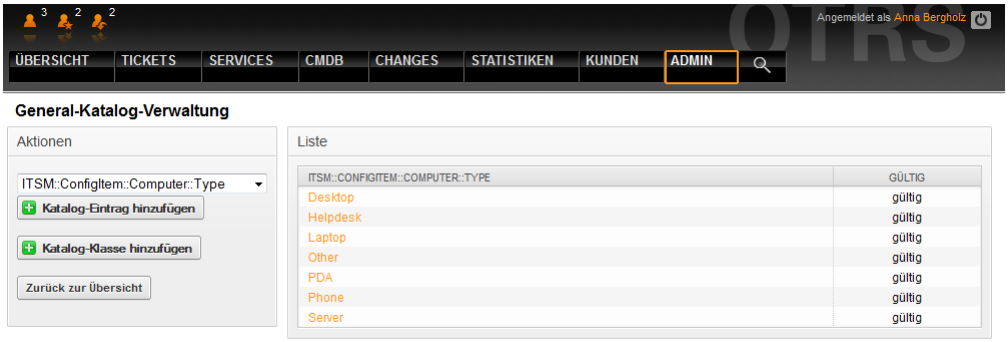


1. Der allgemeine Katalog

As the name indicates, the general catalog serves for basic ITSM relevant configurations in OTRS::ITSM.



For example the editing of reference chart entries for drop-down fields:



2. Configuring configuration item classes

By default OTRS::ITSM provides five CI classes to represent all relevant IT elements:

- [Computer]

  All CIs, which are classically referred to as computers, e.g. desktop PCs or laptops as well as all other intelligent, configurable and non-peripheral appliances such as switches, routers or other active network components.

- [Hardware]

  All hardware components not classified as computers, possibly ranging from a "blade center" chassis to printers and USB sticks, depending on the level of granularity of your CI structure.

- [Netzwerk]

  Logical networks (LAN, WLAN, WAN etc.), which span IP address spaces.

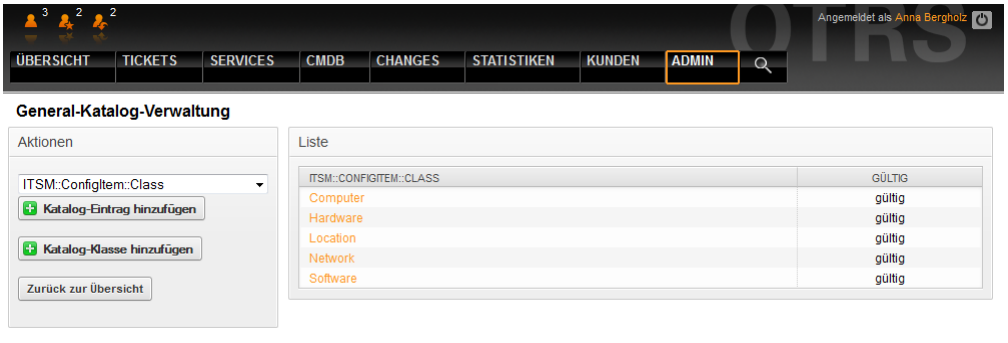
- [Software]

  All software products and licenses.

- [Standorte]

  All Locations, e.g. building, workplace, IT facility.

If the five classes do not suffice to describe your IT environment, further classes can be added via the "general catalog" link in the OTRS::ITSM admin area. After creating a new CI class in the general catalog, a definition must be entered in ConfigItem".



Warnung

The design of a CMDB data model and of the associated CIs is a task which should not be underestimated. Our experience shows that it is highly recommendable to validate conceptual thoughts in a dry run against the existing IT infrastructure, before changing the OTRS::ITSM standard data model and/or CI classes. It has proven to be of value to resort to external assistance, e.g. of ITIL practice experts for the CMDB design.

Please find below a part of the self-explaining default configuration for the "computer" CI class:

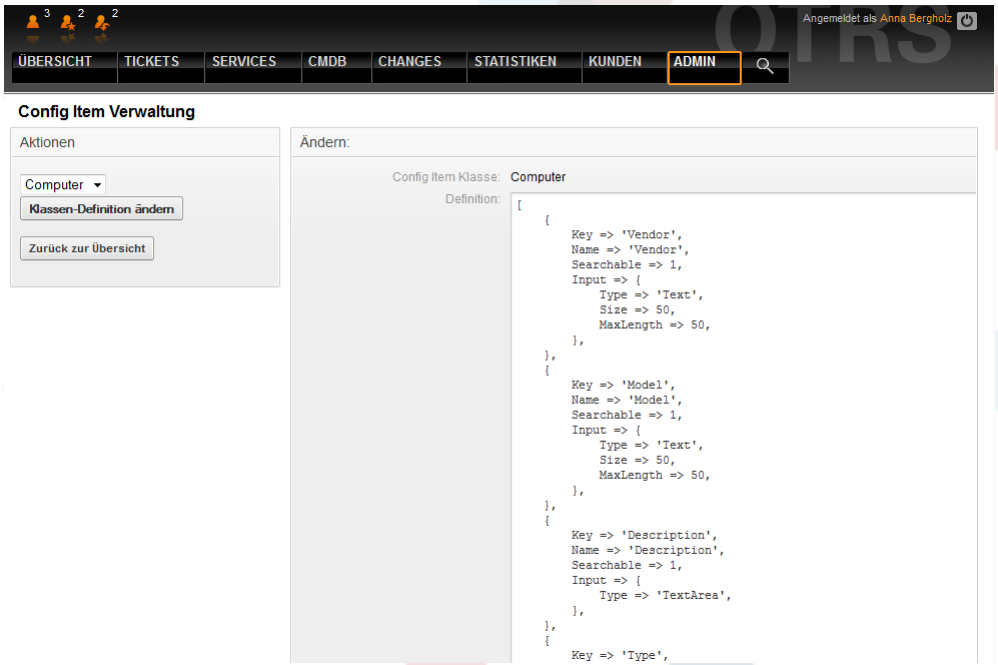
```
[
    {
        Key => 'Description',
        Name => 'Description',
        Searchable => 1,
        Input => {
            Type => 'TextArea',
        },
    },
    {
        Key => 'Type',
        Name => 'Type',
        Searchable => 1,
        Input => {
            Type => 'GeneralCatalog',
            Class => 'ITSM::ConfigItem::Computer::Type',
        },
    },
    {
        Key => 'Owner',
        Name => 'Owner',
        Searchable => 1,
        Input => {
            Type => 'Customer',
        },
    },
    {
        Key => 'AssetTag',
        Name => 'Asset Tag',
        Searchable => 1,
        Input => {
            Type => 'Text',
            Size => 50,
            MaxLength => 100,
            Required => 1,
        },
        CountMin => 0,
        CountMax => 1,
        CountDefault => 0,
    },

            :
            :
            :

    {
        Key => 'Model',
        Name => 'Model',
        Searchable => 1,
        Input => {
            Type => 'Text',
            Size => 50,
            MaxLength => 50,
        },
    },
    {
        Key => 'OperatingSystem',
```

```
        Name => 'Operating System',
        Input => {
            Type => 'Text',
            Size => 50,
            MaxLength => 100,
        },
    },
    {
        Key => 'CPU',
        Name => 'CPU',
        Input => {
            Type => 'Text',
            Size => 50,
            MaxLength => 100,
        },
        CountMin => 1,
        CountMax => 16,
        CountDefault => 1,
    },
];
```

Attribute changes and amendments can be done in the graphical configuration area by selecting "change definition":

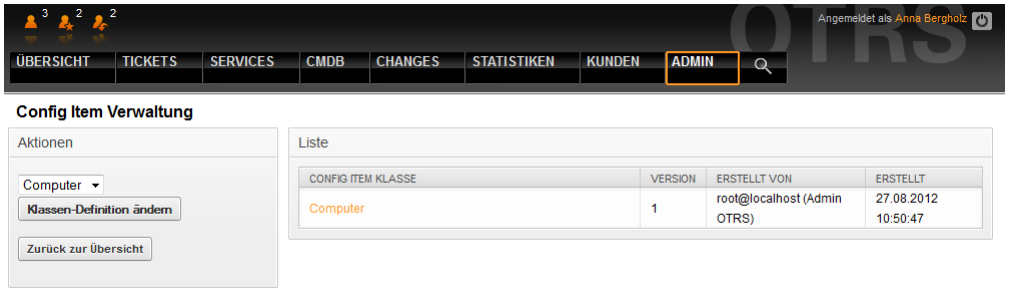


Warnung

In order to assure the consistency of the data managed in OTRS::ITSM, information created in the admin area of the system cannot be deleted as a general rule. If you want to deactivate such information, change the value in the respective listbox settings from "valid" to "invalid" or to "invalid-temporarily".

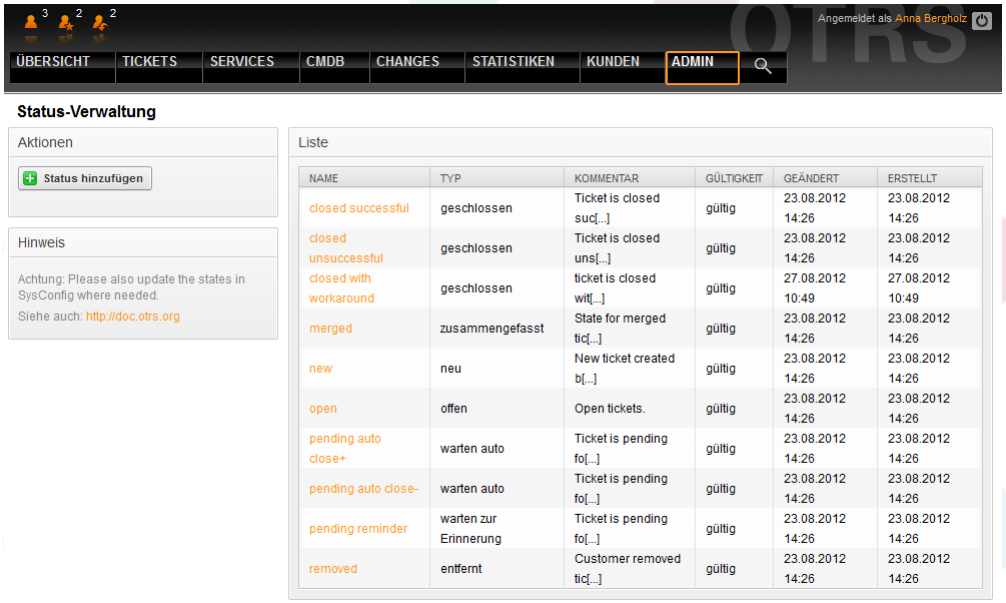
3. Version management of CI classes

Version management for all CI classes is integrated into the system. The latest versions are used for the processes represented in OTRS::ITSM.



4. Anpassung des Ticketstatus

In ITIL aligned incident management, incidents are either resolved successfully or closed with a workaround. To address the latter closure category, OTRS::ITSM by default includes the ticket state "closed with workaround".



With OTRS::ITSM you can change existing ticket states or add new ones. There are two important options: the name of the state "state-name" and the type of it "state-type". All states and types available by default are pictured above.

State names can be chosen freely. In the "state" settings within the admin interface new states can be added or changed for existing state types.

Please consider that changes made to the "new" state require changes to be made in the configuration file kernel/config.pm or in the graphical configuration front-end.

```
[...]
# PostmasterDefaultState
# (The default state of new tickets.) [default: new]
$Self->{PostmasterDefaultState} = 'new';

# CustomerDefaultState
# (default state of new customer tickets)
$Self->{CustomerDefaultState} = 'new';
[...]
```

The same applies to changes made to the "open" state: changes in the kernel/Config.pm or in the graphical configuration frontend are necessary.

```
[...]
# default phone new state
$Self->{'Ticket::Frontend::PhoneNextState'} = 'open';


# PostmasterFollowUpState
# (The state if a ticket got a follow up.) [default: open]

$Self->{PostmasterFollowUpState} = 'open';
[...]
```

Warnung

In order to assure the consistency of the data managed in OTRS::ITSM, information created in the admin area of the system cannot be deleted as a general rule. If you want to deactivate such information, change the value in the respective listbox settings from "valid" to "invalid" or "invalid-temporarily".

5. The criticality impact priority matrix

OTRS::ITSM provides five ticket priority levels:

- [Criticality]

  Significance ("criticality") of the service for the IT user(s)/customer(s)

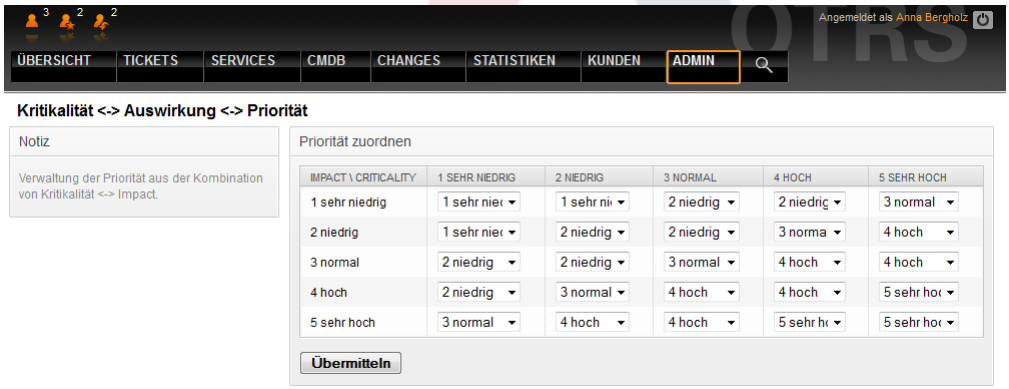
- [Impact]

  Impact of failures of the concerned service on the user(s)/customer(s)

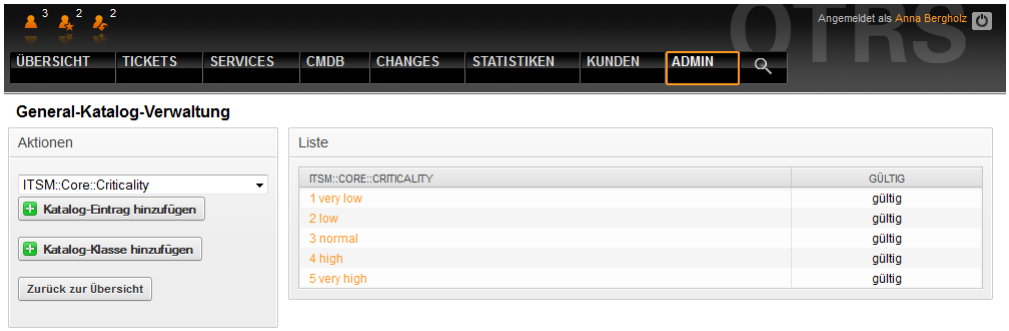
- [Priorität]

  Priority within OTRS::ITSM as resulting from criticality and impact

The OTRS::ITSM ticket priority is determined with the matrix shown below and the prioritized ticket is integrated in the queue views.

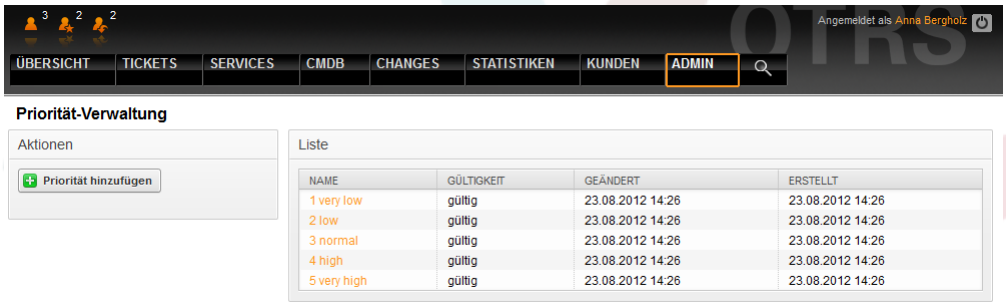


The level number, descriptions and validity can be accessed and changed in the admin interface via the "general catalog" link:



6. Anpassung von Ticketprioritäten

Tickets are arranged within OTRS::ITSM on the basis of ticket priorities, i.e. tickets with a higher priority are displayed further up in the queue views and lower priority ones in lower positions. Priorities can be adjusted, re-named and amended in the graphical admin frontend.



More detailed information can be found in the OTRS Admin Manual.

Warnung

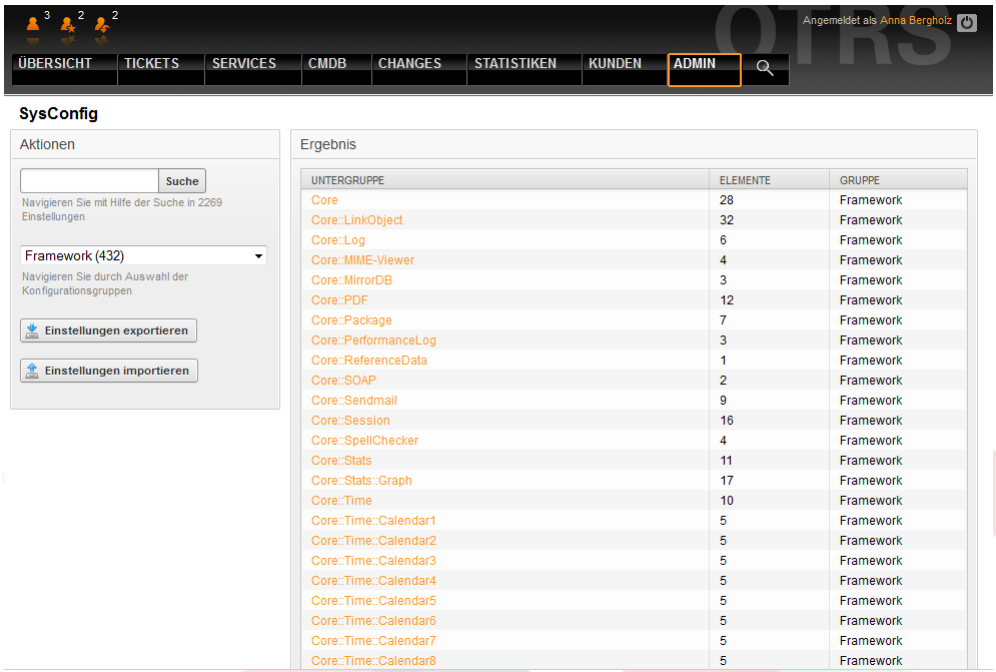
The "id" attribute decides the OTRS::ITSM internal sequence of priorities. 1 corresponds to the minimum and 5 (or higher) to the maximum. The number in the priority name is used to implement the correct sequence within the priorities.

Warnung

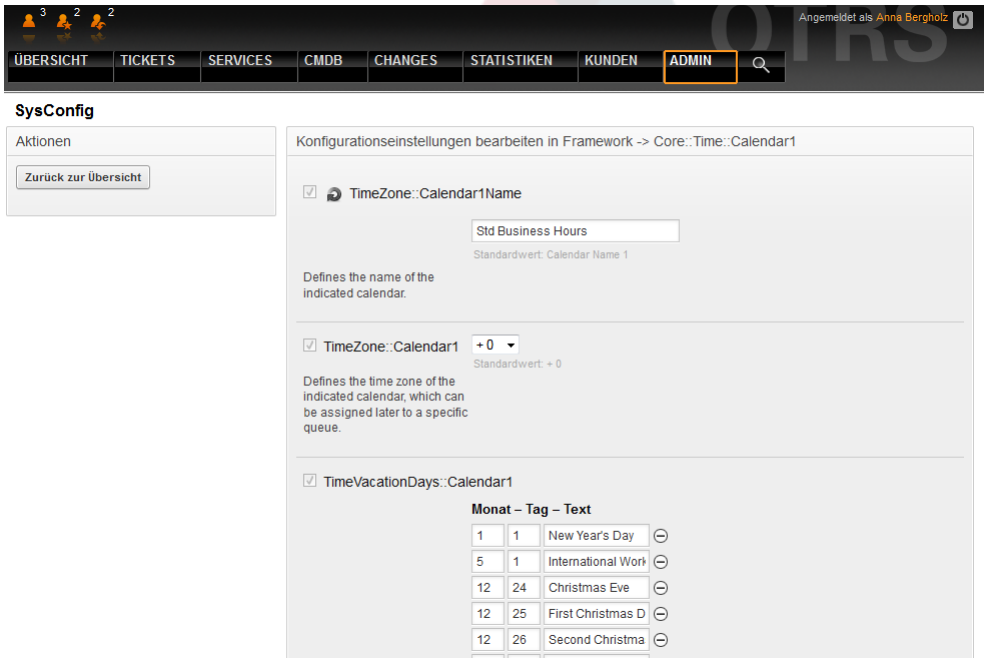
In order to assure the consistency of the data managed in OTRS::ITSM, information created in the admin area of the system cannot be deleted as a general rule. If you want to deactivate such information, change the value in the respective listbox settings from "valid" to "invalid" or "invalid-temporarily".

Kapitel 12. Zusätzliche OTRS-Anwendungen - Kalender

OTRS 3.3 initially supports up to 9 calendars, which can be configured graphically. Using the SysConfig framework found in the admin interface, this number can be increased to 99, by using the calendar 1 etc. links:



"TimeWorkingHours" can be used in OTRS::ITSM to define so-called "service level windows" time frames in which your organization guarantees certain service levels to your customers. If required, these can then be monitored and/or evaluated to ensure compliance with any possible Service Level Agreements.



Kapitel 13. OTRS::ITSM Interfaces

The following partly-generic interfaces can be used for data exchange between OTRS::ITSM and other (ITSM) software products:

- NAGIOS
- SOAP
- LDAP
- E-mail (POP3, IMAP, SMTP)
- CSV Import/Export

OTRS AG will gladly create additional interfaces per request or members of the community may develop them.

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