

## Documentation

## **OTRS::ITSM 2.0 - Basic**

Whitehaven Beach Edition

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## OTRS::ITSM 2.0 - Basic

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## Preface

The document at hand addresses OTRS::ITSM users and administrators and provides information on the basic use of OTRS::ITSM by IT service managers, IT service staff (agent) and end users (customer). Information regarding installation, configuration and administration is only provided if there are differences to the OTRS core product or for functions, which only exist in OTRS::ITSM.

In spite of the many many hours of work, even more cups of coffee and quite a few sausages and pretzels consumed in the course of writing the following sections, this manual does not claim to be complete. The chapters will be revised and/or amended periodically for continual improvement.

We welcome your feedback as a critical contribution to the best possible quality of the following chapters and of the product itself. Please tell us if you miss information, find it difficult to understand certain aspects the way they are presented, have suggestions or other comments. Any feedback submitted at http://otrs.org is highly appreciated.

We are very proud of the product at hand and want to thank the ITIL experts of Enterprise Consulting GmbH and our top-notch OTRS developers. Their joint efforts have significantly contributed to the successful development of OTRS::ITSM.

We want to thank you, the users and OTRS::ITSM community, in advance for any kind of aid and feedback and hope you will have fun using OTRS::ITSM.

André Mindermann, Managing Partner OTRS AG

Bad Homburg, May 2007

((enjoy))



# Chapter 1. OTRS::ITSM - The OTRS for IT service management

IT is expected to deliver consistently high service quality in an increasingly complex field. In this context, effective and efficient incident and problem management are indispensable. However, IT service management remains a task almost impossible if there is no consistent and up-to-date database with information about the state and configuration of the IT infrastructure.

The IT Infrastructure Library®, short ITIL®, is a series of books published by the United Kingdom's Office of Government Commerce (OGC), which generically combine best practice approaches to designing, providing, operating and managing IT services. ITIL does not center the technology but the services provided by the IT and comprises information on processes, roles, responsibilities, potential problem fields/resolutions and definitions of terms.

ITIL has established itself as de facto standard over the past years and its circulation in IT organizations contributed considerably to the development of a collective awareness and consistent terminology for IT service management. However, ITIL only describes "who should do what" and what should be considered along the way. In order to cover as wide a user group as possible, it does not or only rudimentarily address the issue of how to do things. Therefore, no implementable information is given for particular industries, companies or manufacturers.

In December 2005, the ITIL based ISO/IEC 20000 industry standard for IT service management was published. IT organizations can apply for ISO/IEC 20000 certification and prove their conformity.

The continuing boom caused demand for IT service management tools, which could represent the ITIL-based processes. So far, only proprietary solutions existed. Because of their considerable complexity, most of these tools are only affordable for large companies and effective in large IT departments.

The development of OTRS::ITSM was initiated as a logical consequence of the great success of the Open Ticket Request System OTRS in order to combine the globally accepted, public ITIL recommendations with the benefits of open-source software.

OTRS::ITSM 1.0 was the first real-world ITIL compliant IT service management solution on open-source basis, built on the solid fundament of over 55,000 known OTRS installations and the related active community (information dating from April 2007). OTRS::ITSM is under permanent development and new ITIL topics are added continously.

Core objective of the development of OTRS::ITSM is a strong praxis orientation. This aim can be accomplished by the close development collaboration with Enterprise Consulting GmbH from Bad Homburg, which is very experienced in the practical application of ITIL. Additionally to providing ITSM consulting services and solutions, Enterprise operates complete ITIL compliant IT organizations for renowned customers.

The service-desk and ticket system solution OTRS forms the basis for the operation of the ITIL compliant IT service management solution OTRS::ITSM, its incident management, problem management, service level management and configuration management modules and the integrated CMDB.

OTRS::ITSM and OTRS are freely available (no license fees apply) and are subject to GNU General Public License (GPL).

#### 1. Features

OTRS::ITSM 2.0 is based on the Open Ticket Request System OTRS 2.4. All functionalities known from OTRS continue to be available and the functionalities representing ITIL processes can be installed as packages.



#### 1.1. New OTRS::ITSM 2.0 features

OTRS::ITSM 2.0 offers:

• Change Management

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

#### 1.2. New OTRS::ITSM 1.3 features

OTRS::ITSM 1.3 is based on the Open Ticket Request System OTRS 2.4

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

#### 1.3. New OTRS::ITSM 1.2 features

OTRS::ITSM 1.2 is based on the Open Ticket Request System OTRS 2.3

OTRS::ITSM 1.2 offers:

Modularization

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 each other. To you as a user that means that you neither have to install the packages in a certain installation order nor that you have to install them all 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. That 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 the features from both former Link object mechanisms.

Improved speed

The improvement to faster access the Configuration Items (CI) database has been achieved by switching database access technology to SQL bind parameters.

Locations

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 an SLA to multiple Services.

SLA Overwiew

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

Refresh-Mechanism

Added a refresh mechanism to refresh the service overview and the config item overview screens automatically.



#### **1.4. New OTRS::ITSM 1.1 features**

OTRS::ITSM 1.1 offers:

• Authorization concept

Each object like Service/SLA, Location, CI, Linkobject now creates an own group, so the agents rights can be assigned more granulary.

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.

• Service/Cl view

A view on services and CIs including information on each objects current state allows to analyze an incident and calculate the incidents impact on affected services and customers. As an enhancement of the service view, now SLAs and linked CIs are displayed too. For each CI the current incident state is shown. Also, 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.

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

- Operational
- Incident

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:

- Operational (green)
- Warning (yellow)
- Incident (red)

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



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

• CMDB Import/Export (CSV and 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 Cls. 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 needs 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 were 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 have been created, e.g.:

Basic reports for tickets and configuration items (CIs):

- Total of all ever created tickets per ticket-type and priority (state, queue, service).
- Monthly overview of all ever created tickets 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).

Much more reports have been added providing specific data regarding first time solution rate and average resolution time:

- First time solution rate of all ever created tickets 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 ever created tickets 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.

#### 1.5. OTRS::ITSM 1.0 features

OTRS::ITSM 1.0 offers:

- ITIL compliant representation of "service support" processes
  - incident management
  - problem management
  - configuration management
- 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 fundament 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 Cls



- 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)

Incident management:

- 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. email 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

Problem management:

• 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:

- persons, organizations
- time stamp
- priority, impact, severity
- associations to IT service catalog and projects
- activities, e.g. note about a call with time accounting
- objects, e.g. Cls, 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
- ticket history (all changes)
- accounting information (time accounting).

#### 2. Hardware and software requirements

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 evolved around OTRS in 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, too, to constantly improve the product's quality. You can join the community at our homepage http:// otrs.org (http://otrs.org/).

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| OTRS - Open Ticket R  | equest System  | 2007-5-23  | -   |
|   | otrs.org   | bugs.otrs.org   lists.otrs.org   faq.otrs.org   doc.otrs.org   |     |
| Navigation:   | What is the OTRS?  |  |     |
| About<br>Home<br>News Archive<br>Screenhots<br>Demo System<br>Feature List<br>Logos<br>Prinise<br>Source<br>Download<br>CVS Access<br>Support<br>Documentation<br>Mailing Lists | OTRS is an Open source Ticket Bequest System (a<br>tocket system) with many features to manage custo<br>e-mails. The system is built to allow your support,<br>internal IT, helpdesk, etc. department to react quic<br>you receive many e-mails and want to answer then<br>You're going to love the OTRS!<br>It is distributed under the GNU General Public Lice<br>Linux, Solaris, AIX, FreeBSD, OpenBSD, Mac OS<br>The ((otrs)) company provides commercial service<br>training, pre-build-systems, etc.) for the OTRS (Eng<br>Try our <u>demo system</u> to get an impression of this k | mer telephone calls and<br>sales, pre-sales, billing,<br>kty to inbound inquiries. Do<br>m with a team of agents?<br>ense (GPL) and tested on<br>10x and Windows.<br>es (e.g. support, consulting,<br>glish and German). |     |
| Bugzilla<br>Commercial Support  |  |  |     |
| Contact<br>Speaker's Bureau   | People about OTRS  |  |     |
| OTRS 2.2 will be  | OTRS is one of the most advanced Open Source pr<br>email management software. It follows a clear desi<br>extensible to adapt it to individual needs. The alrea<br>ticket management tasks which should be suitable<br>whole system is really remarkable, it simply does not<br>thousand emails per day it always behaves reliably<br>email traffic you should really give OTRS a try.  | gn, yet completely modular and easily<br>dy availaible features provide a good set of<br>for usual purpose. The scalability of the   |     |
| published in 40 days.   |  | Milisav Radmanic, Director Internal IT, SuSE Linux AG  |     |
|   |  |  |     |
| Community   | News (top 15)  |  |     |
| OTRS in Japan!<br>http://otrs.kidanet.com/  | 2007-05-07 OTRS 2.2.0 beta3 (Ipanema) is rel   | eased!   |     |
| OTRS in the Netherlands!<br><u>http://otrs.nl/</u>  | The OTRS Team is pleased to an<br>Changes: Fixed bug #1788 - On W  | nouncet the release of OTRS 2.2.0 beta3.<br>Vindows, the caching XML data did not work; Fixed bug<br>ng, OTRS did not set UTF-8 for the MYSOL database   |     |

#### 4. Mailing lists

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

|   | <u>C</u> hronik <u>L</u> esezeichen E <u>x</u> tras <u>H</u> ilfe  |   |
|---|--|---|
| 🔄 🔶 - 🎯 🛞 🏠   | Http://lists.otrs.org/   | G• Google   |
|   | lists.otrs.org Mailing L   | ists  |
| Welcome!  |  |   |
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## Chapter 2. Commercial services for OTRS::ITSM

OTRS AG is 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. We believe in deploying the most modern methods and our staff are highly skilled experts. 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 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.

Our services include:

- 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. Software development

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. Application support**

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 really 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 admitted 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.



## Chapter 3. Installing OTRS::ITSM

OTRS framework 2.4 must be installed prior to the installation of OTRS::ITSM. All necessary information, options and installation procedures are depicted in the OTRS Admin Manual.

## Warning

Installation of the OTRS::ITSM packages requires empty free-text fields 13-16 and free-time fields 3-6 in the complete system!

#### 1. Installation

As soon as OTRS 2.4 or later is installed, sign on as administrator. Using the package manager in the admin area or via ftp://ftp.otrs.org/pub/otrs/itsm/packages20/ and install the ITSM packages in the following order:

- GeneralCatalog
- ITSMCore

If you have internet access from OTRS, use the online repository [--OTRS::ITSM 2.0 Master--] to install the packages below. Otherwise download the packages and use the package manager to install the packages:

- ITSMIncidentProblemManagement
- ITSMConfigurationManagement
- ITSMChangeManagement
- ITSMServiceLevelManagement
- ImportExport

You can find further information about the installation process here: INSTALL-20.ITSM



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| Online Repository:   | Local Repository   | /:               |  |                          |  |  |             |                  |
| Source: [OTRS::ITSM 1.2 Master] http://ftp.o[]   |  |                  |  |                          | Description                              |  |             | Action           |
| Update   | GeneralCatalog   |                  | 1.2.1  | <u>otrs</u><br><u>AG</u> | The general catalog package              |  | installed   | Uninstall        |
|  | ImportExport   |                  | 1.2.1  | OTRS<br>AG               | The ImportExport package.                |  | installed   | <u>Uninstall</u> |
|  | ITSMConfiguratio   | onManagement     | 1.2.1  | <u>otrs</u><br><u>AG</u> | The OTRS::ITSM Configuration<br>package. | n Management   | installed   | <u>Uninstall</u> |
|  | ITSMCore   |                  | 1.2.1  | OTRS<br>AG               | The OTRS::ITSM core packag               | e.   | installed   | <u>Uninstall</u> |
|  | ITSMIncidentPro  | hle mManage ment | 121  | OTRS                     | The OTBS: ITSM Incident and              | Problem  | installed   | Uninstall        |

#### 2. Upgrade

If an older version than OTRS::ITSM 1.1 is installed, update the system to the latest version 1.1 first.

If OTRS::ITSM 1.1 is installed already, 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 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 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 installed already, 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 2.0 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. Do not uninstall your current packages, or your data will get lost!



## Chapter 4. First steps in OTRS::ITSM

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 continually be used without any modifications.

The manual at hand will therefore only discuss differences to OTRS and new aspects of OTRS::ITSM and will focus particularly on:

- IT services and SLAs
- the CMDB
- new ticket fields and functions
- ITIL compliant terminology

Detailed information on the settings and proceedings identical in OTRS and OTRS::ITSM are provided at http://doc.otrs.org/2.4/en/html/ in the OTRS Admin Manual, which is constantly being revised.

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| OTF       | IS::ITSM 1.1 (de) be trademarks of the respective manufacturer.  |          |
|           | IS::ITSM 1.0 (en)  |          |
|           | S::ITSM 1.0 (de) Table of Contents   |          |
|           | SM-Manual Preface  |          |
|           | BS::ITSM 1.2 (en)         1. Basics about trouble ticket systems   |          |
|           | 1.1. What is a trouble ticket system, when do you need it?   |          |
|           | IS::ITSM 1.1 (en) 1.2. What is a trouble ticket?   |          |
|           | IS::ITSM 1.1 (de) 2. OTRS - Open Ticket Request System   |          |
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|           |  |          |
| Manua     | Developer-         2.2.1. New features of OTRS 2.3           1         2.2.2. New features of OTRS 2.2   |          |
|           | 2.2.2. New leatures of OTRS 2.1  |          |



# Chapter 5. ITIL compliant service support with OTRS::ITSM

Just as 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.

Without the thoughtful adaptation of generic ITIL processes to the individual business situation, OTRS::ITSM will confer no marked improvement core objective of IT service management to IT organization or customer service.

Therefore please excuse our raised finger at this point: The use of an ITIL compliant tool such as OTRS::ITSM only makes sense if processes, people and products (IT services) really are ITIL compliant.

Successful ITIL implementation projects typically take up to a year and longer. A neatly implemented ITIL compliant ITSM tool can help to save time and money though, as the process support of the tool supports and accelerates the process of rethinking.

OTRS::ITSM 2.0 supports the incident and problem management processes, service level management, and configuration management database and change management which usually are designed in the first phase of ITIL implementation. A closer description of use and adaptation of the system can be found in the following sections. The package names correspond to their respective ITIL topics, each package can be installed independently.

Implementation of OTRS::ITSM is based on ITIL v3.



## Chapter 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.

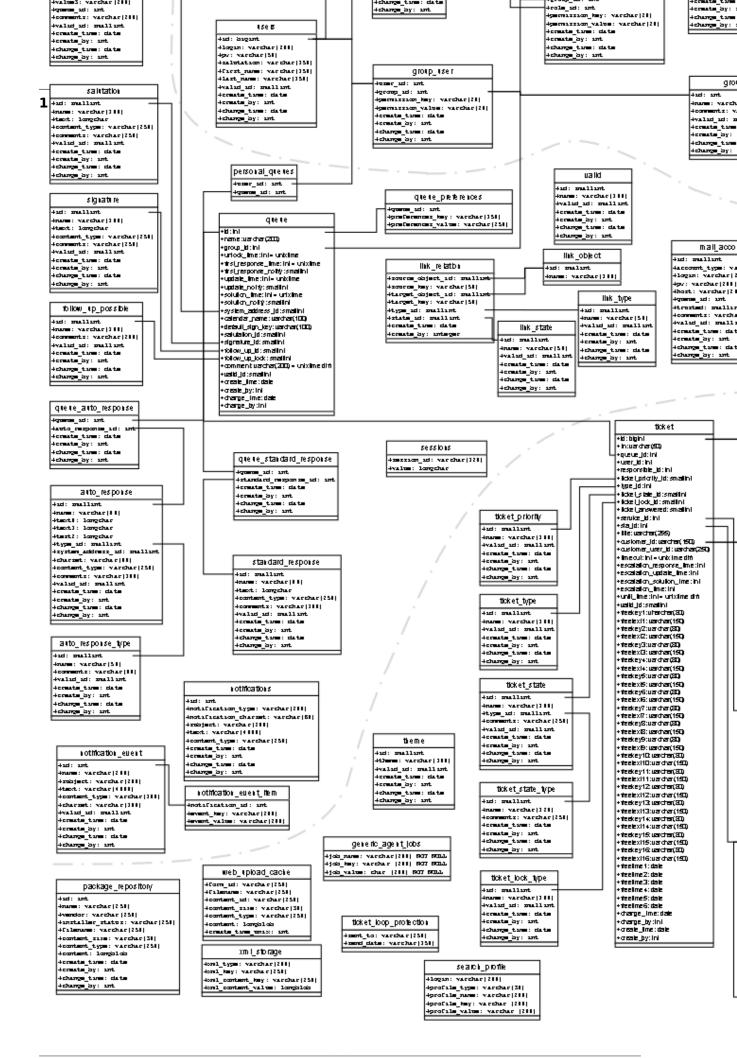
According to ITIL, a CMDB must feature the following functionalities:

- 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. The OTRS::ITSM database model

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





For better readability, the diagram can be found at http://ftp.otrs.org/pub/otrs/misc/ otrs-2.4-database.png.









For better readability, the diagram can be found at http://cvs.otrs.org/viewvc.cgi/GeneralCatalog/doc/general-catalog-database.png?revision=2.0.

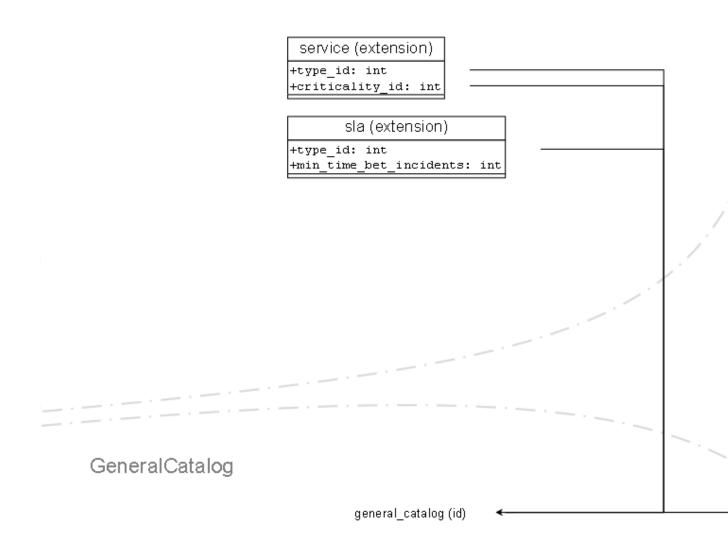


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## OTRS 2.4 Framework

ticket\_priority (id)

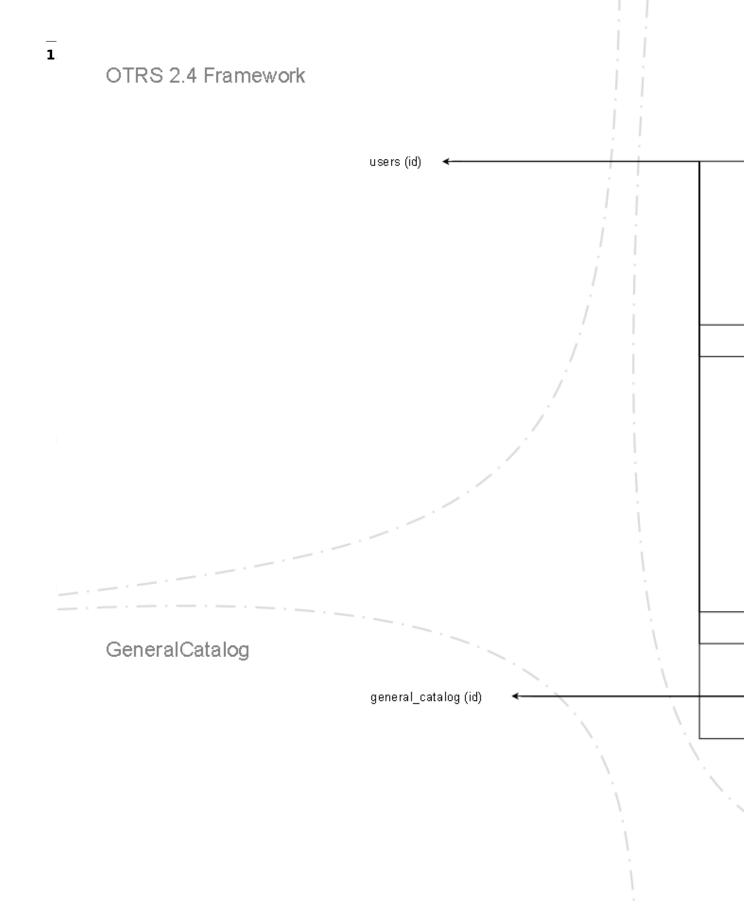
users (id)





For better readability, the diagram can be found at http://cvs.otrs.org/viewvc.cgi/ITSM-Core/doc/itsm-core-database.png?revision=2.0.







For better readability, the diagram can be found at http://cvs.otrs.org/viewvc.cgi/ITSMConfigurationManagement/doc/itsm-configuration-management-database.png?revision=2.0.



1

OTRS 2.4 Framework

#### change\_item

+id: bigint +change\_number: varchar(100) +title: varchar(250) +description: varchar(3800) +description\_plain: varchar(3800) +justification: varchar(3800) +justification\_plain: varchar(3800) +change\_state\_id: int +change\_manger\_id: int +change builder id: int +category id: int +impact\_id: int +priority id: int +requested time: date +create time: date +create\_by: int +change\_time: date +change\_by: int

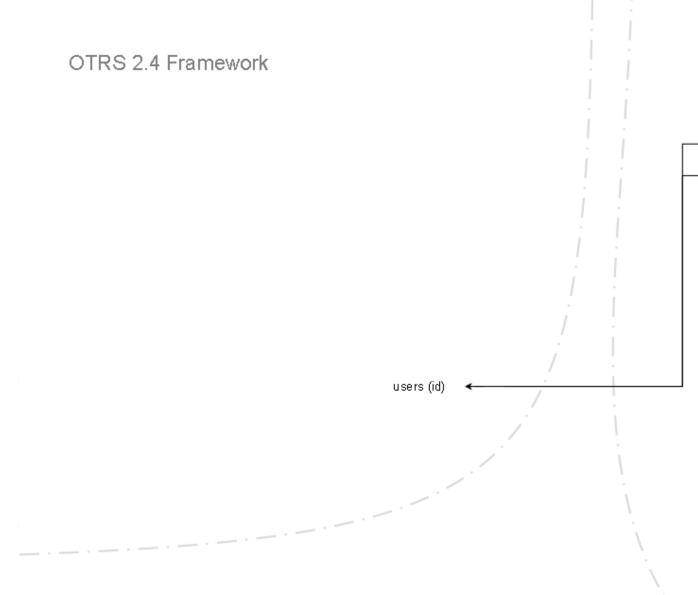
change\_cab

+id: bigint +change\_id: bighnt +user\_id: int +customer\_user\_id: varchar(250)



For better readability, the diagram can be found at http://cvs.otrs.org/viewvc.cgi/ITSM-ChangeManagement/doc/itsm-change-management-database.png?revision=2.0.







For better readability, the diagram can be found at http://cvs.otrs.org/viewvc.cgi/Import-Export/doc/import-export-database.png?revision=2.0.

#### 2. Services, at the core of everything

Services such as "standard IT workstation", "e-mail" or "web access are IT products and should at all costs be compiled in a so called IT service catalog prior to the adoption of OTRS::ITSM. Such service catalogs are usually customer or company specific, can be structured hierarchically and should be formulated in a user friendly, i.e. easily understood, language, as they can be accessed by IT personnel (agents) and IT users (customers).

### Warning

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 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

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| Owner:  | Application Service<br>Application Service::Application Email Service                           |        |              |          |
| Options:  | Application Service::Application File Service<br>Application Service::Application Print Service |        |              |          |
| Text:   | Archive & Restore<br>User Administration  |        |              |          |
|   | User Administration::Application Access   |        |              |          |
|   | User Administration::Authentication<br>User Administration::Door Access                         |        |              |          |
|   | User Administration::Email Access<br>User Administration::User Entry                            |        |              |          |
|   | User Administration::User Exit<br>User Equipment Service  |        |              |          |
|   | User Equipment Service::Fixed and Mobile Phones   |        |              |          |
|   | Webhosting  |        |              |          |
|   |   |        |              |          |
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| [OTRS::ITSM 1.2.1]   |                               |   |  | Admin OTRS (root@localhost) 09:03:25 - 08/27/2008  |
| Logout Service Config Item Stats   | Preferences                   |   |  | New message (0) Locked Tickets (0)   |
| ☆: Don't work with UserID 1 (System a  | account)! Crea                | ate new users!  |  |  |
| [Admin-Area]   |                               |   |  |  |
| Users & Groups & Roles   |                               | Queue & Responses   | System   | Misc   |
| [Usens]<br>[Groups]<br>[Usets <> Groups]<br>[Customer Usens]<br>[Customer Company]<br>[Customer Company]<br>[Customer Company]<br>[Customer Usens <> Groups]<br>[Boks]<br>[Boks <> Usens]<br>[Boks <> Usens]<br>[Boks <> Groups] | Auto Re<br>Auto Re<br>Attachm | zes]<br>geonnes]<br>geonnes]<br>ents]<br>ents -> Responses] | [Salutation]<br>[Sanature]<br>[Email Addimeses]<br>[Motification]<br>[Gnicality -co-Immact -co-Priority]<br>[Contin thm of the optimization of the optimization<br>[Type]<br>[Status]<br>[Priority]<br>[Service]<br>[SLA]<br>[S/MM/E]<br>[PGP] | [PostMaster Mail Account]<br>[PostMaster Filer]<br>[GenerizAgent]<br>[Admin Notification]<br>[Sestion Munagement]<br>[Performance Log]<br>[Svetem Log]<br>[Svetem Log]<br>[Sub_Box]<br>[ImportEsport]<br>[Sustem Log]<br>[Sustem Log]<br>[Sustem Log]<br>[Sustem Log]<br>[Package Manager] |
| Add Service:   |                               | List:   |  |  |
| Add a new Service.   |                               | Service   |  | valid/invalid  |
|  | Add                           | External Internet Services                                  |  | valid  |
|  |                               | Download Service  |  | valid<br>valid   |
|  |                               | Mail Service<br>Web Service                                 |  | valid  |
|  |                               | Network Services  |  | valid  |
|  |                               | Network - 1 st floor  |  | valid  |
|  |                               | Network - 2nd floor   |  | valid  |
|  |                               | Subnet - 2nd floor - section 1                              |  | valid  |
|  |                               | Subnet - 2nd floor - section 2                              |  | valid  |
|  |                               |   |  |  |
|  |                               |   |  |  |
|  |                               |   |  | Powered by OTRS 2.3.1  |

#### 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.



| <u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools   | Help                               |   |  |                     |
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| 🔶 👻 🌊 🛞 📥 💽 http://local  | nost/otrs/index.pl?Action=AdminSLA |   |  |                     |
| [OTRS:ITSM 1.2.1]         Image: State Structure         Logout         Ticket Service Config Item State Prefere         Image: Don't work with UserID 1 (System account         [Admin-Area ]         Users & Groups & Roles         [Users - Groups]         [Gatomer Users]         [Customer Users]         [Additionar Company]         [Customer Users]         [Customer Users]         [Additionar Company] |                                    | System [Salutation] [Sanature] [Sanature] [Imma Addweeses] [Notification] [Genem ICatabog] [Chitkality <> Impact <> Priority] [Confin Hem] [Type 1] [Salutas] [Priority] [Service] [SLA]] | DTRS (rool@localnost) 09:04<br>Wew message (0) ]<br>New message (0) ]<br>Misc<br>[PostMaster /Mail Account<br>[PostMaster /Mail Account<br>[Commission Management]<br>[Series Management]<br>[Series Management]<br>[Sol. Box]<br>[ImportEsport]<br>[SydConfig]<br>[Package Manager] | 1:55 - 08/27/2008   |
| [ SLA Management ]  |                                    | [ <u>\$/MIME]</u><br>[ <u>PGP</u> ]   |  |                     |
| Add SLA:  | List:                              |   |  |                     |
| Add a new SLA.  | SLA                                | Service   | valid/invalid Changed  | Created             |
| А   | dd Basic                           | External Internet Services  | valid 08/07/2008<br>09:42  | 08/07/2008<br>09:41 |
|   |                                    | External Internet<br>Services::Download Service   |  |                     |
|   |                                    | External Internet<br>Services::Mail Service   |  |                     |
|   |                                    | External Internet<br>Services::Web Service  |  |                     |
|   | Gold                               | External Internet Services  | valid 08/07/2008<br>09:43  | 08/07/2008<br>09:43 |
|   |                                    | External Internet<br>Services::Download Service   |  |                     |
|   |                                    | External Internet<br>Services::Mail Service   |  |                     |
|   |                                    |   |  |                     |

The following parameters can be recorded with every SLA:

| Eile Edit View History Bookmarks Tools Help   |  |   |  |  |  |
|---|--|---|--|--|--|
| 🔶 🔶 👻 🔀 🌰 📄 http://localhost/c  | otrs/index.pl?Action=AdminSLA&Subaction=S  | SLAEdit&SLAID=1   |  |  |  |
| [OTRS::ITSM 1.2.1]  |  | Admin OTF   | 1S (root@localhost) 09:08:05 - 08/27/2008  |  |  |
| Logout Ticket Service Config Item Stats Preferences   |  |   | New message (0) Locked Tickets (0)   |  |  |
| A : Don't work with UserID 1 (System account)! Created and a count of the count of | ate new users!   |   |  |  |  |
| Users & Groups & Roles  | Queue & Responses  | System  | Misc   |  |  |
| [Customer Usens] [Auto Re<br>[Customer Usens <> Groups] [Auto Re<br>[Customer Usens <> Groups] [Attachm<br>[Customer Usens <> Services] [Attachm<br>[Boks] [Attachm<br>[Boks] <> Usens]<br>[Boks] <> Groups]  | ises     [Signs       ges<<>Queue     [Email       geponses     [Notific       seponses     [Notific       seponses     [Gene       rents     [Critics | ture ]<br>Addresses ]<br>ation ]<br>ml Catabo ]<br>illerm ]<br>]<br>a Item ]<br>]<br>s]<br>x]<br>g]<br>x]<br>g]   | [PostMaster Mail Account]]<br>[PostMaster Filter]<br>[GenericAgen1]<br>[Admin Notification]<br>[Session Management]<br>[Performance Log]<br>[Svelem Log]<br>[Sub Box]<br>[Imcon/Export]<br>[SveContg]<br>[Package Manager] |  |  |
| [SLA Management]  |  |   |  |  |  |
| Add SLA:<br>Add a new SLA.  | Edit:  |   |  |  |  |
| Add a new sta.  | SLA:<br>Type:  | Basic Availability  |  |  |  |
|   | Service:   | Availability<br>External Internet Services<br>Download Service<br>Mail Service<br>Web Service<br>Network Services |  |  |  |
|   | Calendar:  | Calendar 2 - Calendar Name 2  🜲   |  |  |  |
|   | Escalation - First Response Time:<br>(0 = no escalation - 24 hours = 1440 minutes -<br>Only business hours are counted.)                               | 60 minutes ( Notify by 60%  | •)   |  |  |
|   | Escalation - Update Time<br>(0 = no escalation - 24 hours = 1440 minutes -<br>Only business hours are counted.)  | 80 minutes (Notify by 60%   | •)   |  |  |
|   | Escalation - Solution Time<br>(0 = no escalation - 24 hours = 1440 minutes -   | 400 minutes ( Notify by 80%   | <b>◆</b> )   |  |  |



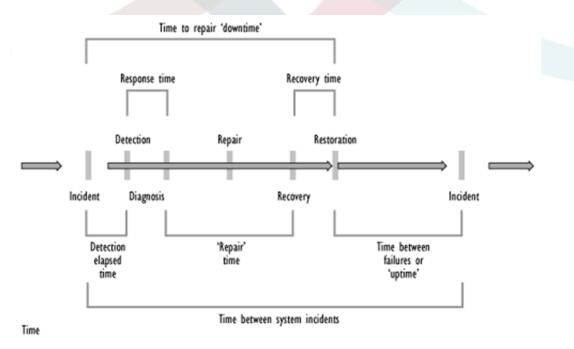
OTRS::ITSM offers up to 99 different calendars by default to describe the various time zones for work or service times. The SLAs can be allocated to them ("service level window"). Various time spans can be entered (in minutes) which OTRS::ITSM uses to control notification and escalation:

- [ Response Time ]
  - = reaction time with incidents
  - = start of service request procession ("service request lead time")
- [ Update Time ]
  - = notification time
- [ Solution Time ]
  - = 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.

### Warning

If no values for the above-named times are entered in the SLAs, escalation is effected 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":



Source: 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.



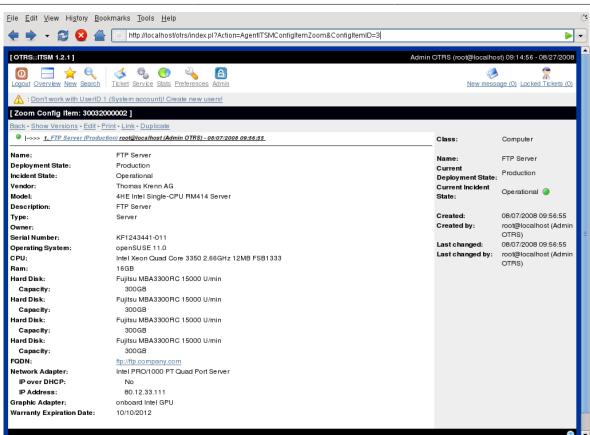
# 4. Configuration items

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

| <u>F</u> ile <u>E</u> dit <u>V</u> iew I | Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools | <u>H</u> elp                                   |                         |                                   |                    |
|--|--|--|-------------------------|-----------------------------------|--------------------|
| 🌩 👻 😂                                    | 🛿 🔛 📥 💿 http://loca                              | alhost/otrs/index.pl?Action=AgentITSN          | //ConfigItem&ClassID=32 |                                   | •                  |
| [OTRS::ITSM 1.2.                         | 🚖 🔍   🎸 🎭  | o 🔌 🔒  |                         | Admin OTRS (root@localhost) 09:11 | 2                  |
| Logout Overview N                        |  | Stats Preferences Admin                        |                         | <u>New message (O)</u> L          | .ocked Tickets (0) |
| Overview: Conf                           | with UserID 1 (System accounting Item 1          | nt)! Create new users!                         |                         |                                   |                    |
|  | n: 2 - Page: <u>1</u> - Config Items a           | available: 2                                   |                         |                                   |                    |
| Class: <u>Computer (</u> )               | 2) - Hardware (0) - Location                     | (1) - <u>Network (0)</u> - <u>Software (0)</u> |                         |                                   |                    |
|  |  | [0   | Class: Computer ]       |                                   |                    |
|  | Number   | Name   | Deployment State        | Last Change                       |                    |
|  | 30032000002                                      | FTP Server                                     | Production              | 08/07/2008 09:56:55               |                    |
|  | 30032000001                                      | Mac Server (internal)                          | Production              | 08/07/2008 09:51:46               |                    |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   | •                  |
|  |  |  |                         | Powe                              | ered by OTRS 2.3.1 |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |
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|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |
|  |  |  |                         |                                   |                    |

Example of an individual CI view:





The graphic exemplarily shows 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:



| Eile Edit ⊻iew History Bo  | ookmarks <u>T</u> ools | Help<br>host/otrs/index.pl?Action=AgentLinkObject&Mod | e=Normal&SourceObject= | ITSMConfigItem&Source | eKey=3&TargetIdentifier=ITSMC 🕨 💌    |
|----------------------------|------------------------|---|------------------------|-----------------------|--------------------------------------|
| [OTRS::ITSM 1.2.1]         | Ticket Service S       | Sats Preferences Admin                                |                        | Admin OTRS (r         | oot@localhost) 09:17:00 - 08/27/2008 |
| A : Don't work with UserID |                        |   |                        |                       |                                      |
| [ Link Object: Configitem# | # 30032000002 ]        |   |                        |                       |                                      |
| Back                       |                        |   |                        |                       |                                      |
| Object                     |                        |   |                        |                       |                                      |
| Link Objec                 | t Configite m# 3003    | 2000002 with Computer   🗢                             |                        |                       |                                      |
|                            |                        |   |                        |                       | Select                               |
| Search                     |                        |   |                        |                       |                                      |
| Confighter                 | n#:                    |   |                        |                       |                                      |
| Name:                      |                        |   |                        |                       |                                      |
| Deployme                   | ent State:             | Expired<br>Inactive<br>Maintenance                    |                        |                       |                                      |
| Incident S                 | itate:                 | Incident<br>Operational<br>Warning                    |                        |                       |                                      |
|                            |                        |   |                        |                       | Search                               |
| Search Re                  | esult: Configitem (    | Computer)   |                        |                       |                                      |
|                            | Confightem#            | Name  | Deployment State       | Created               | Linked as                            |
|                            | 30032000001            | Mac Server (internal)                                 | Production             | 08/07/2008 09:51:46   |                                      |
|                            |                        |   |                        | Alternative to        | Link                                 |
|                            |                        |   |                        |                       |                                      |
|                            |                        |   |                        |                       | Powered by OTRS 2.3.1                |
|                            |                        |   |                        |                       |                                      |
|                            |                        |   |                        |                       |                                      |

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. Documents and knowledge database

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.

# Warning

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 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. Ticket types and attributes

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 on 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.

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|---|--------------------|--------------------------|---|------------------|--|
| 🌩 👻 🎯 🖀 💿 http://   | /localhost/otrs/in | idex.pl?Action=AdminType | •   |                  |  |
| [OTRS::ITSM 1.2.1]  |                    |                          |   |                  | Admin OTRS (root@localhost) 09:23:16 - 08/27/2008  |
|   | 2                  |                          |   |                  |  |
| Logout Ticket Service Config Item Stats P   | references         |                          |   |                  | New message (0) Locked Tickets (0)   |
| 1 : Don't work with UserID 1 (System acc  | count)! Create ne  | ew users!                |   |                  |  |
| [Admin-Area]  |                    |                          |   |                  |  |
| Users & Groups & Roles  |                    | Queue & Responses        |   | System           | Misc   |
| [Uess]<br>[Groups]<br>[UestomerUsem]<br>[CustomerUsem]<br>[CustomerUsem <> Groups]<br>[CustomerUsem <> Groups]<br>[CustomerUsem <> Services]<br>[Boles <> Uesm]<br>[Boles <> Uesm]<br>[Boles <> Groups] | Attachments        | ses]<br>ses <-> Queue]   | [Salutation]<br>[Sinatum]<br>[Email Address<br>[Molfitaton]<br>[General Cata<br>[Critically.co-<br>[Contin_tem]<br>[Sinatus]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status |                  | [PostMasterFiler]<br>[GenerAcgen1]<br>[Admin Hottfication]<br>[Session Nanagemm1]<br>[Performance_comm1]<br>[SwitemLog]<br>[SwitemLog]<br>[SoLBox]<br>[ImportExpot]<br>[SwiContig]<br>[SwiContig]<br>[Package Manager] |
| Add Type:   | Lis                | t:                       |   |                  |  |
| Add a new Type.   | Na                 | ime                      | valid/invalid   | Changed          | Created  |
|   |                    | ident                    | valid   | 08/07/2008 08:48 | 08/07/2008 08:48   |
|   | Inc                | ident::Disaster          | valid   | 08/07/2008 08:48 | 08/07/2008 08:48   |
|   | Inc                | ident::ServiceRequest    | valid   | 08/07/2008 08:48 | 08/07/2008 08:48   |
|   | Pro                | oblem                    | valid   | 08/07/2008 08:48 | 08/07/2008 08:48   |
|   | Pro                | oblem::KnownError        | valid   | 08/07/2008 08:48 | 08/07/2008 08:48   |
|   | Pro                | oblem::PendingRfC        | valid   | 08/07/2008 08:48 | 08/07/2008 08:48   |
|   | de                 | fault                    | invalid   | 08/07/2008 09:45 | 08/07/2008 08:41   |
|   |                    |                          |   |                  |  |
|   |                    |                          |   |                  | •  |
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|   |                    |                          |   |                  |  |
|   |                    |                          |   |                  |  |

# Warning

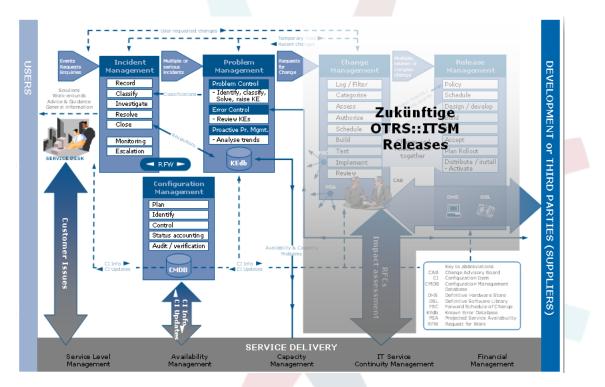
In order to assure the consistency of the data managed in OTRS::ITSM, information created in the admin area of the system cannot be deleted as a general rule. If you want to deactivate such information, change the value in the respective listbox settings from "valid" to "invalid" or "invalid-temporarily".



# Chapter 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 meet here. The ITIL service management process describes, closely interweaved with the service desk, 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 far as possible.



Source: ILX Group (www.ilxgroup.com)

# 1. Ticket generation, classification and prioritization

At ticket generation in our case a phone ticket the following information can be registered additionally to the information implemented in OTRS:

- ticket type
- relevant service
- SLA
- impact
- priority

Depending on the service selected, impact and priority are automatically submitted from the criticality impact priority matrix but can be overwritten. Requests can thus be prioritized higher or lower, which corresponds to real day-to-day IT business requirements.



Surely every IT service staff member knows a so called VIP customer who wants to be treated more equal than others and can be, this way.

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|--|--|-----|------------------------------------|----------|
| - 🔶 - 💽 🛞 🏠  | http://localhost/otrs/index.pl   | •   | G• Google                          |          |
|  |  |     |                                    |          |
| Logout Queueview Phone-Licket Er                                     | mail-LICKET Search Company Customer Buik-Action   Service Contig item Location Stats Preferences Add   | nın | New message (3) Locked Lickets     | · (3)    |
| A : You have 3 new message (s  | <u>1(</u>  |     |                                    |          |
| [Phone call / new ticket ]   |  |     |                                    |          |
| Туре:  | Incident::ServiceRequest 💌   |     |                                    |          |
| From:  | Michaela Kunz' <michaela.kunz@sunshine.com< th=""><th></th><th>Customer Info:<br/>Salutation: Frau</th><th></th></michaela.kunz@sunshine.com<> |     | Customer Info:<br>Salutation: Frau |          |
|  | Search Customer Clear From   |     | Firstname: Michaela                |          |
| To:  | Service Desk   |     | Lastname: Kunz                     |          |
| Subject:   | Pleas create a shar MAR-Collateral on our fileserver   |     | Username: Michaela.Kunz            |          |
| Service:   | Application Service::Application File Service  |     |                                    |          |
| SLA:   | Application File Service 💌   |     |                                    |          |
| Owner:   | Skywalker Anakin (skywalker) 💌 [All]   |     |                                    |          |
| Options:   | [ <sup>Ø </sup> Spell Check ] [ <sup>Ø</sup> Attachments ] [ <sup>22</sup> Customer ]  |     |                                    |          |
| Text:  | Hi,  |     |                                    |          |
|  | In order to let the MAR team collaborate more efficient,<br>they would like to get a distinct file-space for "Marketing<br>collateral".        |     |                                    |          |
|  | Kind regards   |     |                                    |          |
|  | Marry Tiger  |     |                                    |          |
|  |  |     |                                    |          |
|  |  |     |                                    |          |
|  |  |     |                                    |          |
|  |  |     |                                    |          |
| Attachment:  | Browse Attach  |     |                                    |          |
| CustomerID:  | CID008   |     |                                    |          |
| Next ticket state:   | open 👻   |     |                                    |          |
| Pending Date (for pending*   |  |     |                                    | <b>•</b> |

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

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|--|--|---|
| 💠 🔸 🗧 😂 🖀 💿 http://localhost/otrs/index.pl?Action=AgentTicketZoom&TicketID=2   |  | ▶ ▼   |
| [OTRS::ITSM 1.2.1]     Admin       Image: Constraint of the second | ¢.   | ost) 09:29:28 - 08/27/2008  |
| ▲ : Don't work with UserID 1 (System account)! Create new users!   |  |   |
| [ Zoom Ticket#: 20080627300000015 ] No network connection<br>Back - Lock - History - Print - Priority - Additional ITSM Fields - Link - Owner - Customer - Decision - Note - Merge - Pending -   | Cre  | [ Age: 0 minute ]<br>ated:08/27/2008 09:29:23   |
| Close  | Type:<br>State:  | Incident  |
| From: 'Theo Test' <tt@otrs.org></tt@otrs.org>  |  | Misc<br>unlock<br>root@localhost (Admin<br>OTRS)  |
|  | Service:<br>SLA:<br>First Response<br>Time:<br>Solution Time:  | External Internet []<br>Basic<br>59 minutes<br>08/27/2008 10:29<br>6 hours 39 minutes<br>08/27/2008 16:09 |
|  | Criticality:<br>Impact:<br>Priority:   | 5 very high<br>3 normal<br>4 high   |
|  | Decision Result:<br>Decision Date:<br>Repair Start Time<br>Recovery Start<br>Time:<br>Due Date:<br>Accounted time: |   |
|  | CustomerID:  | 1   |
|  | Customer Info:<br>Firstname: Theo  |   |



# 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:

| <u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> to | ory <u>B</u> ookmarks <u>T</u> ools | Help  | 2.12<br>2.12                                      |
|---|-------------------------------------|---|---|
| 🔙 🔶 📼 😂 🚳   | 🗿 🖀 间 http://local                  | host/otrs/index.pl?Action=AgentTicketAddtlTSMField&TickettD=2 |   |
| [OTRS::ITSM 1.2.1]                                    |                                     | Anakin Skyw   | walker (skywalker@otrs.org) 09:35:51 - 08/27/2008 |
|   | ne-Ticket Email-Ticket Sear         | N N N N N N N N N N N N N N N N N N N                         | New message (0) Locked Tickets (0)                |
|   | ds of ticket: 200808273             | -   | THEM THE SALE OF LOCKED TO KED TO KED TO          |
| Back  |                                     |   |   |
| Opti  | ions                                |   |   |
| Title   |                                     | No network connection   |   |
| Rep   | pair Start Time:                    |   |   |
|   | covery Start Time:                  |   |   |
| Due   | e Date:                             |   |   |
|   |                                     |   | Submit  |
|   |                                     |   | 0   |
|   |                                     |   | Powered by OTRS 2.3.1                             |
|   |                                     |   |   |
|   |                                     |   |   |
|   |                                     |   |   |
|   |                                     |   |   |
|   |                                     |   |   |
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|   |                                     |   |   |
|   |                                     |   |   |
|   |                                     |   |   |
|   |                                     |   |   |

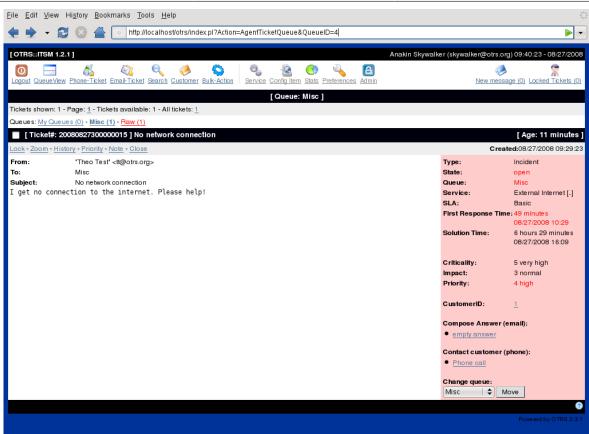
## 3. Allocate tickets (queues)

The OTRS::ITSM queues can be adapted flexibly to your organizational structures. They can follow the vertical scheme of service desk, first, second and third level support 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.





# Warning

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. Change ticket data

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



| Eile Edit View History Bookmarks Tools Help  |                         |  |
|--|-------------------------|--|
| 🔶 🕂 🗧 🔀 🦾 http://localhost/otrs/index.pl?Action=AgentTicketZoom&TicketID=2   |                         |  |
| [OTRS::ITSM 1.2.1] Admin 0   | OTRS (root@localh       | ost) 09:29:28 - 08/27/2008             |
| 💽 📄 💰 🏹 🔍 🌾 🦕<br>Logout QueueView Phone-Ticket Email-Ticket Search Customer Bulk-Action  | New mes                 | sage (0) Locked Tickets (0)            |
| ▲ : Don't work with UserID 1 (System account)! Create new users!   |                         |  |
| [ Zoom Ticket#: 20080827300000015 ] No network connection  |                         | [ Age: 0 minute ]                      |
| Back - Lock - History - Print - Priority - Additional ITSM Fields - Link - Owner - Customer - Decision - Note - Merge - Pending -<br>Close | Cre                     | ated:08/27/2008 09:29:23               |
| -> 1. customer (phone) "Theo Test" <tt@otrs.org>: No network connection 08/27/2008 09/29</tt@otrs.org>                                     |                         | Incident                               |
| From: 'Theo Test' <tt@otrs.org></tt@otrs.org>  | State:<br>Queue:        | open<br>Misc                           |
| To: Misc   | Locked:                 | unlock                                 |
| Subject: No network connection   | Owner:                  | root@localhost (Admin                  |
| Created: 08/27/2008 09:29:23<br>I get no connection to the internet. Please help!  |                         | OTRS)                                  |
|  | Service:                | External Internet []                   |
|  | SLA:                    | Basic                                  |
|  | First Response<br>Time: | 59 minutes<br>08/27/2008 10:29         |
|  | Solution Time:          | 6 hours 39 minutes<br>08/27/2008 16:09 |
|  | Criticality:            | 5 very high                            |
|  | Impact:                 | 3 normal                               |
|  | Priority:               | 4 high                                 |
|  | Decision Result:        |  |
|  | Decision Date:          |  |
|  | Repair Start Time       | :                                      |
|  | Recovery Start<br>Time: |  |
|  | Due Date:               |  |
|  | Accounted time:         | 0                                      |
|  | CustomerID:             | 1                                      |
|  | Customer Info:          |  |
|  | Firstname: Theo         |  |
|  | 1 T                     |  |

# 5. Approvals and decisions

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 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:



| <u>E</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp                              | 2).<br>2)                      |
|---|--------------------------------|
| 🖕 🗼 👻 😰 🔕 🐴 🗻 http://localhost/otrs/index.pl?Action=AgentTicketDecision&TicketD=2   |                                |
|   |                                |
| [OTRS::ITSM 1.2.1] Anakin Skywalker (skywalker@otr  |                                |
| 0 🖃 🚳 🔍 🍳 🤌 💊 🧠 🤮 🕙 🔌 🖻   | 🧼 🤶                            |
|   | nessage (0) Locked Tickets (0) |
| [Add decision to ticket: 20080827300000015]   |                                |
| Back  |                                |
| Options   |                                |
| Subject: Decision   |                                |
| Options: [Ø <u>spell Check</u> ][Ø <u>Attachments</u> ]   |                                |
| Text: Reason:   |                                |
|   |                                |
|   |                                |
|   |                                |
|   |                                |
|   |                                |
|   |                                |
|   |                                |
|   |                                |
|   |                                |
|   |                                |
| Attachment: Browse Attach   |                                |
| Note type: ote-internal ↓   |                                |
| Decision Result: Approved ↓ ↓   |                                |
| Decision Date:     08  \$\phi\$ / (27  \$\phi\$ / (2008  \$\phi\$ - 09  \$\phi\$ ); (42  \$\phi\$)       Time units (work units): |                                |
|   |                                |
|   | Submit                         |
|   |                                |

# 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

Service requests are incidents, too and are 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.



|  | · · · · ·  |                       |             |                     |  |
|--|--|-----------------------|-------------|---------------------|--|
| <u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory  | Bookmarks Tools Help   | ?Action=AgentITSMSLAZ | oom&SLAID=2 |                     | ©<br>▼   |
| [OTRS::ITSM 1.2.1]   | ket Config Item Stats Preferences Admin  |                       |             | Anakin Skywall      | trs.org) 09:45:47 - 08/27/2008   |
| Back - Print<br>SLA:<br>Type:<br>Calendar:<br>First Response Time:<br>Update Time:<br>Solution Time:<br>Minimum Time Between<br>Incidents: | Gold<br>Availability<br>Calendar 2 - Calendar Name 2<br>15 minutes<br>30 minutes<br>120 minutes<br>10080 minutes |                       |             |                     | 08/07/2008 09:43:09<br>roo@localhost (Admin<br>OTRS)<br>08/07/2008 09:43:09<br>roo@localhost (Admin<br>OTRS) |
| Associated Services  |  |                       |             |                     |  |
| Service  |  | Туре                  | Criticality | Changed             |  |
| External Internet Se   | rvices   | Back End              | 5 very high | 08/07/2008 08:53:15 |  |
| External Internet Se   | rvices::Download Service   | Back End              | 4 high      | 08/07/2008 08:53:58 |  |
| External Internet Se   | rvices::Mail Service   | Back End              | 4 high      | 08/07/2008 08:54:22 |  |
| External Internet Se   | rvices::Web Service  | End User Service      | 3 normal    | 08/07/2008 08:54:44 |  |
|  |  |                       |             |                     |  |
|  |  |                       |             |                     | Ø  |
|  |  |                       |             |                     | Powered by OTRS 2.3.1  |
|  |  |                       |             |                     |  |



# Chapter 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. Technical Requirements

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

- 1. OTRS Framework, version 2.4.5 or higher (2.4.7 is recommended)
- 2. ITSM "GeneralCatalog" package, version 2.0
- 3. ITSM "ITSMCore" package, version 2.0

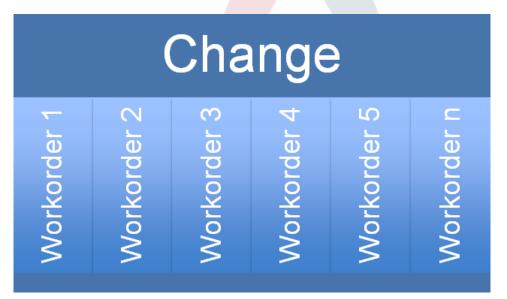
The following packages are recommended, but from a technical perspective not absolutely necessary:

- ITSM "ITSMIncidentProblemManagement" package, version 2.0
- ITSM "ITSMServiceLevelManagement" package, version 2.0
- ITSM "ITSMConfigurationManagement" package, version 2.0
- ITSM "ImportExport" package, version 2.0

## 2. Diagram of Change Management in OTRS::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.

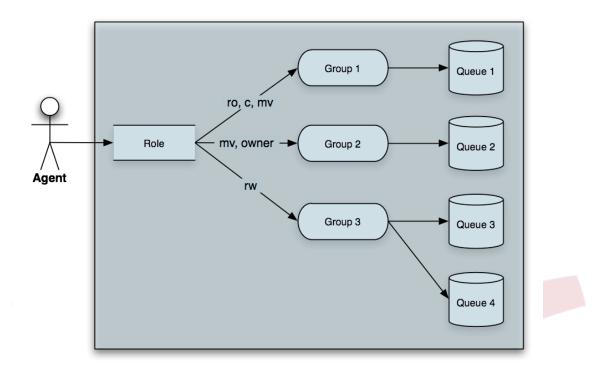
As Changes typically consist of several sub-tasks, OTRS::ITSM allows any number of subtasks to be defined per change. These are known as Work Orders.





# 3. Available User Roles

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:

| Table | 8.1.             | User | roles |
|-------|------------------|------|-------|
|       | <b>•</b> • • • • |      |       |

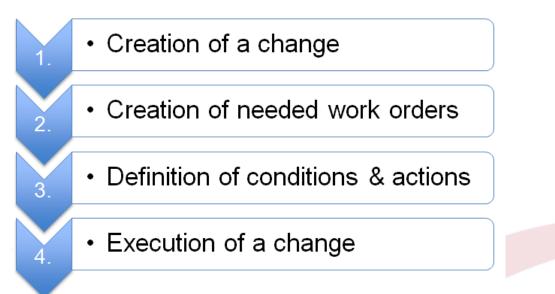
| User role           | Access and privileges  |
|---------------------|--|
| itsm-change         | Members of this user group have access to<br>the Change Management module. All poten-<br>tial Work Order Agents should be assigned<br>to this group.         |
|                     | All Changes and Work 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<br>Change Builder, or that have been defined<br>as accessible to the Change Builder, may be<br>edited by these users. |
| itsm-change-manager | Members of this user group can create new<br>Changes and Work Orders in the system.  |
|                     | All Changes and Work Orders can be viewed by this group.   |



| User role | Access and privileges                                |
|-----------|--|
|           | These users can edit all Changes and Work<br>Orders. |

# 4. Underlying Workflow

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



# 5. Creating a New Change

#### 5.1. Attributes of a Change

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

# Table 8.2. Attributes of a Change

| Attribute     | Required Field | Details  |
|---------------|----------------|--|
| Title         | Yes            | Short description / name of Change   |
| Description   | No             | Longer text description of the Change  |
| Justification | No             | Text explanation of the rea-<br>sons behind the Change; an-<br>swer to the question: "What<br>is the likely consequence if<br>the Change is not imple-<br>mented?" |
| Category      | Yes            | Defines the type of Change,<br>e.g "3 normal" etc.   |
| Impact        | Yes            | Defines the effects or impact<br>the Change will have, eg. "4<br>high", etc.   |
| Priority      | Yes            | Defines the priority of the<br>Change, eg. "5 very high", "3<br>normal", etc   |



| Attribute                       | Required Field | Details  |
|---------------------------------|----------------|--|
| State                           | Yes            | When creating a new<br>Change, the status is au-<br>tomatically set. When mod-<br>ifying an existing Change,<br>the Change Builder and<br>Change Manager can man-<br>ually set the status. Avail-<br>able status and result status<br>are defined by the integrat-<br>ed State Machine, seeSec-<br>tion 5.3, " Change State Ma-<br>chine " [46]. |
| Requested (by customer)<br>Date | No             | If required, this attribute can<br>be deactivated via SysCon-<br>fig for the 'ChangeEdit',<br>'ChangeAdd' and 'Change-<br>Zoom' templates, and dis-<br>play the customer's desired<br>implementation date.   |
| Attachment                      | No             | Enables related files and documents to be attached   |

#### 5.2. Category - Impact - Priority 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.

| Priority allocate     | e:                     |            |                      |                    |                         |
|-----------------------|------------------------|------------|----------------------|--------------------|-------------------------|
|                       | Category<br>1 very low | 2 low      | Category<br>3 normal | Category<br>4 high | Category<br>5 very high |
| Impact<br>1 very low  | 1 very low             | 1 very low | 2 low                | 2 low              | 3 normal                |
| 2 low                 | 1 very low 🛟           | 2 low      | 2 low                | 3 normal 🛟         | 4 high                  |
| Impact<br>3 normal    | 2 low                  | 2 low      | 3 normal             | 4 high             | 4 high                  |
| Impact<br>4 high      | 2 low                  | 3 normal   | 4 high               | 4 high             | 5 very high 🛟           |
| Impact<br>5 very high | 3 normal               | 4 high     | 4 high               | 5 very high 🛟      | 5 very high 🛟           |
|                       |                        |            |                      |                    | Save                    |
|                       |                        |            |                      |                    |                         |

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 very low
- 2 low



- 3 normal
- 4 high
- 5 very high

#### 5.2.2. ITSM::Change Management::Impact

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

- 1 very low
- 2 low
- 3 normal
- 4 high
- 5 very high

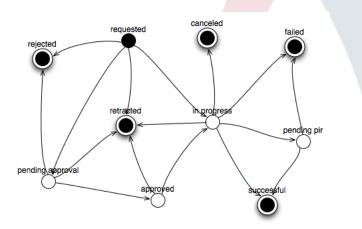
#### 5.2.3. ITSM::Change Management::Priority

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

- 1 very low
- 2 low
- 3 normal
- 4 high
- 5 very high

#### 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:

| Overview over state transitions | for Change:      |        |
|---------------------------------|------------------|--------|
| State                           | Next State       | Delete |
| <u>*START*</u>                  | Requested        |        |
| Requested                       | Pending Approval | X      |
| Requested                       | Rejected         | X      |
| Requested                       | Retracted        | X      |
| Pending Approval                | Approved         | X      |
| Pending Approval                | Retracted        | X      |
| Rejected                        | *END*            | X      |
| Approved                        | Retracted        | X      |
| Approved                        | In Progress      | X      |
| Approved                        | Pending Approval | X      |
| In Progress                     | Canceled         | X      |
| In Progress                     | Failed           | X      |
| In Progress                     | Retracted        | x      |
| In Progress                     | Successful       | X      |
| Successful                      | *END*            | X      |
| Failed                          | *END*            | X      |
| Canceled                        | *END*            | x      |
| Retracted                       | *END*            | X      |
|                                 |                  |        |

#### 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.

| Involved Persons     |   |             |
|----------------------|---|-------------|
| Change Manager:<br>* | "Christopher Kuhn" <ck@otrs.com></ck@otrs.com>                          |             |
| Change Builder: *    | "Werner Siebecke" <werner.siebecke@otrs.com></werner.siebecke@otrs.com> |             |
| Change Advisory B    | oard  |             |
| Add CAB<br>Template: |   | Hinzufügen  |
| Add to CAB:          |   | Hinzufügen  |
| Current CAB:         | Agent:  |             |
|                      | jd (John Doe)   | Löschen     |
|                      | tt (Theo Test)  | Löschen     |
|                      | ub (Udo Bretz)  | Löschen     |
|                      | SAP (CC 1000) (Werner Siebecke)   | Löschen     |
|                      | Kunde:  |             |
|                      | ub (Udo Bretz)  | Löschen     |
|                      |   | Übermitteln |

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.

Table 8.3. Involved Persons

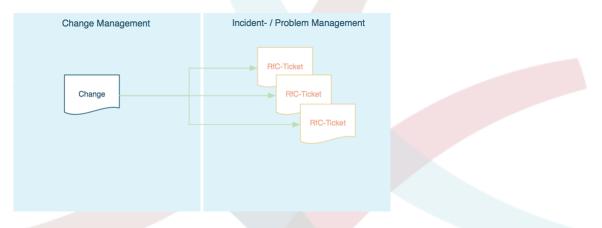
| Attribute      | <b>Required Field</b> | Details  |
|----------------|-----------------------|--|
| Change Manager | Yes                   | Assigns Change Manager privileges to an agent, for the current Change. |



| Attribute             | Required Field | Details   |
|-----------------------|----------------|---|
| Change Builder        | Yes            | Defines the agent who<br>processes and defines the<br>current Change. When creat-<br>ing a new Change, the cur-<br>rent agent is automatical-<br>ly entered as the Change<br>Builder. |
| Change Advisory Board | Νο             | Defines a group of people<br>which can include agents<br>and customers.   |

#### 5.5. Linking a Change with a Request for Change

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 ie. 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 rescrict 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

| <ul> <li>ITSM<br/>ITSMCha</li> </ul> | Change<br>nge::AddChange    | Management<br>LinkTicketTypes  | -> | Core::ITSMChange | - |
|--------------------------------------|-----------------------------|--------------------------------|----|------------------|---|
| <ul> <li>ITSM<br/>ITSMCha</li> </ul> | Change<br>nge::RestrictTicl | Management<br>(etTypes::Groups | -> | Core::ITSMChange | - |

#### 5.6. Defining Conditions

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.



| Condition          |  |
|--------------------|--|
| Name: *            | Test Conditions  |
| Matching:          | Any expression      All expressions                                |
| Valid:             | valid  |
| Comment:           |  |
| Expressions        |  |
| Change 🛟 2010      | 002031215000011 Category is 4 high Delete                          |
| Workorder 🖨 🛛 ITSM | Condition::Selector::any 🗘 WorkOrderState 🗘 is 🗘 Canceled 🗘 Delete |
|                    | Add new expression. Add  |
| Actions            |  |
| Change 🛟 2010      | 002031215000011 ChangeState Canceled Delete                        |
| Change 🛟 2010      | 002031215000011 \$ Priority \$ set \$ 5 very high \$ Delete        |
|                    | Add new action. Add  |
|                    | Save   |

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

 Table 8.4. Conditions available at the Change level

| Change Attribute | Logical Operator |
|------------------|------------------|
| AccountedTime    | is               |
| PlannedEffort    | is not           |
|                  | is empty         |
|                  | is not empty     |
|                  | is greater than  |
|                  | is less than     |
| Category         | is               |
| ChangeBuilder    | is not           |
| ChangeState      |                  |
| Impact           |                  |
| Priority         |                  |
| ChangeManager    | is               |
|                  | is not           |
|                  | is empty         |
|                  | is not empty     |
| ChangeTitle      | begins with      |
|                  | ends with        |



| Change Attribute | Logical Operator |  |
|------------------|------------------|--|
|                  | contains         |  |
|                  | does not contain |  |
|                  | is               |  |
|                  | is not           |  |
|                  | is empty         |  |
|                  | is not empty     |  |

# 5.6.2. Conditions Available at the Work Order Level

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

| Work Order Attribute | Logical Operator |
|----------------------|------------------|
| AccountedTime        | is               |
| PlannedEffort        | is not           |
|                      | is empty         |
|                      | is not empty     |
|                      | is greater than  |
|                      | is less than     |
| WorkOrderNumber      | is               |
|                      | is not           |
|                      | is greater than  |
|                      | is less than     |
| WorkOrderState       | is               |
| WorkOrderType        | is not           |
| WorkOrderAgent       |                  |
| WorkOrderTitle       | begins with      |
|                      | ends with        |
|                      | contains         |
|                      | does not contain |
|                      | is               |
|                      | is not           |
|                      | is empty         |
|                      | is not empty     |



#### 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.

#### Table 8.6. Actions available at the Change level

| Change Attribute | Action |
|------------------|--------|
| Category         | set    |
| Impact           |        |
| Priority         |        |
| ChangeState      | set    |
|                  | lock   |

#### 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.

## Table 8.7. Actions available at the Work Order level

| Work Order Attribute | Action |
|----------------------|--------|
| WorkOrderState       | set    |
|                      | lock   |

#### 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.

| Move Time Slot |                              |              |  |      |
|----------------|------------------------------|--------------|--|------|
| Time type:     | Planned start time ¢         |              |  |      |
| New time:      | 02 \$ / 09 \$ / 2010 \$ - 08 | 8 🛟 : 28 🛟 🖽 |  |      |
|                |                              |              |  | Move |

## 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. Attributes of a Work Order

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



| Attribute                       | Required Field | Details   |
|---------------------------------|----------------|---|
| Title                           | Yes            | Short description / name of Work Order.   |
| Instruction                     | No             | Longer text description of the Work Order.  |
| Work Order Type                 | Yes            | Selection list to define the type of Work Order, eg. approval, work order, PIR, etc.  |
| Category                        | Yes            | Defines the type of Change,<br>e.g "3 normal" etc.  |
| Impact                          | Yes            | Defines the effects or impact<br>of the Change, eg. "4 high",<br>etc.   |
| Priority                        | Yes            | Defines the priority of the<br>Change, eg. "5 very high", "3<br>normal", etc.   |
| State                           | Yes            | When creating a new<br>Change, the status is auto-<br>matically set. When modify-<br>ing an existing Change the<br>Change Builder and Change<br>Manager can manually set<br>the status. Available sta-<br>tuses and result statuses<br>are defined by the integrat-<br>ed State Machine, seeSec-<br>tion 5.3, " Change State Ma-<br>chine " [46]. |
| Requested (by customer)<br>Date | No             | If required, this attribute can<br>be deactivated via SysCon-<br>fig for the 'ChangeEdit',<br>'ChangeAdd' and 'Change-<br>Zoom' templates, and dis-<br>play the customer's desired<br>implementation date.  |
| Attachment                      | No             | Enables related files and documents to be attached  |

# Table 8.8. Attributes of a Work Order

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. Work Order Type

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

- Approval
- Work Order
- Backout
- Decision

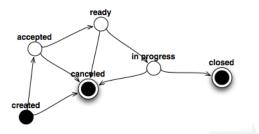


• PIR (Post Implementation Review)

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".

| Verview over state transitions for WorkOrder: |             |        |  |  |
|---|-------------|--------|--|--|
| State   | Next State  | Delete |  |  |
| *START*                                       | Created     |        |  |  |
| Created                                       | Accepted    | X      |  |  |
| Created                                       | Canceled    | X      |  |  |
| Accepted                                      | Ready       | X      |  |  |
| Accepted                                      | Canceled    | X      |  |  |
| Ready   | Canceled    | X      |  |  |
| Ready   | In Progress | X      |  |  |
| In Progress                                   | Canceled    | x      |  |  |
| In Progress                                   | Closed      | x      |  |  |
| Closed  | *END*       | x      |  |  |
| Canceled                                      | *END*       | ×      |  |  |
|   |             |        |  |  |

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

#### 6.4. Defining the Work Order Agent

Each Work Order can be assigned to a so-called Work Order agent, ie. 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.

| Workorder Agent  |  |      |   |
|------------------|--|------|---|
| Workorder Agent: | **<br>agent1 Test Agent 1 (2)                            |      |   |
|                  | agent2 Test Agent 2 (3)<br>root@localhost Admin OTRS (1) | Save | ] |

#### 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.



| Report  |  |
|---------|--|
| Report: | BII E E E E E E S C A V<br>Format V Font V Size V V S Source |
| State:  | Created  |
|         | Save   |

#### 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:

- Cls
  - CI-Class Computer
  - CI-Class Hardware
  - CI-Class Location
  - CI-Class Network
  - CI-Class Software
- Services
- Tickets

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

#### 6.7. Saving a Work Order as a Template

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.

| Save Workorder as | Template  |     |
|-------------------|---|-----|
| Template Name: *  | Installation of OS-patches                          |     |
| Comment:          | Template to install Mac OS X patches on a client pc |     |
| Valid:            | valid   |     |
|                   |   | Add |



#### 6.8. Deleting a Work Order

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 Cls.

| ck - History - Edit -                    | Involved Persons - Add Workorder - Conditions - L           | <u>.ink - Template</u> |                  |                        |                        |  |  |
|--|---|------------------------|------------------|------------------------|------------------------|--|--|
|  |   |                        |                  |                        |                        | Change State:  | Approved 🥥   |
| > 1.<br> > 2.<br> > 3.<br> > 4.<br> > 5. | · ·   |                        |                  |                        |                        | Planned Start:<br>Planned End:<br>Actual Start:<br>Actual End: | 01/20/2010 14:38:00<br>02/02/2010 11:01:00<br>01/22/2010 09:51:00        |
| > 6.<br> > 7.<br> > 8.<br> > 9.          | =   | _                      |                  |                        |                        | Requested (by<br>customer) Date:                               | -  |
| 01/20/20<br>14:38:00                     | 10 01/23/2010 04:18:40 01/25/2010                           | 17:59:20 01/28         | /2010 07:40:00   | 01/30/2010 21:20:40    | 02/02/2010<br>11:01:00 | Planned Effort:<br>Accounted Time:                             | 42.00<br>26.00   |
| escription:                              | The mailserver must be replaced with a new one.             | Add some lines here.   |                  |                        |                        | Category:  | 2 standard   |
| stification:                             | The old mail server is <u>too</u> <b>slow</b> .             |                        |                  |                        |                        | Impact:<br>Urgency:  | 3 All Users Affected<br>4 high   |
| tachment:                                | MailServer-Infrastructure.pdf 🧊 4                           | 23.0 KBytes            |                  |                        |                        | Change Initiator(s):   | root@localhost (Admir<br>OTRS)<br>ub (Udo Bretz)                         |
| Linked: ConfigIter                       | n (Computer)  |                        |                  |                        |                        | Change Manager:  | root@localhost (Admir<br>OTRS)   |
| ConfigItem#                              | Name  | Deployment Sta         |                  |                        | Linked as              | Change Builder:  | root@localhost (Admir  |
| <u>40167000002</u>                       |   | Review                 | 01/25/2010       |                        | Peer-2-Peer            | change bunder.   | OTRS)  |
| <u>40167000001</u>                       | Sony i8000  | To be disposed         | 01/25/2010       | 12:20:54               | Peer-2-Peer            | CAB:   |  |
| Linked: Service                          |   |                        |                  |                        |                        | CAB:   | jd (John Doe)<br>tt (Theo Test)<br>ub (Udo Bretz)<br>SAP (CC 1000) (Wern |
| Service                                  |   | Туре                   | Criticality C    | Changed                | Linked as              |  | Siebecke)  |
| Email Service                            |   |                        | -                | 11/21/2010 10:09:41    | Depends on             |  | ub (Udo Bretz)   |
|  | User Request for Information                                |                        |                  | 1/21/2010 10:13:36     | Peer-2-Peer            | Created:<br>Created by:  | 01/20/2010 16:02:4<br>root@localhost (Admir                              |
|  |   |                        |                  |                        |                        |  | OTRS)  |
| Linked: Ticket                           |   |                        |                  |                        |                        | Last changed:<br>Last changed by:                              | 02/09/2010 08:56:1<br>root@localhost (Admin<br>OTRS)                     |
| Ticket#                                  | Title   | Туре                   | State            | Created                | Linked as              |  | 0113)  |
|  | 016 Please provide to me a new std. laptop                  |                        | pending reminder | 14:13:59               | Peer-2-Peer            |  |  |
| 20100122401000                           |   | Incident               | open             | 01/22/2010<br>16:16:04 | Peer-2-Peer            |  |  |
| 201001214010000                          | 014 Mailserver should be replaced with a faster<br>machin[] | RfC                    | open             | 01/21/2010<br>10:04:30 | Peer-2-Peer            |  |  |
|  |   |                        |                  |                        |                        |  |  |
|  |   |                        |                  |                        |                        |  |  |

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:

- Gray Work Order is "created"
- Yellow Work Order is "pending approval"



- Green Work Order is "closed"
- Red Work Order is "canceled"

| [ Zoom Change#: 201           | 00120401000016 ] Re         | eplacement of mailserv       | er in company headqua | rter                |            |
|-------------------------------|-----------------------------|------------------------------|-----------------------|---------------------|------------|
| Back - History - Edit - Invol | ved Persons - Add Workorder | - Conditions - Link - Templa | ite                   |                     |            |
|                               |                             |                              |                       |                     |            |
| ○ <u> &gt; 1.</u>             |                             |                              |                       |                     |            |
| ○ <u> &gt; 2.</u>             |                             |                              |                       |                     |            |
| ○ <u> &gt; 3.</u>             |                             |                              |                       |                     |            |
| ○ <u> &gt; 4.</u>             | =                           |                              |                       |                     |            |
| I> 5.                         |                             |                              |                       |                     |            |
| ● <u> &gt; 6.</u>             |                             |                              |                       |                     |            |
| ○ <u> &gt; 7.</u>             |                             |                              |                       |                     |            |
| I> 8.                         |                             |                              |                       |                     |            |
| ○ <u> &gt; 9.</u>             |                             |                              |                       |                     |            |
|                               | 1                           |                              | 1                     | I                   |            |
| 01/20/2010                    | 01/23/2010 04:18:40         | 01/25/2010 17:59:20          | 01/28/2010 07:40:00   | 01/30/2010 21:20:40 | 02/02/2010 |
| 14:38:00                      |                             |                              |                       |                     | 11:01:00   |

#### 8. Change Views

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. Change Overview

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

| Change#          | Change Title<br>G / G  | Change Builder<br>Output           | Workorders | Change<br>State<br>(2) / (2) | Urgency<br>O / O | Services  | Planned Start<br>O / O | Planned End            |
|------------------|--|------------------------------------|------------|------------------------------|------------------|---|------------------------|------------------------|
| 2010012040100001 | 6 Replacement of mailserver in<br>company hea[]                    | SAP (CC 1000) (Werner<br>Siebecke) | 9          | Pending<br>Approval          | 4 high           | Email Service     User Services::User Request for     Information | 01/20/2010<br>14:38:00 | 02/02/2010<br>11:01:00 |
| 2010012240100001 | 2 Another change   | root@localhost (Admin<br>OTRS)     | 4          | Successful                   | 2 low            |   | 01/24/2010<br>11:39:00 | 01/27/2010<br>15:35:00 |
| 2010012240100002 | 1 new change   | root@localhost (Admin<br>OTRS)     | 1          | In Progress                  | 1 very<br>low    | User Services::Provisioning of User<br>Equipment                  | 01/23/2010<br>21:19:00 | 01/23/2010<br>22:19:00 |
| 2010012540100001 | 6 Another change   | root@localhost (Admin<br>OTRS)     | 4          | Successful                   | 2 low            |   | 01/27/2010<br>14:15:00 | 01/29/2010<br>11:14:00 |
| 2010012740100001 | 2 Austausch Ticketsystems  | root@localhost (Admin<br>OTRS)     | 2          | Requested                    | 3 normal         |   | 01/27/2010<br>09:00:00 | 01/28/2010<br>15:42:00 |
| 2010012740100002 | <ol> <li>Replacement of mailserver in<br/>company hea[]</li> </ol> | SAP (CC 1000) (Werner<br>Siebecke) | 9          | Pending<br>Approval          | 4 high           |   | 01/20/2010<br>14:38:00 | 02/02/2010<br>11:01:00 |
| 2010020140100001 | 4 Another change   | root@localhost (Admin<br>OTRS)     | 4          | Successful                   | 1 very<br>low    |   | 02/03/2010<br>05:05:00 | 02/04/2010<br>14:30:00 |
| 2010020140100002 | 2 Another change   | root@localhost (Admin<br>OTRS)     | 3          | Successful                   | 2 low            |   | 02/08/2010<br>03:39:00 | 02/09/2010<br>08:00:00 |
| 2010020140100003 | 1 Another change   | root@localhost (Admin<br>OTRS)     | 3          | Successful                   | 2 low            |   | 01/24/2010<br>11:39:00 | 01/25/2010<br>16:00:00 |
| 2010020140100004 | <u>k8</u> test   | root@localhost (Admin<br>OTRS)     | 2          | Requested                    | 3 normal         |   | 02/01/2010<br>22:15:00 | 02/12/2010<br>23:18:00 |
| 2010020340100001 | 1 Another change   | root@localhost (Admin<br>OTRS)     | 3          | Successful                   | 2 low            |   | 01/24/2010<br>11:39:00 | 01/25/2010<br>16:00:00 |
| 2010020340100002 | Replacement of mailserver in<br>company hea[]                      | SAP (CC 1000) (Werner<br>Siebecke) | 9          | Pending<br>Approval          | 4 high           |   | 02/03/2010<br>16:29:00 | 02/16/2010             |

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

# Table 8.9. Change Overview

| Attribute       | Active | Details  |
|-----------------|--------|--|
| ActualStartTime | No     | Date and time at which the<br>Change implementation be-<br>gan |
| ActualEndTime   | No     | Date and time at which<br>the Change implementation<br>ended   |



| Attribute         | Active | Details  |
|-------------------|--------|--|
| Category          | No     | Category or type of Change                             |
| ChangeBuilder     | Yes    | Change Builder's name                                  |
| ChangeManager     | Yes    | Change Manager's name                                  |
| ChangeNumber      | Yes    | System generated Change number                         |
| ChangeState       | Yes    | Change status  |
| ChangeStateSignal | Yes    | Change status indicator, shown as traffic light        |
| ChangeTitle       | Yes    | Name of Change   |
| CreateTime        | No     | Date and time at which the<br>Change was created       |
| Impact            | No     | Expected effect of the Change                          |
| PlannedStartTime  | Yes    | Planned Change implemen-<br>tation start date and time |
| PlannedEndTime    | Yes    | Projected Change implemen-<br>tation end date and time |
| Priority          | Yes    | Priority level of the Change                           |
| RequestedTime     | No     | Customer's desired imple-<br>mentation date            |
| Services          | Yes    | Services affected by the Change                        |
| WorkOrderCount    | Yes    | Number of Work Orders re-<br>lated 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":

# Table 8.10. Change Overview Filters

| Attribute        | Details  |
|------------------|--|
| requested        | Displays all changes that have the status<br>"requested"     |
| pending approval | Displays all changes that have the status "pending approval" |
| rejected         | Displays all changes that have the status<br>"rejected"      |
| approved         | Displays all changes that have the status "approved"         |
| 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"         |



| Attribute | Details  |
|-----------|--|
| retracted | Displays all changes that have the status<br>"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:

| [ Overview: FSC: Approv<br>Filter: Approved (2)<br>Changes: 1-2 of 2 - Page: 1 | /ed ]                                      |                             |            |              |          |                     |                     |
|--|--|-----------------------------|------------|--------------|----------|---------------------|---------------------|
| Change#  | Change Title                               | Change Builder              | Workorders | Change State |          | Planned Start       | Planned End         |
| <u>20100120401000016</u>   | Replacement of mailserver in company hea[] | root@localhost (Admin OTRS) | 9          | Approved     | 4 high   | 01/20/2010 14:38:00 | 02/02/2010 11:01:00 |
| 20100127401000012  | Austausch Ticketsystems                    | root@localhost (Admin OTRS) | 2          | Approved     | 3 normal | 01/27/2010 09:00:00 | 01/28/2010 15:42:00 |
| Changes: 1-2 of 2 - Page: 1  |  |                             |            |              |          |                     |                     |

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

# Table 8.11. Change Schedule

| Attribute         | Active | Details  |  |  |
|-------------------|--------|--|--|--|
| ActualStartTime   | No     | Date and time at which t<br>Change implementation b<br>gan           |  |  |
| ActualEndTime     | No     | Date and time at which the<br>Change implementation was<br>completed |  |  |
| Category          | No     | Category or type of Change   |  |  |
| ChangeBuilder     | Yes    | Change Builder's name  |  |  |
| ChangeManager     | Yes    | Change Manager's name  |  |  |
| ChangeNumber      | Yes    | System generated Change number                                       |  |  |
| ChangeState       | Yes    | Change status  |  |  |
| ChangeStateSignal | Yes    | Change status indicator;<br>shown as traffic light                   |  |  |
| ChangeTitle       | Yes    | Name of the Change   |  |  |
| CreateTime        | No     | Date and time at which the<br>Change was created                     |  |  |
| Impact            | No     | Expected effect of the<br>Change                                     |  |  |
| PlannedStartTime  | Yes    | Planned Change implemen-<br>tation start date and time               |  |  |
| PlannedEndTime    | Yes    | Projected Change implemer<br>tation completion date an<br>time       |  |  |
| Priority          | Yes    | Priority level of the Change   |  |  |
| RequestedTime     | No     | Customer's desired implementation date                               |  |  |
| Services          | Yes    | Services affected by the Change                                      |  |  |



| Attribute      | Active | Details  |
|----------------|--------|--|
| WorkOrderCount | Yes    | Number of Work Orders re-<br>lated 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.

| Overview: PIR: Alle ]   |                             |  |                       |                 |                     |                     |
|---|-----------------------------|--|-----------------------|-----------------|---------------------|---------------------|
| Filter: Alle (3) - Accepted (0) - Ready (3) - In Progress (0) - Closed (0) - Canceled (0) Changes: 1-3 von 3 - Seite: 1 |                             |  |                       |                 |                     |                     |
| Workorder#  | Workorder Title             | Change Title                               | Workorder Agent       | Workorder State | Planned Start       | Planned End         |
| <u>20100127401000021-9</u>  | Review the completed change | Replacement of mailserver in company hea[] | ck (Christopher Kuhn) | Ready           | 30.01.2010 10:01:00 | 02.02.2010 11:01:00 |
| <u>20100120401000016-9</u>  | Review the completed change | Replacement of mailserver in company hea[] | ck (Christopher Kuhn) | Ready           | 30.01.2010 10:01:00 | 02.02.2010 11:01:00 |
| <u>20100203401000028-9</u>  | Review the completed change | Replacement of mailserver in company hea[] | ck (Christopher Kuhn) | Ready           | 13.02.2010 11:52:00 | 16.02.2010 12:52:00 |
|   |                             |  |                       |                 |                     |                     |
| Changes: 1-3 von 3 - Seite: 1   |                             |  |                       |                 |                     |                     |

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

# Table 8.12. PIR - Post Implementation Review

| Attribute         | Active | Details  |
|-------------------|--------|--|
| ActualStartTime   | No     | Date and time at which the<br>Change implementation be-<br>gan       |
| ActualEndTime     | No     | Date and time at which the<br>Change implementation was<br>completed |
| Category          | No     | Category or type of Change   |
| ChangeBuilder     | Yes    | Change Builder's name  |
| ChangeManager     | Yes    | Change Manager's name  |
| ChangeNumber      | No     | System generated Change number                                       |
| ChangeState       | No     | Change status  |
| ChangeStateSignal | No     | Change status indicator;<br>shown as traffic light                   |
| ChangeTitle       | Yes    | Name of Change   |
| CreateTime        | No     | Date and time at which the<br>Change was created                     |
| Impact            | No     | Expected effect of the<br>Change                                     |
| PlannedStartTime  | Yes    | Planned Change implemen-<br>tation start date and time               |
| PlannedEndTime    | Yes    | Projected Change implemen-<br>tation completion date and<br>time     |
| Priority          | Yes    | Priority level of the Change   |
| RequestedTime     | No     | Customer's desired imple-<br>mentation date                          |
| Services          | Yes    | Services affected by the Change                                      |



| Attribute            | Active | Details  |
|----------------------|--------|--|
| WorkOrderAgent       | Yes    | Agent assigned to the PIR                                |
| WorkOrderNumber      | Yes    | Work Order number  |
| WorkOrderState       | Yes    | Number of Work Orders re-<br>lated to the Change         |
| WorkOrderStateSignal | No     | Work Order status indicator to be shown as traffic light |
| WorkOrderTitle       | Yes    | Name of the Work Order                                   |
| WorkOrderType        | No     | The type of Work Order                                   |

#### 8.4. Template

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.

| [ Overview: Template: All ]  |              |  |                  |        |                             |                     |
|--|--------------|--|------------------|--------|-----------------------------|---------------------|
| Filter: All (3) - <u>Change (3)</u> - <u>Workorder (0)</u> - <u>CAB (0)</u> -<br>Templates: 1-3 of 3 - Page: 1 | Condition (C | <u>)</u>                                   |                  |        |                             |                     |
| Name   | Type         | Comment                                    | Valid<br>I Valid | Delete | CreateBy                    | CreateTime          |
| Test Template 1  | Change       |  | valid            | ×      | root@localhost (Admin OTRS) | 2010-01-25 15:11:05 |
| 10.01.3879 Std. Laptop Provisioning - [DT: 3d]   | Change       | To be used when providing Lenovo Thinkpa[] | valid            | ×      | root@localhost (Admin OTRS) | 2010-01-25 15:14:45 |
| Mailserver Template  | Change       |  | valid            | ×      | root@localhost (Admin OTRS) | 2010-02-03 16:29:22 |
|  |              |  |                  |        |                             |                     |
| Templates: 1-3 of 3 - Page: 1  |              |  |                  |        |                             |                     |

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

| Attribute  | Active | Details   |
|------------|--------|---|
| ChangeBy   | No     | Username of the agent who<br>last modified the template   |
| ChangeTime | No     | Date and time of the last modification  |
| Comment    | Yes    | Comments / description of the template  |
| CreateBy   | Yes    | Username of the agent who<br>created the template   |
| CreateTime | Yes    | Date and time at which the template was created   |
| Delete     | Yes    | Option to delete a chosen template  |
| Name       | Yes    | Name of the template  |
| TemplateID | No     | The template's internal data-<br>base identity  |
| Туре       | Yes    | Type of template  |
| Valid      | Yes    | Defines the validity of<br>the template (valid, invalid,<br>and temporarily invalid). In-<br>valid / temporarily invalid<br>templates cannot be used by<br>Change Builders. |

# Table 8.13.Template



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":

# Table 8.14. Template Types

| Attribute     | Details                                   |    |
|---------------|---|----|
| ITSMChange    | Templates for Changes                     |    |
| ITSMWorkOrder | Templates for Work Orders                 |    |
|               | Templates for Change Advi-<br>sory Boards | i- |

#### 8.5. Search

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:





| [ OTRS::ITSM 2.0.1 ]                         |   |   | Admin OTRS (re | oot@localhost) 10:35:40 - 02/08/201                   |
|--|---|---|----------------|---|
| 0 📀 🤞 🍕                                      |   | = = = 🔍 🚖 🔌   | ۲              | 🧆 🧔 😤   |
| Logout Dashboard Ticket Service Cont<br>Iter | hg Change FAQ Stats Customer Preferences Admin Overview Ch  | ange <u>PIR Template Search New Change</u><br>redule <u>Manager</u> |                | Vorkorders New message Locked Tickets<br>(7) (7) (16) |
| A : Don't work with UserID 1 (Syste          | em account)! Create new users!  |   |                |   |
| [ Search: Change ]                           |   |   |                |   |
|  | Change#, Workorder and CAB  |   |                |   |
|  | Change# (e.g. 10*5155 or 105658*)   |   |                |   |
|  | Change Title  |   |                |   |
|  | Workorder Title   |   |                |   |
|  |   |   |                |   |
|  | CABAgent (e. g. 234231)   |   |                |   |
|  | CABCustomer (e. g. US4231)  |   |                |   |
|  | Fulltext-Search in Change and Workorder (e. g. "Mar*in" or  | "Baue*")  |                |   |
|  | Change description  |   |                |   |
|  | Change Justification  |   |                |   |
|  | Workorder Instruction   |   |                |   |
|  | Workorder Report  |   |                |   |
|  | Change Priority   | Change Impact   |                |   |
|  | 1 very low<br>2 low   | 1 One user affected<br>2 Some Users Affected                        |                |   |
|  | 3 normal<br>4 high  | 3 All Users Affected  |                |   |
|  | 5 very high   |   |                |   |
|  | Change Category   | Change State  |                |   |
|  | 1 minor<br>2 standard<br>2 standard   | Requested<br>Pending Approval                                       |                |   |
|  | 3 major<br>4 emergency  | Rejected<br>Approved  |                |   |
|  | Change Manager  | In Progress   |                |   |
|  | Bretz Udo (ub)  | Bretz Udo (ub)  |                |   |
|  | Doe John (jd)<br>Kuhn Christopher (ck)  | Doe John (jd)<br>Kuhn Christopher (ck)                              |                |   |
|  | OTRS Admin (root@localhost)<br>Siebecke Werner (SAP (CC 1000))  | OTRS Admin (root@localhost)<br>Siebecke Werner (SAP (CC 1000))      |                |   |
|  | Created by Agent  |   |                |   |
|  | Bretz Udo (ub)<br>Doe John (jd)   |   |                |   |
|  | Kuhn Christopher (ck)<br>OTRS Admin (root@localhost)<br>Siebecke Werner (SAP (CC 1000))   |   |                |   |
|  | Workorder State   | Workorder Agent   |                |   |
|  | Created<br>Accepted   | Bretz Udo (ub)<br>Doe John (jd)                                     |                |   |
|  | Ready<br>In Progress  | Kuhn Christopher (ck)<br>OTRS Admin (root@localhost)                |                |   |
|  | Closed •  | Siebecke Werner (SAP (CC 1000))                                     |                |   |
|  | Requested (by customer) Date <ul> <li>No requested (by customer) date settings.</li> </ul>  |   |                |   |
|  | Requested (by customer) date last 1 day(s)  | •   |                |   |
|  | Requested (by customer) date between 01 + / 09 + /  | 2010 🔹 🗉 and 02 🔹 / 08 🔹 / 2010                                     | •              |   |
|  | Planned Start Time  |   |                |   |
|  | No planned start time settings.   |   |                |   |
|  | Planned start time last     1     day(s)  |   |                |   |
|  | ○ Planned start time between 01   |   |                |   |
|  | No planned end time settings.   |   |                |   |
|  | O Planned end time last + 1 + day(s) +  |   |                |   |
|  | O Planned end time between 01 + / 09 + / 2010 + = a   | and 02 🗘 / 08 🛟 / 2010 🛟 🗌  |                |   |
|  | Actual Start Time   |   |                |   |
|  | No actual start time settings.  |   |                |   |
|  | <ul> <li>Actual start time last          <ul> <li>1</li> <li>day(s)</li> <li>day(s)</li> </ul> </li> <li>Actual start time between 01</li> <li>√ 09</li> <li>√ 2010</li> <li>□ attribute</li> </ul> | and 02 • / 08 • / 2010 •  |                |   |
|  | Actual End Time   |   |                |   |
|  | <ul> <li>No actual end time settings.</li> </ul>  |   |                |   |
|  | ○ Actual end time last 🗘 1 🗘 day(s) 🗘   |   |                |   |
|  | Actual end time between 01 + / 09 + / 2010 + and  | id 02 🗘 / 08 🗘 / 2010 🗘 🖽   |                |   |
|  | Create Time   |   |                |   |
|  | No create time settings.     Create time last      1     day(s)   |   |                |   |
|  | Create time between 01 \$ / 09 \$ / 2010 \$ # and 0   |   |                |   |
|  | Change Time   |   |                |   |
|  | <ul> <li>No change time settings.</li> </ul>  |   |                |   |
|  | Change time last 1 day(s)   |   |                |   |
|  | ○ Change time between 01 ÷ / 09 ÷ / 2010 ; □ and  | 02 08 02 2010   |                |   |
|  |   |   | Search         |   |
|  |   |   |                |   |
|  |   |   |                | Powered by OTRS 2.4.                                  |



# Table 8.15. Template

| Attribute                    | Details  |
|------------------------------|--|
| Change#                      | Search by Change number; an asterisk ("*")<br>may be used as a wildcard  |
| ChangeTitle                  | Search by Change title or name   |
| Work Order Title             | Search by the title/name of a Work Order   |
| CABAgent                     | Search by CAB member, defined in the sys-<br>tem as an agent   |
| CABCustomer                  | Search by CAB member, defined in the sys-<br>tem as a customer. Here, the auto-complete<br>function can offer suggestions when typing<br>in the CAB customer field   |
| Change Description           | 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  |
| Change Priority              | Search by Change priority level  |
| Change Impact                | Search by Change effect / impact level   |
| Change Category              | Search by Change category or type  |
| Change State                 | 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<br>implementation date. Search can be per-<br>formed using absolute time values (eg. from<br>date 1 to date 2) or in relative time values<br>(eg. Changes created in the last x days /<br>weeks).          |
| Planned Start Time           | Search by the planned start date and time<br>of a Change implementation. Search can be<br>performed using absolute time values (eg.<br>from date 1 to date 2) or in relative time val-<br>ues (eg. Changes created in the last x days /<br>weeks). |
| Planned End Time             | Search by the projected end date and time<br>of a Change implementation. Search can be<br>performed using absolute time values (eg.<br>from date 1 to date 2) or in relative time val-<br>ues (eg. Changes created in the last x days /<br>weeks). |
| Actual Start Time            | Search by the actual start date and time of a<br>Change implementation. Search can be per-<br>formed using absolute time values (eg. from<br>date 1 to date 2) or in relative time values  |



| Attribute       | Details   |
|-----------------|---|
|                 | (eg. Changes created in the last x days / weeks).   |
| Actual End Time | Search by the actual end date and time of a<br>Change implementation. Search can be per-<br>formed using absolute time values (eg. from<br>date 1 to date 2) or in relative time values<br>(eg. Changes created in the last x days /<br>weeks). |
| Create Time     | Search by the Change creation date and<br>time. Search can be performed using ab-<br>solute time values (eg. from date 1 to date<br>2) or in relative time values (eg. Changes<br>created in the last x days / weeks).                          |
| Change Time     | Search by the date and time a Change<br>was modified. Search can be performed us-<br>ing absolute time values (eg. from date 1<br>to date 2) or in relative time values (eg.<br>Changes created in the last x days / weeks).                    |

#### 8.6. Change Manager

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

| ilter: <b>All (1)</b> - <u>Requeste</u><br>Changes: 1-1 of 1 - Page | Manager: All ]<br>ed (0) - Pending Approval (0) - Approved (1)<br>e 1 | - In Progress (0)                  |                                |            |                              |         |                        |                        |  |
|---|---|------------------------------------|--------------------------------|------------|------------------------------|---------|------------------------|------------------------|--|
| Change#<br>⊘ / ♡  | Change Title<br>♀ / ♀   | Change Builder                     | Change Manager                 | Workorders | Change<br>State<br>(a) / (c) | Urgency | Planned Start          | Planned End            |  |
| 201001204010000   | 16 Replacement of mailserver in company<br>hea[]                      | SAP (CC 1000) (Werner<br>Siebecke) | root@localhost (Admin<br>OTRS) | 9          | Approved                     | 4 high  | 01/20/2010<br>14:38:00 | 02/02/2010<br>11:01:00 |  |
| hanges: 1-1 of 1 - Page   | : 1   |                                    |                                |            |                              |         |                        |                        |  |

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":

| Attribute         | Active | Details  |
|-------------------|--------|--|
| ActualStartTime   | No     | Date and time at which the<br>Change implementation be-<br>gan       |
| ActualEndTime     | Νο     | Date and time at which the<br>Change implementation was<br>completed |
| Category          | No     | Category or type of Change   |
| ChangeBuilder     | Yes    | Change Builder's name  |
| ChangeManager     | Yes    | Change Manager's name  |
| ChangeNumber      | Yes    | System generated Change number                                       |
| ChangeState       | Yes    | Change status  |
| ChangeStateSignal | Yes    | Change status indicator to be shown as traffic light                 |



| Attribute        | Active | Details  |
|------------------|--------|--|
| ChangeTitle      | Yes    | Name of Change   |
| CreateTime       | No     | Date and time at which the<br>Change was created                 |
| Impact           | No     | Expected effect of the<br>Change                                 |
| PlannedStartTime | Yes    | Planned Change implemen-<br>tation start date and time           |
| PlannedEndTime   | Yes    | Projected Change implemen-<br>tation completion date and<br>time |
| Priority         | Yes    | Priority level of the Change                                     |
| RequestedTime    | No     | Customer's desired imple-<br>mentation date                      |
| Services         | Yes    | Services affected by the Change                                  |
| WorkOrderCount   | Yes    | Number of Work Orders re-<br>lated 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:

# Table 8.17. Change Manager Filter

| Attribute        | Details  |
|------------------|--|
| requested        | Displays all Changes which have status "re-<br>quested"      |
| pending approval | Displays all Changes which have status<br>"pending approval" |
| approved         | Displays all Changes which have status "approved"            |
| in progress      | Displays all Changes which have status "in progress"         |

#### 8.7. My Changes

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

| [ Overview: My Change<br>Filter: All (3) - Requested | -                          | 0) - Approved (1) - In Progre  | ss (1)     |             |                  |  |                        |                        |  |
|--|----------------------------|--------------------------------|------------|-------------|------------------|--|------------------------|------------------------|--|
| Changes: 1-3 of 3 - Page:                            | 1                          |                                |            |             |                  |  |                        |                        |  |
| Change#  | Change Title<br>♀ / ♀      | Change Builder<br>() / ()      | Workorders |             | Urgency<br>0 / 0 | Services   | Planned Start          | Planned End            |  |
| <u>20100122401000021</u>                             | new change                 | root@localhost (Admin<br>OTRS) | 1          | In Progress | 1 very<br>low    | User Services::Provisioning of User<br>Equipment | 01/23/2010<br>21:19:00 | 01/23/2010<br>22:19:00 |  |
| 20100127401000012                                    | Austausch<br>Ticketsystems | root@localhost (Admin<br>OTRS) | 2          | Approved    | 3 normal         |  | 01/27/2010<br>09:00:00 | 01/28/2010<br>15:42:00 |  |
| <u>20100201401000048</u>                             | test                       | root@localhost (Admin<br>OTRS) | 2          | Requested   | 3 normal         |  | 02/01/2010<br>22:15:00 | 02/12/2010<br>23:18:00 |  |
|  |                            |                                |            |             |                  |  |                        |                        |  |
| Changes: 1-3 of 3 - Page:                            | 1                          |                                |            |             |                  |  |                        |                        |  |

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":



# Table 8.18.My Changes

| Attribute         | Active | Details  |
|-------------------|--------|--|
| ActualStartTime   | No     | Date and time at which the<br>Change implementation be-<br>gan |
| ActualEndTime     | No     | Date and time at which the<br>Change was completed             |
| Category          | No     | Category or type of Change                                     |
| ChangeBuilder     | Yes    | Change Builder's name  |
| ChangeManager     | Yes    | Change Manager's name  |
| ChangeNumber      | Yes    | System generated Change<br>number                              |
| ChangeState       | Yes    | Change status  |
| ChangeStateSignal | Yes    | Change status indicator to<br>be shown as traffic light        |
| ChangeTitle       | Yes    | Name of Change   |
| CreateTime        | No     | Date and time at which the<br>Change was created               |
| Impact            | No     | Expected effect the Change will have                           |
| PlannedStartTime  | Yes    | Planned Change implemen-<br>tation start date and time         |
| PlannedEndTime    | Yes    | Projected Change comple-<br>tion date and time                 |
| Priority          | Yes    | Priority level of the Change                                   |
| RequestedTime     | No     | Customer's desired imple-<br>mentation date                    |
| Services          | Yes    | Services affected by the Change                                |
| WorkOrderCount    | Yes    | Number of Work Orders re-<br>lated 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":

# Table 8.19. My Changes Filter

| Attribute        | 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. My Work Orders

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.

| Changes: 1-7 of 7 - Page: 1           | +) - <u>Ready (3)</u> - <u>In Progress (0)</u> |   |                                |                             |                          |                        |
|---------------------------------------|--|---|--------------------------------|-----------------------------|--------------------------|------------------------|
| Workorder#<br>⊘ / ⊙                   | Workorder Title<br>♀ / ♡                       | Change Title<br>G / G                         | Workorder Agent                | Workorder<br>State<br>O / O | Planned Start<br>() / () | Planned End<br>O       |
| <u>20100127401000021-</u><br><u>3</u> | Think about mail server<br>replacement         | Replacement of mailserver in company<br>hea[] | root@localhost (Admin<br>OTRS) | Ready                       | 01/21/2010<br>09:49:00   | 01/25/2010<br>10:49:00 |
| <u>20100120401000016-</u><br><u>3</u> | Think about mail server<br>replacement         | Replacement of mailserver in company<br>hea[] | root@localhost (Admin<br>OTRS) | Ready                       | 01/21/2010<br>09:49:00   | 01/25/2010<br>10:49:00 |
| 20100127401000021-<br><u>Z</u>        | Backout Plan                                   | Replacement of mailserver in company<br>hea[] | root@localhost (Admin<br>OTRS) | Accepted                    | 01/26/2010<br>09:59:00   | 01/30/2010<br>10:59:00 |
| <u>20100120401000016-</u><br><u>7</u> | Backout Plan                                   | Replacement of mailserver in company<br>hea[] | root@localhost (Admin<br>OTRS) | Accepted                    | 01/26/2010<br>09:59:00   | 01/30/2010<br>10:59:00 |
| <u>20100127401000012-</u><br><u>1</u> | Evaluierung Systeme                            | Austausch Ticketsystems                       | root@localhost (Admin<br>OTRS) | Accepted                    | 01/27/2010<br>09:00:00   | 01/27/2010<br>17:00:00 |
| 20100203401000028-<br><u>3</u>        | Think about mail server<br>replacement         | Replacement of mailserver in company<br>hea[] | root@localhost (Admin<br>OTRS) | Ready                       | 02/04/2010<br>11:40:00   | 02/08/2010<br>12:40:00 |
| 20100203401000028-<br>7               | Backout Plan                                   | Replacement of mailserver in company<br>hea[] | root@localhost (Admin<br>OTRS) | Accepted                    | 02/09/2010<br>11:50:00   | 02/13/2010<br>12:50:00 |

Changes: 1-7 of 7 - Page: 1

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":

## Table 8.20. My Work Orders

| Attribute         | Active | Details  |
|-------------------|--------|--|
| ActualStartTime   | No     | Date and time at which the<br>Change implementation be-<br>gan       |
| ActualEndTime     | No     | Date and time at which the<br>Change implementation was<br>completed |
| Category          | No     | Category or type of Change   |
| ChangeBuilder     | No     | Change Builder's name  |
| ChangeManager     | No     | Change Manager's name  |
| ChangeNumber      | No     | System generated Change number                                       |
| ChangeState       | No     | Change status  |
| ChangeStateSignal | No     | Change status indicator to<br>be shown as traffic light              |
| ChangeTitle       | Yes    | Name of Change   |
| CreateTime        | No     | Date and time at which the<br>Change was created                     |
| Impact            | No     | Expected effect the Change will have                                 |
| PlannedStartTime  | Yes    | Planned Change implemen-<br>tation start date and time               |
| PlannedEndTime    | Yes    | Projected Change comple-<br>tion date and time                       |
| Priority          | No     | Priority level of the Change   |
| RequestedTime     | No     | Customer's desired imple-<br>mentation date                          |



| Attribute            | Active | Details  |  |  |  |  |
|----------------------|--------|--|--|--|--|--|
| Services             | Yes    | Services affected by the Change                          |  |  |  |  |
| WorkOrderAgent       | Yes    | Agent assigned to the PIR                                |  |  |  |  |
| WorkOrderNumber      | Yes    | Work Order number  |  |  |  |  |
| WorkOrderState       | Yes    | Number of Work Orders re-<br>lated to the Change         |  |  |  |  |
| WorkOrderStateSignal | No     | Work Order status indicator to be shown as traffic light |  |  |  |  |
| WorkOrderTitle       | Yes    | Name of the Work Order                                   |  |  |  |  |
| WorkOrderType        | No     | 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":

#### Table 8.21. My Work Orders Filter

| Attribute   | Details   |
|-------------|---|
| created     | Displays all Work Orders which have the sta-<br>tus "created"     |
| accepted    | Displays all Work Orders which have the sta-<br>tus "accepted"    |
| ready       | Displays all Work Orders which have the sta-<br>tus "ready"       |
| in progress | Displays all Work Orders which have the sta-<br>tus "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.





# **Chapter 9. Release Management**

The release management process will be implemented in a later OTRS::ITSM version. Basic information, however, can be configured, captured and controlled since version 1.0 too.

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





# **Chapter 10. Service Level Management**

The OTRS stats framework has been completely revised for version 2.1 and nearly every type of ticket report can be created in the web interface. Generation and view of stats and charts can be activated for users, groups and/or roles. It is possible to import or export existing or new stats and further use can be made of stats modules from previous OTRS versions. With the installation of the ITSMServiceLevelManagement package, additional ITSM relevant statistics are available.

#### Example of a report overview:

| le <u>E</u> dit ⊻ien | w Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp                   |              |  |
|----------------------|---|--------------|--|
| - 🦛                  | 😴 🛞 🖀 💽 http://localhost/otrs/index.pl?Action=AgentStats&Subaction=               | Overview     | •  |
| OTRS::ITSM           | 4041  |              | Anakin Skywalker (skywalker@otrs.org) 09:46:18 - 08/27/200 |
|                      |   |              |  |
|                      | 😭 🤣 🤹 📽 🛀 🕒<br>aw New Import Ticket Service Config Item Preferences Admin         |              | New message (0) Locked Tickets (0                          |
|                      |   |              | ten meeskis (s) menen isnen (s                             |
| Overview: S          | Total hits: <b>43</b> - Page: 1 2 3   |              |  |
| 10 3 GH2 3. 1-20     |   |              |  |
| Stat# 😏 / 🐼          | Title 🕑 / 😒   | Object 😏 / 😔 | Description  |
| 10001                | New Tickets   | Ticket       | Total number of new tickets per day and queue whic[]       |
| 10002                | Overview about all tickets in the system  | Ticket       | Current state of all tickets in the system without[]       |
| 10003                | Changes of status in a monthly overview   |              | Monthly overview, which reports status changes per[]       |
| 10004                | Total number of all tickets ever created per Ticket-Type and Priority.            | Ticket       | Total number of all tickets ever created per Ticke[]       |
| 10005                | Total number of all tickets ever created per Ticket-Type and State.               | Ticket       | Total number of all tickets ever created per Ticke[]       |
| 10006                | Total number of all tickets ever created per Ticket-Type and Queue.               | Ticket       | Total number of all tickets ever created per Ticke[]       |
| 10007                | Total number of all tickets ever created per Ticket-Type and Service.             | Ticket       | Total number of all tickets ever created per Ticke[]       |
| 10008                | Monthly overview of all tickets created in the last month per Ticket-Type.        | Ticket       | Monthly overview of all tickets created in the las[]       |
| 10009                | Monthly overview of all tickets created in the last month per Priority.           | Ticket       | Monthly overview of all tickets created in the las[]       |
| 10010                | Monthly overview of all tickets created in the last month per State.              | Ticket       | Monthly overview of all tickets created in the las[]       |
| 10011                | Monthly overview of all tickets created in the last month per Queue.              | Ticket       | Monthly overview of all tickets created in the las[]       |
| 10012                | Monthly overview of all tickets created in the last month per Service.            | Ticket       | Monthly overview of all tickets created in the las[]       |
| 10013                | Number of tickets created in a specific time period per Ticket-Type and Priority. | Ticket       | Number of tickets created in a specific time perio[]       |
| 10014                | Number of tickets created in a specific time period per Ticket-Type and State.    | Ticket       | Number of tickets created in a specific time perio[]       |
| 10015                | Number of tickets created in a specific time period per Ticket-Type and Queue.    | Ticket       | Number of tickets created in a specific time perio[]       |
| 10016                | Number of tickets created in a specific time period per Ticket-Type and Service.  | Ticket       | Number of tickets created in a specific time perio[]       |
| 10017                | Number of currently open tickets per Ticket-Type and Priority.                    | Ticket       | Number of currently open tickets per Ticket-Type a[]       |
| 10018                | Number of currently open tickets per Ticket-Type and Queue.                       | Ticket       | Number of currently open tickets per Ticket-Type a[]       |
|                      |   |              |  |
| 10019                | Number of currently open tickets per Ticket-Type and Service.                     | Ticket       | Number of currently open tickets per Ticket-Type a[]       |

XML export of report settings:



| • 🕪 • 🕑 😡   | ) 🚮 📄 http://localhost/otrs/index.pl?Action=AgentSta  | its&Subaction=View&StatID=2   |
|---|---|---|
| <u>ti Overview</u> New Imp<br>w: Stat#: 10002 ]   | ort Ticket Service Confg Item Location Preferences Admin  | New message (0) Locked Tickets (0)  |
| - <u>Edit</u> - <u>Delete</u> - <u>E</u>  | xport Config  | Opening Overview-tickets-in-system-Created_2007-06-12_0   |
| formations about th   | ne Stat   | You have chosen to open   |
| tat#:<br>:<br>escription:<br>ormat:<br>um rows:<br>um columns:<br>ache:<br>alid:<br>axis<br>tate: | 1002<br>Overview tickets in system<br>Ticket<br>Status quo all tickets in system without time limit<br>Print<br>Yes<br>Yes<br>No<br>valid<br>closed successful<br>closed unsuccessful<br>closed with workaround<br>merged | Overview-tickets-in-system-Created_2007-06-12_01-19.pdf         which is a: PDF document         from: http://lancelot otrs.com         What should Firefox do with this file?            @ Qpen with KGhostView (default)          Save to Digk         Do this gutomatically for files like this from now on.         Cancel       OK |
| lue Series  | new<br>open<br>pending auto close+<br>pending auto close-<br>pending reminder<br>removed  |   |
| ueue:   | Application Service<br>Archive & Restore<br>Junk<br>Misc<br>Postmaster  |   |
| log-base  | ed creation of a new repor  | t template:   |
| <u>E</u> dit <u>∨</u> iew Hi <u>s</u> tor   | y <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp  | 0   |
| → · C ⊗   | ) 🏠 📄 http://localhost/otrs/index.pl/Action=AgentSta  |   |
|   | xort Ticket Service Config Item Location Preferences Admin  | New message (2) Locked Tickets (2)  |

| File Edit View Histe  | ory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp |  |                                    |   |
|-----------------------|--|--|------------------------------------|---|
|                       |  |  |                                    |   |
| 🛹 • 🕪 • 🕑 🤘           | Intp://localhost/otrs/inc                        | ex.pl?Action=AgentStats&Subaction=EditSpecification&StatID=* 💌 🕨                                     | G• Google                          |   |
|                       |  | American Sky mennes (sky mennes  | (Goodoolg) 1101 0011 1 EE          |   |
|                       | A Structure Config Item Locat                    |  | New message (2) Locked Tickets (2) | Ê |
| A : You have 2 new r  | nessage(s)!                                      |  |                                    |   |
| [ Edit: Stat# 10001 ] |  |  |                                    |   |
|                       | 6  |  |                                    |   |
|                       | (1   | -(2)-(3)-(4)   |                                    |   |
|                       | Ċ.   |  |                                    |   |
|                       | Insert of the common specification               | s (1/4)  |                                    |   |
|                       | Title:*  | New tickets  |                                    |   |
|                       | Description:*                                    | The number of the new tickets per diem and queue of the las<br>month which arrived in to the system. | t                                  |   |
|                       |  |  |                                    |   |
|                       |  |  |                                    | _ |
|                       | Dynamic-Object:*                                 | Ticket   |                                    |   |
|                       | Permissions:*                                    | admin 🔺  |                                    |   |
|                       |  | users  |                                    |   |
|                       |  |  |                                    |   |
|                       | Format:*   | CSV  |                                    |   |
|                       |  | Print<br>graph-area  |                                    |   |
|                       |  | graph-bars ▼   |                                    |   |
|                       | Graphsize:                                       |  |                                    |   |
|                       |  | 1600x1200  |                                    |   |
|                       |  | 800x600  |                                    |   |
|                       |  |  |                                    | - |

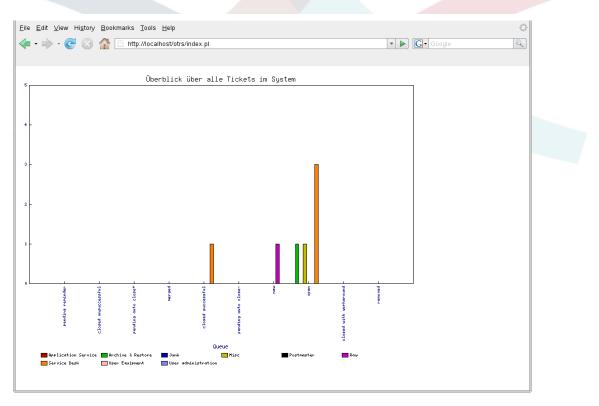
A PDF generator is incorporated too, which facilitates the export of the print view of tickets, stats and search results in PDF files:



| ((otrs))               | Con   | nmuni | catio | n with | n suci | ess! |         |       |       |       |          |        |          |        |       |          |       |       |        |       |         |         |       |        |         |         |          |        |          | St      | at#1   | 000   |
|------------------------|-------|-------|-------|--------|--------|------|---------|-------|-------|-------|----------|--------|----------|--------|-------|----------|-------|-------|--------|-------|---------|---------|-------|--------|---------|---------|----------|--------|----------|---------|--------|-------|
| Neue Tic               | ket   | s 20  | 07-0  | )5-0   | 01 0   | 0:0  | 0:00-   | 200   | 7-05  | 31 :  | 23:5     | 9:5    | э        |        |       |          |       |       |        |       |         | printed | by An | akin S | ikywal  | ker (si | kywalki  | n@otr: | s.org) ( | 06/10/3 | 2007 2 | 3:49: |
| Queue                  | Tue 1 | Wed 2 | Thu:  | Fri 4  | Sat 5  | Sun  | 6 Mon 1 | Tue 8 | Wed 9 | Thu 1 | D Fri 11 | Bat 12 | 2 Sun 1: | Mon 1- | Tue 1 | 5 Wed 16 | Thu T | Fri 1 | Set 15 | Sun 2 | 0 Mon 2 | Tue 22  | Wed 2 | Thu 2  | 4 Fri 2 | Sat 21  | 5 Sun 23 | Mon 28 | Tue 25   | Wed 3   | 0 Thu? | 1 Sum |
| Application<br>Service | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | ٥     | D      | 0     | 0       | ٥       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | 0     |
| inchive & Restore      | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | 0     |
| lusk                   | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | 0     |
| Asc.                   | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | 1        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | 1     |
| batmaater              | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | 0     |
| law.                   | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 1     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | 1     |
| ervice Desk            | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 1       | 0       | 0        | 3      | 0        | 0       | 0      | 4     |
| leer Equipment         | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | C     |
| laar<br>dministration  | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 0     | 0     | D        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | D      | 0     | 0       | ٥       | 0     | 0      | 0       | 0       | 0        | 0      | 0        | 0       | 0      | 0     |
| Sum                    | 0     | 0     | 0     | 0      | 0      | 0    | 0       | 0     | 1     | 0     | 1        | 0      | 0        | 0      | 0     | 0        | 0     | 0     | 0      | 0     | 0       | 0       | 0     | 0      | 1       | 0       | 0        | 3      | 0        | 0       | 0      | 8     |

| ((otrs)) or         | mmunication with    | success'            |                     |        |                   |                    |      |               |                         |                | Stat#100(     |
|---------------------|---------------------|---------------------|---------------------|--------|-------------------|--------------------|------|---------------|-------------------------|----------------|---------------|
| ((0110)) 00         | in ridincation with | BLKAADIST.          |                     |        |                   |                    |      |               |                         |                | 5121#1000     |
| A                   |                     |                     |                     |        |                   |                    |      |               |                         |                |               |
| Uberblick ü         | ber alle Tick       | ets im System       | l –                 |        |                   |                    | prin | ited by Anaki | n Skywalker (skywalker@ | otrs.org) 06/1 | 1/2007 01:45: |
| Queue               | pending reminder    | closed unsuccessful | pending auto close+ | merged | closed successful | pending autoclose- | new  | open          | closed with workaro und | removed        | Sum           |
| Application Service | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | 0    | 0             | 0                       | 0              | ٥             |
| Archive & Restore   | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | 0    | 1             | 0                       | 0              | 1             |
| Junk                | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | ٥    | 0             | 0                       | 0              | 0             |
| Misc                | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | 0    | 1             | 0                       | 0              | 1             |
| Postmaster          | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | 0    | 0             | 0                       | 0              | 0             |
| Raw                 | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | 1    | 0             | 0                       | 0              | 1             |
| Service Desk        | 0                   | 0                   | 0                   | 0      | 1                 | 0                  | 0    | э             | 0                       | 0              | 4             |
| User Equipment      | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | 0    | 0             | 0                       | 0              | 0             |
| User administration | 0                   | 0                   | 0                   | 0      | 0                 | 0                  | 0    | 0             | 0                       | 0              | 0             |
| Sum                 | 0                   | 0                   | 0                   | 0      |                   | 0                  | 1    | 5             | 0                       | 0              | 7             |

#### Example of a graphical ticket overview:





# Chapter 11. The admin area of OTRS::ITSM

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

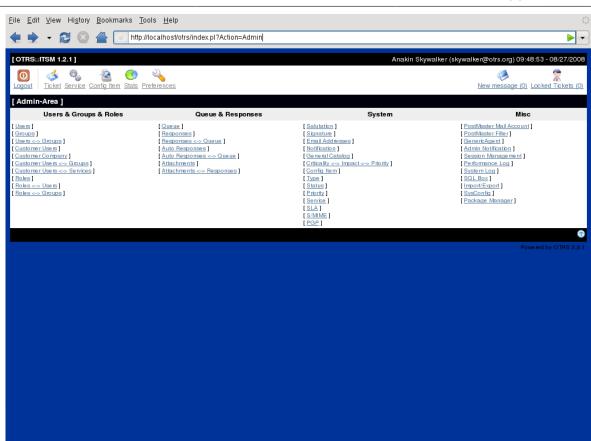
The admin area can be accessed via the "admin" link in the agent interface navigation bar. The link is only shown to users logged on to the system as OTRS::ITSM administrators or having administrator permissions in the system. After a default installation you can log on to the system as OTRS admin using the user name "root@localhost" and the password "root".

# Warning

Make sure to change the password of root@localhost in the user preferences as quickly as possible after the installation as it is the default password and commonly known.

- from OTRS::ITSM 1.0 on
  - [ General Catalog ]
  - [ Criticality Impact Priority
  - [ ConfigItem ]
- from OTRS::ITSM 1.1 on
  - [ Import/Export ]
- from OTRS::ITSM 2.0 on
  - [ Notification (ITSM Change Management) ]
  - [ Category Impact Priority ]
  - [ State Machine ]
- from OTRS 2.2 on
  - [ Type ]
  - [ Status ]
  - [ Service ]
  - [ SLA ]
- from OTRS 2.3 on
  - [ Priority ]





## 1. The general catalog

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



| <u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp                     |   |  | ž,  |  |  |  |  |  |  |
|--|---|--|---|--|--|--|--|--|--|
| 💠 👻 🛃 💿 http://ocalhost/otrs/index.pl?Action=AdminGeneralCatalog   |   |  |   |  |  |  |  |  |  |
| [OTRS::ITSM 1.2.1]   |   | Anakin Skyv  | valker (skywalker@otrs.org) 09:49:24 - 08/27/2008   |  |  |  |  |  |  |
| O State Preferences  |   |  | New message (0) Locked Tickets (0)  |  |  |  |  |  |  |
| [Admin-Area]   |   |  |   |  |  |  |  |  |  |
| Users & Groups & Roles   | Queue & Responses                               | System   | Misc  |  |  |  |  |  |  |
| [Customer Users]     [Auto Resp       [Customer Company]     [Auto Resp       [Customer Users <-> Groups]     [Attachmer | s> Queue ]<br>onses ]<br>onses> Queue ]         | [Salutation]<br>[Signatuse spees]<br>[Ermail Addressees]<br>[Notification]<br>[General Catabag]<br>[Criticality-co-Impact <>> Priority]<br>[Config litern]<br>[Type]<br>[Signatus]<br>[Priority]<br>[Sarrice]<br>[SiA]<br>[SiA]<br>[SiA]<br>[SiAME]<br>[PGP] | [PostMaster Hail Account]<br>[PostMaster Hail Account]<br>[GenericAgent]<br>[Admin Notification ]<br>[Session Management]<br>[Performance Log ]<br>[SoL Box]<br>[SoL Box]<br>[ImpoffExport]<br>[SysSonfis]<br>[Package Manager] |  |  |  |  |  |  |
| Add Catalog Item:  | List:   |  |   |  |  |  |  |  |  |
| Catalog  | Catalog Class                                   |  |   |  |  |  |  |  |  |
| Class:   | ITSM::Configitem::Class                         |  |   |  |  |  |  |  |  |
| Add  | ITSM::ConfigItem::Computer::                    | uter::Type   |   |  |  |  |  |  |  |
|  | ITSM::ConfigItem::Deploymer                     | n::De ploymentState  |   |  |  |  |  |  |  |
| Add Catalog Class:   |   | SM::ConfigItem::Hardware::Type   |   |  |  |  |  |  |  |
| Add a new Catalog Class.   | ITSM::ConfigItem::Location::T                   |  |   |  |  |  |  |  |  |
| Add  | ITSM::ConfigItem::Network::Ty                   |  |   |  |  |  |  |  |  |
|  | ITSM::ConfigItem::Software::L                   |  |   |  |  |  |  |  |  |
|  | ITSM::ConfigItem::Software::T                   | уре  |   |  |  |  |  |  |  |
|  | ITSM::ConfigItem::YesNo                         |  |   |  |  |  |  |  |  |
|  | ITSM::Core::Criticality                         |  |   |  |  |  |  |  |  |
|  | ITSM::Core::Impact<br>ITSM::Core::IncidentState |  |   |  |  |  |  |  |  |
|  | ITSM::Core::IncidentState                       |  |   |  |  |  |  |  |  |
|  | TOM/OLA/TWO                                     |  |   |  |  |  |  |  |  |

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

| <u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> el   | )   |   |   |                 |
|---|---|---|---|-----------------|
| 🔶 👻 😂 🕙 🕋 💽 http://localhos   | /otrs/index.pl?Action=AdminGenera   | ICatalog&Subaction=ItemList&Class=ITSM::  | ConfigItem::Computer::Type  | ▶ ▼             |
| [OTRS::ITSM 1.2.1]  |   | Anakin Sk   | ywalker (skywalker@otrs.org) 09:51:5  | 7 - 08/27/2008  |
| O S Config Item Stats Preferences   |   |   | New message (0)   | ked Tickets (0) |
| [Admin-Area]  |   |   |   |                 |
| Users & Groups & Roles  | Queue & Responses   | System  | Misc  |                 |
| [Users <> Groups]         [Resp.           [Customer Users]         [Auto           [Customer Company]         [Auto           [Customer Users <> Groups]         [Atta | e]<br>onees <> Queue]<br>Besponses]<br>Responses <> Queue]<br>Imments /> Responses] | [Salutation]<br>[Sanature]<br>[ErnalAddesees]<br>[Motification]<br>[GenemICataba]<br>[Config Item]<br>[Tone]<br>[Tone]<br>[Status]<br>[Phothy]<br>[Saruks]<br>[SLA]<br>[SJA]<br>[SJA] | [PostMaster/Mail Account]<br>[PostMaster/Her]<br>[GenerhAgent]<br>[Admin Notification]<br>[Session Management]<br>[Performance Log]<br>[System Log]<br>[SQL Box]<br>[Import/Export]<br>[SysConfig]<br>[Package Manager] |                 |
| [General Catalog Management ]   |   |   |   |                 |
| Add Catalog Item:   | List:   |   |   |                 |
|   | TISM::Configitem::Compute   | er::Type  | Functionality   | Valid           |
| Class:  | Desktop   |   |   | valid           |
| Ac  | d Laptop  |   | -   | valid           |
|   | Other   |   | -   | valid           |
| Add Catalog Class:  | PDA   |   |   | valid           |
| Add a new Catalog Class.  | Phone   |   |   | valid           |
| Ad  | d <u>Server</u>   |   | -   | valid           |
|   |   |   |   |                 |
|   |   |   |   | 0               |
|   |   |   | Powere  | d by OTRS 2.3.1 |
|   |   |   |   |                 |
|   |   |   |   |                 |
|   |   |   |   |                 |
|   |   |   |   |                 |



#### 2. Configurating configuration item classes

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

• [ Computer ]

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

• [ Hardware ]

All hardware components not being considered as computers, ranging from "blade center" chassis, to printers and USB sticks depending on the level of detailedness of the listing.

• [ Network ]

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

• [ Software ]

All software products and licenses.

• [ Locations ]

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 Cl class in the general catalog, a definition must be entered in Configitem".

| <u>F</u> ile <u>E</u> dit <u>V</u> iew History <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp                     |  |  |   |                     |
|---|--|--|---|---------------------|
| 🔶 👻 😂 🖀 💿 http://localhost/   | trs/index.pl?Action=AdminGenera                              | ICatalog&Subaction=ItemList&Class=ITSM::C  | ConfigItem::Class   | -                   |
| [OTRS::ITSM 1.2.1]  |  | Anakin Sky   | walker (skywalker@otrs.org) 09:53   | 55 - 08/27/2008     |
| Image: Service Config Item         Stats         Preferences  |  |  | New message (O)   | oc ked Tic kets (0) |
| [Admin-Area]  |  |  |   |                     |
| Users & Groups & Roles  | Queue & Responses  | System   | Misc  |                     |
| [Customer Users]     [Auto F       [Customer Company]     [Auto F       [Customer Users <>> Groups]     [Attach | nses]<br>nses <-> Queue]<br>esponses]<br>esponses <-> Queue] | [Salutation]<br>[Sanature]<br>[Email.Addresses]<br>[Notification]<br>[GeneralCatalog]<br>[Criticatify <>> Impact <>> Priority]<br>[Config Item]<br>[Tome]<br>[Satus]<br>[Phority]<br>[Satus]<br>[Satus]<br>[SLA]<br>[SLA]<br>[SLA]<br>[SAMME]<br>[PGP] | [PostMaster Mail Account]<br>PostMaster Filter]<br>[GenericAcent]<br>[Admin Notification]<br>[Session Management]<br>[Performance Log]<br>[Soll Box]<br>[Imot/Export]<br>[SveConfig]<br>[Package Manager] |                     |
| [General Catalog Management ]   |  |  |   |                     |
| Add Catalog Item:   | List:  |  |   |                     |
| Catalog ITSM::ConfigItem::Class   | ITSM::ConfigItem::Class                                      |  | Functionality   | Valid               |
| Class:  | Computer   |  | -   | valid               |
| Add   | Hardware   |  | -   | valid               |
|   | Location   |  |   | valid               |
| Add Catalog Class:  | Network  |  | •   | valid               |
| Add a new Catalog Class.  | Software   |  | •   | valid               |
| Add   |  |  |   |                     |
|   |  |  |   | Û                   |
|   |  |  | Powe  | red by OTRS 2.3.1   |
|   |  |  |   |                     |



## Warning

The design of a CMDB data model and the CIs to be managed in 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 before changing the OTRS::ITSM standard data model and/or CI classes. It has proven 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" Cl 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 effected in the graphical configuration area selecting "change definition":

| <u>Eile E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> | Help   |  |
|--|--|--|
| <ul> <li></li></ul>  | ost/otrs/index.pl?Action=AdminITSMConfigItem&Subaction=DefinitionChang 🔻 🕨 💽 🕻 Google  |  |
|  |  |  |
|  | ( <u>PGP</u> )   |  |
| [ConfigItem Management ]   |  |  |
| Change Definition:   | Change:  |  |
| Configitem Class: Computer 💌   | Configitem Computer<br>Class:  |  |
| Change   | <pre>Definition:<br/>CountDefault =&gt; 0,<br/>},<br/>},<br/>{<br/>Key =&gt; 'GraphicAdapter',<br/>Name =&gt; 'Graphic Adapter',<br/>Input =&gt; {<br/>Type =&gt; 'Text',<br/>Size =&gt; 50,<br/>MaxLength =&gt; 100,<br/>},<br/>},<br/>{<br/>Key =&gt; 'OtherEquipment',<br/>Name =&gt; 'OtherEquipment',<br/>Name =&gt; 'TextArea',<br/>Required =&gt; 1,<br/>},<br/>CountMax =&gt; 1,<br/>CountDefault =&gt; 0,</pre>   |  |
|  | <pre>}, {     Key =&gt; 'WarrantyExpirationDate',     Name =&gt; 'Warranty Expiration Date',     Searchable =&gt; 1,     Input =&gt; {         Type =&gt; 'Date',         },         {             Key =&gt; 'InstallDate',             Name =&gt; 'Install Date',             Install Date',             Name =&gt; 'Install Date',             Install Date',             Name =&gt; 'Install Date',             Install Date',</pre> |  |

## Warning

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".



#### 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.

| <u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp  |  |   |  |                           |
|---|--|---|--|---------------------------|
| 🔶 👻 😂 🖀 💽 http://localhost/of   | rs/index.pl?Action=AdminITSMConfig                   | gltem&Subaction=DefinitionList&Class  | sID=32   | ► <b>-</b>                |
| [OTRS::ITSM 1.2.1]  |  | Anakin  | Skywalker (skywalker@otrs.org  | ) 10:00:15 - 08/27/2008   |
| Indext         Index         Index         Index <td></td> <td></td> <td>New message</td> <td>ge (0) Locked Tickets (0)</td> |  |   | New message  | ge (0) Locked Tickets (0) |
| [ Admin-Area ]<br>Users & Groups & Roles  | Queue & Responses                                    | System  |  | Misc                      |
| [Usem]         [Queue]           [Groups]         [Respon           [Usem s-> Groups]         [Respon           [Customer Lasem]         [Auto Re           [Customer Company]         [Auto Re           [Customer Lasem]         [Auto Re   | 255]<br>255<> Queue]<br>250n255]<br>250n255<> Queue] | [Salutation]<br>[Signatume]<br>[Notification]<br>[GeneralCataboo]<br>[Contiguitem]<br>[Contiguitem]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau]<br>[Sintau] | [PostManter Mail A<br>[PostManter Filer]<br>[GenericAcent]<br>[Admin Notification<br>[Session Manager<br>[Performance_Log]<br>[System Log]<br>[SoL Boz]<br>[Imooff.Sport]<br>[SysContig]<br>[Package_Manager | 2000mt]<br>]<br>went]     |
| [ Config Item Management ]  |  |   |  |                           |
| Change Definition:  | List:  |   |  |                           |
| Config Item Class: Computer   | Config Item Class                                    | Version   | Created by   | Created                   |
| Change  | Computer   | 1   | root@localhost (Admin OTRS)  | 08/07/2008 08:48:20       |
|   |  |   |  |                           |
|   |  |   |  | Powemd by OTRS 2.3.1      |
|   |  |   |  |                           |

## 4. Adjustment of ticket state

In ITIL compliant incident management, incidents are either resolved successfully or closed with a workaround. For such cases, OTRS::ITSM standard provides the ticket state "closed with workaround".



| OTRS::ITSM 1.2.1 ]  |                                    |   |  | Anakir   | n Skywalker (skywalker@  | otrs.org) 10:00:39 - 08/27/2   |
|---|------------------------------------|---|--|--|--|--|
| 🧿   🧆 🎭 🗟 🤭<br>ogout   Ticket Service Config Item Stats P   | Preferences                        |   |  |  | Nev  | v message (0) Locked Tickets   |
| Admin-Area ]  |                                    |   |  |  |  |  |
| Users & Groups & Roles  |                                    | Queue & Responses   |  | System   |  | Misc<br>ster Mail Account]   |
| leem s-o Groups ]<br>unitormer Leem ]<br>unitormer Loem a -o Groups ]<br>unitormer Lieem -oo Services ]<br>obes ]<br>loes -o Lieems ] | Auto Resp<br>Auto Resp<br>Attachme | ponses <-> Queue  | [Email Addresses]<br>[Notification]<br>[General Catalog]<br>[Criticality <> Impac<br>[Config. Item]<br>[Type]<br>[Status]  | :t <-> Priority]   | Session  | <u>lotification</u> ]<br><u>Management]<br/>ance_Log]<br/>Log]<br/>×]</u>  |
| to <u>ks «→ Groups</u> ]<br>State Management ]  |                                    |   | [Priority]<br>[Service]<br>[SLA]<br>[S/MIME]<br>[PGP]  |  | SysConf  |  |
| State Management ]<br>Add State:  |                                    | List:   | [ <u>Priority</u> ]<br>[ <u>Service</u> ]<br>[ <u>SLA</u> ]<br>[ <u>S/MIME</u> ]   |  | SysConf  | ia 1   |
| state Management ]<br>dd State:   |                                    | Name  | [ Phothy]<br>[ Service ]<br>[ SLA ]<br>[ S.A.MME ]<br>[ PGP ]  | valid/invalid  | [ SysConf<br>[ Package<br>Changed  | ia]<br>• Manager]<br>Created   |
| state Management ]<br>dd State:   | Add                                | Name<br>closed successful   | (Phothy)<br>(Service)<br>(SLA)<br>(SLA)<br>(S.AMME)<br>(PGP)<br>Type<br>closed   | valid  | [ <u>SysCont</u><br>[ <u>Package</u><br><b>Changed</b><br>08:07/2008 08:41   | ia ]<br>• Manager ]<br>Created<br>08/07/2008 08:41   |
| state Management ]<br>dd State:   | Add                                | Name<br>closed successful<br>closed unsuccessful  | [ Phothy]<br>[ Service ]<br>[ SinA]<br>[ SinA]<br>[ SinAME ]<br>[ PSP ]<br>Type<br>closed<br>closed  | valid<br>valid   | [ <u>SysConf</u><br>[ <u>Package</u><br><b>Changed</b><br>08/07/2008 08:41<br>08/07/2008 08:41   | ia ]<br>- Manager ]<br>Created<br>08/07/2008 08:41<br>08/07/2008 08:41   |
| state Management ]<br>dd State:   | Add                                | Name<br>closed successful<br>closed unsuccessful<br>closed with workaround  | [Phothu]<br>[Service]<br>[Service]<br>[SLA]<br>[SLA]<br>[SLAME]<br>[PSP]<br>Type<br>closed<br>closed<br>closed   | valid<br>valid<br>valid  | [ <u>SysConf</u><br>[ <u>Package</u><br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:48   | Eal<br>Manager]<br>Created<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:48   |
| state Management ]<br>dd State:   | Add                                | Name<br>closed successful<br>closed unsuccessful<br>closed with workaround<br>merged  | [Phothu]<br>[Senice]<br>[Senice]<br>[SAMME]<br>[SAMME]<br>[PGP]<br>Type<br>closed<br>closed<br>closed<br>closed<br>merged  | valid<br>valid<br>valid<br>valid                                     | [ <u>SysConf</u><br>[ <u>Package</u><br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:48<br>08/07/2008 08:41   | Eal<br>Manager]<br>Created<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:48<br>08/07/2008 08:41   |
| state Management ]<br>dd State:   | Add                                | Name<br>closed successful<br>closed unsuccessful<br>closed with workaround<br>merged<br>new   | (Phothy)<br>Service ]<br>(SAA)<br>(SAAME)<br>(PSP)<br>Closed<br>closed<br>closed<br>closed<br>merged<br>new  | valid<br>valid<br>valid<br>valid<br>valid                            | [ <u>SyaConf</u><br>[ <u>Package</u> ]<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41   | Eal<br>Manager]<br>Created<br>08/07/2008 08:41<br>08/07/2008 08:48<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41   |
| State Management ]<br>dd State:   | Add                                | Name<br>closed successful<br>closed unsuccessful<br>closed with workaround<br>merged<br>new<br>open   | (Protection)<br>(Services)<br>(Services)<br>(SAMME)<br>(SAMME)<br>(PGF)<br>Closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>energed<br>new<br>open  | valid<br>valid<br>valid<br>valid<br>valid<br>valid                   | [ <u>SyaConf</u><br>[ <u>Package</u> ]<br>[ <u>Package</u> ]<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41                     | Ea ]<br>Manager ]<br>Created<br>08/07/2008 08:41<br>08/07/2008 08:43<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41   |
| State Management ]<br>dd State:   | Add                                | Name<br>closed successful<br>closed unsuccessful<br>closed with workaround<br>merged<br>new<br>open<br>pending auto close+                        | [ Phothy]<br>[ Senice ]<br>[ SLA]<br>[ SLAMME ]<br>[ SLAMME ]<br>[ PGE ]<br>Closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed | valid<br>valid<br>valid<br>valid<br>valid<br>valid<br>valid          | [SysConf<br>[Package<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41   | Ea ]<br>Manager ]<br>Created<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41                     |
| State Management ]<br>dd State:   | Add                                | Name<br>closed successful<br>closed unsuccessful<br>closed with workaround<br>merged<br>new<br>open<br>pending auto close+<br>pending auto close- | ( Phothy)<br>( Service )<br>( SLA  | valid<br>valid<br>valid<br>valid<br>valid<br>valid<br>valid<br>valid | [SysConf<br>[Package<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41 | Ea ]<br>Manager ]<br>Created<br>08,07/2008 08:41<br>08,07/2008 08:41<br>08,07/2008 08:41<br>08,07/2008 08:41<br>08,07/2008 08:41<br>08,07/2008 08:41<br>08,07/2008 08:41<br>08,07/2008 08:41 |
| State Management ]  | Add                                | Name<br>closed successful<br>closed unsuccessful<br>closed with workaround<br>merged<br>new<br>open<br>pending auto close+                        | [ Phothy]<br>[ Senice ]<br>[ SLA]<br>[ SLAMME ]<br>[ SLAMME ]<br>[ PGE ]<br>Closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed<br>closed | valid<br>valid<br>valid<br>valid<br>valid<br>valid<br>valid          | [SysConf<br>[Package<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41   | Ea ]<br>Manager ]<br>Created<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41<br>08/07/2008 08:41                     |

With OTRS::ITSM you can change 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 to the "new" state require changes 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 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';
[...]
```

# Warning

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)

• [ Priority ]

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.

| ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks   | <u>T</u> ools <u>H</u> elp  |                          |  |                       |   |             |
|--|---|--------------------------|--|-----------------------|---|-------------|
| 🌩 👻 😂 🚖 💽  | http://localhost/otrs/inde  | ex.pl?Action=AdminITSMC  | IPAllocate   |                       |   |             |
| [OTRS::ITSM 1.2.1]   |   |                          |  | Anakin Skywalker      | (skywalker@otrs.org) 10:02:36 - 0   | 8/27/2008   |
| O de logout de l | ats Preferences   |                          |  |                       | New message (0) Locked  | Tickets (0) |
| [ Admin-Area ]<br>Users & Groups & Roles   | 0   | ue & Responses           |  | System                | Misc  |             |
| Users & Groups & Holes<br>[Groups]<br>[Groups]<br>[Guidomer Users]<br>[Guidomer Users <> Groups]<br>[Guidomer Users <> Groups]<br>[Guidomer Users <> Services]<br>[Roles =<br>[Roles <> Groups]<br>[Roles <> Groups]<br>[Roles <> Groups]<br>[Criticality <> Impact <> Priority  | [Queue]<br>[Responses]<br>[Responses]<br>[Auto Responses<br>[Auto Responses<br>[Attachments]<br>[Attachments] | Queue]<br>]<br><> Queue] | [Solution]<br>[Statute]<br>[Email Addimenses]<br>[Motification]<br>[Contraint cost interaction<br>[Contraint cost interaction<br>[Contraint cost interaction<br>[Contraint]<br>[Contraint]<br>[Contraint]<br>[Contraint]<br>[Status]<br>[Pontry]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status]<br>[Status] |                       | I PostMaster MailAccount]<br>[PostMaster Eiter]<br>[GenericAgen]<br>[Admin Notification]<br>[Session Management]<br>[Performance Log]<br>[System Log]<br>[Sout Bos]<br>[Import/Export]<br>[SystConfig]<br>[Package Manager] |             |
| Priority allocate:   |   |                          |  |                       |   |             |
|  | Criticality<br>1 very low   | 2 low                    | Criticality<br>3 normal  | Criticality<br>4 high | Criticality<br>5 very high  |             |
| Impact<br>1 very low   | 1 very low   🗢  | 1 very low   🗢           | 2 low   🗘  | 2 Iow   \$            | 3 normal   🗢  |             |
| Impact<br>2 low  | 1 very low   🗢  | 2 low   🖨                | 2 low   🖨  | 3 normal   🖨          | 4 high   🗢  |             |
| <b>Impact</b><br>3 normal  | 2 Iow   \$  | 2 low   \$               | 3 normal   🗢   | 4 high   \$           | 4 high   🖨  |             |
| Impact<br>4 high   | 2 low   🖨   | 3 normal   🖨             | 4 high   🖨   | 4 high   \$           | 5 very high   |             |
| Impact<br>5 very high  | 3 normal   \$   | 4 high   🖨               | 4 high   \$  | 5 very high           | 5 very high   |             |
|  |   |                          |  |                       | Save  |             |
|  |   |                          |  |                       |   |             |

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



| <u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> o  | ols <u>H</u> elp                    |   |  |   |                     |
|---|-------------------------------------|---|--|---|---------------------|
| 🔙 🔶 👻 🔁 🔁 💿 http://   | /localhost/otrs                     | /index.pl?Action=AdminGene              | ralCatalog&Subaction=ItemList&Class=ITSM::   | Core::Criticality   | -                   |
|   |                                     |   |  | analla a (ala analla a Qatas a an) 40.0   | 4.20 08/87/8008     |
|   | 5                                   |   | Anakin Skj   | ywalker (skywalker@otrs.org) 10:0   | 14:36 - 08/27/2008  |
| Image: State Service         Config litem         State         P   | references                          |   |  | New message (0)   | Locked Tickets (0)  |
| [Admin-Area]  |                                     |   |  |   |                     |
| Users & Groups & Roles  |                                     | Queue & Responses                       | System   | Misc  |                     |
| [Uers]<br>[Groups]<br>[Uestomer Uers]<br>[Customer Uers]<br>[Customer Uers]<br>[Customer Uers ~> Groups]<br>[Customer Uers ~> Groups]<br>[Roles ~> Uers]<br>[Roles ~> Uers]<br>[Roles ~> Groups]<br>[General Catalog Management]<br>Add Catalog Item: | Auto Resp<br>Auto Resp<br>Attachmen | s> Queue ]<br>onses ]<br>onses> Queue ] | [Salutation]<br>[Sinature]<br>[Email Addresses]<br>[Hotfication]<br>[General Catables]<br>[Criticality <> Impact <> Priority]<br>[Contig Item]<br>[Tape]<br>[Status]<br>[Priority]<br>[Service]<br>[SLA]<br>[SIAME]<br>[PGP] | [PostMaster/Mail.Account<br>[PostMaster/Miller]<br>[GenericAgent]<br>[Admin.Notification]<br>[Session.Management]<br>[Performance.Log]<br>[System.Log]<br>[SOL.Box]<br>[Import/Export]<br>[SystConfig]<br>[Package Manager] | 1                   |
| Catalog ITSM::Core::Criticality   | \$                                  | ITSM::Core::Criticality                 |  | Functionality   | Valid               |
| Class:  |                                     | 1 very low                              |  | -   | valid               |
|   | Add                                 | <u>2 low</u>                            |  | -   | valid               |
|   |                                     | <u>3 normal</u>                         |  | -   | valid               |
| Add Catalog Class:  |                                     | 4 high                                  |  | -   | valid               |
| Add a new Catalog Class.  |                                     | 5 very high                             |  |   | valid               |
|   | Add                                 |   |  |   |                     |
|   |                                     |   |  |   | 0                   |
|   |                                     |   |  | Pov   | wered by OTRS 2.3.1 |
|   |                                     |   |  |   |                     |
|   |                                     |   |  |   |                     |
|   |                                     |   |  |   |                     |
|   |                                     |   |  |   |                     |

## 6. Adjustment of ticket priorities

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.



|   |  |  |                               | neal Service  |
|---|--|--|-------------------------------|---|
| ile <u>E</u> dit ⊻iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> o   | ols <u>H</u> elp   |  |                               |   |
| 🛑 🔶 🗕 🔁 🙁 🖀 🧻 http://   | /localhost/otrs/index.pl?Action=Adm  | inPriority   |                               |   |
|   |  |  |                               |   |
| [OTRS::ITSM 1.2.1]  | 5  |  | Anakin Si                     | kywalker (skywalker@otrs.org) 10:06:32 - 08/27/20   |
| O Service Config Item Stats Pr  | references   |  |                               | New message (0) Locked Tickets  |
| [ Admin-Area ]  |  |  |                               |   |
| Users & Groups & Roles  | Queue & Response   |  | System                        | Misc  |
| (Jean)<br>(Toruns)<br>(Jean & Groups)<br>(Customer Lease)<br>(Customer Leases)<br>(Customer Leases ~ Services)<br>(Roles (<br>(Roles ~ Groups)<br>(Poles ~ Groups)<br>(Priority Management ]<br>Add Priority: | [Qeues]<br>[Responses]<br>[Auto Responses]<br>[Auto Responses]<br>[Auto Responses]<br>[Attachments]<br>[Attachments] | [Salutation]<br>[Sanature]<br>[Email Addust<br>[Notification]<br>[Genemicative<br>[Control theory of Control<br>[Control theory<br>[Ture]<br>[Status]<br>[Pionty]<br>[Sanize]<br>[SiziA]<br>[SiziA]<br>[SiziA] | ilog]<br>Impact <-> Priority] | [PostMaster/MailAccount]<br>[PostMaster/Bitr]<br>[GenericAgent]<br>[Admin Motification]<br>[Session Management]<br>[Performance Log]<br>[System Log]<br>[SoL Box]<br>[ImportExport]<br>[SysConfig]<br>[Package Manager] |
| Add a new Priority.   | Name   | valid/invalid  | Changed                       | Created   |
|   | Add 1 very low   | valid  | 08/07/2008 08:41              | 08/07/2008 08:41  |
|   | 2 low  | valid  | 08/07/2008 08:41              | 08/07/2008 08:41  |
|   | 3 normal   | valid  | 08/07/2008 08:41              | 08/07/2008 08:41  |
|   | 4 high   | valid  | 08/07/2008 08:41              | 08/07/2008 08:41  |
|   | 5 very high  | valid  | 08/07/2008 08:41              | 08/07/2008 08:41  |
|   |  |  |                               |   |
|   |  |  |                               |   |
|   |  |  |                               | Powered by OTRS 2   |
|   |  |  |                               |   |
|   |  |  |                               |   |
|   |  |  |                               |   |
|   |  |  |                               |   |

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

## Warning

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.

# Warning

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".



# Chapter 12. Additional OTRS applications - calendar

In OTRS 2.4, 9 calendars can directly be configurated graphically by default. This number can be extended to 99. Calendar configuration is effected in the admin interface using the SysConfig framework calendar 1 etc. links:

| e <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks  | <u>T</u> ools <u>H</u> elp   |  |  |   |
|---|--|--|--|---|
| 🛚 • 🗼 • 🥑 🛞 🏠 🕒 http  | //localhost/otrs/index.pl  |  | ▼ ▶ Google   |   |
|   |  |  |  |   |
|   |  |  |  | A |
| Users & Groups & Roles  | Queue & Responses  | System   | Misc   |   |
| Uaeme]<br>Groupps]<br>Uaemers-Caroupps]<br>Cuatomer Uaeme ]<br>Cuatomer Company ]<br>Cuatomer Company ]<br>Robes ]<br>Robes ]<br>Robes <> Groupps ]<br>Robes <> Groupps ] | [Queue]<br>[Regonaes]<br>[Regonaes]<br>[Auto Regonaes]<br>[Auto Regonaes]<br>[Auto Regonaes]<br>[Attachments]<br>[Attachments]                               | [Salutation]<br>[Signatuw]<br>[Email Addresses]<br>[Notification]<br>[Genemil Catalog]<br>[Priothy]<br>[Critically <>> Impact <>> Priority]<br>[Contigliem]<br>[Situw]<br>[Salutas]<br>[Salutas]<br>[Salutas]<br>[Salutas] | [PostMaster POP3 Acount]<br>[PostMaster Film]<br>[GenericAgent]<br>[Admin Notification]<br>[Semion Monagement]<br>[Performance Log]<br>[System Log]<br>[System Log]<br>[SoL Box]<br>[System[]<br>[Package Munager] |   |
| SysConfig ]   |  | [ <u>S/MIME]</u><br>[ <u>PGP</u> ]   |  |   |
| Search (1064):  | Result:  |  |  |   |
| Search for:   | Subgroup   | Elements   | Group  |   |
| ,   | Core   | 24   | Framework  |   |
|   | Search Core::LinkObject2::PossiblePart   | ner 3  | Framework  |   |
| Group selection:  | Core::LinkObject2::Types   | 7  | Framework  |   |
|   | Core::Log  | 6  | Framework  |   |
| Group: Framework (309)  | Core::MIME-Viewer  | 4  | Framework  |   |
|   | Show Core::MirrorDB  | 3  | Framework  |   |
|   |  |  |  |   |
|   | Core::PDF  | 4  | Framework  |   |
| Download Settings:  | Core::PDF<br>Core::Package   | 4 6  | Framework<br>Framework   |   |
| Download Settings:  |  |  |  |   |
| -   | Core::Package  | 6  | Framework  |   |
| -<br>Download all system config changes.  | <u>Core::Package</u><br><u>Core::PerformanceLog</u>  | 6  | Framework<br>Framework   |   |
| -<br>Download all system config changes.  | Core::Package<br>Core::PerformanceLog<br>Core::SOAP  | 6<br>3<br>2  | Framework<br>Framework<br>Framework  |   |
| Download all system config changes.   | Core::Package<br>Core::PerformanceLog<br>Core::SOAP<br>Core::Sendmail  | 6<br>3<br>2<br>9   | Framework<br>Framework<br>Framework<br>Framework   |   |
| Download all system config changes.   | Core::Package           Core::PerformanceLog           Core::SOAP           Core::SOAP           Core::Soap           Core::Sendmail           Core::Session | 6<br>3<br>2<br>9<br>14   | Framework<br>Framework<br>Framework<br>Framework<br>Framework  |   |
| Download all system config changes. Do Load Settings: File: Browse  | wrload<br>Core::Parkage<br>Core::SOAP<br>Core::SOAP<br>Core::Sendmail<br>Core::Session<br>Core::SpellChecker   | 6<br>3<br>2<br>9<br>14<br>4  | Framework<br>Framework<br>Framework<br>Framework<br>Framework<br>Framework<br>Framework  |   |

"TimeWorkingHours" can be used in OTRS::ITSM to define so-called "service level windows" time frames in which certain service levels are guaranteed, if applicable monitored and/or evaluated to secure service level compliance.



| TimeZone::Calendar1Name:       Calendar Name 1<br>(Default: Calendar Name 1)         TimeZone::Calendar1:<br>The time zone of the queue.       + 0 for the queue.         TimeVacationDays::Calendar1:<br>Add your permanent vacation days. Use<br>single-digit pattern for months January to<br>September and for days of month lower<br>than ten.       month<br>1       day Text<br>1         New       1       New Year's Eve!       Delete         2       24       Christmas Day       Delete         12       - 25       First Christmas Day       Delete         12       - 26       Second Christmas Day       Delete         12       - 31       Silvester       Delete         12       - 1       - 1       Test       Delete         12       - 1       - 1       Elete       Elete         12       - 1 | Co | onfig Options: Framework -> Core::Time::Ca   | lendar1  |  |
|---|----|--|--|--|
| The time zone of the queue.       (Default + 0)         TimeVacationDays::Calendar1:       Add your permanent vacation days. Use single-digit pattern for months January to September and for days of month lower than ten.       month day Text         1       1       New Year's Evel       Delete         2       -1       1 St. May       Delete         12       -24       Christmas       Delete         12       -26       First Christmas Day       Delete         12       -26       Second Christmas Day       Delete         12       -31       Silve ster       Delete         12       -31       Silve ster       Delete         New       war       Text       Delete  |    |  |  |  |
| Add your permanent vacation days. Use ingle-digit pattern for months January to September and for days of month lower than ten.   |    |  |  |  |
| One time vacation days. Use single-digit<br>pattern for months January to September   |    | Add your permanent vacation days. Use<br>single-digit pattern for months January to<br>September and for days of month lower | 1     -1     New Year's Evel     Delete       5     -1     1 St. May     Delete       12     -24     Christmas     Delete       12     -25     First Christmas Day     Delete       12     -26     Second Christmas Day     Delete       12     -28     Second Christmas Day     Delete       12     -31     Silve ster     Delete |  |
|   |    | One time vacation days. Use single-digit<br>pattern for months January to September  | 2004 - 1 - 1 test Delete   |  |



# Chapter 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 on request or members of the community can develop them.



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Version 1.1, March 2000

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