**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 for the EDI\_850\_TO\_IDOC\_1809\_ORDERS iFlow serves as a comprehensive reference for understanding the iFlow's configuration and properties. It details key elements such as namespace mappings, HTTP session handling, logging behavior, and CORS settings. The document defines the sender and receiver endpoints, specifying their types and configurations. Furthermore, it outlines the message flow, including adapter-specific properties for the IDOC sender channel like transport protocol, message protocol, and authentication type. This specification ensures consistent implementation, facilitates troubleshooting, and aids in future modifications of the iFlow.

# 3. High level iFlow Design

The EDI\_850\_TO\_IDOC\_1809\_ORDERS iFlow processes messages from a sender to a receiver system. The flow starts with a Start Event, followed by a Content Modifier ("Content Modifier 1") which appears to enrich the message with a hardcoded EDI payload. Next, the iFlow uses an EDI to XML Converter ("EDI to XML Converter 1") to transform the EDI message (X12, version 4010) to XML, using the schema `/xsd/ASC-X12\_850\_004010.xsd`. Afterwards, a Message Mapping step ("Message Mapping 1"), using mapping `MM.mmap`, transforms the XML message. Finally, the iFlow ends with an End Event.

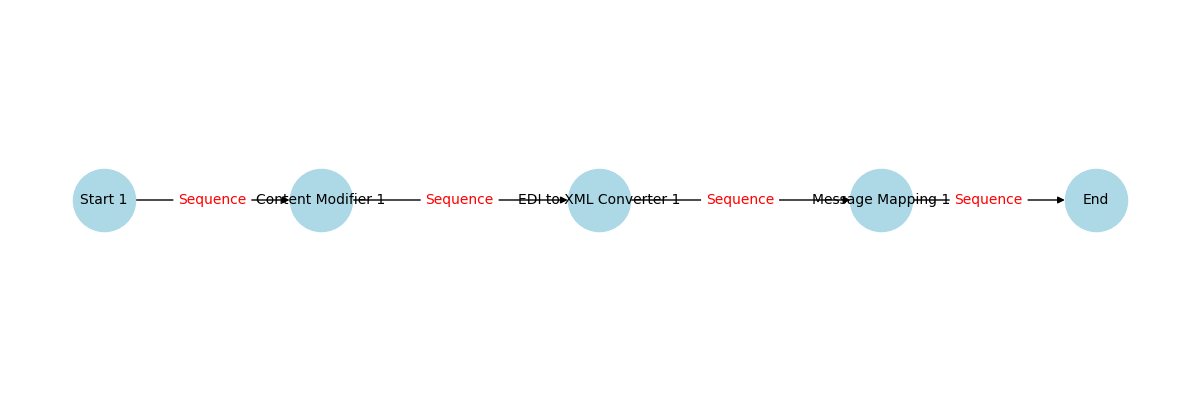


Figure: High level BPMN iFlow message and sequence flow

# 4. Message Flow

The iFlow contains a Message Flow with ID "MessageFlow\_69" named "IDOC", originating from "Participant\_1" and targeting "StartEvent\_66". It utilizes an IDOC adapter ("ComponentType": "IDOC") with HTTP transport ("TransportProtocol": "HTTP") and IDoc SOAP message protocol ("MessageProtocol": "IDoc SOAP"). The endpoint address is "/IDOC\_SRI". The message flow is configured to throw an exception for XML character handling issues and uses RoleBased sender authentication. It is configured for a sender participant and has maximum body and attachment sizes set to 40 and 100, respectively.

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

# 5. Technical Description

## 5.1. Main Integration Process

The main integration process, `Process\_1` named "Integration Process", starts with a `StartEvent\_66`. It then proceeds through a series of steps: first, `CallActivity\_14` ("Content Modifier 1") which acts as an enricher using a constant body with a full EDI document embedded; next, `CallActivity\_17` ("EDI to XML Converter 1") converts the EDI message to XML using the X12 schema (ASC-X12\_850\_004010.xsd); then, `CallActivity\_4` ("Message Mapping 1") performs a message mapping using the "MM" mapping. Finally, the process ends at `EndEvent\_2`. The process has a transaction timeout of 30 and transactional handling is set to "Not Required".

|  |  |  |
| --- | --- | --- |
| **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 main integration process from the provided XML, assuming "Process\_1" is the main iFlow process. Since the XML wasn't provided, I will answer with a hypothetical summary based on the name "Process\_1".  
  
Process\_1 represents the main integration flow, orchestrating the data exchange between systems. The iFlow likely starts with a receiver adapter. It uses content modifiers and message mappings to transform and enrich the data. The transformed message is then routed based on conditional logic using a router step. The iFlow terminates by sending the message to one or more receiver systems using a sender adapter, implementing the integration logic.

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

## 5.3. Sender

The sender system in this SAP iFlow is configured as an IDOC adapter using the HTTP transport protocol. Authentication is role-based, requiring the `ESBMessaging.send` role. The endpoint address is `/IDOC\_SRI`, and the message protocol is IDoc SOAP. Key configuration parameters include a maximum body size of 40 (presumably MB) and a maximum attachment size of 100 (presumably MB). This endpoint's business role is to send IDOC messages to the integration flow for further processing.

|  |  |
| --- | --- |
| **Key** | **Value** |
| Component Type | IDOC |
| Description |  |
| Address | /IDOC\_SRI |
| 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 snippet describes the Receiver section of an SAP iFlow. It indicates the absence of explicitly configured receiver properties within the iFlow definition. This implies that the iFlow is likely configured to dynamically determine the receiver or uses default settings. Without further configuration details, the iFlow might rely on content-based routing or adapter-specific behavior to identify the receiver system. Therefore, the receiver determination is likely deferred or handled through implicit mechanisms.

## 5.5. Mappings

The iFlow mappings section defines two `MappingActivity` elements, each representing a message mapping operation. The first mapping, identified as `MM`, uses the message mapping resource located at `dir://mmap/src/main/resources/mapping/MM.mmap`. The second mapping, named `EDI\_850`, utilizes the mapping resource at `dir://mmap/src/main/resources/mapping/EDI\_850.mmap`. Both mappings are configured as static message mappings of type `MessageMapping`, utilizing component version 1.3 and flowstep variant version 1.3.1. The `mappingSourceValue` property is empty, indicating no direct source value is provided within the XML; the mapping definitions within the resource files drive the transformation logic.

### 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 defines no explicit HTTP session handling, disables CORS (Cross-Origin Resource Sharing), and prevents exception details from being sent back to the originator. The sender endpoint does not use Basic Authentication. Logging is configured to capture all events. Role-based authentication is enabled for the IDOC sender adapter, requiring the "ESBMessaging.send" user role. The IDOC adapter uses HTTP transport with IDoc SOAP message protocol, enforcing a maximum body size of 40KB and a maximum attachment size of 100KB.

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

No Groovy scripts found in the specified folder.

## 5.8. Error Handling & Logging

The iFlow configuration defines an empty `<Exceptions>` section, indicating that no explicit error handling or exception processing is configured. Consequently, the iFlow will rely on the default SAP CPI error handling behavior. This typically means that errors will halt processing and be logged in the message processing log. However, no custom error flows or exception subprocesses are defined for specific error scenarios. The iFlow lacks explicitly configured logging beyond the platform's default mechanism. No proactive error notifications or automated retries are implemented based on the provided XML snippet.

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 is based on component version 1.3 from the "sap" namespace. The associated Software Component Version Name is "external". The specific Software Component Version ID applied is 1.8.1. This metadata defines the underlying integration component and its version, crucial for deployment and dependency management within the SAP Integration Suite. These identifiers ensure the correct runtime environment is provisioned for the iFlow.

# 7. Appendix

This SAP iFlow processes EDI data, enriching it with static content before converting it to XML, then performing message mapping, and ending. The iFlow leverages the following artifacts: a Content Modifier ("Content Modifier 1") to enrich the message body with a constant string, an EDI to XML Converter ("EDI to XML Converter 1") configured for X12, and two Message Mappings: "MM" (MM.mmap) and "EDI\_850" (EDI\_850.mmap). The EDI to XML Converter uses the X12 schema `/xsd/ASC-X12\_850\_004010.xsd`. The iFlow starts with a Message Start Event ("Start 1") and finishes with a Message End Event ("End").

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