SAP Cloud Integration –

Integration Flow EDI to SAP SOAP - Inbound

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1. Introduction

The SAP BTP includes the SAP Cloud Integration, which offers diverse approaches to connect your IT systems with other cloud or on premise system landscapes. This makes cloud integration simple and reliable. Hence it is SAP's strategic integration platform for SAP Cloud customers. It provides out-of-the-box connectivity across cloud and on-premise solutions. Since the SAP Cloud Integration is operated by SAP, you don't need to worry about basic activities. Additionally, SAP is offering prepackaged integration content as reference templates, that allows customers to quickly realize new business scenarios. This drastically reduces integration project lead times and lowers resource consumption significantly.

This document gives an overview about the inbound EDI to SAP SOAP template flow of SAP Cloud Integration in combination with SAP Integration Advisor (IA). It explains how exported runtime artefacts from SAP IA can be imported into the flow and how the flow can be configured. This applies to both SAP SOAP OnPremise and SAP SOAP Cloud .

This template flow can be used for the following EDI standards:

- ASC X12
- UN/EDIFACT
- Any UN/EDIFACT subset (like GS1 EANCOM or Odette EDIFACT)
- ODETTE
- TRADACOMS

We assume the reader is an integration developer and is familiar with SAP Cloud Integration.

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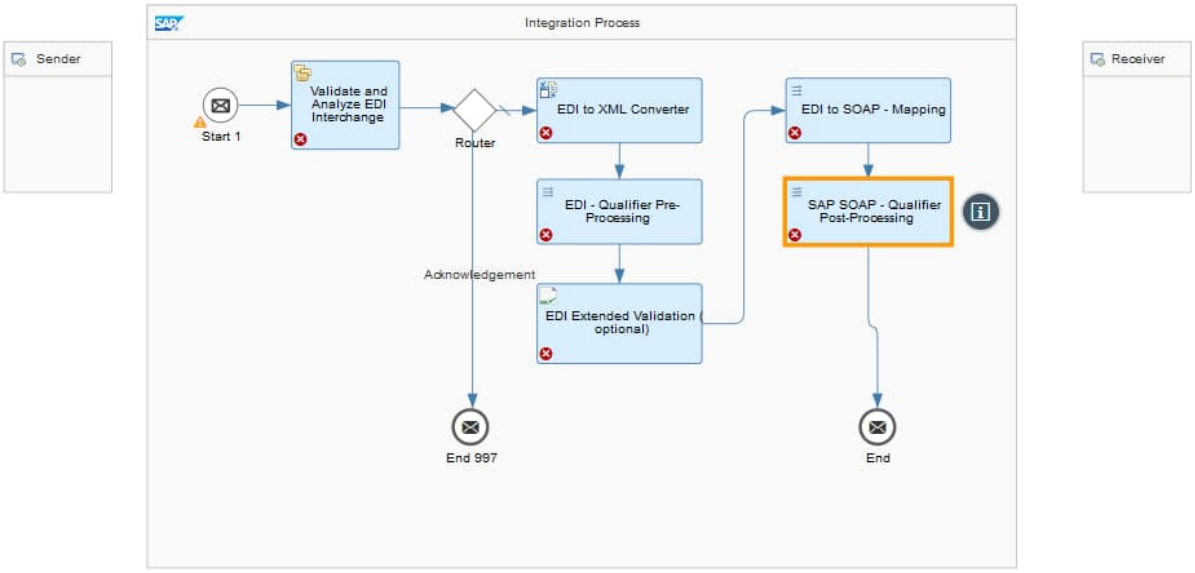
3. Integration Flow

Integration Flow	
Name	EDI to SAP SOAP - Inbound
Description	EDI to SAP SOAP – Inbound Template



3.1 Basic Concepts

With the SAP Integration Advisor one can create MIG (message implementation guidelines) and MAG (mapping guidelines). These can be exported as SAP Cloud Integration runtime artifacts (zip file containing *xslt and *xsd files). The flow templates contain steps serving as containers for the exported runtime artifacts (where the runtime artifacts can be imported into). E.g. the runtime artifacts exported from the MIG and MAG of the SAP Integration Advisor can be used as follows: schemas (xsd) can be used in EDI Splitter, EDI to XML Converter, XML to EDI Converter, XML Validator (extended validation) ; stylesheet transformations (xslt files) in XSLT Mapping.

Furthermore, it is necessary to define and customize the communication adapters as well as the required information of the interchange envelope and header structures (e.g. in the content modifier).

3.2 Sender Channel

Sender channel is configured by the customer. In case of SOAP outbound scenario, a SOAP adapter should be used.

3.3 Start Event

The Start Message event is triggered by the sending system.

3.4 Validate and Analyze EDI Interchange

EDI Splitter

EDIFACT / X12 / TRADACOMS	*Incoming EDI message is validated (optional) and an acknowledgement is generated (optional). Depending upon the result of validation, the payload is forwarded for further processing.*
Source Encoding	*(select)*
Validate Message	*(select)*
Transaction Mode	*(select)*
EDI Schema Definition	*Integration Flow*
Schema Name	*ASC-X12_<MessageType>_<ReleaseVersion>.xsd or* *UN-EDIFACT_<MessageType>_<ReleaseVersion>.xsd or* *UN-EDIFACT_<MessageType>_<ReleaseVersion>_<AssociationAssignedCode>.xsd or* *ODETTE_<MessageType>_<ReleaseVersion>.xsd* *TRADACOMS_<MessageType>_<ReleaseVersion>.xsd* *Runtime artefact from SAP IA. Located in the MIG source folder within the exported zip file.*
Create Acknowledgement	*(select)*
Interchange Number	*(select)*

3.5 Router (optional)

Processing	*If acknowledgement generation is configured at the EDI Splitter, acknowledgement messages and EDI messages can be routed separately.*
ERORR HANDLING	*(select)*
ROUTING CONDITION:	*(Row 1)*
Order	*1*
Route Name	*(type in) For e.g., "997" or "CONTRL"*
Condition Expression	*${header.EDI_ACKNOWLEDGEMENT} = 'true'*
Default Route	*(not selected)*
ROUTING CONDITION:	*(Row 2)*
Order	*2*
Route Name	*None*
Condition Expression	*None*
Default Route	*(selected)*

In case of conversion from TRADACOMS, the 997 acknowledgement and the router are not used and can be removed.

3.6 EDI to XML Converter

Converter

EDI to XML Converter	
General	
Name	EDI to XML Converter
EDIFACT / X12 / TRADACOMS	
Source Encoding	e.g. UTF-8
EDI Schema Definition	Integration Flow
Schema Name	*ASC-X12_<MessageType>_<ReleaseVersion>.xsd or* *UN-EDIFACT_<MessageType>_<ReleaseVersion>.xsd or* *UN-EDIFACT_<MessageType>_<ReleaseVersion>_<AssociationAssignedCode>.xsd or* *ODETTE_<MessageType>_<ReleaseVersion>.xsd* *TRADACOMS_<MessageType>_<ReleaseVersion>.xsd* *Runtime artefact from SAP IA. Located in the MIG source folder within the exported zip file.*

3.7 EDI - Qualifier Pre-Processing

XSLT Mapping

Mapping	*In this step, the EDI is preprocessed via an XSLT mapping.*
Name	<*SourceMIGName*>__preproc.xsl
Resource	*Runtime artefact from SAP IA. Located in the MIG source folder within the exported zip file.*
Type	XSLT Mapping
Output Format	XML

3.8 EDI Extended Validation (optional)

XML Validator

Mapping	*XML Validation step where the result of the qualifier pre-processing is validated against the ASC X12 / EDIFACT / TRADACOMS extended validation XSD. Supports XSD 1.1 version.*
Name	<*SourceMIGName*>__*RD.xsd*
Resource	*Runtime artefact from SAP IA. Located in the MIG source folder within the exported zip file.*
Type	XSLT Mapping
Output Format	XML

If you don’t want to execute validation of the message, simply remove this flow step from your integration flow.

3.9 EDI to SAP SOAP Mapping

XSLT Mapping

Mapping	*Mapping step where the EDI message is transformed into the SAP SOAP message via XSLT.*
Name	*<MAGName>.xsl*
Resource	*Runtime artefact from SAP IA. Located at the root folder of the exported zip file.*
Type	XSLT Mapping
Output Format	XML

3.10 SAP SOAP - Qualifier Post-Processing

XSLT Mapping

Mapping	*The qualifiers within the target SOAP message are removed via an XSLT mapping.*
Name	*<TargetMIGName>__postproc.xsl*
Resource	*Runtime artefact from SAP IA. Located in the MIG target folder within the exported zip file.*
Type	XSLT Mapping
Output Format	XML

3.11 End Event

The End Message event shoud be connected with the receiving system.

3.12 Receiver Channel

Receiver channel is configured by the customer.