PI Troubleshooting Tips: Component Based Message Alerting

Purpose: <Work in Progress>

In this Wiki, we will take a look at how to set up Component Based Message Alerting (CBMA) in SAP Process Integration or SAP Process Orchestration systems and we will take a look at how to troubleshoot for errors/issues using the XPI Inspector tool.

Overview:

We will provide the links which describe how to configure this functionality.

Background:

Configurations:

How to configure Component Based Message Alerting is documented in the resources below:

SAP help: Alert Configuration
SAP help Configuring Component-Based Message Alerting
SAP help Component-Based Message Alerting
SAP Community blog: Michal’s PI tips: Component-Based Message Alerting

Key points:

1. If you have a Dual stack PI system Go to transaction SXMS_ADMIN Specific Configuration
   
   ALERTING_IS_ACTIVE = 1 - switches on CBMA alerting for the ABAP Runtime engine
   ALERTING_TARGET = 1 - switches on CBMA alerting on ABAP side

   ![Change View "Configuration of the Integration Engine": Overview](image)

2. In the Java NetWeaver Administrator go to the URL http://<server>:<port>/nwa/sys-config
   Services XPI Services: AF Core
   alerting.isActive = true - switches on alerting for the Java Runtime engine
   alerting.target = 1 - switches on CBMA Alerting on Java side
3. Ensure these parameters are set at Instance level (ZATPL_AIO) and not at Node level (IDxxxxx)

4. These basic settings must also be configured in any other systems that you wish to include in your alerting landscape e.g. backend ABAP Proxy systems or decentral Adapter Engines. See the notes below for details:
   1. SAP KBA 2360905 The Component-Based Message Alert doesn't work on backend ECC system
   2. SAP KBA 2200611 Alerts not forwarded from Non-Central Adapter Engine in SAP PI

**Tracing:**

Use the XPI Inspector tool with Example 100 (Custom) to collect traces for the following logging locations:

- com.sap.aii.af.service.alerting
- com.sap.aii.af.service.alert
- com.sap.aii.alert

See SAP KBA 2381478 XPI traces for Component Based Message Alerting, for more details.

**Reading the XPI Trace:**

- Open the resulting zip file and go to result.xml
- Click on the hyperlink under the Errors

1. Search for text: "PI error event had been sent to the master queue" =>
Tip: You can use the MsgId value to search the trace for all alert related entries for this message ID.

2. Search for text: “PI error event had been retrieved from the master queue” =>

```
PI error event had been retrieved from the master queue: {
    "AdapterType": "XI_J2EE_MESSAGING_SYSTEM",
    "ErrCat": "XI_J2EE_ADAPTER_ENGINE",
    "ErrCode": "CHANNEL_STOPPED",
    "ErrText": "Channel stopped by administrative task.",
    "FromParty": ".",
    "FromService": "",
    "Interface": "DEBMAS.DEBMAS05.ZDEBMAS",
    "MsgId": "9bc5650b9-3fe5-11e7-b8f3-0000000c5326",
    "Namespace": "um.sap-com.document.sap.idoc.messages",
    "ScenarioId": "dir://ICO/e19923f034d6335ebea0c932176f608"
}
```

3. RulesEngine.executeRules

```
⇒ with ( {
    "AdapterType": "XI_J2EE_MESSAGING_SYSTEM",
    "ErrCat": "XI_J2EE_ADAPTER_ENGINE",
    "ErrCode": "CHANNEL_STOPPED",
    "ErrText": "Channel stopped by administrative task.",
    "FromParty": "",
    "FromService": "",
    "Interface": "DEBMAS.DEBMAS05.ZDEBMAS",
    "MsgId": "9bc5650b9-3fe5-11e7-b8f3-0000000c5326",
    "Namespace": "um.sap-com.document.sap.idoc.messages",
    "ScenarioId": "dir://ICO/e19923f034d6335ebea0c932176f608",
    "ToParty": ".",
    "ToService": "",
    "UDSAttrs": [ { "6450": "0000163494" } ]
})
```

4. Search for text: “PI alert had been delivered to consumer queue” =>

```
PI alert had been delivered to consumer queue: "ALERT_". {
    "AdapterType": "XI_J2EE_MESSAGING_SYSTEM",
}
```

5. AlertConsumerJob.sendMail
Some Known Issues:

SAP Note 2411534 CBMA alert suppressing improvement
SAP Note 1980625 Adding jms.persistence property to XPI Service: AF Core
SAP Note 2122500 Alerting: wrong mail receiver in e-mail consumer job
SAP Note 2279043 New Feature: Alerting: changes and improvements in Component Based Message Alerting
SAP Note 2119910 PI component-based alerting: No writing of logs