**SAP Integration Suite   
Cloud Integration - Technical Specification  
 iFlow Name : EDI\_850\_TO\_IDOC\_1809\_ORDERS**

Version: 1.0

Author: Generated by AI

Date: 2025-10-24

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# 1. Change History

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Description** |
| 1.0 | 2025-10-24 | Generated by AI | Initial version |

# 2. Overview

This technical specification document, derived from the iFlow's XML definition, serves as a blueprint for the EDI\_850\_TO\_IDOC\_1809\_ORDERS integration. It captures key configuration parameters such as security settings (e.g., authentication, CORS), logging behavior, and component versions. The document details the communication endpoints (Sender and Receiver) and message flow properties for the IDOC adapter, including address, transport protocol (HTTP), and message protocol (IDoc SOAP). Developers can use this document to understand the integration's architecture, configuration, and dependencies. It aids in troubleshooting, modification, and maintaining the iFlow's intended functionality.

# 3. High level iFlow Design

The iFlow `EDI\_850\_TO\_IDOC\_1809\_ORDERS` processes EDI 850 Purchase Orders to IDOC format. The flow starts with a `Start` event, followed by a `Content Modifier` to enrich the message with a constant EDI 850 payload. Next, an `EDI to XML Converter` transforms the EDI to XML using the `ASC-X12\_850\_004010.xsd` schema. Finally, a `Message Mapping` activity converts the XML into IDOC format using the `MM.mmap` mapping and sends to `End` event.

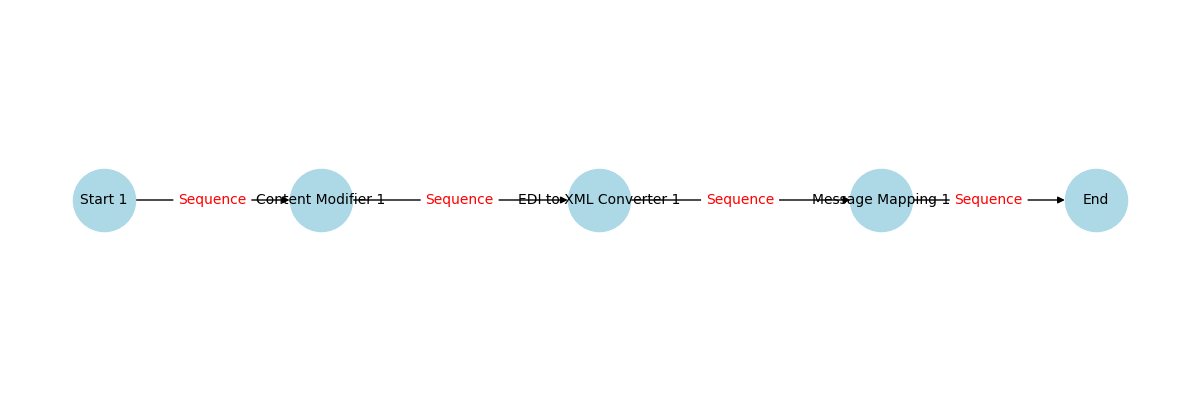


Figure: High level BPMN iFlow message and sequence flow

# 4. Message Flow

The message flow named "IDOC" (ID: MessageFlow\_69) is configured as an IDOC sender adapter. It uses the HTTP transport protocol with the IDoc SOAP message protocol. The adapter's address is "/IDOC\_SRI27" and supports role-based authentication. Maximum body size is 40KB and maximum attachment size is 100KB. The sender's system is named "Sender", and XML character handling throws exceptions.

|  |  |  |
| --- | --- | --- |
| **Source** | **Target** | **Name** |
| Sender | Start 1 | IDOC |

# 5. Technical Description

## 5.1. Main Integration Process

The main integration process, "Integration Process" (Process\_1), begins with a "Start 1" message start event (StartEvent\_66) and ends with an "End" message end event (EndEvent\_2). The flow proceeds through a series of call activities: "Content Modifier 1" (CallActivity\_14), which enriches the message with a constant body containing EDI data, then to "EDI to XML Converter 1" (CallActivity\_17), which converts the EDI message to XML using the X12 schema ASC-X12\_850\_004010.xsd. This output is then transformed by "Message Mapping 1" (CallActivity\_4), which uses a message mapping named MM, located at dir://mmap/src/main/resources/mapping/MM.mmap, before the process ends. The process has a transaction timeout of 30.

|  |  |  |
| --- | --- | --- |
| **Component Name** | **Key** | **Value** |
| Integration Process | Transaction Timeout | 30 |
| Integration Process | Component Version | 1.2 |
| Integration Process | Cmd Variant Uri | ctype::FlowElementVariant/cname::IntegrationProcess/version::1.2.1 |
| Integration Process | Transactional Handling | Not Required |

### endEvent End Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| Component Version | 1.1 |
| Cmd Variant Uri | ctype::FlowstepVariant/cname::MessageEndEvent/version::1.1.0 |

### callActivity Content Modifier 1 Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| Body Type | constant |
| Property Table |  |
| Header Table |  |
| Wrap Content | ISA\*00\* \*00\* \*ZZ\*0011223456 \*ZZ\*999999999 \*990320\*0157\*U\*00401\*000000015\*0\*P\*>~ GS\*PO\*0011223456\*999999999\*950120\*0147\*5\*X\*004010~ ST\*850\*000000001~ BEG\*00\*SA\*95018017\*\*\*950118~ N1\*SE\*UNIVERSAL WIDGETS~ N3\*375 PLYMOUTH PARK\*SUITE 205~ N4\*IRVING\*TX\*75061~ N1\*ST\*JIT MANUFACTURING~ N3\*BUILDING 3B\*2001 ENTERPRISE PARK~ N4\*JUAREZ\*CH\*\*MEX~ N1\*AK\*JIT MANUFACTURING~ N3\*400 INDUSTRIAL PARKWAY~ N4\*INDUSTRIAL AIRPORT\*KS\*66030~ N1\*BT\*JIT MANUFACTURING~ N2\*ACCOUNTS PAYABLE DEPARTMENT~ N3\*400 INDUSTRIAL PARKWAY~ N4\*INDUSTRIAL AIRPORT\*KS\*66030~ PO1\*001\*4\*EA\*330\*TE\*IN\*525\*VN\*X357-W2~ PID\*F\*\*\*\*HIGH PERFORMANCE WIDGET~ SCH\*4\*EA\*\*\*\*002\*950322~ CTT\*1\*1~ SE\*20\*000000001~ GE\*1\*5~ IEA\*1\*000000015~ |
| Component Version | 1.6 |
| Activity Type | Enricher |
| Cmd Variant Uri | ctype::FlowstepVariant/cname::Enricher/version::1.6.1 |

### callActivity EDI to XML Converter 1 Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| Tradacoms Source Encoding | ISO-8859-1 |
| X12 Source Encoding | ISO-8859-1 |
| Edifact Source Encoding | ISO-8859-1 |
| Tradacoms Header Name |  |
| Tradacoms Conversion Preference | No |
| Tradacoms Edi Schema Source | IntegrationProject |
| Component Version | 2.6 |
| Edifact Header Name |  |
| Edifact Envelope Truncator | true |
| Edifact Decimal Character | fromIncomingPayload |
| Edifact Target Root Element | interchange |
| X12 Edi Schema Source | IntegrationProject |
| X12 Header Name |  |
| X12 Envelope Truncator | false |
| Tradacoms Schema Table |  |
| Edifact Edi Schema Source | IntegrationProject |
| Activity Type | EDItoXMLConverter |
| Cmd Variant Uri | ctype::FlowstepVariant/cname::EDItoXMLConverter/version::2.6.0 |
| X12 Schema Table | <row><cell id='x12SchemaName'>/xsd/ASC-X12\_850\_004010.xsd</cell></row> |
| Edifact Target Encoding | ISO-8859-1 |
| Edifact Schema Table |  |

### startEvent Start 1 Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| Cmd Variant Uri | ctype::FlowstepVariant/cname::MessageStartEvent |

### callActivity Message Mapping 1 Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| Mappinguri | dir://mmap/src/main/resources/mapping/MM.mmap |
| Mappingname | MM |
| Mapping Source Value |  |
| Mapping Type | MessageMapping |
| Mapping Reference | static |
| Mappingpath | src/main/resources/mapping/MM |
| Component Version | 1.3 |
| Activity Type | Mapping |
| Cmd Variant Uri | ctype::FlowstepVariant/cname::MessageMapping/version::1.3.1 |
| Message Mapping Bundle Id |  |

### callActivity Message Mapping 2 Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| Mappinguri | dir://mmap/src/main/resources/mapping/EDI\_850.mmap |
| Mappingname | EDI\_850 |
| Mapping Source Value |  |
| Mapping Type | MessageMapping |
| Mapping Reference | static |
| Mappingpath | src/main/resources/mapping/EDI\_850 |
| Component Version | 1.3 |
| Activity Type | Mapping |
| Cmd Variant Uri | ctype::FlowstepVariant/cname::MessageMapping/version::1.3.1 |
| Message Mapping Bundle Id |  |

## 5.2. Local Integration Process

Okay, provide the XML for the `Main Integration Process` section of the SAP iFlow Process\_1. Once you provide the XML, I will summarize it in a concise, technical style limited to 5 sentences. The summary will focus on the overall flow and its main components/steps.

No process with id='Process\_1' found.

## 5.3. Sender

The sender system in this SAP iFlow is an \*\*SAP IDoc interface\*\* identified as "Sender". It uses the \*\*HTTP\*\* transport protocol with \*\*IDoc SOAP\*\* messaging. Authentication is \*\*RoleBased\*\*, requiring the `ESBMessaging.send` user role. The endpoint address is `/IDOC\_SRI27`. This sender's business role is to initiate communication by sending IDocs to the iFlow for processing, enforcing a maximum body size of 40 MB and attachment size of 100 MB.

|  |  |
| --- | --- |
| **Key** | **Value** |
| Component Type | IDOC |
| Description |  |
| Address | /IDOC\_SRI27 |
| Maximum Body Size | 40 |
| Component N S | sap |
| Maximum Attachment Size | 100 |
| Component Version | 1.4 |
| Name | IDOC |
| Xml Character Handling | throwException |
| Transport Protocol Version | 1.8.1 |
| Component S W C V Name | external |
| System | Sender |
| Transport Protocol | HTTP |
| Cmd Variant Uri | ctype::AdapterVariant/cname::sap:IDOC/tp::HTTP/mp::IDoc SOAP/direction::Sender/version::1.4.4 |
| User Role | ESBMessaging.send |
| Sender Auth Type | RoleBased |
| Message Protocol | IDoc SOAP |
| Message Protocol Version | 1.8.1 |
| Component S W C V Id | 1.8.1 |
| Direction | Sender |
| Client Certificates |  |

## 5.4. Receiver

The iFlow's Receiver section, defined by `<ReceiverProperties>`, is currently empty, indicating a simplified configuration. No specific receiver components are configured, meaning no external system is directly addressed by this step. The absence of configuration implies either a local processing step within the iFlow or a subsequent step dynamically determines the receiver. This suggests a design prioritizing internal logic or indirect receiver selection via content-based routing or adapter metadata. The iFlow relies on alternative mechanisms for message delivery and integration.

## 5.5. Mappings

The SAP iFlow Mappings section defines two Message Mapping activities. Activity ID 1 uses the "MM" message mapping, located at `dir://mmap/src/main/resources/mapping/MM.mmap`. Activity ID 2 utilizes the "EDI\_850" message mapping, found at `dir://mmap/src/main/resources/mapping/EDI\_850.mmap`. Both mappings are referenced statically and use component version 1.3 with FlowstepVariant 1.3.1. No specific source value or bundle ID is defined for either mapping within the XML, indicating configuration likely occurs elsewhere. These mappings will perform data transformation based on the logic defined within their respective `.mmap` files.

### Mapping Activity 1 Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| mappinguri | dir://mmap/src/main/resources/mapping/MM.mmap |
| mappingname | MM |
| mappingSourceValue |  |
| mappingType | MessageMapping |
| mappingReference | static |
| mappingpath | src/main/resources/mapping/MM |
| componentVersion | 1.3 |
| activityType | Mapping |
| cmdVariantUri | ctype::FlowstepVariant/cname::MessageMapping/version::1.3.1 |
| messageMappingBundleId |  |

### Mapping Activity 2 Properties

|  |  |
| --- | --- |
| **Key** | **Value** |
| mappinguri | dir://mmap/src/main/resources/mapping/EDI\_850.mmap |
| mappingname | EDI\_850 |
| mappingSourceValue |  |
| mappingType | MessageMapping |
| mappingReference | static |
| mappingpath | src/main/resources/mapping/EDI\_850 |
| componentVersion | 1.3 |
| activityType | Mapping |
| cmdVariantUri | ctype::FlowstepVariant/cname::MessageMapping/version::1.3.1 |
| messageMappingBundleId |  |

## 5.6. Security

The iFlow's security configuration specifies `httpSessionHandling` is set to "None," disabling session management. CORS is disabled (`corsEnabled` is false), with no exposed or allowed headers, origins, or methods configured, and credentials are not allowed. Sender authentication is role-based, requiring the `ESBMessaging.send` role. Basic authentication is disabled for the sender. Return exceptions to sender is set to false.

|  |  |
| --- | --- |
| **Key** | **Value** |
| Namespace Mapping |  |
| Http Session Handling | None |
| Access Control Max Age |  |
| Return Exception To Sender | false |
| Log | All events |
| Cors Enabled | false |
| Exposed Headers |  |
| Component Version | 1.2 |
| Allowed Header List |  |
| Server Trace | false |
| Allowed Origins |  |
| Access Control Allow Credentials | false |
| Allowed Headers |  |
| Allowed Methods |  |
| Cmd Variant Uri | ctype::IFlowVariant/cname::IFlowConfiguration/version::1.2.4 |

## 5.7. Groovy Scripts

The SAP iFlow `EDI\_850\_TO\_IDOC\_1809\_ORDERS` does not contain any Groovy Scripts. It utilizes message mappings and other components. The iFlow starts with a `StartEvent`, then a `Content Modifier` enriches the message with a constant value representing an EDI 850 document. This is followed by an `EDI to XML Converter` which uses the `/xsd/ASC-X12\_850\_004010.xsd` schema to transform the EDI message into XML format. Finally, a `Message Mapping` activity transforms the XML to a desired output format before ending at the `EndEvent`.

No Groovy scripts found in the specified folder.

## 5.8. Error Handling & Logging

This SAP iFlow's Error Handling & Logging configuration, as defined by the provided XML snippet, shows \*\*no explicit exception handling mechanisms implemented\*\*. The `<Exceptions>` tag is empty, indicating a lack of defined error processes. Consequently, the iFlow will likely rely on default SAP CPI error handling, potentially leading to generic error messages and limited logging detail. There are \*\*no custom error branches, exception subprocesses, or specific error event configurations\*\*. This implies a need for further development to incorporate robust error management and enhance logging for improved troubleshooting.

No exception subprocesses found in the iFlow.

# 6. Version and Metadata

|  |  |
| --- | --- |
| **Key** | **Value** |
| componentVersion | 1.3 |
| ComponentNS | sap |
| ComponentSWCVName | external |
| ComponentSWCVId | 1.8.1 |

The SAP iFlow metadata indicates a component version of 1.3 from the `sap` namespace. This component leverages software component version external. The specific software component version ID is 1.8.1, providing a unique identifier for this particular external dependency. The `ComponentSWCVName` and `ComponentSWCVId` together denote a specific version of an external software component used by the iFlow. This enables tracking of dependencies and potential impact of external updates.

# 7. Appendix

This SAP iFlow contains several technical artifacts. It begins with a `StartEvent\_66` and ends with an `EndEvent\_2`. An `Enricher` (Content Modifier 1), `CallActivity\_14`, is used to enrich the message. An `EDItoXMLConverter` called `CallActivity\_17` converts EDI data into XML format, specifically using the `/xsd/ASC-X12\_850\_004010.xsd` X12 schema. Finally, two message mappings are used: `MM.mmap` and `EDI\_850.mmap`.

|  |  |
| --- | --- |
| **Key** | **Value** |
| mappinguri | dir://mmap/src/main/resources/mapping/MM.mmap |
| mappingname | MM |
| mappingType | MessageMapping |
| mappingReference | static |
| mappingpath | src/main/resources/mapping/MM |
| mappinguri | dir://mmap/src/main/resources/mapping/EDI\_850.mmap |
| mappingname | EDI\_850 |
| mappingType | MessageMapping |
| mappingReference | static |
| mappingpath | src/main/resources/mapping/EDI\_850 |