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

Version: 1.0

Author: Generated by AI

Date: 2025-10-27

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# 1. Change History

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Description** |
| 1.0 | 2025-10-27 | 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 capabilities. It details the properties, parameters, and components involved in the integration process. The document outlines key aspects such as sender/receiver configurations, message protocols (IDOC SOAP), transport protocols (HTTP), and security settings. This specification facilitates implementation, maintenance, and troubleshooting efforts by providing a structured overview of the iFlow's technical design and expected behavior. It also captures component versions (e.g., componentVersion: 1.2 ) and other configuration settings which are used during runtime.

# 3. High level iFlow Design

The EDI\_850\_TO\_IDOC\_1809\_ORDERS iFlow processes an inbound X12 850 Purchase Order message. The iFlow starts with a Start Event followed by a Content Modifier that enriches the message. Next, an EDI to XML Converter transforms the EDI message into an XML structure using the ASC-X12\_850\_004010 schema. Subsequently, a Message Mapping "MM" (MM.mmap) performs data transformation from the converted XML to the target structure. Finally, the transformed message is delivered to the Receiver system via an End Event.

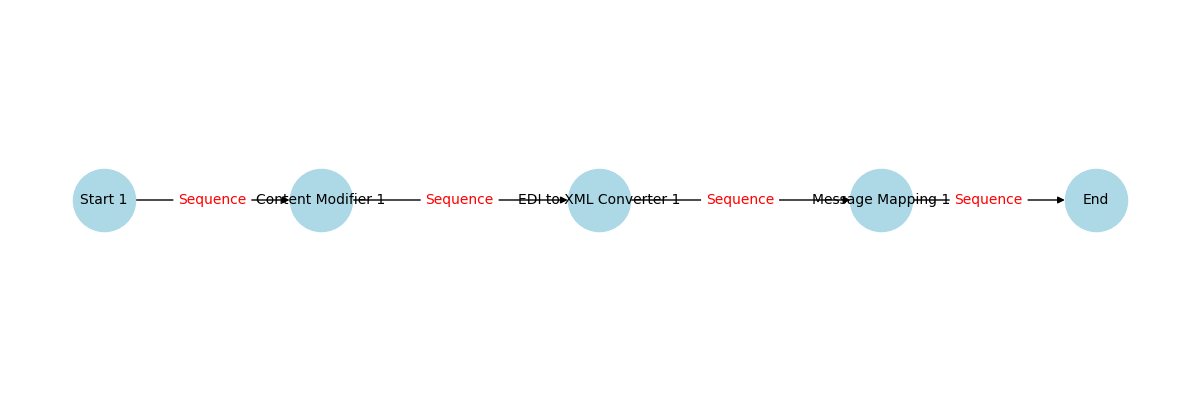


Figure: High level BPMN iFlow message and sequence flow

# 4. Message Flow

The message flow, identified as `MessageFlow\_69` and named "IDOC", connects `Participant\_1` to `StartEvent\_66`. It utilizes the `IDOC` adapter with HTTP as the transport protocol and IDoc SOAP as the message protocol. It's configured as a sender component named "IDOC" from namespace "sap" with version 1.4, targeting the endpoint `/IDOC\_SRI`. Role-based authentication (`ESBMessaging.send`) is enabled, and exception is thrown for XML character handling issues. Maximum body and attachment sizes are set to 40KB and 100KB, respectively.

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

# 5. Technical Description

## 5.1. Main Integration Process

The main integration process, named "Integration Process" (ID: Process\_1), starts with a `StartEvent` (StartEvent\_66), followed by a `Content Modifier` (CallActivity\_14) which enriches the content with a static EDI message. Then, an `EDI to XML Converter` (CallActivity\_17) converts the EDI message to XML using the `/xsd/ASC-X12\_850\_004010.xsd` schema for X12. Next, a `Message Mapping` (CallActivity\_4) using `MM.mmap` performs a mapping transformation. Finally, the iFlow ends with an `EndEvent` (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

Please provide the XML data you would like me to summarize. Once you provide the XML, I will analyze it and give you a 5-sentence summary of the Main Integration Process section, including its child elements, for the specified SAP iFlow Process\_1, in a human-friendly, technical style.

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

## 5.3. Sender

The Sender system in this iFlow utilizes the SAP IDoc adapter with the HTTP transport protocol. Authentication is RoleBased, requiring the "ESBMessaging.send" user role. Key configuration parameters include an address of "/IDOC\_SRI", a maximum body size of 40 (likely KB), and message protocol of IDoc SOAP. The sender component version is 1.4. The business role of this endpoint is to transmit IDoc messages to the integration platform using SOAP over HTTP.

|  |  |
| --- | --- |
| **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 Receiver section in this SAP iFlow configuration, represented by `<ReceiverProperties>`, is currently \*\*empty\*\*. This signifies that the iFlow isn't explicitly configured with specific receiver-side processing or features. Therefore, there are no custom receiver components defined. The system will likely use default configurations or rely on sender-side configurations to determine the final destination and processing of the message. This setup implies a straightforward, possibly direct, message delivery scenario, without intermediary receiver-side transformations or routing rules defined in this specific section. Essentially, the message is handed off without specific receiver-side instructions.

## 5.5. Mappings

The iFlow's Mappings section defines two Message Mapping activities, identified by IDs 1 and 2. Activity 1 executes the "MM" mapping, located at `src/main/resources/mapping/MM.mmap`. Activity 2 executes the "EDI\_850" mapping, found at `src/main/resources/mapping/EDI\_850.mmap`. Both mappings are static Message Mappings, utilize component version 1.3, and the FlowstepVariant version is 1.3.1. No dynamic lookup or value assignments are specified within the mapping activity definitions themselves; the transformation logic resides within the Message Mapping 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 collaboration settings define security-related properties. HTTP session handling is disabled. CORS is disabled (`corsEnabled: false`) with no exposed headers or allowed origins, methods or headers defined, also client certificates are empty. The sender authentication type for the IDOC message flow is RoleBased, requiring the 'ESBMessaging.send' role. The iFlow's logging is set to "All events", and returnExceptionToSender is false. Basic Authentication is disabled on the Endpoint Sender.

|  |  |
| --- | --- |
| **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, processes EDI 850 purchase orders and converts them to IDOC format. The iFlow starts with an EDI document being enriched with the content modifier. The EDI document is then converted to XML using the "EDI to XML Converter" which leverages the `/xsd/ASC-X12\_850\_004010.xsd` XSD schema for X12 EDI 850. The XML document is mapped from `src/main/resources/mapping/EDI\_850.mmap` to a message mapping from `src/main/resources/mapping/MM.mmap`. Finally, the result is sent to the End Event.

No Groovy scripts found in the specified folder.

## 5.8. Error Handling & Logging

This SAP iFlow's XML configuration for error handling and logging provides a designated section for exceptions (`<Exceptions>`). However, the current configuration is empty, indicating that \*\*no specific, custom error handling or logging strategies have been defined\*\*. The iFlow will likely rely on default SAP CPI error handling, which might include automatic retries or message failure notifications. Without specific configurations, granular control over error responses and detailed logging is limited. Developers would need to implement custom exception handling and logging for more specific requirements.

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 utilizes component version 1.3 from the `sap` namespace. The software component involved is named `external` and is identified by SWCV ID `1.8.1`. The iFlow leverages functionality associated with this specific version of the `external` component. Therefore, features or bug fixes introduced in SWCV `1.8.1` are relevant to this iFlow's behavior. This metadata ensures proper dependency management and version compatibility within the SAP integration landscape.

# 7. Appendix

This SAP iFlow, named "Integration Process," leverages several technical artifacts to process data. It begins with a Start Event and concludes with an End Event. An Enricher (Content Modifier 1) adds static content to the message body. An EDI to XML Converter transforms EDI data based on the X12 850 schema, followed by two message mappings: "MM" located at `src/main/resources/mapping/MM.mmap`, and "EDI\_850" located at `src/main/resources/mapping/EDI\_850.mmap`. No scripts are explicitly referenced within the provided XML.

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