Generic Interface

Easy data exchange between OTRS and third party applications.
The Generic Interface of OTRS

OTRS is one of the most prevalent Open Source Help Desk Software solutions and the need for its integration with third party applications is therefore very great. The Generic Interface (GI) Framework and the XSLT Mapping Module is the quintessential precondition to integrate other systems with OTRS quickly and easily.

The multilayered Generic Interface Framework has several modules, which make a more flexible and easily adjustable creation of web services possible (see graphic).

The GUI of the Generic Interface allows you to configure web services conveniently. However, one requirement must be met: You must have a connector to establish a connection between OTRS and the third party system.

A connector is a set of modules that suits the third party system to be integrated. A connector acts as a tool-kit that matches the characteristics of the third party system.

Typical questions that arise while doing an integration project

Questions about the transport of data:
- Which technical protocols should be used for communication?
- How will incoming and outgoing requests be handled?

Questions about the mapping of data:
- What is the labeling of the same attribute in both systems?
- How should a 3-grade priority be translated into a 5-grade priority?

Questions about which operations shall be executed if requests reach OTRS:
- Should a ticket be created and/or updated?
- Should CI data be updated or should a change be approved?

Questions about actions (Invoker), if OTRS contacts third party systems.
Mapping with the XSLT Mapping Module

With the release of OTRS 5, the XSLT (eXtensible Stylesheet Language Transformation) mapping module has been integrated.

Using this module it is possible to adapt incoming and outgoing data structures – to and from third party systems – to the OTRS data structures, without complex programming or Perl know-how. Only an XML file with mapping details is required.

The transformation of data structures using XSLT typically causes three data attributes to change:
1. Structure
2. Key
3. Value

Example:

<table>
<thead>
<tr>
<th>Third party system format</th>
<th>OTRS format</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
<td><strong>Ticket</strong></td>
</tr>
<tr>
<td>- IncidentSeverity: 1 critical</td>
<td>- Type: Incident</td>
</tr>
<tr>
<td>- IncidentPhase: vendor action required</td>
<td>- Priority: 5 very high</td>
</tr>
<tr>
<td></td>
<td>- State: pending for vendor</td>
</tr>
</tbody>
</table>

A corresponding logic can be set up through the description language XSLT:
- If Issue → IncidentSeverity = “1 critical” then Ticket → Priority = “5 very high”
- If Issue → IncidentSeverity = “2 medium” then Ticket → Priority = “3 normal”
- Otherwise Ticket → Priority = “3 normal”

The mapping of incoming and outgoing data structures is the greatest challenge in interface design. This module – with its extremely high flexibility and zero programming requirements – thus provides useful help in almost all web service projects.
Influencing factors for ease and duration of an interface project

The following factors have an effect on the ease and duration of such an interface project: Type of system (unique or standard), installed customizations, and if a connector is available for the objects (ticket, change, etc.) that should be connected. If you have made customizations to one or both systems, the connector has to be supplemented or adjusted.

The ideal case would be that a suitable connector for the objects to be connected already exists and that both systems have no relevant customizations. In this case, the integration can be done simply via configuration.

<table>
<thead>
<tr>
<th>None of the systems is customized</th>
<th>One or both systems are customized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector for the objects to be linked exists</td>
<td>Integration can be done via configuration</td>
</tr>
<tr>
<td>Connector for the objects to be linked does not exist</td>
<td>Connector has to be supplemented/adjusted</td>
</tr>
</tbody>
</table>

If you want to connect OTRS with a third party system, the Generic Interface offers the benefit that certain basic tools (modules) can be reused.

However, major parts of the tool kit (the connector) are adjusted to or developed for individual cases of application.
Technical possibilities of the GI

- Incoming and outgoing communication is possible.
- Complex business logics can be mapped by the connectors e.g. round-trip prevention in bi-directional ticket synchronization, user-based access control.
- Components (modules) can be re-used e.g. SOAP network interface, data mapping.
- Web services can be integrated simply via configuration, if the suitable connector exists.

Benefits for your project

- More fields of application/more use cases can be mapped
- Shorter Time-to-Market (Go Live more quickly)
- Better cost-benefit ratio

Availability Connectors sorted by Functionality

We offer OTRS connectors only in combination of an OTRS Business Solution™ contract or an OTRS Business Solution™ Managed contract. For the first time, in OTRS Business Solution™ 5s and OTRS Business Solution™ 5s Managed three selected connectors will be fully integrated in OTRS, and will therefore be ready to be used immediately without any additional development: The OTRS – OTRS Connector, the JIRA Connector and the Bugzilla Connector.

1. Ticket Object:

- **OTRS – OTRS Connector**
  Enables the possibility to exchange information between different OTRS instances.

- **JIRA Connector**
  Enables a linking of OTRS and JIRA. Issues can be created and updated in JIRA through OTRS.

- **Bugzilla Connector**
  Enables a linking of OTRS and Bugzilla. Bugs can be created and updated in Bugzilla through OTRS.

- **OTRS – Solman Connector**
  Enables the integration of OTRS with the SAP Solution Manager.
### 2. CMDB

**Baramundi Connector**

Enables the integration of OTRS with Baramundi.

### 3. FAQ

**FAQ Connector**

Enables a linking of OTRS and your own webpage. FAQ updates in the Knowledge Database can be shown on the webpage.

### 4. CRM

**Customer Service Connector SugarCRM – OTRS**

Enables an integration of the CRM tool “Sugar CRM” into OTRS. Customer and contract data (SLA's, Support hours) can be synchronized and updated in a bi-directional process.