Interface Documentation in Solution Documentation

SAP Solution Manager 7.2, SP05

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SAP Run Simple

Agenda

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Introduction

Motivation for Interface Documentation

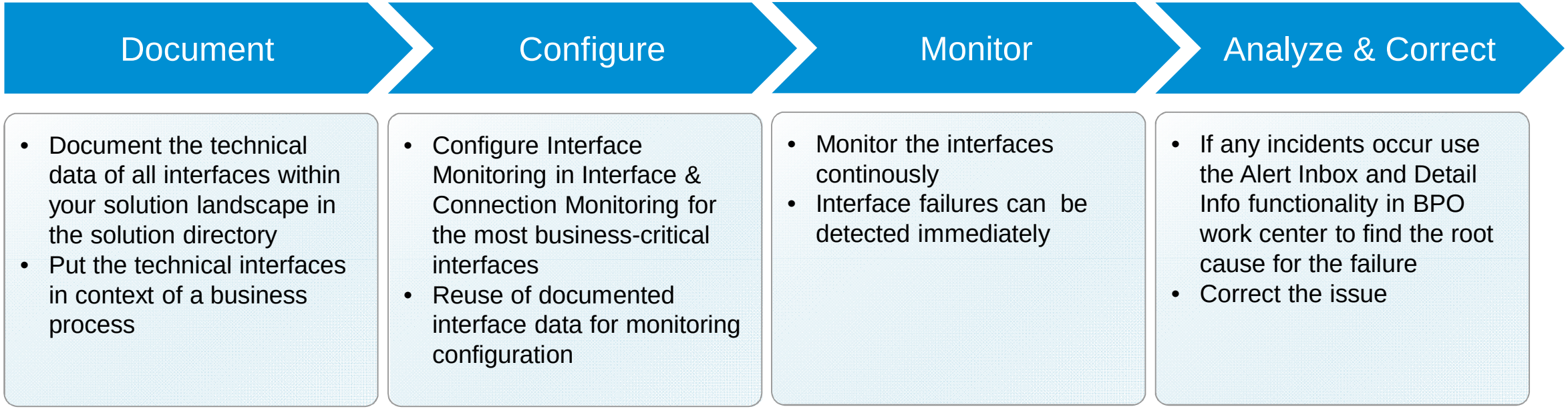
- SAP Solution Manager as the central component to document and view all interface information throughout the complete solution landscape.
- Interface operations can be managed centrally (e.g. which business processes are affected once an interface is down, which interfaces are affected if a system is to be shut down for maintenance).
- Interface data can be re-used for different tools in SAP Solution Manager (e.g. Interface & Connection Monitoring), which avoids double maintenance effort.

Interface Management in SAP Solution Manager

Main Solution Manager functions to handle interface operations:

- Interface Documentation
- Interface & Connection Monitoring

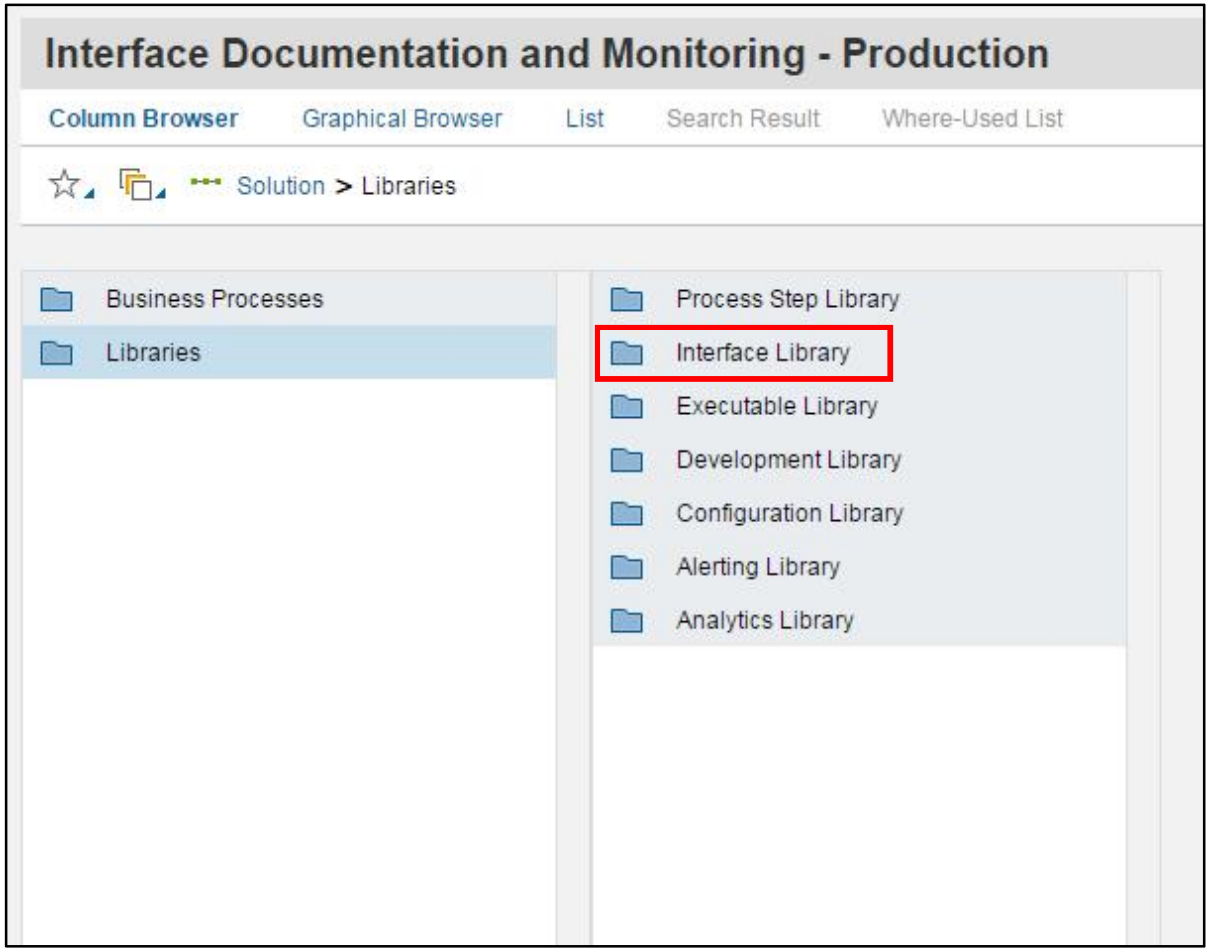
Guideline on how Interface Management can be realized in SAP Solution Manager:



Interfaces in Solution Documentation

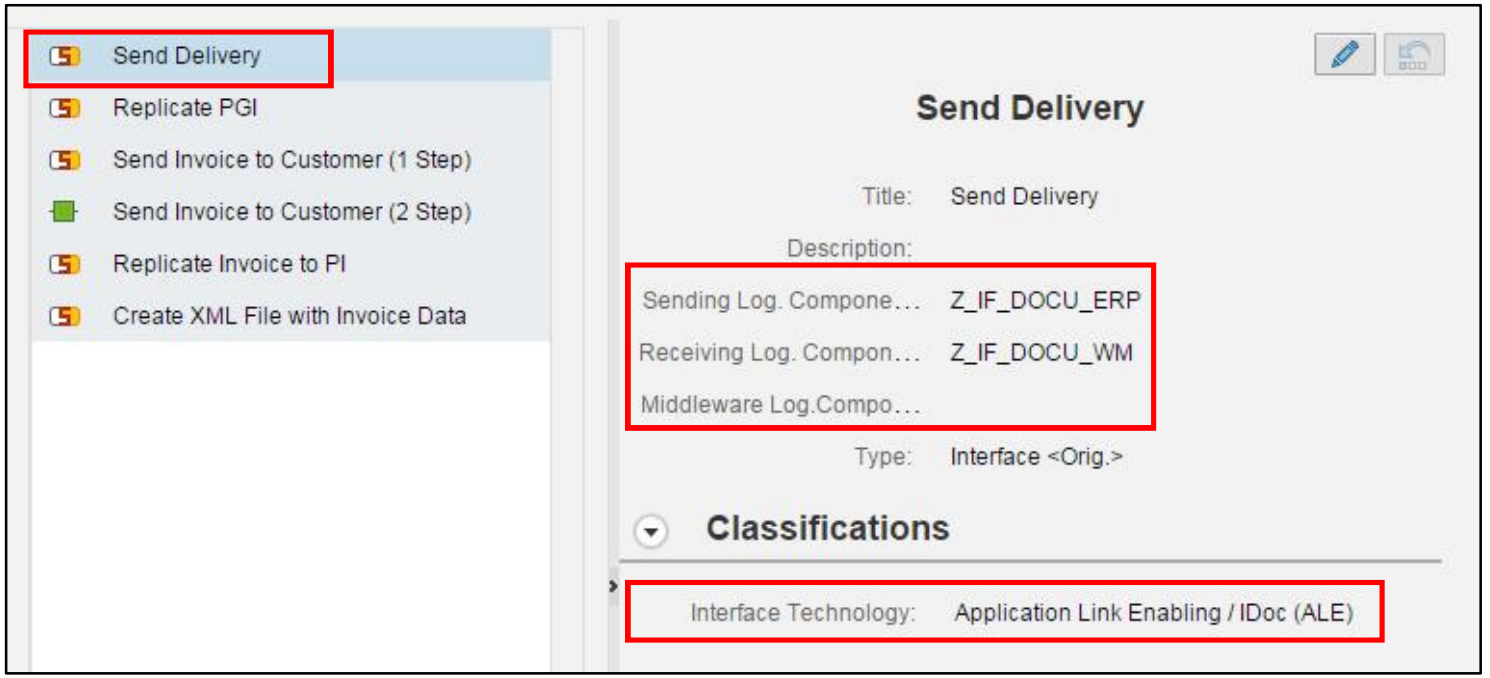
Interface Library in Solution Documentation

- In SAP Solution Manager 7.2, Solution Documentation replaces project and solution maintenance as available before.
- Data can be maintained in the Business Process section and in Libraries.
- For Interfaces, a dedicated Interface Library exists.



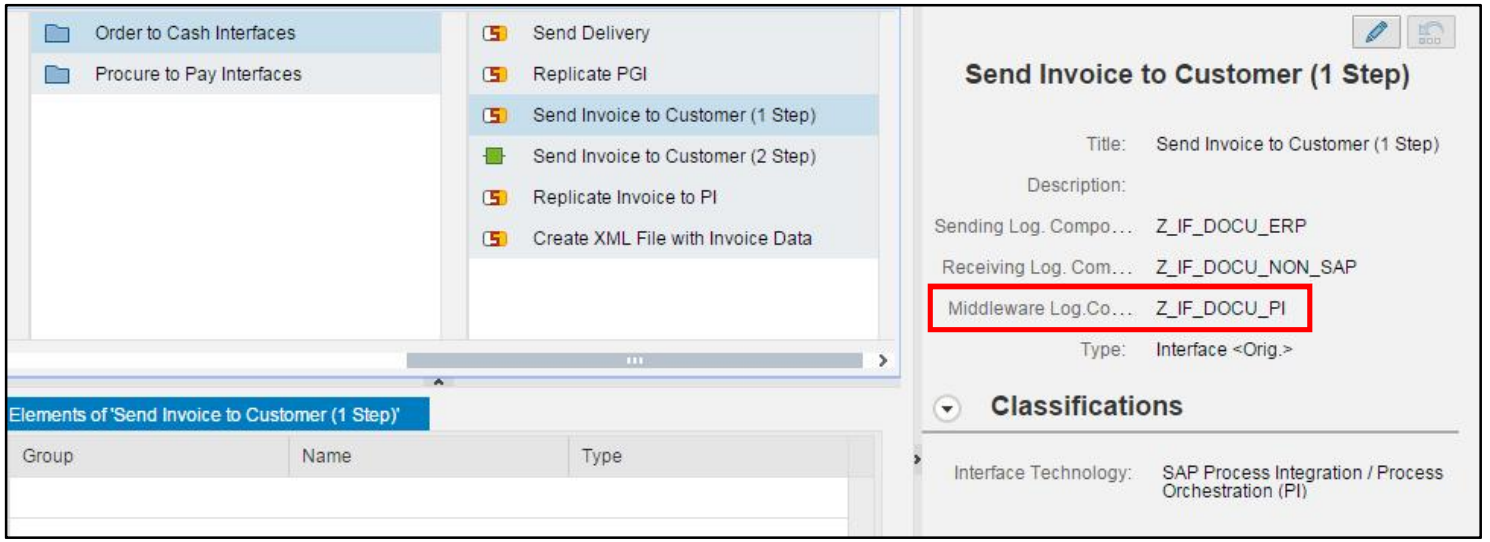
Interfaces in Interface Library

- Main use-case: point-to-point connections.
- Defined by sender and receiver system and interface technology.
- Can be detailed by providing interface attributes in Interface Documentation application.
- No interface graphics.



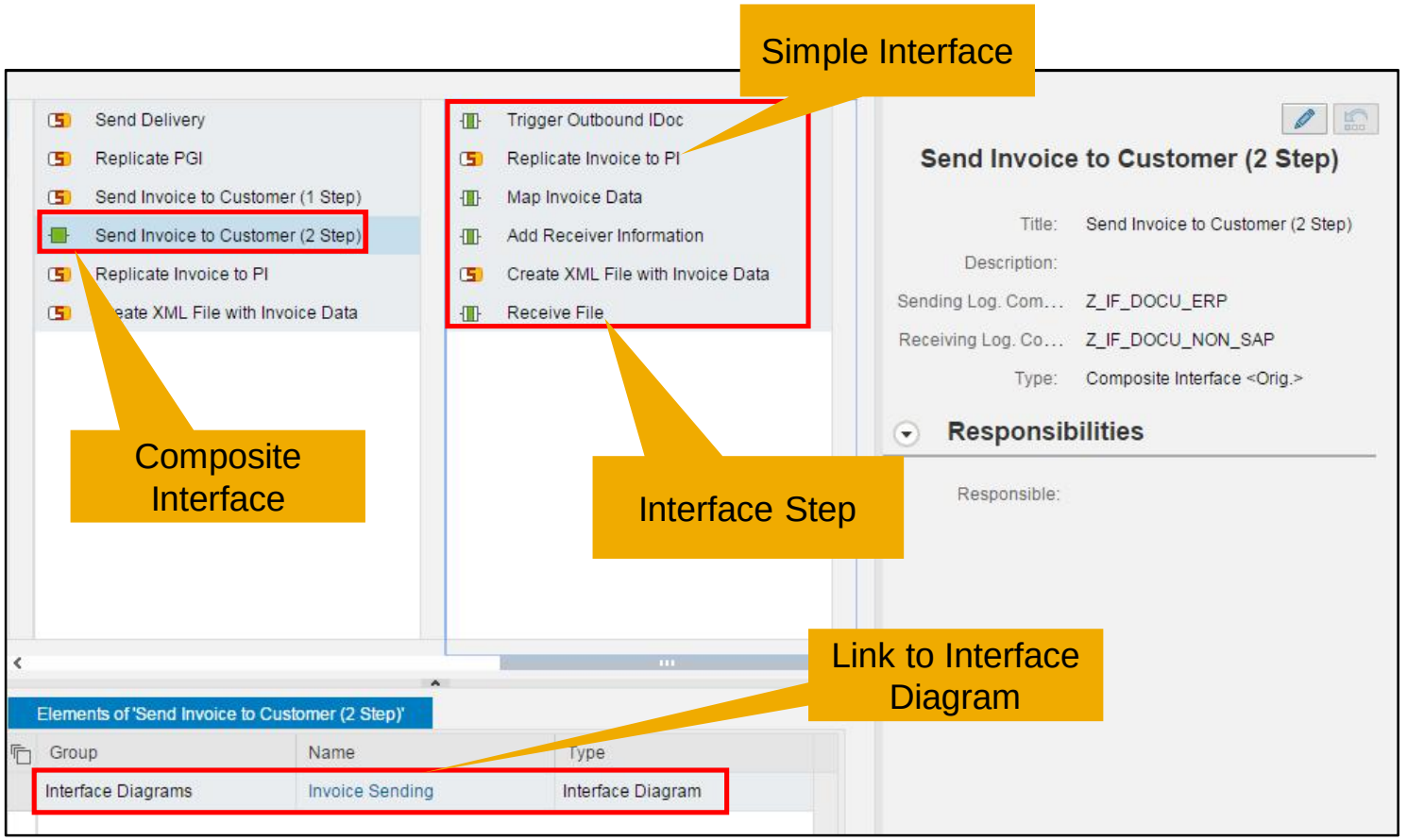
Simple 3-Component Interfaces

- Simple interface flows which include a single middleware component can be represented by an Interface, too.
- In that case the optional middleware component has to be provided in Solution Documentation.
- For interface flows including more than 3 components, or with additional logic like interface steps, Composite Interfaces have to be used instead.



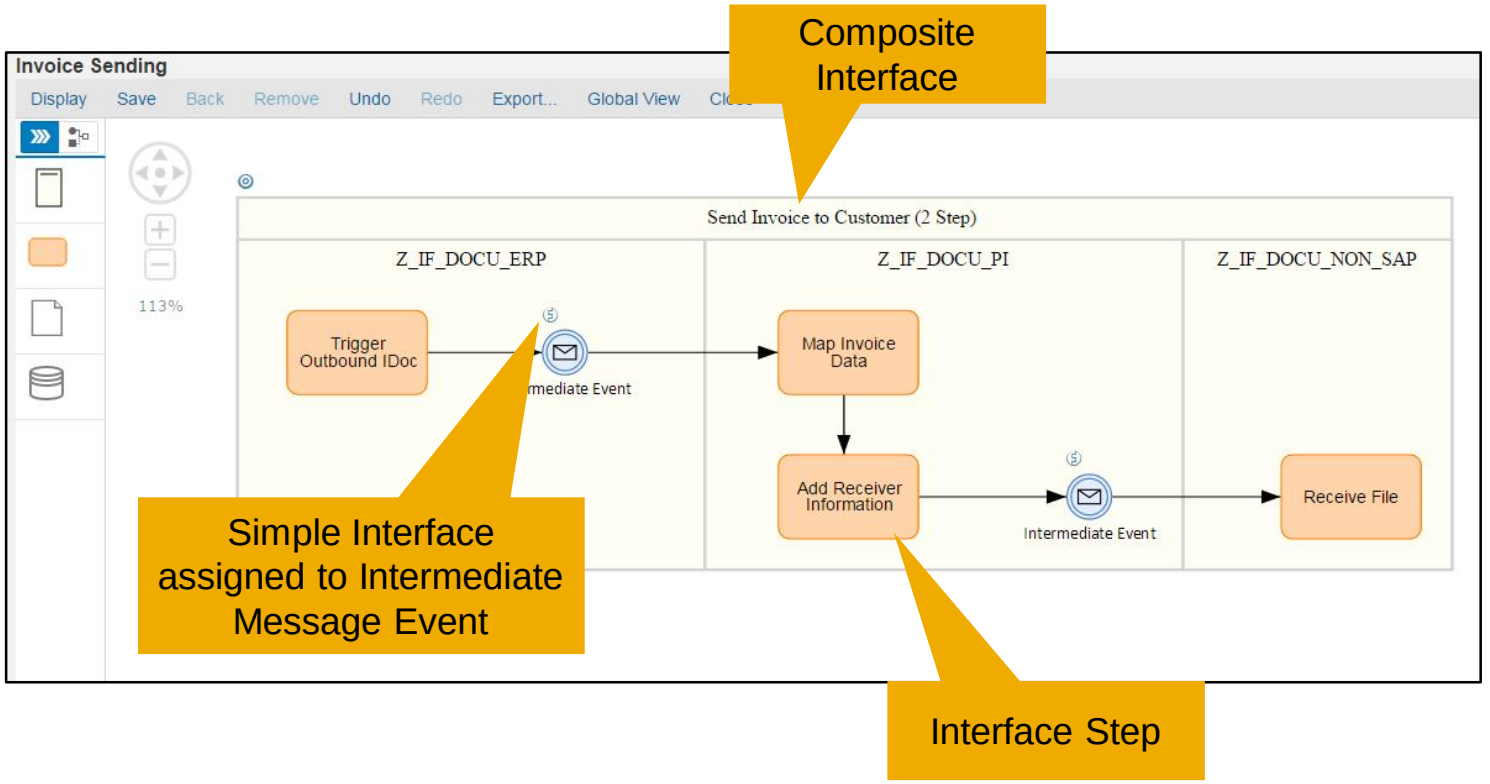
Composite Interfaces in Interface Library

- Main use-case: complex interface processing including several components and interface steps.
- No interface technology available, but Interfaces can be re-used.
- Interface graphics at hand.



Interface Graphics for Composite Interfaces

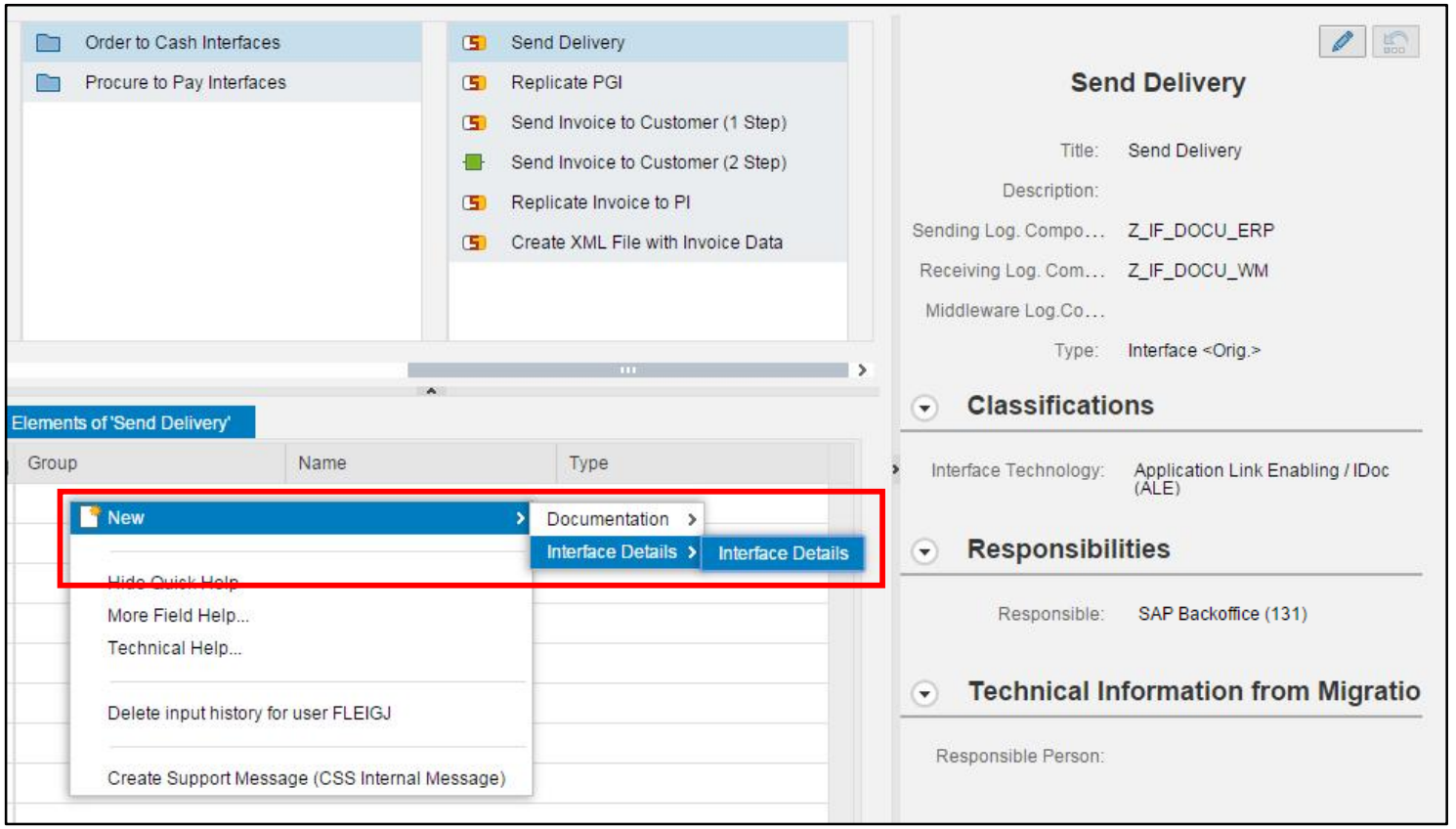
- To visualize a complex interface flow, including several steps and multiple (SAP and non-SAP) components.
- Monitoring can be attached to the Interface Steps.
- Diagram can be re-used in a business process diagram, to hide the (technical) interface details from the business-oriented view on a business process.



Interface Documentation Application

Create Interface Documentation

- Interface Documentation application provides the possibility to maintain further attributes for the Interface (besides affected systems and interface technology).
- The application can be called from the ‘Elements of…’ box using context menu *New à Interface Details à Interface Details.*

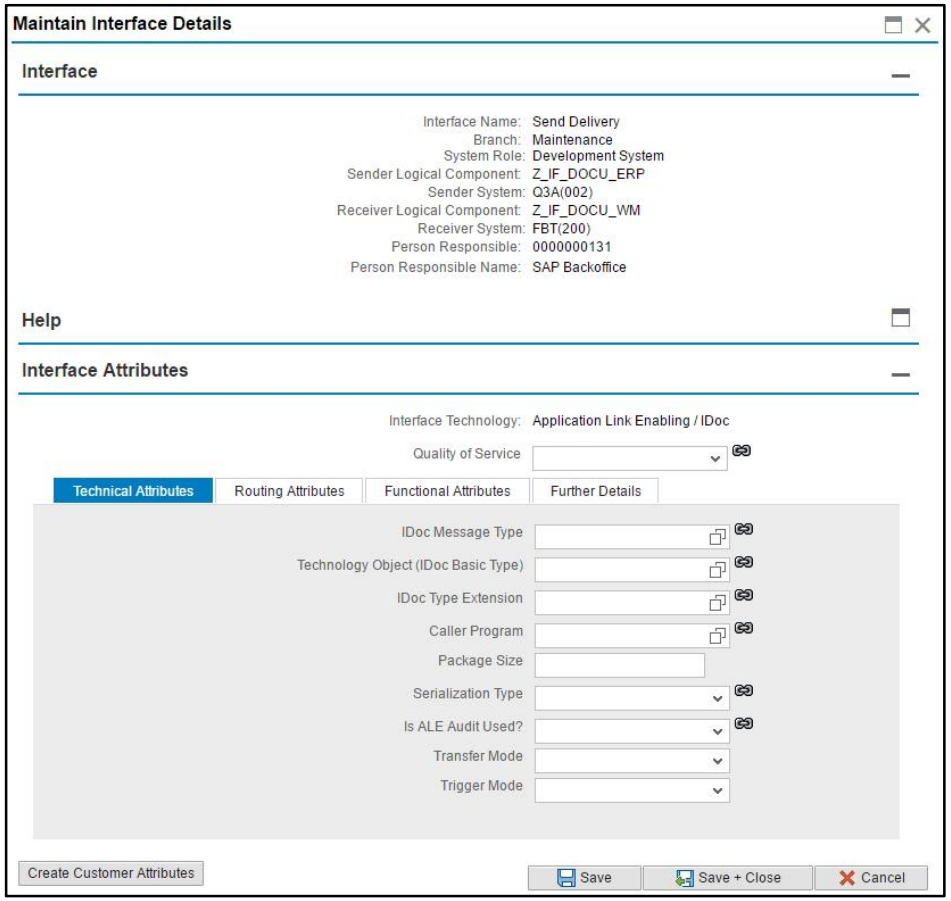


Interface Documentation: Main UI

The main UI is split into several sections:

- Header data of the Interface
- Help text (hidden per default)
- Interface attributes section
- Custom attributes maintenance (hidden per default)

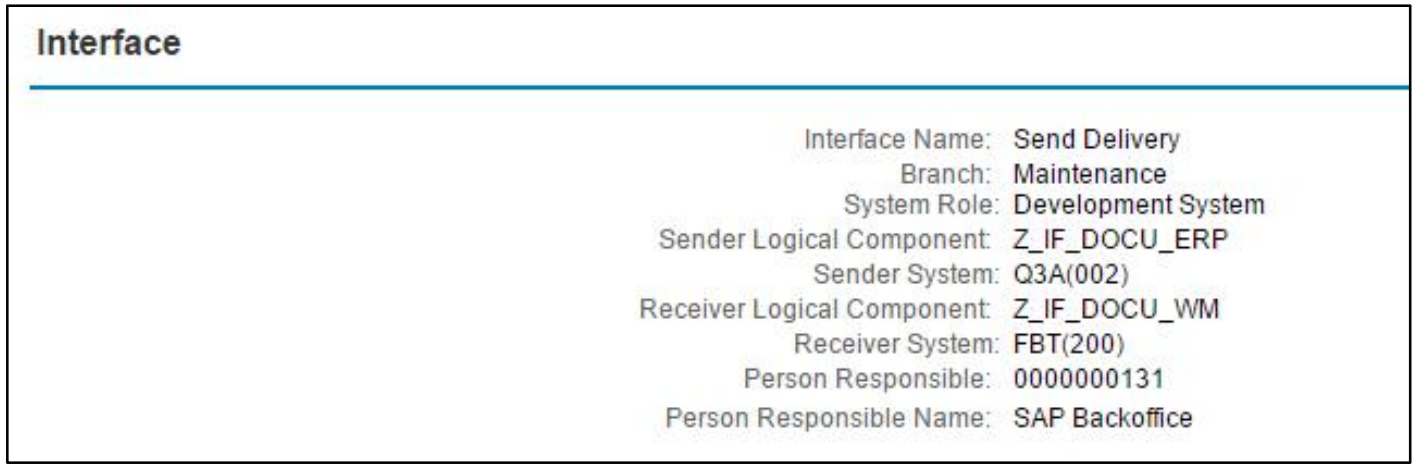
Value helps are available for the interface attributes where meaningful.



Interface Documentation: Interface Header Data

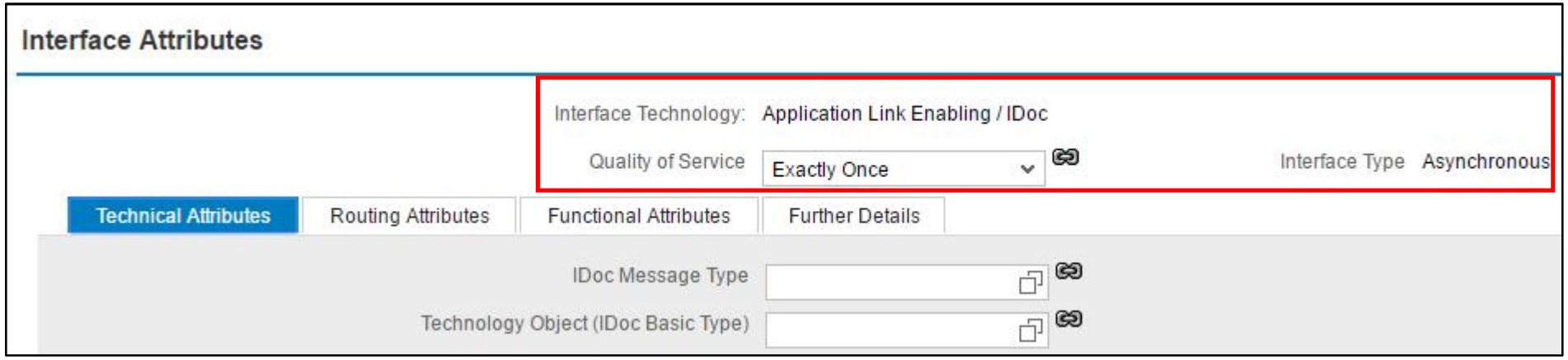
The interface header data is taken from Solution Documentation. It contains:

- Interface Name
- Branch and system role of the solution
- Sender and receiver system data
- System data of the optional middleware component (if maintained)
- Person responsible (as maintained for the Interface object in Solution Documentation)



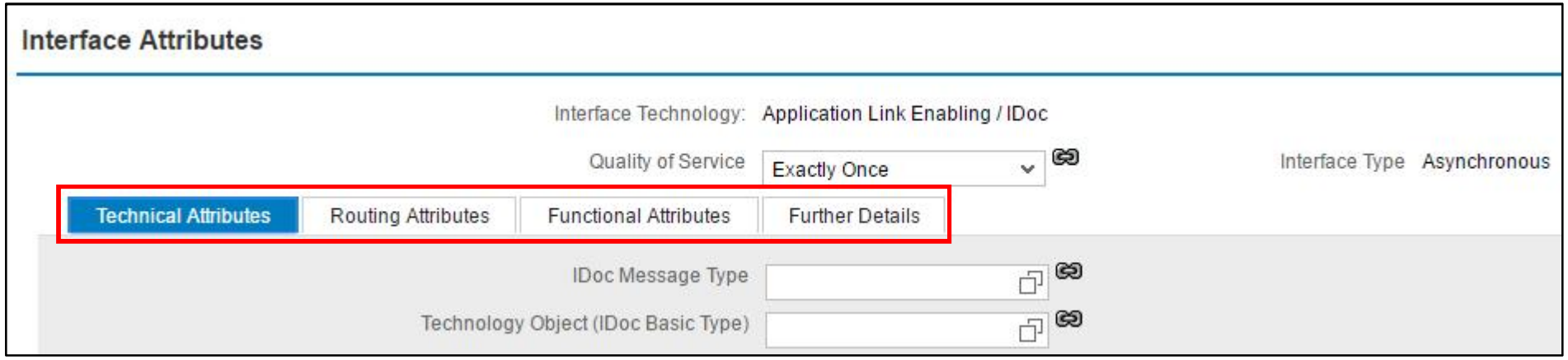
Interface Documentation: Interface Attributes Header Data

- The interface attributes section shows the Interface Technology, and the Quality of Service of the interface can be selected per drop-down menu.
- Sometimes – depending on the Interface Technology – an additional subtype has to be maintained to specify the type further. Example:
  - Interface Technology: RFC
  - Interface subtype: qRFC



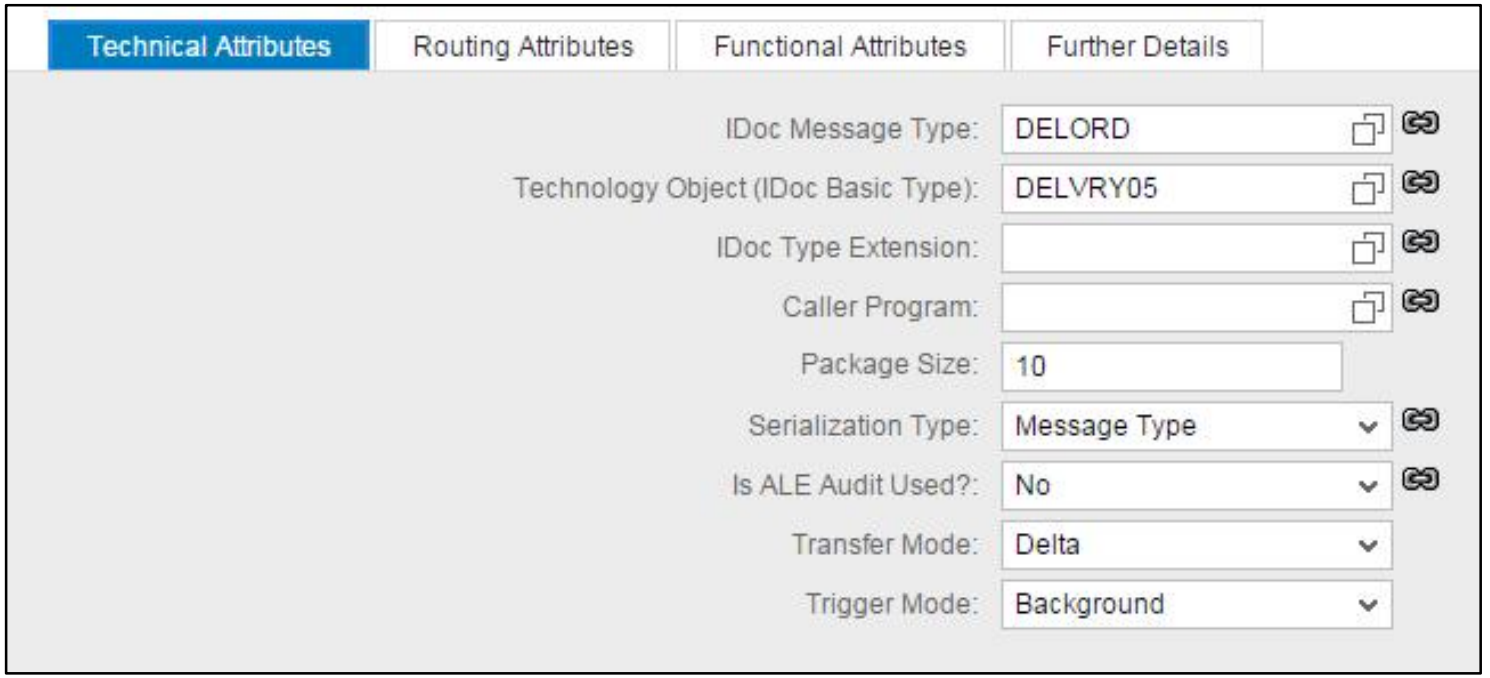
Interface Documentation: Interface Attribute Areas

- The actual interface attributes can be maintained in three areas: *Technical Attributes, Routing Attributes, Functional Attributes*.
- In *Further Details* additional interface information can be provided in free text format.



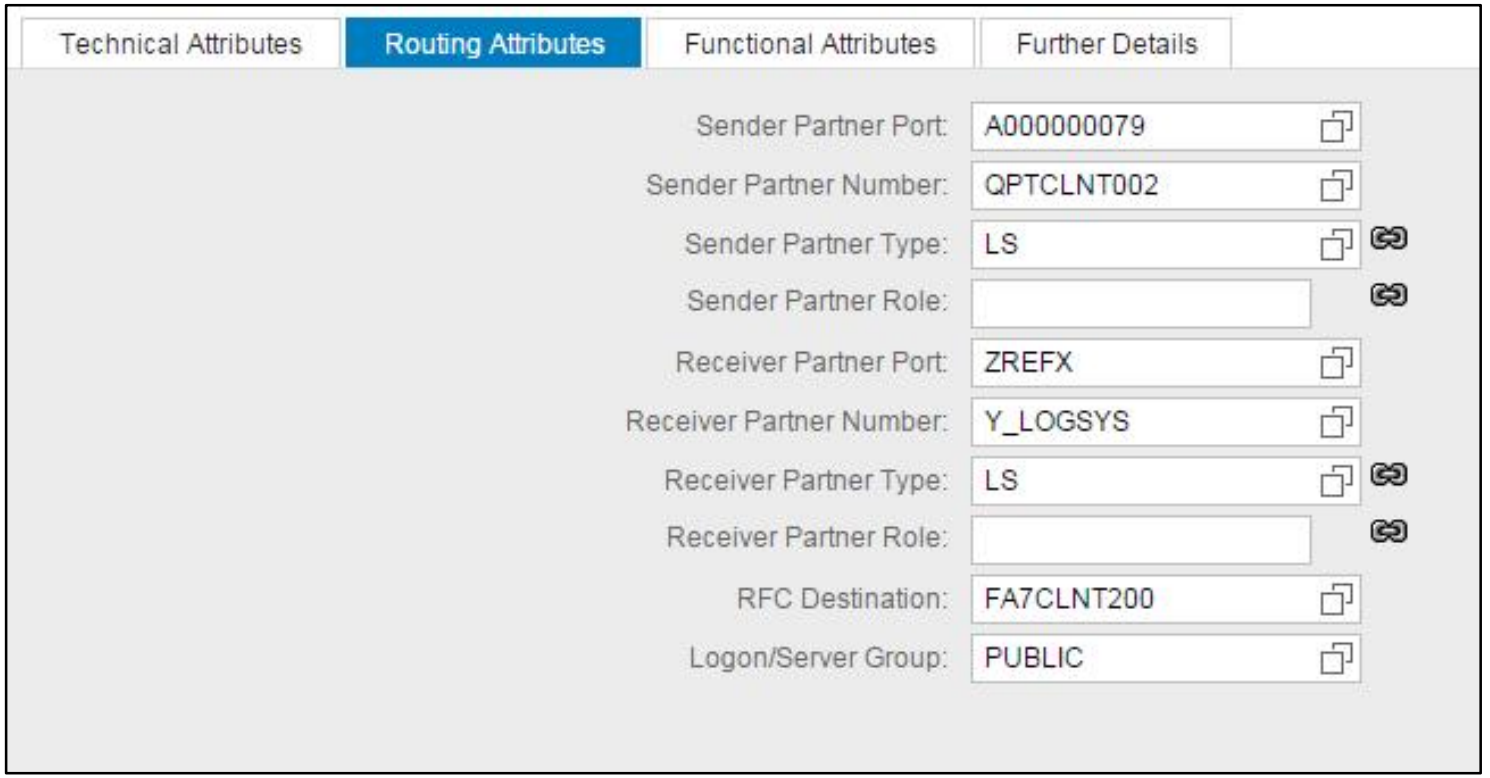
Interface Documentation: Technical Attributes

- In *Technical Attributes* the type of interface can be classified further.
- The available attributes are different for each Interface Technology.



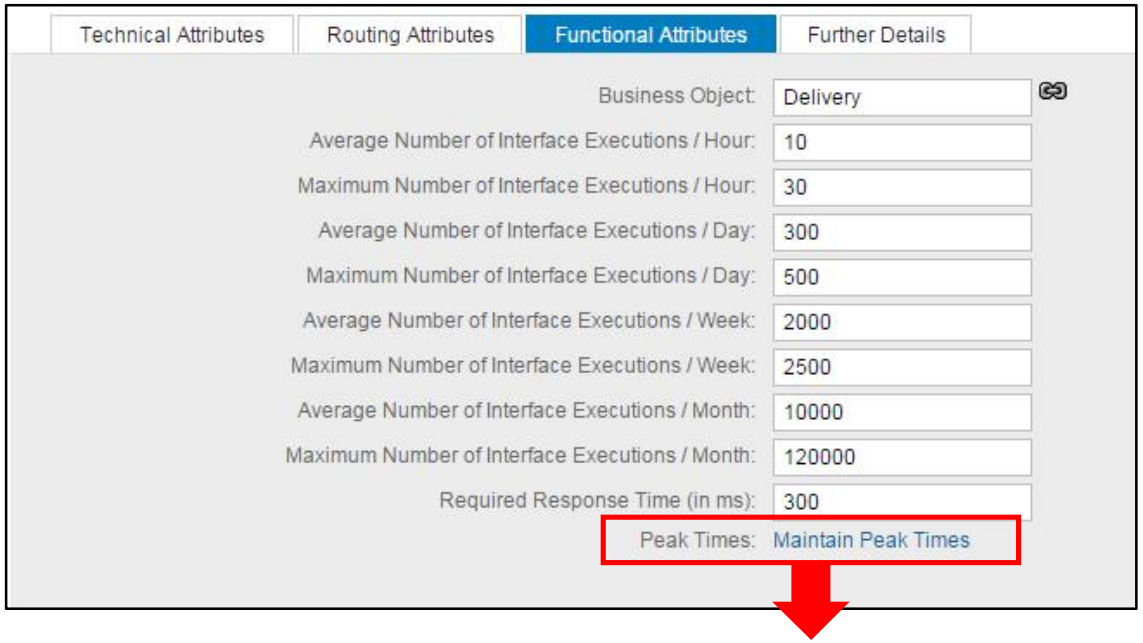
Interface Documentation: Routing Attributes

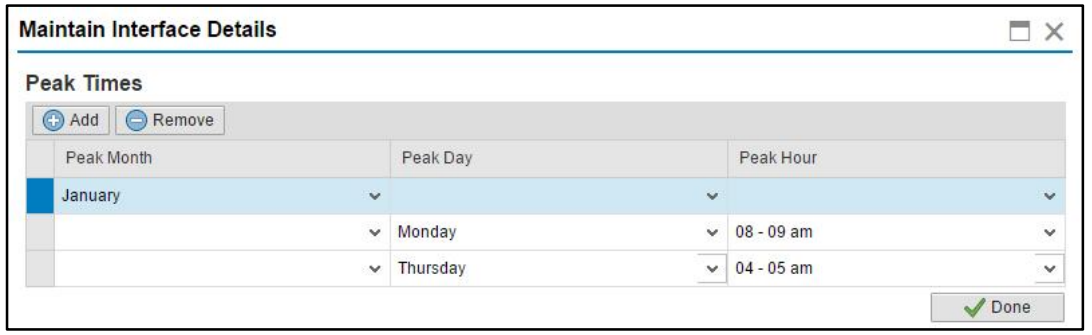
- In *Routing Attributes* the communication profile (like communication partners, destinations etc.) can be specified further.
- The available attributes are different for each Interface Technology.



Interface Documentation: Functional Attributes

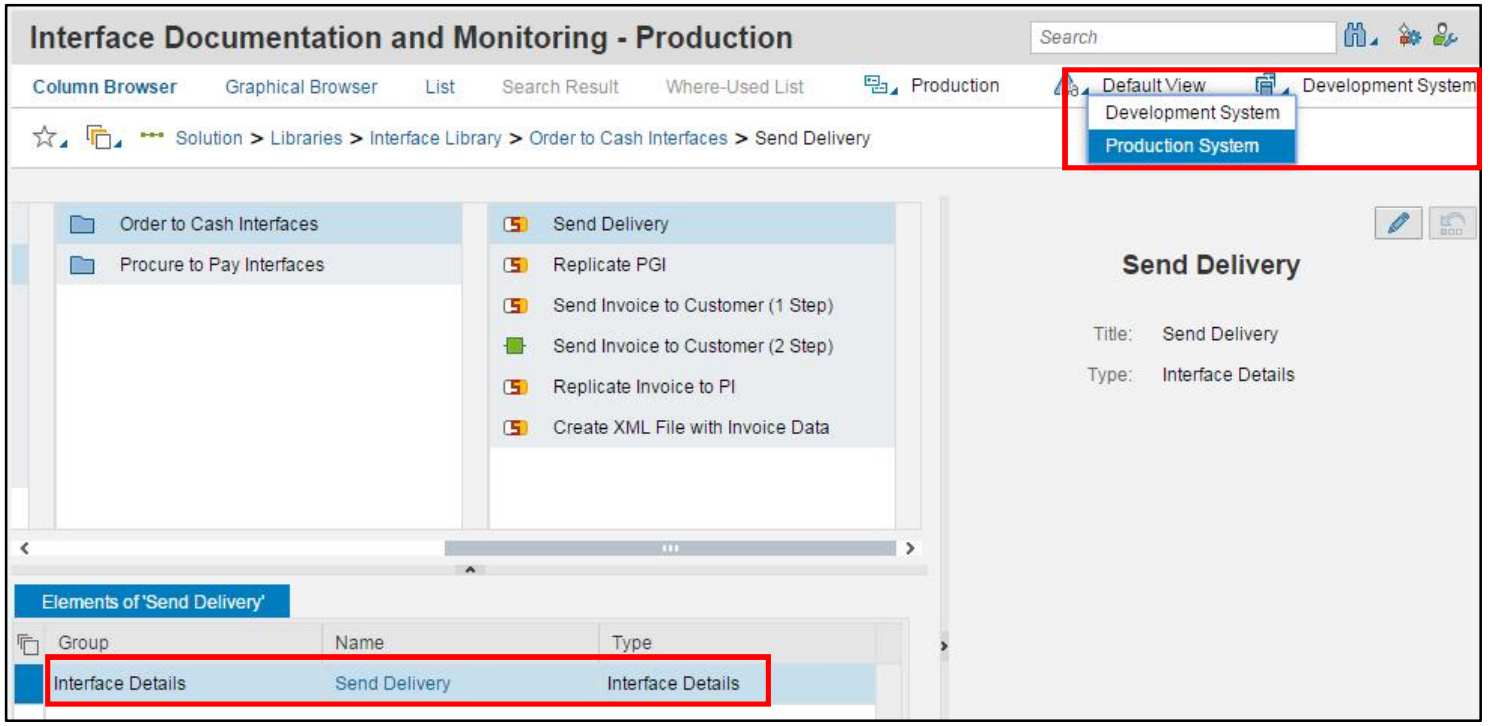
- In *Functional Attributes* basic business-related data can be maintained. This includes the business object, expected volumes and peak times.
- These attributes are the same for each Interface Technology.
- The peak times are maintained in a separate window and allow to provide multiple entries.





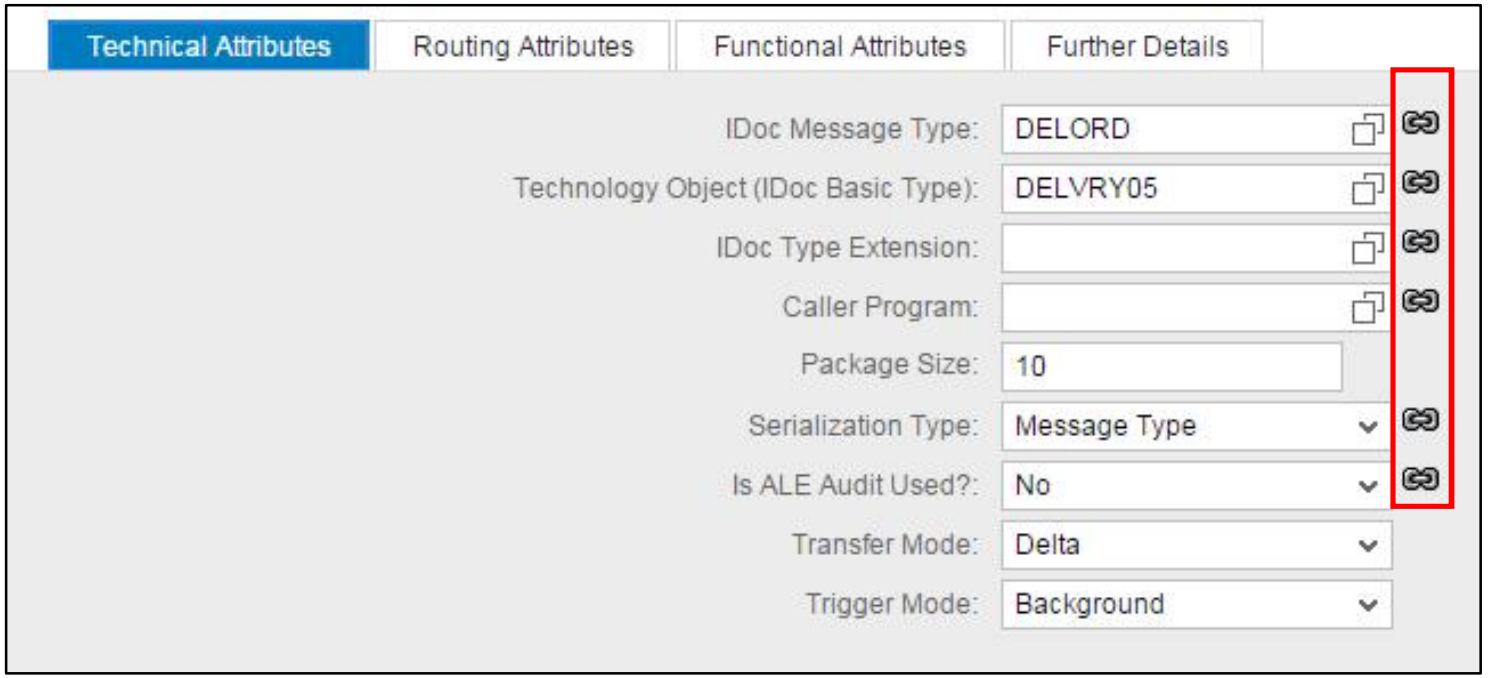
System Roles in Solution Documentation

- Solution Documentation allows to switch between branches, sites and system roles.
- If an Interface Documentation already exists in another system role interface attribute data is partly available in the current system role, too.
- Such globally available interface attributes are called system-independent.



Interface Documentation: System-independent Attributes

- System-independent attributes represent interface properties which remain the same for the whole lifetime of an interface (e.g. from development, to test, to productive use).
- Thus, when changing a system-independent attribute in the current system role, the attribute value is updated in all other system roles, too.
- In Interface Documentation UI system-independent attributes are marked with the chain icon.

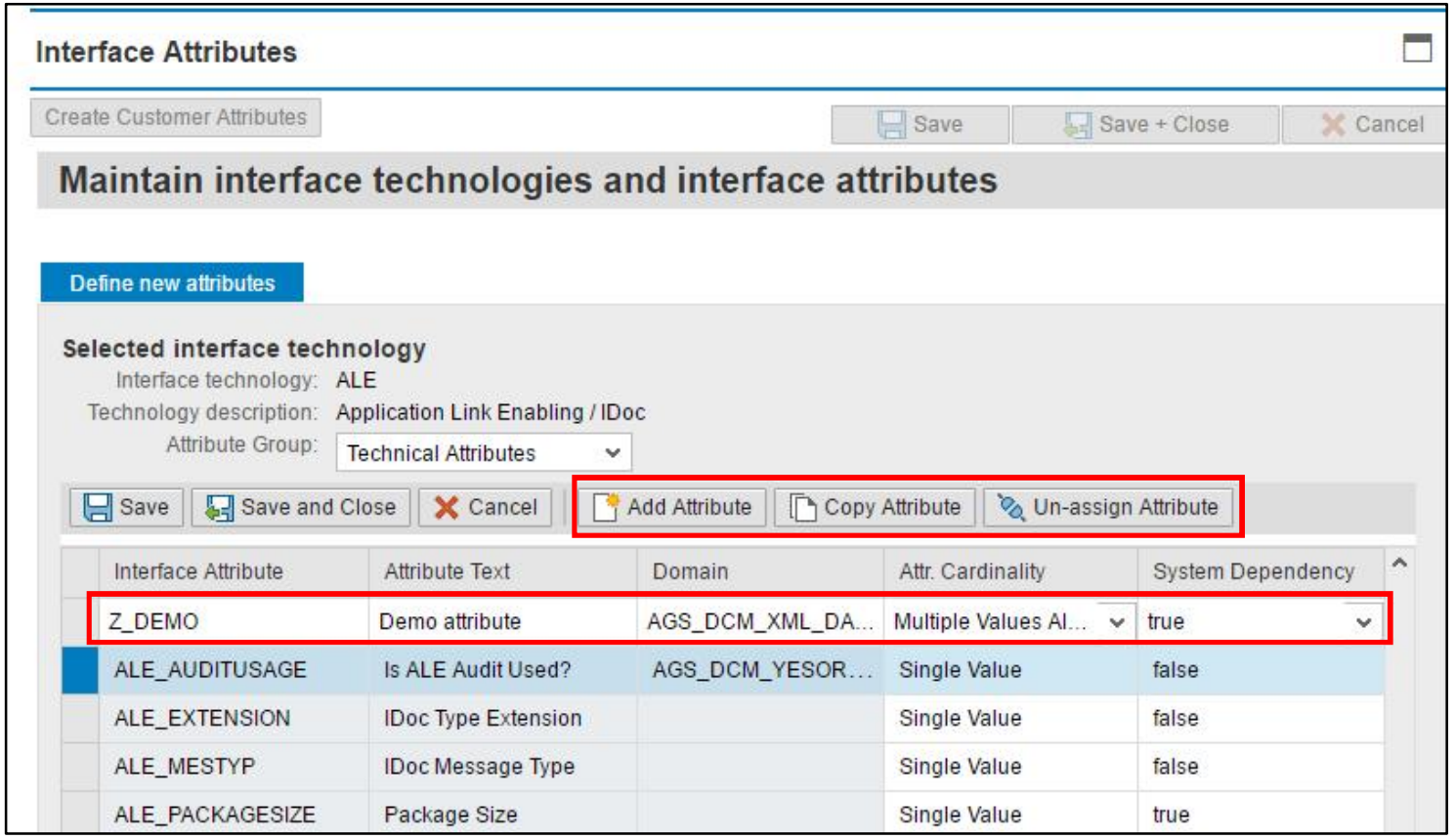


Custom Content for Interface Documentation

- Interface Documentation application can be enhanced with custom interface attributes and custom interface technologies
- Two ways exist to maintain custom entries:
  - Built-in feature inside Interface Documentation application: maintain custom attributes for the current interface technology
  - Transaction AGS_DCM_CUST_IFDOCU: maintain custom interface technologies and attributes, assign custom and standard attributes to technologies
- Both approaches require to have authorization object S_TCODE with value AGS_DCM_CUST_IFDOCU assigned (available in standard roles SAP_SM_SL_ADMIN and SAP_SM_SL_EDIT_BPMN)
- Custom content is maintained in customer namespace (Y* and Z*)

Built-in Custom Attribute Maintenance

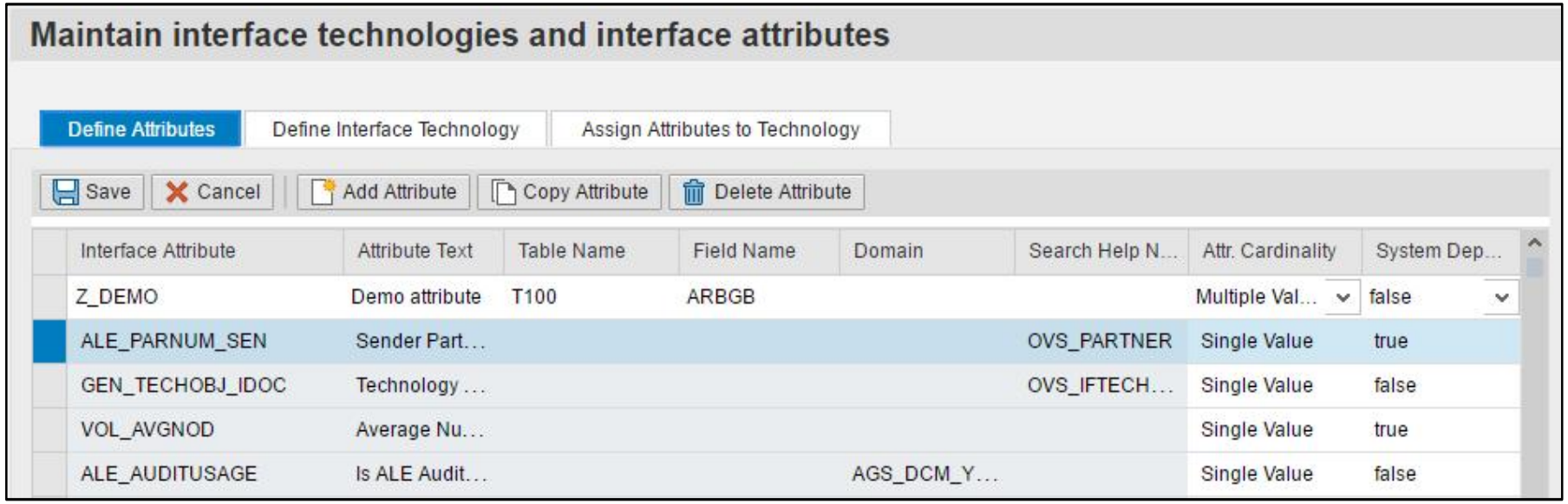
- Inside of Interface Documentation you can add custom attributes for the *current* Interface Technology
- Click the *Create Customer Attributes* button to open the custom attribute maintenance
- Assign an existing attribute to the current Interface Technology, or create an entirely new one
- After saving the new attribute can be directly used in the Interface Attributes section



Stand-alone Transaction to Maintain Custom Content

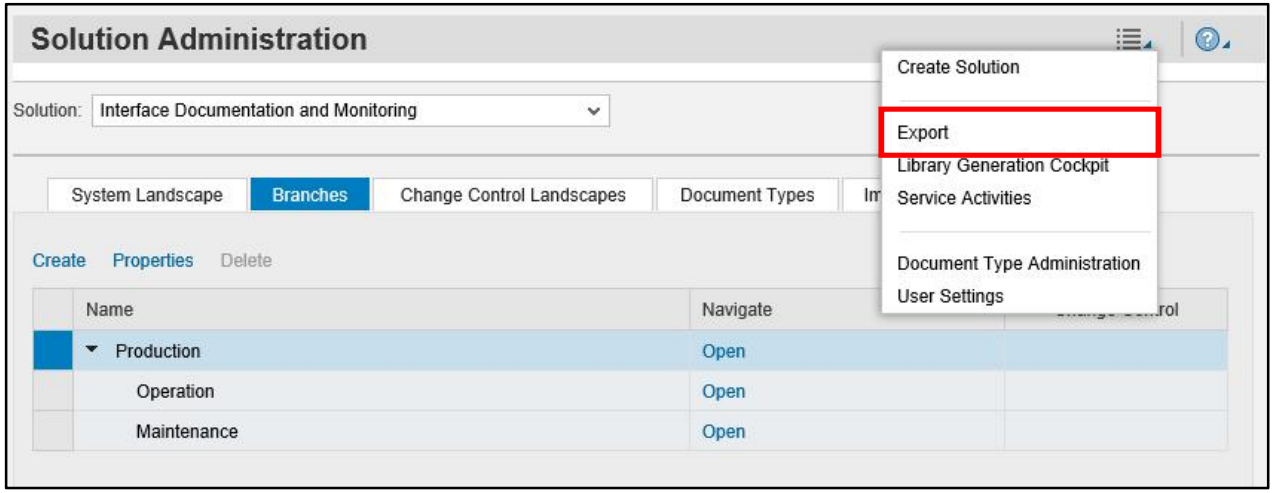
Transaction AGS_DCM_CUST_IFDOCU is split into three areas:

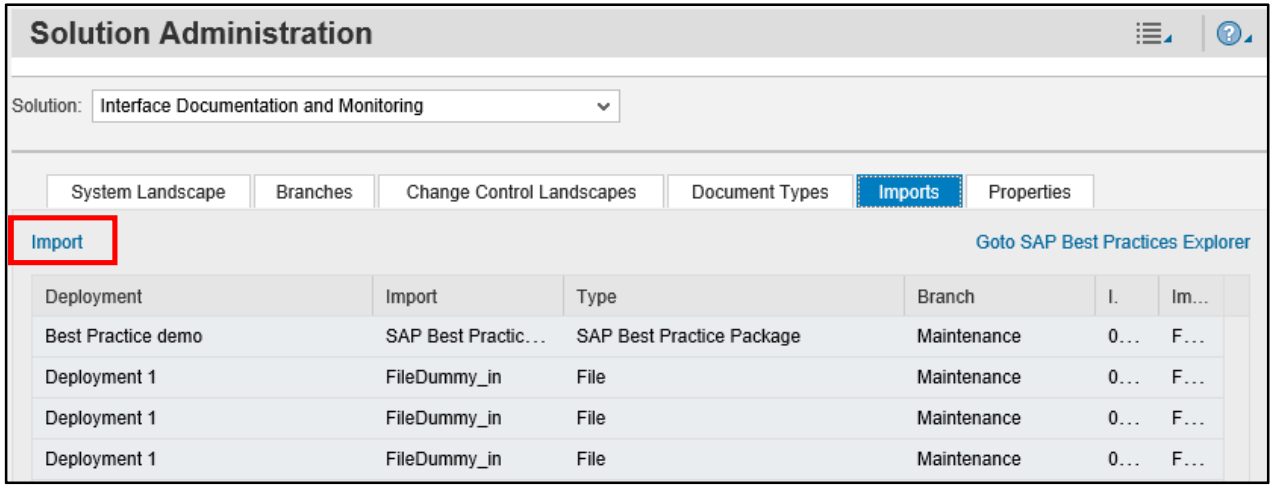
- Definition of custom interface attributes: add or delete custom attributes
- Definition of custom interface technologies: add or delete custom interface technologies
- Assignment of attributes to technologies: assign or un-assign (standard or custom) attributes to (standard or custom) interface technologies



Generic Export / Import of Interface Documentation Data

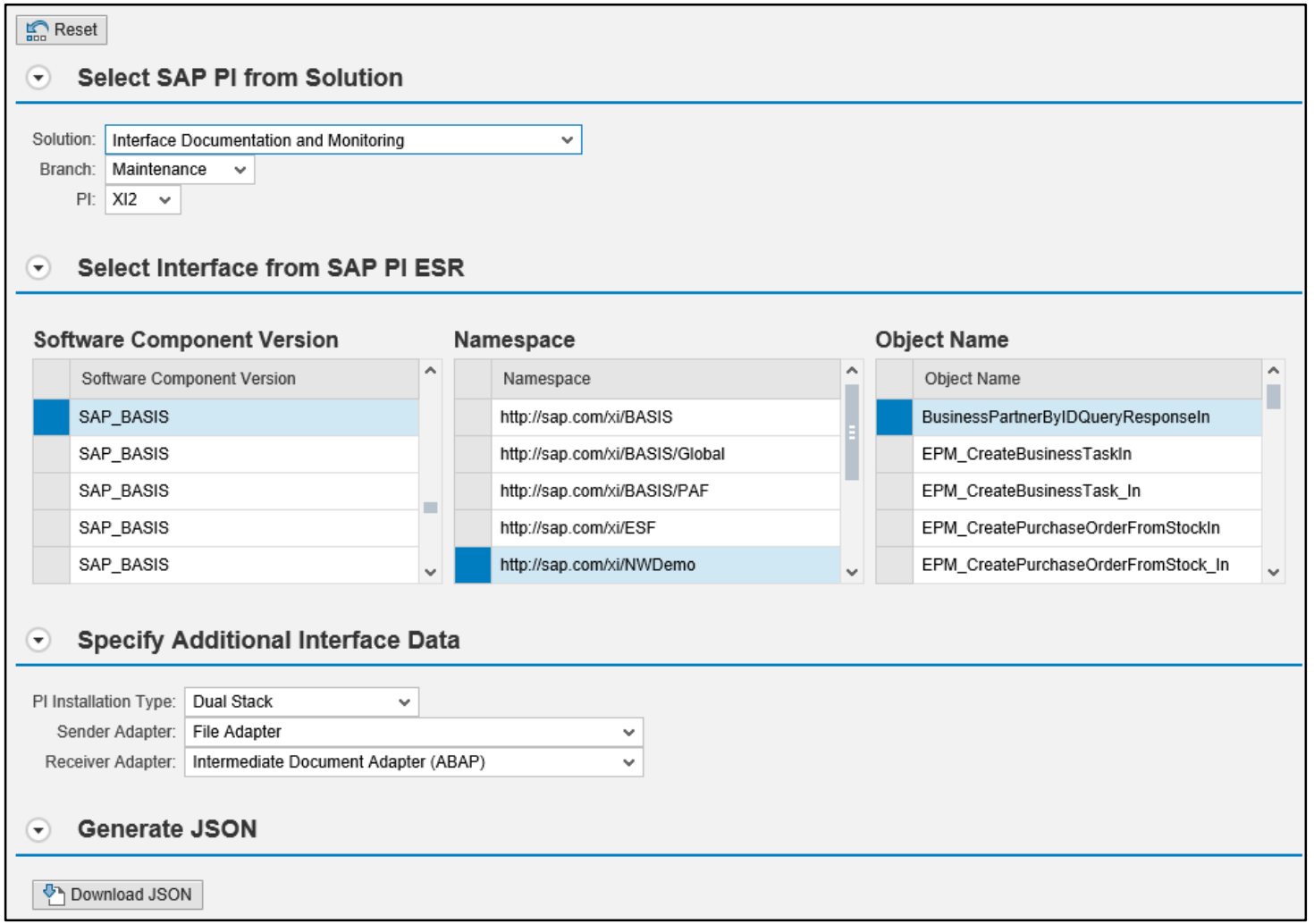
- Export / Import in Solution Administration brings selected Solution Documentation content to another context (another solution in the same Solution Manager system, or to a different Solution Manager system)
- Interface Documentation is part of this Export / Import feature:
  - Interface Details elements in scope are automatically included into the export file
  - By importing the file into the target context the Interface Details elements are automatically created and assigned to the right interface objects





Import of SAP PI/PO Enterprise Service Repository Data

- Transaction AGS_DCM_EXT_IMPORT provides an import feature for interface data that resides in an SAP PI/PO Enterprise Service Repository (ESR)
- Data is stored in a local file in JSON format and can afterwards be imported into the target solution using Solution Administration's generic import feature
- As a result, an interface is created in Interface Library having the interface attributes as maintained in ESR



Migration Aspects

Migration of Interface Documentation – General Remarks

- Interface Documentations which were available in projects or solutions in SAP Solution Manager 7.1 are migrated into the new Interface Documentation application as part of Content Activation procedure
- In order to facilitate the new environment some slight changes are made to the content, most importantly:
  - Number of Interface Technologies is reduced – instead, interface subtypes are introduced
  - Old interface attributes are usually migrated into corresponding new attributes, but few attributes are discontinued or merged (to clean up redundant and superfluous attributes)
  - All custom attributes which were assigned to an interface in Solution Manager 7.1 are re-created in Solution Manager 7.2 (in customer namespace)

Target Landscape in Solution Documentation

- While SAP Solution Manager 7.1 projects and solutions only worked with a single leading role for the system landscape, Solution Documentation in SAP Solution Manager 7.2 operates with branches, sites and system roles.
- Since only the target branch of the old project or solution can be defined during Content Activation, it’s not clear which combination of site and system role the interface attributes should be transferred to. Thus all combinations of sites and system roles in the target branch are supplied with the same source data set.
- Follow the instructions in SAP note 2343988 to bring the interface attribute data to further branches in the same solution.

Resource Material

You can find further resources here:

- Data Consistency Management Wiki