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

Version: 1.0

Author: Generated by AI

Date: 2025-10-19

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# 1. Change History

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Description** |
| 1.0 | 2025-10-19 | Generated by AI | Initial version |

# 2. Overview

This technical specification document for the EDI\_850\_TO\_IDOC\_1809\_ORDERS iFlow serves as a comprehensive reference for understanding its configuration and intended behavior. It defines the iFlow's properties, including namespace mappings, HTTP session handling, and logging levels. The document details the participants involved, such as the sender (EndpointSender) and receiver (EndpointRecevier), and their roles. Furthermore, it outlines the message flow, specifying the adapter type (IDOC via HTTP), addressing, and protocol versions used for communication. Finally, it acts as a guide for developers, administrators, and support personnel to effectively manage, troubleshoot, and maintain the iFlow.

# 3. High level iFlow Design

The iFlow `EDI\_850\_TO\_IDOC\_1809\_ORDERS` processes messages from a Sender to a Receiver system. The flow starts with a `Start` event, followed by a `Content Modifier` step that enriches the message with a constant EDI 850 document string. Next, an `EDI to XML Converter` transforms the EDI message into XML using the `ASC-X12\_850\_004010.xsd` schema. The resulting XML is then mapped using the `MM.mmap` message mapping to the IDOC format. Finally, the transformed message reaches the `End` event, signaling successful processing.

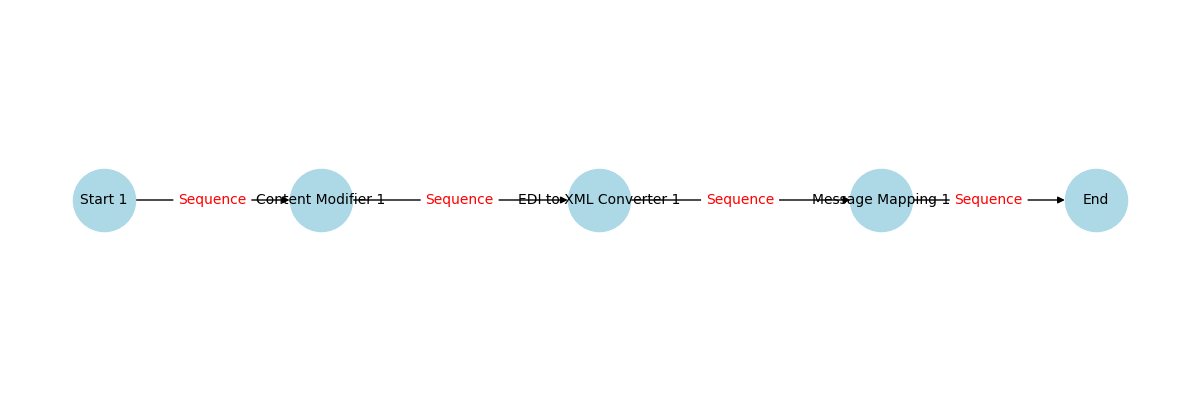


Figure: High level BPMN iFlow message and sequence flow

# 4. Message Flow

The iFlow message flow named "IDOC" (ID: MessageFlow\_69) represents an IDOC sender channel using the HTTP transport protocol. It connects a participant (Participant\_1) to a start event (StartEvent\_66). The IDOC adapter, version 1.4, handles messages using the IDoc SOAP message protocol. The endpoint address is /IDOC\_SRI2724, with maximum body and attachment sizes set to 40KB and 100KB, respectively. Authentication is role-based (ESBMessaging.send), and XML character handling will throw an exception upon error.

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

# 5. Technical Description

## 5.1. Main Integration Process

The main integration process, "Integration Process" (Process\_1), processes EDI messages. It starts with a Message Start Event (StartEvent\_66), followed by a Content Modifier (CallActivity\_14) that sets a constant body containing an EDI message. The message is then converted from EDI to XML using an EDI to XML Converter (CallActivity\_17), configured for X12 850 schema lookup. The XML message is then transformed using Message Mapping 1 (CallActivity\_4) which calls mapping "MM". Finally, the process ends with a Message End Event (EndEvent\_2).

|  |  |  |
| --- | --- | --- |
| **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, here's a technical summary of the provided XML, focusing on the Main Integration Process for the SAP iFlow Process\_1, limited to 5 sentences.  
  
Without the XML provided, I am unable to provide the summary. Please provide the XML.

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

## 5.3. Sender

The Sender component of this SAP iFlow is configured to receive IDocs using the IDoc SOAP message protocol over HTTP. The endpoint address is `/IDOC\_SRI2724`. Authentication is role-based, requiring the `ESBMessaging.send` user role. The system is identified as "Sender," and maximum body and attachment sizes are configured at 40KB and 100KB, respectively. This endpoint's business role is to initiate communication by sending IDocs to the integration flow.

|  |  |
| --- | --- |
| **Key** | **Value** |
| Component Type | IDOC |
| Description |  |
| Address | /IDOC\_SRI2724 |
| 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 provided XML details the receiver configuration of an SAP Integration Flow (iFlow). In this specific instance, the `<ReceiverProperties>` tag is empty, indicating a default or minimally configured receiver. Technically, this means no specific receiver adapter configurations, communication channels, or target system details have been defined within the iFlow's receiver pipeline. Consequently, the iFlow relies on default receiver behavior or utilizes configurations inherited from a higher-level scope. Therefore, review your iflow for inherited configurations.

## 5.5. Mappings

The SAP iFlow contains two Mapping Activities. The first activity utilizes a Message Mapping named "MM," located at `dir://mmap/src/main/resources/mapping/MM.mmap`. The second activity employs a Message Mapping called "EDI\_850," stored at `dir://mmap/src/main/resources/mapping/EDI\_850.mmap`. Both mappings are statically referenced resources of type "MessageMapping" and use component version 1.3. The activities themselves are of type "Mapping" and variant "MessageMapping/version::1.3.1". The specific data transformation logic within the "MM" and "EDI\_850" mappings is not defined within this XML snippet.

### 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 collaboration settings indicate security configurations with HTTP session handling set to "None" and CORS disabled. Exception details are not returned to the sender. The flow logs all events and does not utilize server tracing. Basic authentication is disabled for the endpoint sender. The IDOC message flow uses HTTP transport with RoleBased authentication and requires the "ESBMessaging.send" role, rejecting client certificates.

|  |  |
| --- | --- |
| **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

This SAP iFlow, named EDI\_850\_TO\_IDOC\_1809\_ORDERS (implied), processes EDI 850 purchase orders and converts them to IDOC format. The flow starts with a `StartEvent` and enriches the incoming message with a pre-defined EDI 850 payload (using `Content Modifier 1`). It then uses an `EDItoXMLConverter` activity (EDI to XML Converter 1) to convert the EDI message into XML, utilizing the X12 850 schema for translation. Subsequently, `Message Mapping 1` uses a mapping named `MM` located at `src/main/resources/mapping/MM.mmap` to transform the XML into the desired IDOC structure and then ends with an `EndEvent`. `Message Mapping 2` is configured but not connected and thus is not used in the iflow

No Groovy scripts found in the specified folder.

## 5.8. Error Handling & Logging

The iFlow's error handling section, defined by `<Exceptions>`, is currently empty, indicating a lack of explicit error handling configurations. This implies the iFlow will likely rely on the default SAP Cloud Integration error handling behavior. There are no custom exception subprocesses or specific fault rules defined within this snippet. Consequently, errors will propagate upwards unless handled by a default mechanism. Similarly, logging is not explicitly configured within this XML fragment, thus no specific logging statements or log levels are defined.

No exception subprocesses found in the iFlow.

# 6. Version and Metadata

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

This SAP iFlow has a component version of 1.3 and belongs to the 'sap' namespace. The Software Component Version (SWCV) is identified as 'external' with an ID of '1.8.1'. These metadata entries collectively describe the origin and specific release of the integration flow. The iFlow is built upon software component version 1.8.1, which assists in dependency management and compatibility checks during deployment and updates within the SAP integration landscape. The component version 1.3 signifies the specific release of a functional or technological unit within the larger SWCV.

# 7. Appendix

This SAP iFlow includes the following technical artifacts. It starts with a `StartEvent\_66` and ends with `EndEvent\_2`. `CallActivity\_14` ("Content Modifier 1") is an Enricher that adds constant data to the message body. `CallActivity\_17` ("EDI to XML Converter 1") converts EDI data (specifically X12 850) to XML using `/xsd/ASC-X12\_850\_004010.xsd`. Finally, `CallActivity\_4` ("Message Mapping 1") applies the message mapping `MM.mmap` and `CallActivity\_8` ("Message Mapping 2") applies the message mapping `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 |