How to Use Interface-Documentation on SAP Solution Manager

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NetWeaver Process Integration
Motivation

- Get a link between Business Process and assigned Interface
- Central repository to maintain the documentation for the complete processes (including interface documentation)
- Needed for Business Monitoring of interfaces using the SolMan
- Graphical overview to give everybody the same understanding of the whole process / landscape
1. **New functionality for Interface Documentation** *(ST SP15 and ST SER2008_1)*

2. How to structure / name Business Scenarios – possible ways

3. How to document Interface Scenarios
Structure on Business Scenario Level – already existing

Business Scenario:

Used to group business processes
The following hierarchy applies:

- Business Scenarios
- Business Processes
- Business Steps
New functionality in Solution Manager (as of ST SP15 /18 and STSER2008_1)

New structure element in Business Blueprint structure to link Interfaces to the related Business Processes

**Interface Scenario:**

- **Interface Scenario**
- **Interface** (with attributes)
- **Interface Step** (with attributes) – used for e.g. ALE scenarios
1. New functionality for Interface Documentation  (ST SP15 and ST SER2008_1)

2. How to structure / name Business Scenarios - possible ways

3. How to document Interface Scenarios
How to structure / name Business Scenarios => Benefit

- Interface Steps:
  - represent actions which are related to business process
  - responsible for data transmission like send an Order IDOC or receive Invoices
  - Steps have to be placed in order as they are used

- Why using Interface Steps on Business Scenario Level?
  - The business level serves to document the Business Process themselves
  - The step from and to PI can be used to create test cases
  - To get all involved systems in the graphic for a complete process view
  - Also needed / used for monitoring
  - To get the possibility to link business scenario and interface
How to structure / name Business Scenarios => Logical Component

- Logical Component is an administrative entity which assigns logical systems, in the entire system landscape and across projects, to the following:
  - a main instance of a product with a product version
  - the system roles or phases in a project

- for Interfaces the following entries can be used
  - SAP to SAP (ALE) and vice versa => sending SAP system e.g. Z_ECC_AFS,
  - SAP to nonSAP and vice versa using PI => Z_PI_7_1
  - SAP to nonSAP and vice versa using middleware X => Z_<X>_<BusinessSystem>
The names for this steps should be picked up from an interface list / database where all interfaces have unique ID’s.

It should be a combination of:

- **IF_<IF ID>_[xxxx]<Logical Interface Name>**
  - IF_ – stands for Interface
  - IF ID_ – Interface ID number taken from Interface database
  - [xxxx] - If the process on sending side is the same for multiple receivers then you can put more than one ID in the name e.g.
    IF_IF1176_DailySales&CustomerRet
    IF_IF2272_DailySales&ReturnsToRMS
    could then move to IF_IF1176_2272_DailySales&CustomerReturns

- Logical Interface Name (NO system information)

<table>
<thead>
<tr>
<th>STEP Name</th>
<th>Logical Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. IF_0123_SPOTransmissionToSourcing</td>
<td>&lt;middleware&gt; or SAP system (ALE)</td>
</tr>
<tr>
<td>e.g. IF_0125_SPOConfirmationFromSourcing</td>
<td>&lt;middleware&gt; or SAP system (ALE)</td>
</tr>
<tr>
<td>e.g. Z_PI_7_1</td>
<td></td>
</tr>
<tr>
<td>e.g. Z_ERP_AFS / Z_ERP_FF/CO</td>
<td></td>
</tr>
</tbody>
</table>

How to structure / name Business Scenarios => Naming Rules
How to structure / name Business Scenarios

**Business Scenarios - 1**

Option 1:

Option 2:
### Option 1: only one logical interface name

<table>
<thead>
<tr>
<th>STEP Name</th>
<th>Logical Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF_0123_Thirdparty_SAP_PreOrderSND</td>
<td>&lt;middleware&gt; e.g. Z_PI_71K</td>
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</table>

### Option 2: logical interface names for send and receive

<table>
<thead>
<tr>
<th>STEP Name</th>
<th>Logical Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF_0123_Thirdparty_SAP_PreOrder_SND</td>
<td>&lt;application&gt; e.g. Z_ECC_C50</td>
</tr>
<tr>
<td>IF_0123_Thirdparty_SAP_PreOrder_RCV</td>
<td>&lt;middleware&gt; &gt; e.g. Z_PI_71K</td>
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</tbody>
</table>
How to structure / name Business Scenarios =>
Pro & Cons – Option 1

Pro:
- No “confusion” about steps in the Business Process – only the known interfaces are visible

Cons:
- Only one technical interface step is usable for documentation means only one side of the interface e.g. the used technology (ALE, PI-Adpater…) can be documented
- to complete the documentation only “Customer Attributes” or free text entries can be used
- At the moment no report possibility for “Customer Attributes”
- If you try to check where the interface is used (Where-Used list) only one part of the interface will be shown e.g. ERP to PI but not PI to e.g. YXZ
Pro:

- This option is the recommended way to document interfaces.
- The technical documentation per used connection / adapter is possible (sending system => middleware and middleware => receiving system)
- No “work around” is needed to document the complete interface

Cons:

- Technical team has to divide one technical interface in two steps
- Functional team has to add also one step more in the business process
1. New functionality for Interface Documentation (ST SP15 and ST SER2008_1)

2. How to structure / name Business Scenarios - possible ways

3. How to create / document Interface Scenarios
Interface scenarios

**Suggestion:**

to group interfaces to the same business process, Interface Scenarios should use the same names as for Business Scenarios

**Business Scenario Name = Interface Scenario Name**

![Diagram showing Business Scenarios and Interface Scenarios with matching names]
Interface

- for processes which need a communication to other systems, create one / two interface with the same name used for the interfaces on middleware platform.

- If two interfaces are used, take “Send” / “Receive” or “Snd” / “Rcv” (depend on naming convention) as ending.

- Fill in all needed information like:
  - Sending / Receiving Logical Component =>
    - e.g. Sender = SAP AFS (Z_ERP_AFS)
    - Receiver = PI / Middleware (Z_PI_7_1)
  - Technology => (interface technology like ALE, RFC, EDI, XI Adapter-File……
  - Type => (sync/async)

- How To Name:
  - IF_<IF-ID>_<SendingSystem>_<ReceivingSystem>_<Logical Interface Name>_<Direction>
Interface – Attributes

- add the related attributes per interface e.g. Quality of Service = EOIO (exactly once in order) ….
- all not changeable entries are taken from previous steps

If you fill here the Routing Information you will have later on the possibility (in case of using BPMon) to get this information into the monitoring customizing.
How to document Interface Scenarios => Interfaces – 3

Interface – Customer Attributes

- To add information like:
  - Receiver Adapter
  - Sender Adapter
  - Development ID
  - Interface ID
  - Source System
  - Target System

you have to use Customer Attributes.

How to „maintain customer attributes“ is described in the document: „Interface Documentation with SAP Solution Manager 4.0 (as of ST SP15 and STSER2008_1)“ => can be found under: http://service.sap.com/bpm -> Technical Information
How to document Interface Scenarios => Interface steps

Interface steps

- Assign for more explanation Interface Steps if needed and assign the Logical Components (e.g. for ALE scenarios where may be other programs will be called or jobs are scheduled)

- add attributes per step if needed
- Also for “Customer Attributes” can be assigned but are not available / decided yet
How to create / document Interface Scenarios => Process View

**Graphic - Business Scenario Level**

- Used to get the link between Business Processes and assigned interfaces
- Set the attributes to see Arrowheads, Interface Icons and Step Numbers
- Connect the Business process steps with lines presenting the kind of communication (sync/async)
- Add the used interface to the process steps related to the SAP system (e.g. AFS)
How to create / document Interface Scenarios => documentation on Business Scenario Level

Documentation

- Documents related to interfaces like **Functional Specification** or **Mapping Documents** would be stored in that example under:
  - Business Scenarios
  - Business Process
  - Interface Step Name
  - e.g. Wholesale Sales
  - e.g. PreOrder Creation 1
  - e.g. IF_0123_Thirdparty_SAP_PreOrder_<snd/rec>

![Business Blueprint Structure]

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<tr>
<th>Name</th>
<th>Documentation Type</th>
<th>Person Responsible</th>
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<td>D035808</td>
<td>Copy Editing</td>
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