

## Usage of the Monitoring UI

The main screen of the UI shows a **Service Error List**, a list of all errors that have previously occurred on the Bridge node where the Monitoring service is running.

Figure: Main Screen of the Monitoring UI

| Service Error Log                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                |                |                 |      |                     |       |                   |            |                     |                     |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------|----------------|-----------------|------|---------------------|-------|-------------------|------------|---------------------|---------------------|-------------------|
| Message Error Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      | View Questions |                | View Change Log |      | Add/Remove Requests |       | Delete Statistics |            | Logged              | Admin               | Monitoring/Alerts |
| State                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ID                   | Service        | Source         | Event           | Time | Info                | Alert | Content           | Error Code | First Seen          | Last Seen           | Severity          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                      | Severity       | Event Category | Event Type      | Time | Info                | Alert | Content           | Error Code | First Seen          | Last Seen           | Options           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | InfoLog4j            | Internal       | 14             | CRASH           | true | true                | Info  | Value             | Checked    | 01/27/2016 12:29:25 | 01/27/2016 12:29:25 | 1   1   Disabled  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | Template Entry       | Internal       | 0              | Template/Type   | true | true                | Info  | Template          | Template   |                     |                     | 1   1   Disabled  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | GSP_AmpersandMsg_MNW | Internal       | 8              | CRASH           | true | true                | Info  | Value             | Checked    | 01/27/2016 08:51:49 | 01/27/2016 08:51:50 | 1   1   Disabled  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | GSP_AmpersandMsg_MNW | Internal       | 7              | CRASH           | true | true                | Info  | Value             | Checked    | 01/27/2016 08:51:50 | 01/27/2016 08:51:50 | 1   1   Disabled  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | GSP_AmpersandMsg_MNW | Internal       | 7              | CRASH           | true | true                | Info  | Value             | Checked    | 01/27/2016 08:51:50 | 01/27/2016 08:51:50 | 1   1   Disabled  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | GSP_AmpersandMsg_MNW | Internal       | 7              | CRASH           | true | true                | Info  | Value             | Checked    | 01/27/2016 08:51:50 | 01/27/2016 08:51:50 | 1   1   Disabled  |
| <b>Error Log</b><br>The following table contains information about the errors that have occurred in the system. The table is updated every 10 seconds. The table contains the following information: "Error Code" - The error code that was generated. "First Seen" - The date and time when the error first occurred. "Last Seen" - The date and time when the error last occurred. "Severity" - The severity of the error. "Options" - The options for the error. The table is sorted by the "Error Code" column. |                      |                |                |                 |      |                     |       |                   |            |                     |                     |                   |
| <b>Request Error</b><br>Connect error: Check endpoint URL is correct. If correct check with GSP Provider of service and is running.                                                                                                                                                                                                                                                                                                                                                                                 |                      |                |                |                 |      |                     |       |                   |            |                     |                     |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | Log4J-Beans          | External       | 10             | CRASH           | true | true                | Info  | Value             | Checked    | 01/27/2016 09:43:18 | 01/27/2016 09:43:18 | 1   1   Disabled  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                    | Log4J-Beans          | External       | 10             | CRASH           | true | true                | Info  | Value             | Checked    | 01/26/2016 12:29:29 | 01/26/2016 12:29:29 | 1   1   Disabled  |
| Showing 12 of 12 entries                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                      |                |                |                 |      |                     |       |                   |            |                     |                     |                   |

Once an error occurs during the execution of a Bridge service, an error type entry is written to that service's log file. These will be collected by the Monitoring Base Service. The Monitoring UI presents a user interface to configure the individual handling of known errors. In order to configure a specific error, it has to occur at least once. So this list typically grows over time.

When an error occurs for the first time, a new entry in the error list is created, using the default settings from the template entry (see screenshot above, the first entry in the list is that template entry). You can tweak this template entry to your needs, so new entries will get the most appropriate settings. Once the entry is created, it can be modified to configure individual handling for this specific type of error. To open the configuration dialog, double click the entry in the list.

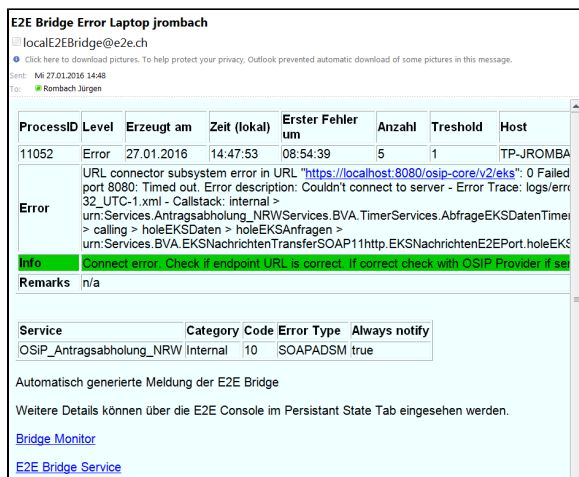
The first four columns of the table are generated by the Bridge and contain the meta info about the error: which service raised this error, and category, code and type of the error. This can either be one of the uncaught errors thrown by the xUML Runtime (see also [Error Codes](#)) or a user generated log entry by using the log operation and type **Error** (only type **Error** is notified by the Bridge, refer to [Logging](#) for explicit error logging).

| Table Column      | Description                                                                                                                                                                                                                                                                                                                                                                                           | Values      |                                                                      |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------------|
| Info Mail         | If checked, an email is sent to the recipients configured below.                                                                                                                                                                                                                                                                                                                                      | true, false |                                                                      |
| Always Notify     | If checked, the notification is triggered each time the error threshold is reached. If unchecked, the notification is triggered once per day only.                                                                                                                                                                                                                                                    | true, false |                                                                      |
| Custom Notify     | If checked, a <a href="#">custom notification</a> is triggered. This is a customized extension of the Monitoring Base Service, allowing the integration with other monitoring or ticketing systems like Nagios, JIRA, DataDog etc. This can be configured by linking a customer specific library. Please do not hesitate to contact us, if you need assistance (see <a href="#">Bridge Support</a> ). | true, false |                                                                      |
| Error Entry State | This column displays the status of the error entry.                                                                                                                                                                                                                                                                                                                                                   | New         | A new entry of an error or one that has been configured by an admin. |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                       | Template    | An error template.                                                   |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                       | Checked     | Entry has been checked manually.                                     |
| First Occ         | This column displays date and time of the first occurrence of this specific error.                                                                                                                                                                                                                                                                                                                    |             |                                                                      |
| Last Occ          | This column documents the most recent occurrence of this specific error.                                                                                                                                                                                                                                                                                                                              |             |                                                                      |
| Error Count       | This column documents how often this specific error occurred (over the whole lifetime of this Bridge instance).                                                                                                                                                                                                                                                                                       |             |                                                                      |
| Threshold         | Specifies the count of occurrences that trigger a notification. This setting is related to <b>Always notify</b> and <b>Info Mail</b> .                                                                                                                                                                                                                                                                |             |                                                                      |

If **Info Mail** is set to true the Bridge automatically sends a notification email to the configured recipients. It looks like:

### On this Page:

- **Managing Error Definitions**
  - **Modifying an Error Definition**
  - **Deleting Error Definitions**
  - **Bulk Change of Error Definitions**
- **Managing Error Groups**
- **Downtimes**
  - **Configuring Downtimes**
  - **Viewing Downtimes**
- **Viewing the Change Log**



For details on all possibilities to configure the error notifications (recipients, ...) refer to [Managing Error Definitions](#) below.

The notification mail states an error count: the number of times this error occurred so far **this day**. At the end of day, this error counter will be reset to 0.  
 Having a look at the Monitoring UI, you may notice a different error count. The error count of the UI is never reset and states the overall occurrence of the error.

For that reason the number of occurrences in the notification email and the error count in the user interface may differ. The email is related to the current day, whereas the error count in the UI is the absolute number of occurrences of this specific error.

## Managing Error Definitions

### Modifying an Error Definition

Double-click an error entry on the **Service Error List** to modify the error configurations. The screenshot below shows the configuration dialog:

Figure: Error Configuration Dialog

**Error Definition**

Service Name: Template Entry  
 Error Category: TemplateCategory  
 Error Code: 0  
 Error Type: TemplateErrorType

**Error Group Definition**

**Information About Error**  
 Description: This is the template entry - Do not delete this entry This is used for the default settings for new entries  
 Remarks: Remarks  
 Entry State: Template

**Error Notification**  
 Info Mail: ☒ Always notify: ☒ Error threshold: 1  
 Recipients TO: anyaddress@anymailprovider.com  
 Recipients CC: anotheraddress@anymailprovider.com  
 Description for required action: 2) This is the template entry. Put in here the required action or further info about the error  
 Subject: Enter your custom subject here.

Buttons: Modify, Delete, Cancel

The upper two boxes contain information on the error, i.e. the service that raised it, category, code, description etc.

You can define the specific error handling in the box labelled **Error Notification**.

| Setting              | Description                                                                                                                                        |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Info Mail</b>     | If checked, an email is sent to the recipients configured below.                                                                                   |
| <b>Always notify</b> | If checked, the notification is triggered each time the error threshold is reached. If unchecked, the notification is triggered once per day only. |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Error threshold</b>                 | Specifies the count of occurrences that trigger a notification. This setting is related to <b>Always notify</b> and <b>Info Mail</b> .                                                                                                                                                                                                                                                                                                                                                    |
| <b>Custom Notify</b>                   | If checked, a <a href="#">custom notification</a> is triggered. This is a customized extension of the Monitoring Base Service, allowing the integration with other monitoring or ticketing systems like Nagios, JIRA, DataDog etc.<br>This can be configured by linking a customer specific library. Please do not hesitate to contact us, if you need assistance (see <a href="#">Bridge Support</a> ).                                                                                  |
| <b>Recipients TO</b>                   | Specify a list of recipients addressed as TO if email notification is used.                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Recipients CC</b>                   | Specify a list of recipients addressed as CC if email notification is used .                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Description for required action</b> | Enter a free text. This text is typically used to give the email recipients detailed instructions about what to do about the error (e.g. "this error indicates that there is a parcel stuck in logistics, please check LogiManager for the parcel ID given in the error description").                                                                                                                                                                                                    |
| <b>Subject</b>                         | <p>Enter a free text. The subject in this field will replace the default subject defined in the service settings of the Monitoring service (Bridge). You can still overwrite the subject, when an error using this template is thrown.</p> <div> <p>If you want to use the subject field, a column <b>subject</b> has to be added to table <b>Error</b> in the errorList.sqlite database. Use the SQL script <a href="#">addSubjectToErrorTable.sql</a> to create this column.</p> </div> |

Furthermore, in box **Error Group Definition** you can assign the error to one or more error groups by selecting the groups from the list. To unselect an error group, use **Ctrl + click**. Error groups are used for documentation reasons and to specify centralized downtimes. Refer to [Managing Error Groups](#) further below for more details on how to add and manage error groups.

## Deleting Error Definitions

In the far right column of the error list on the main screen, you can select entries of the error list by a checkbox. Clicking **Delete Selection** will delete all selected entries.

## Bulk Change of Error Definitions

Click **Add/Remove Recipients** to bulk add or remove one recipient (mail address) for all error entries.

## Managing Error Groups

All errors can be added to one or more error groups for centralized downtime administration. Click **Manage Error Groups** on the main screen to manage the error groups.

Error Group List

|                                                                                   |                              |
|-----------------------------------------------------------------------------------|------------------------------|
| <a href="#">Create New Error Group</a> <a href="#">Back to Service Error List</a> |                              |
| Show 10 entries                                                                   | Search:                      |
| Error Group                                                                       | Options                      |
| testgroupoff                                                                      | <a href="#">Details/Edit</a> |
| Showing 1 to 1 of 1 entries                                                       |                              |

Click **Create New Error Group** to create a new error group.  
Click **Details/Edit** on an entry of the error group list to inspect the details of an error group, like

- the error members of the group
- the configured downtimes

Click **Manage Downtime** to change the service downtimes for this error group during which occurring errors should not be notified. Refer to [Downtimes](#) for more details.  
Click **Modify** to save the changes you made. Click **Delete** to delete the error group and all assignments to errors.

## Downtimes

Downtimes are defined periods of time during which errors should not trigger notifications. E.g. if an SAP system is being updated and will temporarily be unavailable, some services may throw corresponding errors. Since this is known in advance, a downtime for these errors can be configured to avoid the flood of error notifications. Downtimes can be assigned to [error groups](#) (see above).

## Configuring Downtimes

|  |                                                                                                                          |
|--|--------------------------------------------------------------------------------------------------------------------------|
|  | <p>Click the <b>Downtime</b> button in the list. This will open the list of defined downtimes for the current entry.</p> |
|  | <p>Clicking <b>Create New Entry</b> will open the dialog to create a new downtime entry.</p>                             |

Downtimes can either be created for a certain date, or on a day pattern.

## Viewing Downtimes

Defined Downtimes For All Error and Error Group Definitions

| Type | Date       | Days | Time From | Time To             | Offline Recipients | Group Name | Service Name | Error Category | Error Code | Error Type |
|------|------------|------|-----------|---------------------|--------------------|------------|--------------|----------------|------------|------------|
| None | 10/30/2015 |      | 00:00:00  | 01/01/1900 10:00:00 |                    |            |              |                |            |            |

This screen shows all defined downtimes of all services. During this downtimes, no error notifications will be sent for this error.

## Viewing the Change Log

This screen simply shows the trace of all changes on Monitoring data sets.