**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 details the configuration and properties of the EDI\_850\_TO\_IDOC\_1809\_ORDERS iFlow. It serves as a comprehensive reference guide, capturing key settings such as namespace mappings, HTTP session handling, and logging behavior for the iFlow's collaboration. The document also outlines sender/receiver participants and configurations of the IDOC adapter, documenting parameters like address, message protocol, authentication type, and transport protocol. This enables efficient deployment, troubleshooting, and future modifications of the integration flow. Finally, it facilitates a clear understanding of the iFlow's operational parameters, supporting informed decision-making during its lifecycle.

# 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` that enriches the message with a constant value containing EDI data. Next, an `EDI to XML Converter` transforms the EDI data to XML using the `ASC-X12\_850\_004010.xsd` schema. Finally, the XML message is mapped using the `MM.mmap` message mapping and sent to the `End` event. The iFlow uses a transaction timeout of 30 seconds.

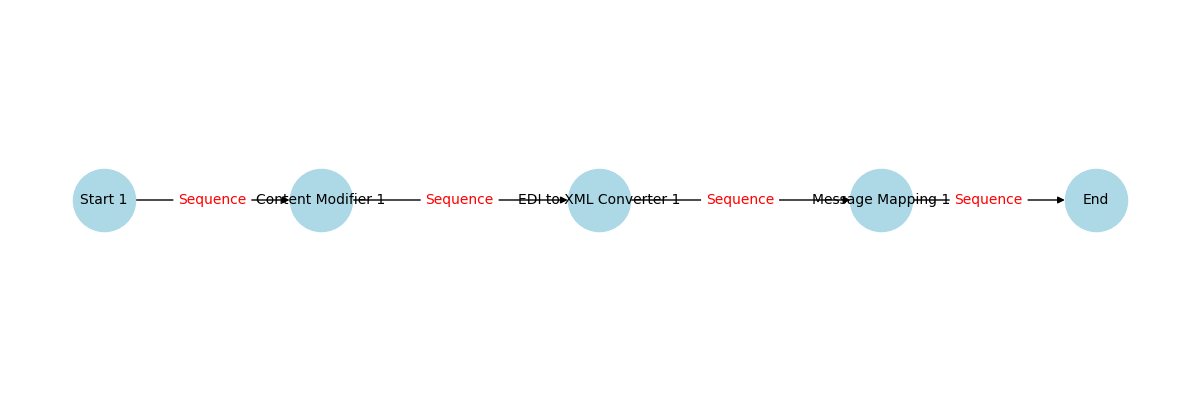


Figure: High level BPMN iFlow message and sequence flow

# 4. Message Flow

The message flow, identified as "MessageFlow\_69" and named "IDOC", connects "Participant\_1" to "StartEvent\_66". This flow utilizes an IDOC adapter (version 1.4) configured as a sender and employing the HTTP transport protocol. It uses IDoc SOAP as the message protocol. The endpoint address is "/IDOC\_SRI23" with a maximum body size of 40KB and maximum attachment size of 100KB. Role-based authentication ("ESBMessaging.send") is enabled for sending messages.

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

# 5. Technical Description

## 5.1. Main Integration Process

The SAP iFlow `Process\_1`, named "Integration Process," defines a message processing flow. It begins with a `StartEvent\_66`, "Start 1," followed by a `CallActivity\_14`, "Content Modifier 1," which enriches the message. The flow then utilizes an `EDI to XML Converter 1` (`CallActivity\_17`) to transform EDI data. Subsequently, `CallActivity\_4`, "Message Mapping 1," performs message mapping using the `MM.mmap` mapping. Finally, the iFlow ends with an `EndEvent\_2`, "End."

|  |  |  |
| --- | --- | --- |
| **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 summary of the main integration process and its child elements from the provided XML, assuming the XML represents an SAP iFlow definition:  
  
The main integration process of the iFlow "Process\_1" defines the core logic of the integration scenario. It likely contains message processing steps arranged sequentially. These steps, acting as child elements, could include content modifiers, routers, mapping operations, and calls to external systems or other integration flows. The specific actions within these child elements determine how data is transformed, routed, and ultimately delivered to the target system. The flow is designed to orchestrate and manage the data exchange according to preconfigured settings.

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

## 5.3. Sender

The sender system is an `IDOC` adapter within the `sap` namespace communicating over `HTTP`. It uses `IDoc SOAP` as the message protocol, version `1.8.1`. Authentication is `RoleBased`, requiring the `ESBMessaging.send` user role. The endpoint address is `/IDOC\_SRI23`, with maximum body and attachment sizes configured to 40 and 100 respectively. This endpoint is responsible for sending IDoc messages via SOAP over HTTP.

|  |  |
| --- | --- |
| **Key** | **Value** |
| Component Type | IDOC |
| Description |  |
| Address | /IDOC\_SRI23 |
| 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 contains the `<ReceiverProperties>` element. Currently, it appears empty, indicating a simple scenario with no specifically defined receiver properties. This suggests a default or implicitly configured receiver. Without explicit configuration, the iFlow likely relies on global settings or channel-level definitions for receiver determination and message routing. The absence of specific receiver configuration simplifies the iFlow's design but requires careful attention to underlying system configurations. Therefore, receiver details would be configured elsewhere, outside this XML snippet.

## 5.5. Mappings

The iFlow's `Mappings` section defines two Message Mapping activities: `MM` and `EDI\_850`. Both mappings are of type `MessageMapping` and are referenced statically. `MM` is defined by the file `src/main/resources/mapping/MM.mmap` and `EDI\_850` by `src/main/resources/mapping/EDI\_850.mmap`. These files contain the actual mapping logic which is not described within this XML. Both mappings use component version 1.3.

### 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 includes CORS being disabled (corsEnabled=false) and no specific allowed origins, headers or methods are defined. HTTP session handling is set to "None". Basic authentication for the sender is disabled (enableBasicAuthentication=false). The iFlow leverages RoleBased authentication with the 'ESBMessaging.send' user role for the sender. Finally, exception handling is configured to not return exceptions to the sender, and ServerTrace is disabled.

|  |  |
| --- | --- |
| **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 `EDI\_850\_TO\_IDOC\_1809\_ORDERS` iFlow utilizes Groovy scripting indirectly via the "Message Mapping" and "Content Modifier" steps. There's no explicit Groovy script step but the iflow uses Content Modifier, which may utilize Groovy scripts. Call Activity "Content Modifier 1" and Message Mappings "Message Mapping 1" and "Message Mapping 2" are used, each with its respective mapping artifacts. The iFlow starts with a message start event, enriches content with a static EDI 850 message, converts the EDI to XML using the ASC X12 850 004010 schema, maps the XML to IDOC format and ends with a message end event.

No Groovy scripts found in the specified folder.

## 5.8. Error Handling & Logging

The SAP iFlow's Error Handling & Logging section, as defined in the provided XML, currently lacks explicitly configured exception handling mechanisms. Consequently, the iFlow will likely rely on default SAP Cloud Integration exception behavior. Without custom exception processes, error handling will primarily involve logging errors encountered during message processing. This default logging will capture basic details, potentially aiding in initial troubleshooting. However, the absence of specific exception routes or fault management means no bespoke actions will be performed upon error occurrence. More comprehensive error management would require explicit configuration within the iFlow design.

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 metadata version of 1.3. The component namespace is "sap", indicating it's a standard SAP component. The Software Component Version Name (SWCV Name) is "external". The Software Component Version ID (SWCV Id) is 1.8.1, uniquely identifying the version of the underlying software component used in this iFlow. This information is critical for dependency management and understanding compatibility within the SAP integration landscape.

# 7. Appendix

The iFlow contains a sequence of steps including a Start Event, Content Modifier (Enricher), EDI to XML Converter, and Message Mappings. The iFlow concludes with an End Event. A "Content Modifier 1" is used to enrich the message with a constant body containing EDI data. "EDI to XML Converter 1" converts EDI data to XML, using the "ASC-X12\_850\_004010.xsd" schema. This iFlow uses two Message Mappings: "MM.mmap" and "EDI\_850.mmap" located at "src/main/resources/mapping/".

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