



**How-to Guide
SAP NetWeaver 2004s**

How To... Sample IDoc-XI Scenarios

Version 1.00 – Sept 2006

**Applicable Releases:
SAP NetWeaver 2004s
End-to-End Process Integration
Enabling Application-to-Application Processes**

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1 Scenario

This guide gives an overview of how to configure different IDoc-XI-IDoc scenarios using alternative identifiers and header mapping. However, the contents are also relevant to other interfaces, for instance, scenarios involving systems that use the RNIF adapter. The table below shows the scenarios that will be addressed, and the different approaches that will be applied.

Case	Outbound Party Type Sender / Recv.	Inbound Party Type Sender / Recv.	Alternative Identifiers	Header Mapping	Identifiers in Communication Channel	Chapter
1	LS / LS	LS / LS	—	—	—	3
2	≠LS / ≠LS	≠LS / ≠LS	✓	—	✓	4
3*	≠LS / ≠LS	≠LS / ≠LS				5
4	≠LS / ≠LS	LS / LS	✓	✓	—	6
5	≠LS / ≠LS	≠LS / LS	✓	✓	✓	7
6	LS / LS	≠LS / ≠LS	✓	✓	✓	8
7	LS / ≠LS	≠LS / ≠LS	✓	✓	✓	9

* Master data consolidated

2 Introduction

An IDoc that is sent to the inbound channel of the Integration Server is converted from native IDoc format to IDoc XML format by the IDoc adapter. The IDoc adapter calls the Integration Engine pipeline for routing and mapping purposes. The XML message that is sent to the Integration Server consists of a header and a body with the IDoc XML as the payload.

The sender service within the message header is identified by the adapter-specific identifiers. For business systems that are maintained in the System Landscape Directory (SLD), the relevant properties are replicated into the Integration Directory. For business services, you can enter the adapter-specific identifiers directly in the Integration Directory. For SAP systems, the sender service is determined by the system ID of the sender port and by the client. For non-SAP systems, it is identified by the logical system name.

The sender and receiver party within the message header are specified depending on the IDoc partner type. For logical systems (partner type *LS*), the service remains party-less. For any other, an alternative party is generated as follows:

Party name	IDoc partner number
Identification scheme	ALE#<partner-type>#<partner-role>
Agency	Service (identified as described above)

In order to normalize the alternative party, that is, to replace it with an internal XI party, you have to specify alternative identifiers. The conversion can be done in both the inbound channel and the outbound channel of the Integration Server.

The IDoc adapter at the Integration Server outbound channel converts the IDoc XML to native IDoc format, and sends the IDoc to the receiver system. The IDoc partner is

identified by the sender and receiver service in the message header. For party-less services, the IDoc partner is a logical system. Otherwise, the IDoc partner is identified using the alternative party. In the case of a normalized party, you have to define alternative identifiers in the communication channel. Furthermore, you can modify the party and service by a header mapping. The header mapping is required within the receiver agreement, hence you only define it at the outbound channel of the Integration Server. There, it is executed before the internal XI party is converted to the alternative party.

The control record of the IDoc is discarded and renewed by the IDoc adapter. If you want to add values to the control record, you have to select the *Apply Control Record Values from Payload* checkbox in the communication channel. When a new communication channel of type IDoc is created, the flag is set by default. If the flag is not set, the settings comply with XI 2.0. For more information, see SAP Note 728792.

3 Case 1: IDoc of Type Logical System (LS)

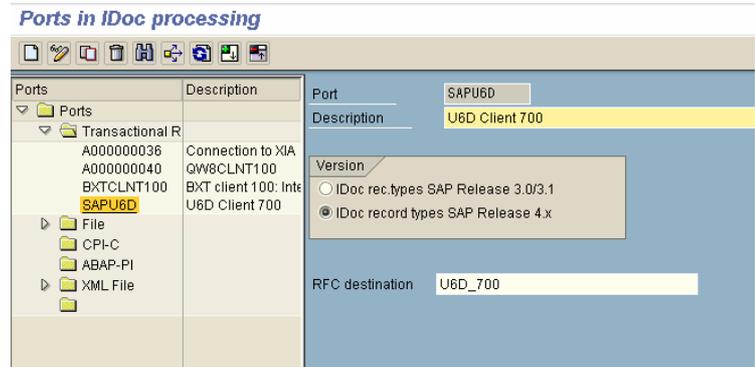


	IDoc Party Name / Type	XI Party Agency / Scheme / Name / Service	IDoc Party Name / Type
Sender:	B6MCLNT000 / LS	- / - / - / B6M_000	B6MCLNT000 / LS
Receiver:	XIDCLNT113 / LS	- / - / - / XID_113	XIDCLNT113 / LS

3.1 Maintain Partner Profiles in Sender and Receiver Systems

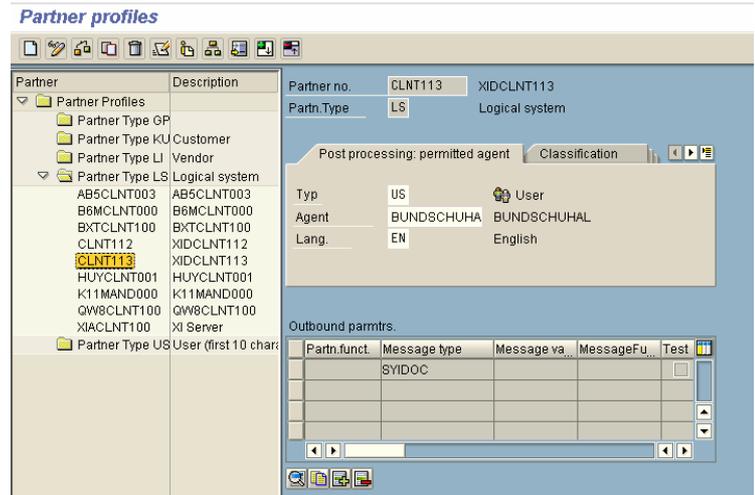
1. In the sender system, call transaction **WE21** to create the tRFC port SAPU6D.

Maintain the RFC destination U6D_700 to address the Integration Server.



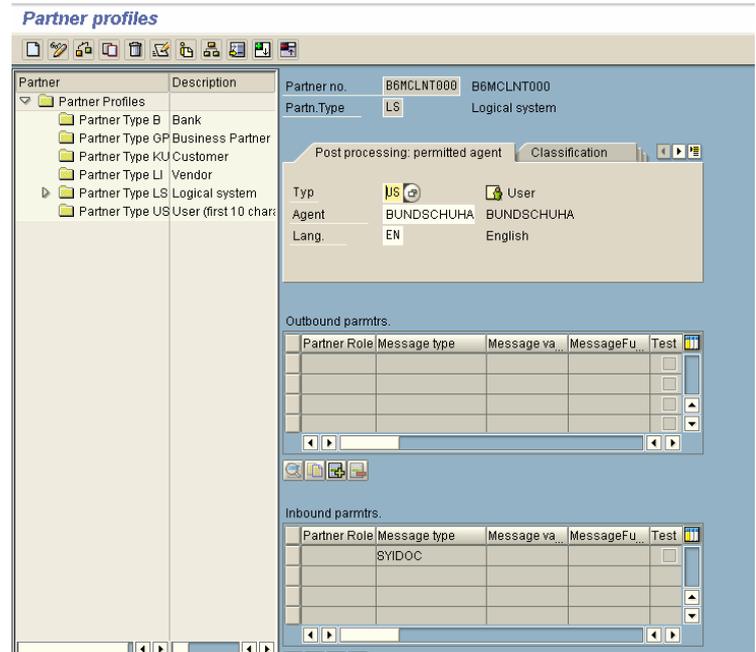
2. In the sender system, call transaction **WE20** to maintain the partner profile for the receiver system CLNT113.

Select message type SYIDOC, the corresponding basic type, and receiver port SAPU6D as outbound parameters.



3. In the receiver system, call transaction **WE20** to maintain the partner profile for the sender system B6MCLNT000.

Select message type SYIDOC as an inbound parameter.



3.2 Maintain the System Landscape Directory (SLD)



The following steps are valid for all other business cases as well.

1. In the SLD, maintain the business system B6M_000.

Select the *technical system*, the *system ID*, the *client*, and the *logical system name*.

2. In the Integration Directory, the adapter-specific identifiers of business system B6M_000 are retrieved from the SLD.

The IDoc adapter uses *system ID*, and *client* to determine the corresponding service.

Business Landscape

View and configure business systems for use in the Exchange Infrastructure (XI).

Business System: B6M_000

Save Remove Export

Name: B6M_000

Description:

Administrative Contact:

Business System Role: Application System

Related Integration Server: INTEGRATION_SERVER_U6D_700

Group: CONS

Transport Targets:

Technical System: [B6M on Is0028](#) [Change...](#)

Client: 000 of B6M

Logical System Name: B6MCLNT000

Installed Products: SAP WEB AS, 6.20 B6M on Is0028

Scenarios Objects Change Lists

Search:

Service Without Party

Business Service

Business Process

Business System

AJH

B6M_000

Communication Channel

com_mset_seller

EBP

Fileadapter_P45380

HASU2EE

Integration_Server_U6D

INTEGRATION_SERVER_U6D_700

JPL50021307

JPR30_Selftest

JPTes_Local

RKT30_Adapter_HK

U6D_105

U6D_106

U6D_107

Webservices_NWLH

XI6_300

Receiver Determination

Service Edit View

Display Service

Service: B6M_000

Party:

Description:

Business System

Display Adapter-Specific Identifiers

IDoc Adapter

Logical System: B6MCLNT000

IDoc Adapter and RFC Adapter

R/3 System ID: B6M

Client: 000

MML Adapter

DDID:

Close

3.3 Maintain the Integration Server



The following steps are valid for all other business cases as well.

1. Call transaction **IDX1** to maintain port `SAPB6M_000` to load the IDoc metadata.

Port Maintenance in IDoc Adapter

Ports	Description
Ports	
SAPB6M_000	Metadata load
SAPBCE_000	BCE CLIENT 000
SAPU6D_000	U6D Client 700

Port:
Client:
Description:
RFC Destination:
Receiver of Status Messages:
Partner No.
Partn.Type

2. Call transaction **IDX2** to obtain an overview of the metadata that is already loaded to the Integration Server.

Metadata Overview for IDoc Adapter

Loaded Meta Data	Description
Loaded Meta Data	
SAPB6M	System: SAPB6M
IDoc Types	
SYIDOC01	IDoc Type: SYIDOC01
Clients	
SAPBCE	System: SAPBCE
SAPU6D	System: SAPU6D
SUBSYSTEM	System: SUBSYSTEM

3.4 Integration Builder: Configuration

1. In the Integration Directory, create a receiver determination, an interface determination, and a receiver agreement.

Select the party-less sender service B6M_000, the sender interface SYIDOC.SYIDOC01, the party-less receiver service XID_113, the inbound interface SYIDOC.SYIDOC01, and the communication channel IDoc.

2. Create a communication channel of adapter type IDoc.

Select adapter type IDoc, RFC destination XID_113, port SAPXID, and the appropriate SAP release.



The *Apply Control Record Values from Payload* checkbox is selected by default.

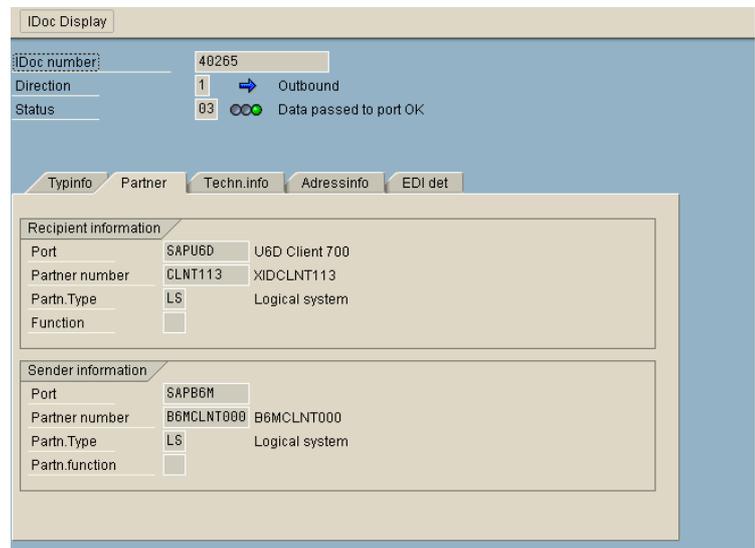
The screenshot displays three SAP Integration Builder configuration screens:

- Display Receiver Determination:** Shows sender details (Party, Service: B6M_000, Interface: SYIDOC.SYIDOC01, Namespace: urn:sap-com:document:sap.idoc:messages) and receiver details (Party: *, Service: *, Description: *). A table of Configured Receivers shows Condition, Party, and Service (XID_113).
- Configuration Overview for Receiver Determination:** Shows a tree view with Receiver (Partner | Service) / Mapping Program / Receiver Agreement (Communication Channel). The selected receiver is SYIDOC.SYIDOC01 with a status of 'Not specified' and an IDoc type.
- Edit Communication Channel:** Shows details for Communication Channel IDoc (Party, Service: XID_113, Description). The Parameters tab is active, showing Adapter Type: IDoc, Transport Protocol: IDoc, Message Protocol: IDoc, Adapter Engine: Integration Server, RFC Destination: XID_113, Segment Version, Interface Version: SAP Release 4.0 or Higher, Port: SAPXID, SAP Release: 640, Queue Processing (unchecked), and Apply Control Record Values from Payload (checked).

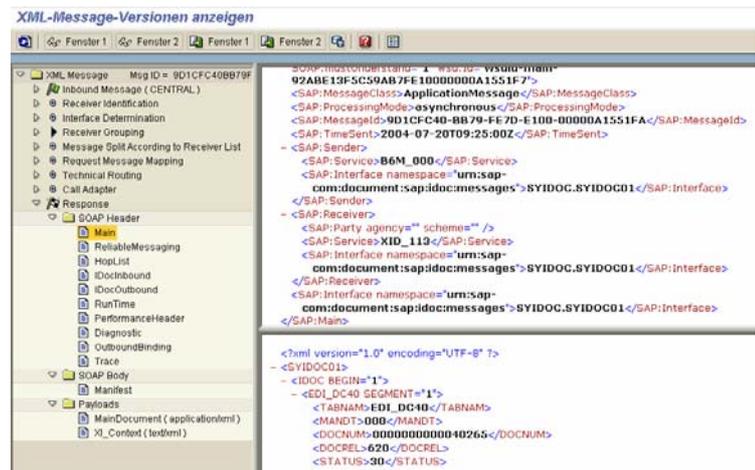
3.5 Execute the Scenario

1. Send an IDoc of partner type *LS* (logical system).

In the sender system, call transaction **WE05** to display the outbound IDoc. The IDoc partner type of both receiver and sender is *LS*.

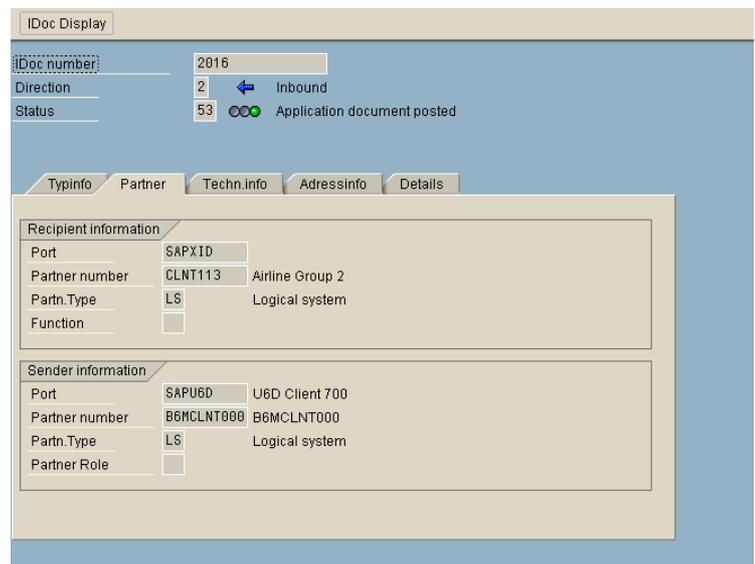


2. On the Integration Server, call transaction **SXMB_MONI** (Integration Engine Monitoring → Monitor for Processed XML Messages) to display the message.



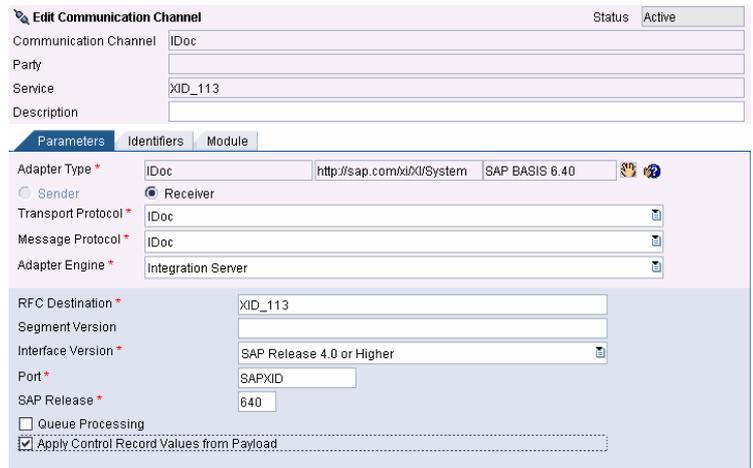
3. In the receiver system, call transaction **WE05** to display the inbound IDoc.

IDoc partner name and type remain unchanged.

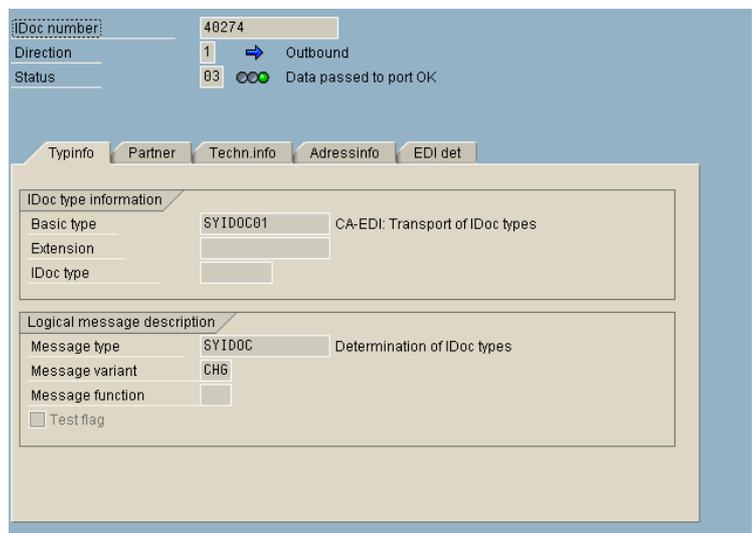


3.6 XI 2.0 Compliance

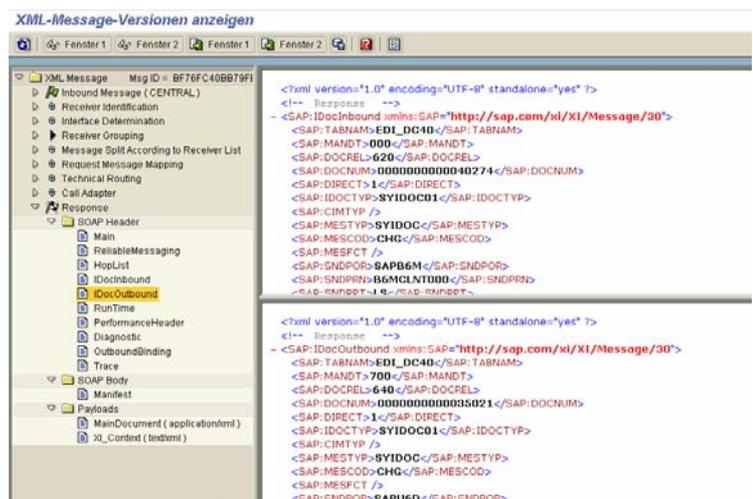
- Option 1: The *Apply Control Record Values from Payload* checkbox is selected in the communication channel.



- Send an IDoc of message type SYIDOC and message variant (technical name: *MESCOD*) CHG.



- Comparing *IDoc Inbound* and *IDoc Outbound* header segments indicates that the *MESCOD* field is filled by the corresponding value of the IDoc XML.



- Option 2: The *Apply Control Record Values from Payload* checkbox is not selected (XI 2.0 compliant).

Edit Communication Channel Status: Active

Communication Channel: IDoc

Party:

Service: XID_113

Description:

Parameters Identifiers Module

Adapter Type * IDoc http://sap.com/xi/XI/System SAP BASIS 6.40

Sender Receiver

Transport Protocol * IDoc

Message Protocol * IDoc

Adapter Engine * Integration Server

RFC Destination * XID_113

Segment Version:

Interface Version * SAP Release 4.0 or Higher

Port * SAPXID

SAP Release * 640

Queue Processing

Apply Control Record Values from Payload

- Comparing *IDoc Inbound* and *IDoc Outbound* header segments indicates that the *MESCOD* field is not set.

XML-Message-Versionen anzeigen

Fenster 1 Fenster 2 Fenster 1 Fenster 2

XML Message Msg ID = 9079FC40BB79F1

Inbound Message (CENTRAL)

- Receiver Identification
- Interface Determination
- Receiver Grouping
- Message Split According to Receiver List
- Request Message Mapping
- Technical Routing
- Call Adapter
- Response
 - SOAP Header
 - Main
 - ReliableMessaging
 - HopList
 - IDocInbound
 - IDocOutbound**
 - Runtime
 - PerformanceHeader
 - Diagnostic
 - OutboundBinding
 - Trace
 - SOAP Body
 - Manifest
 - Payloads
 - MainDocument (application/xml)
 - XI_Content (text/xml)

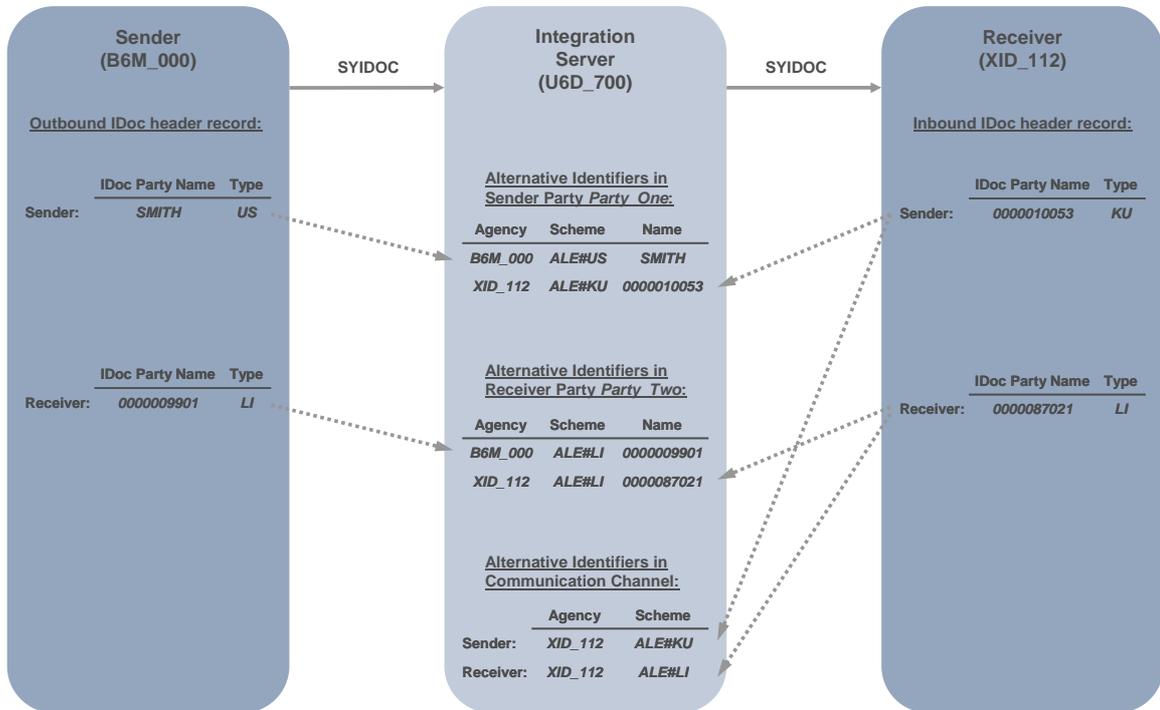
```

<!-- Response -->
<SAP:IDocInbound xmlns:SAP="http://sap.com/xi/XI/Message/30">
  <SAP:TABNAM>ED1_DC40</SAP:TABNAM>
  <SAP:MANDT>000</SAP:MANDT>
  <SAP:DOCREL>620</SAP:DOCREL>
  <SAP:DOCDNUM>0000000000000275</SAP:DOCDNUM>
  <SAP:DIRECT>1</SAP:DIRECT>
  <SAP:IDOCTYP>SYIDOC01</SAP:IDOCTYP>
  <SAP:CIMTYP />
  <SAP:MESTYP>SYIDOC</SAP:MESTYP>
  <SAP:MESCOD>CHG</SAP:MESCOD>
  <SAP:MESFCT />
  <SAP:SNDPOR>SAPB61</SAP:SNDPOR>
  <SAP:SNDRPR>B6MCLNT000</SAP:SNDRPR>
  <SAP:SNDRPT>LS</SAP:SNDRPT>
  <SAP:SNDFCT />
</SAP:IDocInbound>

<SAP:IDocOutbound xmlns:SAP="http://sap.com/xi/XI/Message/30">
  <SAP:TABNAM>ED1_DC40</SAP:TABNAM>
  <SAP:MANDT>700</SAP:MANDT>
  <SAP:DOCREL>640</SAP:DOCREL>
  <SAP:DOCDNUM>00000000000035022</SAP:DOCDNUM>
  <SAP:DIRECT>2</SAP:DIRECT>
  <SAP:IDOCTYP>SYIDOC01</SAP:IDOCTYP>
  <SAP:CIMTYP />
  <SAP:MESTYP>SYIDOC</SAP:MESTYP>
  <SAP:MESFCT />
  <SAP:SNDPOR>SAPU6D</SAP:SNDPOR>
  <SAP:SNDRPR>B6MCLNT000</SAP:SNDRPR>
  <SAP:SNDRPT>LS</SAP:SNDRPT>
  <SAP:SNDFCT />
</SAP:IDocOutbound>

```

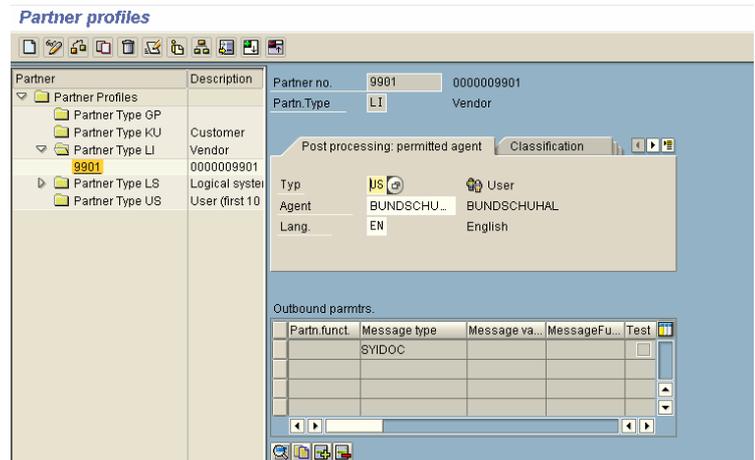
4 Case 2: IDoc of Type ≠LS



4.1 Maintain Partner Profiles in Sender and Receiver Systems

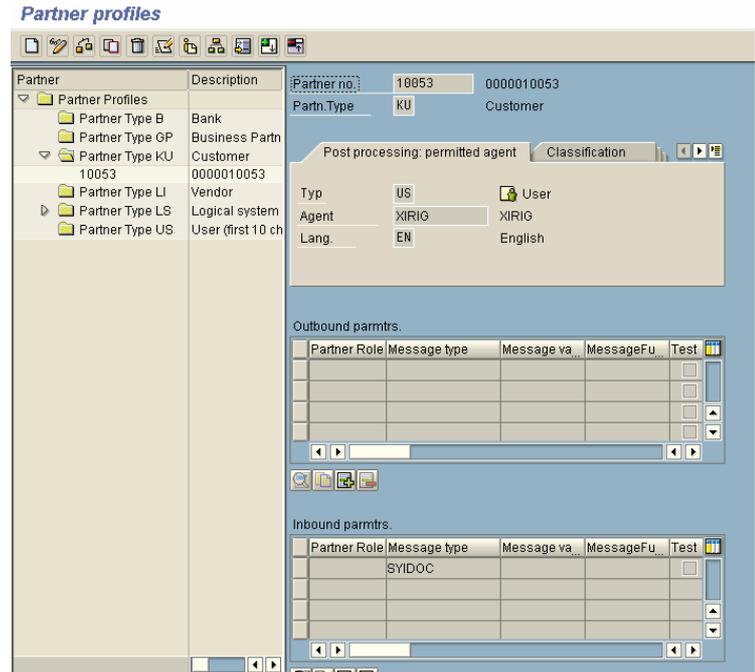
1. In the sender system, call transaction **WE20** to maintain the partner profile for partner 9901 of type *Vendor (LI)*.

Select message type SYIDOC, and receiver port SAPU6D as outbound parameters.



2. In the receiver system, call transaction **WE20** to maintain the partner profile for partner 10053 of type *Customer (KU)*.

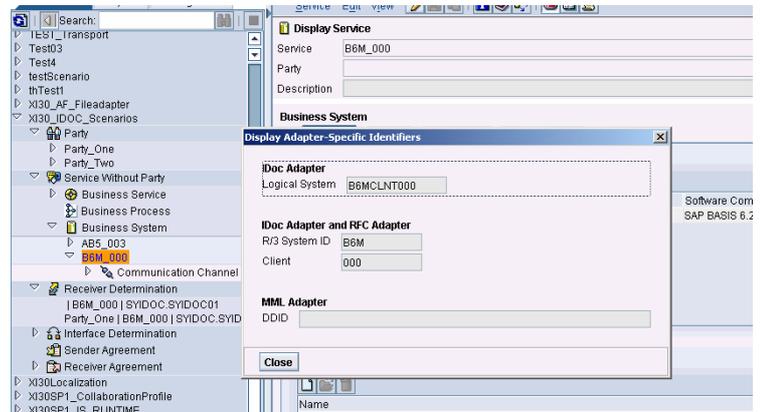
Select message type SYIDOC as inbound parameter.



4.2 Integration Builder: Configuration

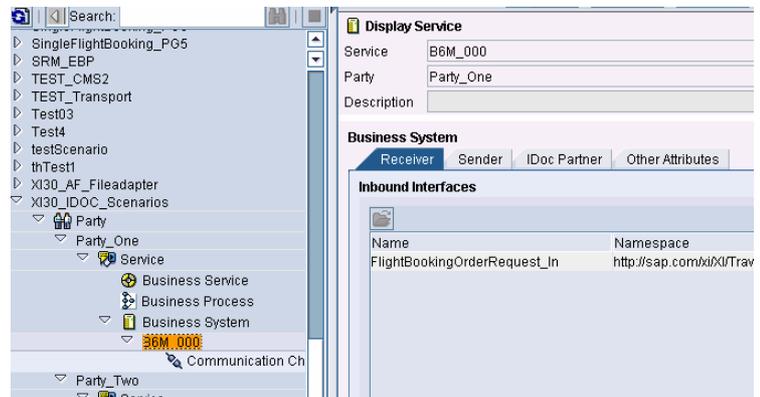
1. In the Integration Directory, assign business system B6M_000 to the configuration scenario.

The party-less service is required for the IDoc adapter to determine the service by using *system ID* and *client*.

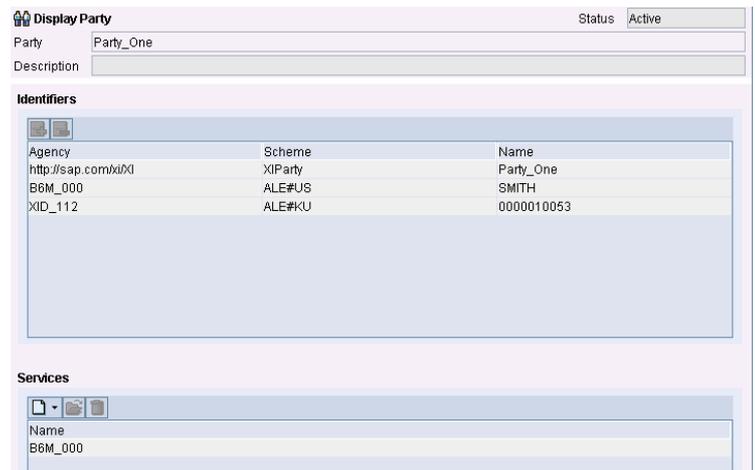


2. Create party Party_One, and assign business system B6M_000 to it.

The XI party Party_One acts as the sender party.

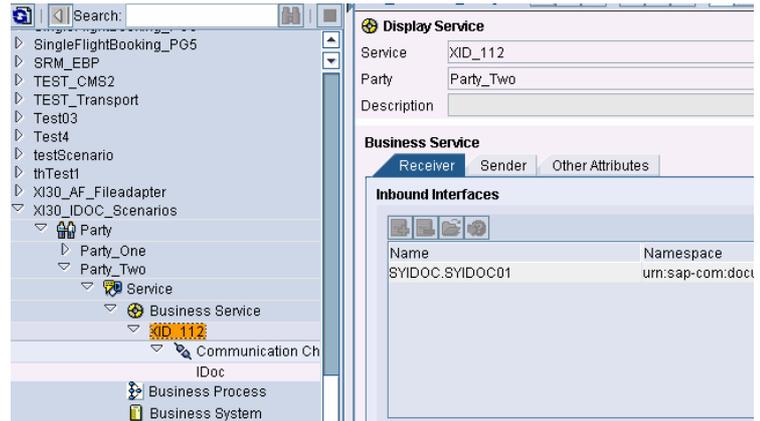


3. Maintain the alternative identifiers for Party_One according to the figure on the right.

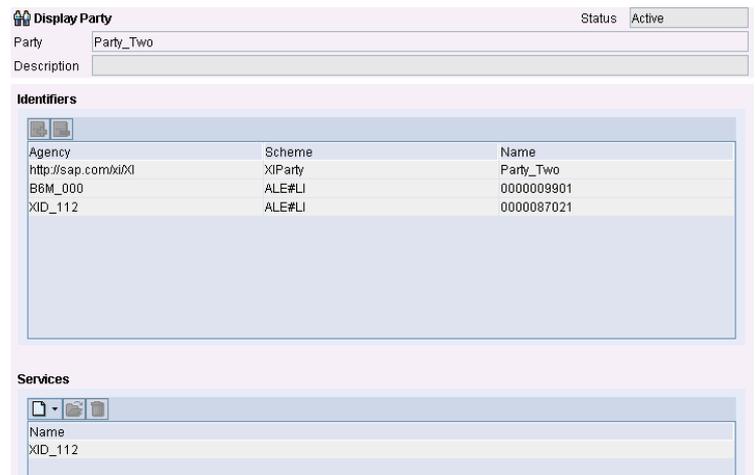


4. Create party `Party_Two`, and assign business system `XID_112` to it.

The XI party `Party_Two` acts as the receiver party.

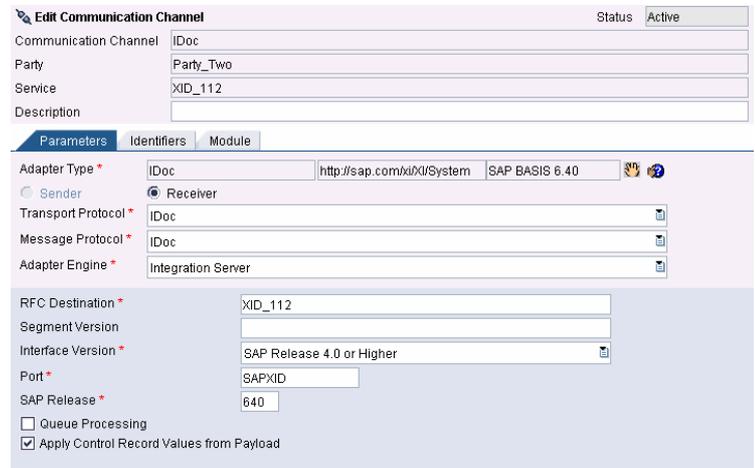


5. Maintain the alternative identifiers for `Party_Two` according to the figure on the right.



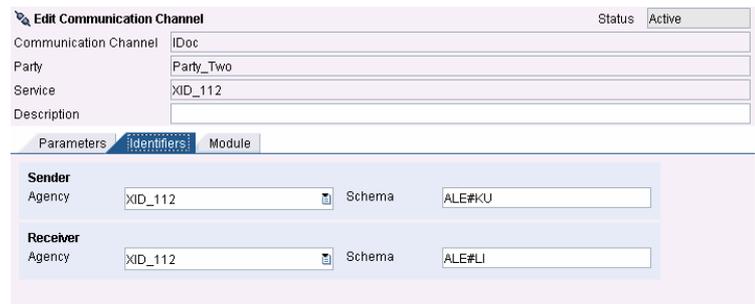
6. Create a communication channel of adapter type `IDoc`.

Select adapter type `IDoc`, RFC destination `XID_112`, port `SAPXID`, and the appropriate SAP release.



7. Switch to the `Identifiers` tab page, and maintain the alternative identifiers for the sender and the receiver according to the figure on the right.

`Party`, `agency`, and `scheme` are used to identify the IDoc partner at the Integration Server outbound side.



4.3 Execute the Scenario

1. Send an IDoc with sender partner SMITH of type *User (US)*, and with receiver partner 9901 of type *Vendor (LI)*.

Doc number: 40269
 Direction: 1 Outbound
 Status: 03 Data passed to port OK

Recipient information	
Port	SAPU6D U6D Client 700
Partner number	9901 0000009901
Parth.Type	LI Vendor
Function	

Sender information	
Port	SAPB6M
Partner number	SMITH SMITH
Parth.Type	US User (first 10 characters, no check)
Parth.function	

2. At the inbound channel of the Integration Server, an alternative party is generated in the message header consisting of *party name, identification scheme, and agency*.



Note: If no alternative identifiers are maintained, the alternative party is displayed in the main header of the XML message as shown in the figure on the right.

```

<SAP:Main xmlns:SAP="http://sap.com/xi/XI/Message/30"
  xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:wssu="http://www.docos.oasis-open.org/wss/2004/01/oasis-200401-wss-
  wsssecurity-utility-1.0.xsd" versionMajor="003" versionMinor="000"
  SOAP:mustUnderstand="1" wsu:id="wssuid-main-
  92ABE13F5C59AB7FE1000000A1551F7">
  <SAP:MessageClass>ApplicationMessage</SAP:MessageClass>
  <SAP:ProcessingMode>asynchronous</SAP:ProcessingMode>
  <SAP:MessageId>D26BFC40-BB79-FE7D-E100-00000A1551FA</SAP:MessageId>
  <SAP:TimeSent>2004-07-20T12:43:52Z</SAP:TimeSent>
  <SAP:Sender>
  <SAP:Party agency="B6M_000" scheme="ALE#US">SMITH</SAP:Party>
  <SAP:Service>B6M_000</SAP:Service>
  <SAP:Interface namespace="urn:sap-
  com:document:sap:doc:messages">8YIDOC.8YIDOC01</SAP:Interface>
  </SAP:Sender>
  <SAP:Receiver>
  <SAP:Party agency="B6M_000" scheme="ALE#LI">0000009901</SAP:Party>
  <SAP:Service>/>
  <SAP:Interface namespace="*" />
  </SAP:Receiver>
  SOAP:mustUnderstand=""
  <SAP:Category>XIServer</SAP:Category>
  <SAP:Code area="INTERNAL">PARTY_SERVICE</SAP:Code>
  <SAP:P1 />
  <SAP:P2 />
  <SAP:P3 />
  <SAP:P4 />
  <SAP:AdditionalText />
  <SAP:ApplicationFaultMessage namespace="*" />
  <SAP:Stack>Partner und Service sind nicht bestimmt.</SAP:Stack>
  </SAP:Main>
  
```

3. If alternative identifiers are maintained, the alternative parties are normalized, that is, they are replaced by the XI parties Party_One and Party_Two, respectively.

```

xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:imins="http://www.docos.oasis-open.org/wss/2004/01/oasis-200401-wss-
  wsssecurity-utility-1.0.xsd" versionMajor="003" versionMinor="000"
  SOAP:mustUnderstand="1" wsu:id="wssuid-main-
  92ABE13F5C59AB7FE1000000A1551F7">
  <SAP:MessageClass>ApplicationMessage</SAP:MessageClass>
  <SAP:ProcessingMode>asynchronous</SAP:ProcessingMode>
  <SAP:MessageId>A68BF1C40-BB79-FE7D-E100-00000A1551FA</SAP:MessageId>
  <SAP:TimeSent>2004-07-20T12:11:14Z</SAP:TimeSent>
  <SAP:Sender>
  <SAP:Party agency="http://sap.com/xi/XI"
  scheme="XIParty">Party_One</SAP:Party>
  <SAP:Service>B6M_000</SAP:Service>
  <SAP:Interface namespace="urn:sap-
  com:document:sap:doc:messages">8YIDOC.8YIDOC01</SAP:Interface>
  </SAP:Sender>
  <SAP:Receiver>
  <SAP:Party agency="http://sap.com/xi/XI"
  scheme="XIParty">Party_Two</SAP:Party>
  <SAP:Service>/>
  <SAP:Interface namespace="*" />
  </SAP:Receiver>
  <?xml version="1.0" encoding="UTF-8" ?>
  <SYIDOC01>
  <IDOC_B6GIN="1">
  <EOL_DC40 SEGMENT="1">
  <TABNAM>ED1_DC40</TABNAM>
  <MANDT>000</MANDT>
  <DOCNUM>000000000040269</DOCNUM>
  <DOCREL>620</DOCREL>
  <STATUS>30</STATUS>
  
```


4.4 XI 2.0 Compliance

1. In the communication channel, the *Apply Control Record Values from Payload* checkbox is not selected (XI 2.0 compliant).

Edit Communication Channel Status: Active

Communication Channel: IDoc

Party: Party_Two

Service: XID_112

Description:

Parameters Identifiers Module

Adapter Type * IDoc http://sap.com/xi/XI/System SAP BASIS 6.40

Sender Receiver

Transport Protocol * IDoc

Message Protocol * IDoc

Adapter Engine * Integration Server

RFC Destination * XID_112

Segment Version

Interface Version * SAP Release 4.0 or Higher

Port * SAFXID

SAP Release * 640

Queue Processing

Apply Control Record Values from Payload

2. Send an IDoc with sender partner SMITH of type *User (US)* and receiver partner 9901 of type *Vendor (LI)*.

iDoc number: 40276

Direction: 1 Outbound

Status: 03 Data passed to port OK

Typinfo Partner Techn.info Addressinfo EDI det

Recipient information

Port	SAPU6D	U6D Client 700
Partner number	9901	0000009901
Partn.Type	LI	Vendor
Function		

Sender information

Port	SAPB6M	
Partner number	SMITH	SMITH
Partn.Type	US	User (first 10 characters, no check)
Partn.function		

3. The *IDoc Outbound* header section indicates that the fields are filled as follows:

Partner Number: <logical system>
 Sender Type: LS (constant)
 Partner Function: blank
 Direction: 2 (constant)
 Status: 03 (constant)

XML-Message-Versionen anzeigen

Fenster 1 Fenster 2 Fenster 1 Fenster 2 Fehler-Information

XML Original Message Msg ID = DF1CFD408D
 Acknowledgment Msg ID = FAA3FA4064FE2

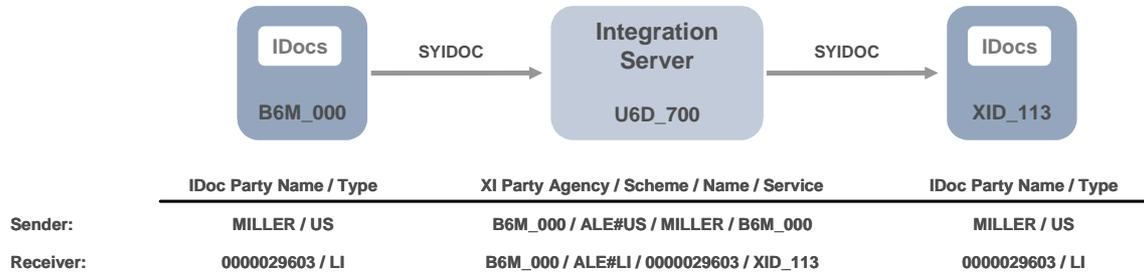
Call Adapter
 Restart: Message Split According to R...
 Request Message Mapping
 Technical Routing
 Call Adapter
 Response
 SOAP Header
 Main
 ReliableMessaging
 HopList
 IDocInbound
 IDocOutbound
 RunTime
 PerformanceHeader
 Diagnostic
 OutboundBinding
 Trace
 SOAP Body
 Manifest
 Payloads
 MainDocument (application/xml)
 XI_Context (text/xml)

```

<SAP:MESCOD />
<SAP:MESFCT />
<SAP:SNDPOR>SAPB6M</SAP:SNDPOR>
<SAP:SNDRPN>SMITH</SAP:SNDRPN>
<SAP:SNDRPT>US</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAPU6D</SAP:RCVPOR>
<SAP:RCVPRN>0000009901</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
<SAP:DOCTYPE>SYIDOC01</SAP:DOCTYPE>
<SAP:CIIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MESFCT />
<SAP:SNDPOR>SAPU6D</SAP:SNDPOR>
<SAP:SNDRPN>B6MCLNT000</SAP:SNDRPN>
<SAP:SNDRPT>LS</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAFXID</SAP:RCVPOR>
<SAP:RCVPRN>XIDCLNT112</SAP:RCVPRN>
<SAP:RCVPRT>LS</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
<SAP:SERIAL />
<SAP:EXPRS />
<SAP:STD />
<SAP:STDVRS />
<SAP:STATUS>03</SAP:STATUS>
<SAP:OUTMOD />
  
```

5 Case 3: IDoc of Type ≠LS – Master Data Consolidated

This scenario is relevant for system landscapes where master data is already consolidated, that is, master data for business partners, material, products etc., is globally identical.



The alternative parties do not necessarily have to be normalized, because the partner names and types are identical in both systems involved, although for monitoring reasons it is recommended to do so. So, you do not have to maintain any alternative identifiers within XI. This can be a significant advantage when you have a very large amount of master data.

One approach for configuring this scenario would be to leave the alternative parties unchanged, without any need for conversion. This works for the sender party but causes problems for the receiver party: The party name is restricted to letters only, and if the name of the party contains a number, it is not possible to enter the party in the receiver agreement. Another problem occurs if two partners exist with identical partner numbers but different partner types. Party agency and party scheme are ignored during interface determination and receiver agreement. Therefore, the two parties cannot be distinguished from each other. The next section illustrates this approach up to the point where the problem occurs.

To solve this problem, use the following workaround: Enter a party-less receiver service in the receiver determination. The alternative party is reconstructed using header mapping (see section 5.2).

5.1 Approach: Configuring Using Context Objects Within the Receiver Determination

1. Create a receiver determination.

Select sender party MILLER, and sender service B6M_000.



Note: This is only possible because the sender party in the current example does not contain any numbers (see below).

2. For the receiver party, select context objects *ReceiverPartyAgency*, and *ReceiverPartyScheme*, respectively.

Condition	Party	Service
	ReceiverParty	XID_112

Prefix	Namespace

3. **Problem:** For the receiver agreement, you have to enter the receiver party. However, this is not possible if the receiver party contains a number, as is the case in the current example. As mentioned above, only letters are permitted.

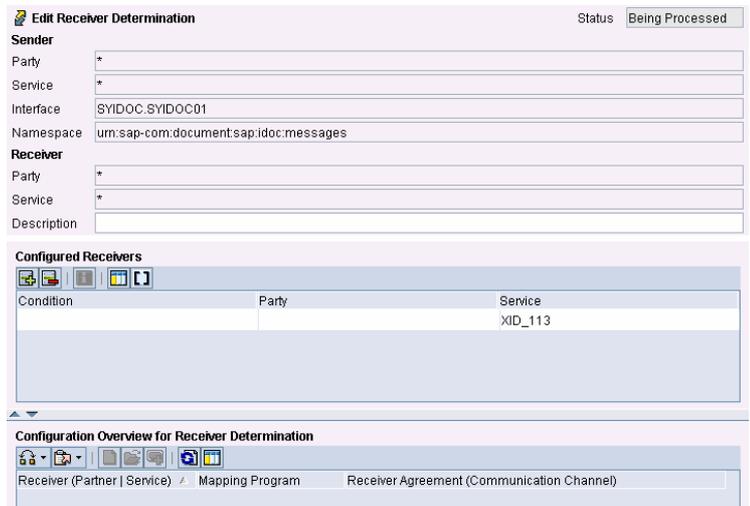


5.2 Workaround: Configuring Using Header Mapping

1. Create a receiver determination, and an interface determination.

Enter asterisks for *sender party* and *sender service*, respectively.

Select receiver service XID_113. This causes party, agency, and scheme to disappear from the message header.



Edit Receiver Determination Status: Being Processed

Sender

Party: *

Service: *

Interface: SYIDOC.SYIDOC01

Namespace: urn:sap-com:document:sap.idoc:messages

Receiver

Party: *

Service: XID_113

Description:

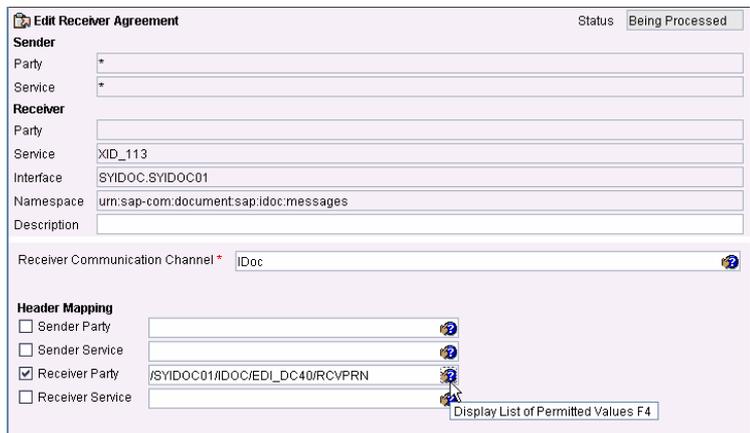
Configured Receivers

Condition	Party	Service
		XID_113

Configuration Overview for Receiver Determination

Receiver (Partner | Service) / Mapping Program / Receiver Agreement (Communication Channel)

2. In the receiver agreement, a header mapping is required for the receiver party.



Edit Receiver Agreement Status: Being Processed

Sender

Party: *

Service: *

Receiver

Party:

Service: XID_113

Interface: SYIDOC.SYIDOC01

Namespace: urn:sap-com:document:sap.idoc:messages

Description:

Receiver Communication Channel: IDoc

Header Mapping

Sender Party

Sender Service

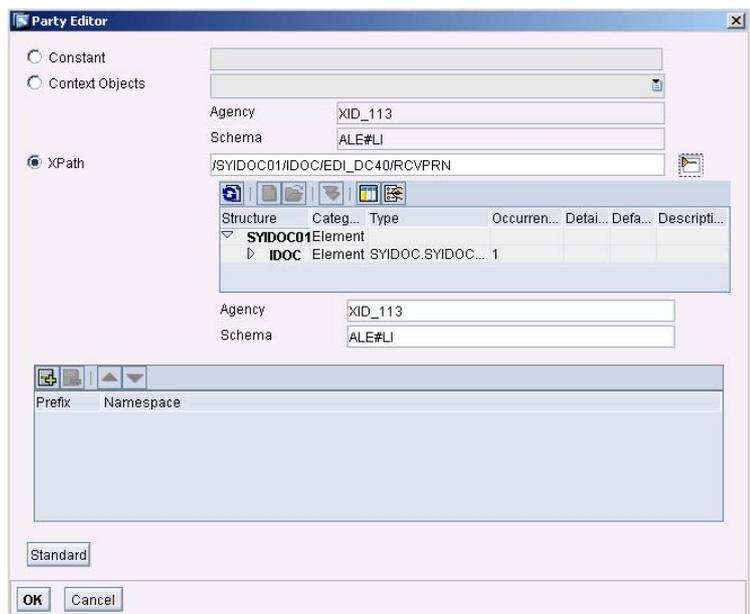
Receiver Party: /SYIDOC01/IDOC/EDI_DC40/RCVPRN

Receiver Service

Display List of Permitted Values F4

3. In the header mapping, you have to replace the receiver party with the IDoc receiver partner number that is provided in the payload of the XML message. Hence, select the appropriate XPath expression.

For the current example, enter agency XID_113, and scheme ALE#LI. Alternatively, enter an XPath expression.



Party Editor

Constant

Context Objects

XPath

Agency: XID_113

Schema: ALE#LI

XPath: /SYIDOC01/IDOC/EDI_DC40/RCVPRN

Structure	Categ...	Type	Occuren...	Detai...	Defa...	Descripti...
SYIDOC01	Element					
IDOC	Element	SYIDOC.SYIDOC...	1			

Agency: XID_113

Schema: ALE#LI

Prefix	Namespace

Standard

OK Cancel

4. In the communication channel, no alternative identifiers are required.

The screenshot shows a web application interface for editing a communication channel. The title bar reads "Edit Communication Channel" with a status indicator "Active". The form is divided into several sections:

- Metadata:** Fields for "Communication Channel" (IDoc), "Party", "Service" (XID_113), and "Description".
- Navigation:** Tabs for "Parameters", "Identifiers" (selected), and "Module".
- Sender Section:** Labeled "Sender", it contains an "Agency" dropdown menu, a "Schema" label, and an empty text input field.
- Receiver Section:** Labeled "Receiver", it contains an "Agency" dropdown menu, a "Schema" label, and an empty text input field.

5.3 Execute the Scenario (Workaround)

1. Send an IDoc with sender partner MILLER of type *User (US)*, and receiver partner 29603 of type *Vendor (LI)*.

The screenshot shows the SAP IDoc configuration interface. At the top, the IDoc number is 40302. The direction is set to 'Outbound' and the status is 'Data passed to port OK'. Below this are tabs for 'Typinfo', 'Partner', 'Techn.info', 'Adressinfo', and 'EDI det'. The 'Partner' tab is active, displaying recipient and sender information.

Recipient information		
Port	SAPU6D	U6D Client 700
Partner number	29603	0000029603
Partn.Type	LI	Vendor
Function		

Sender information		
Port	SAPB6M	
Partner number	MILLER	MILLER
Partn.Type	US	User (first 10 characters, no check)
Partn.function		

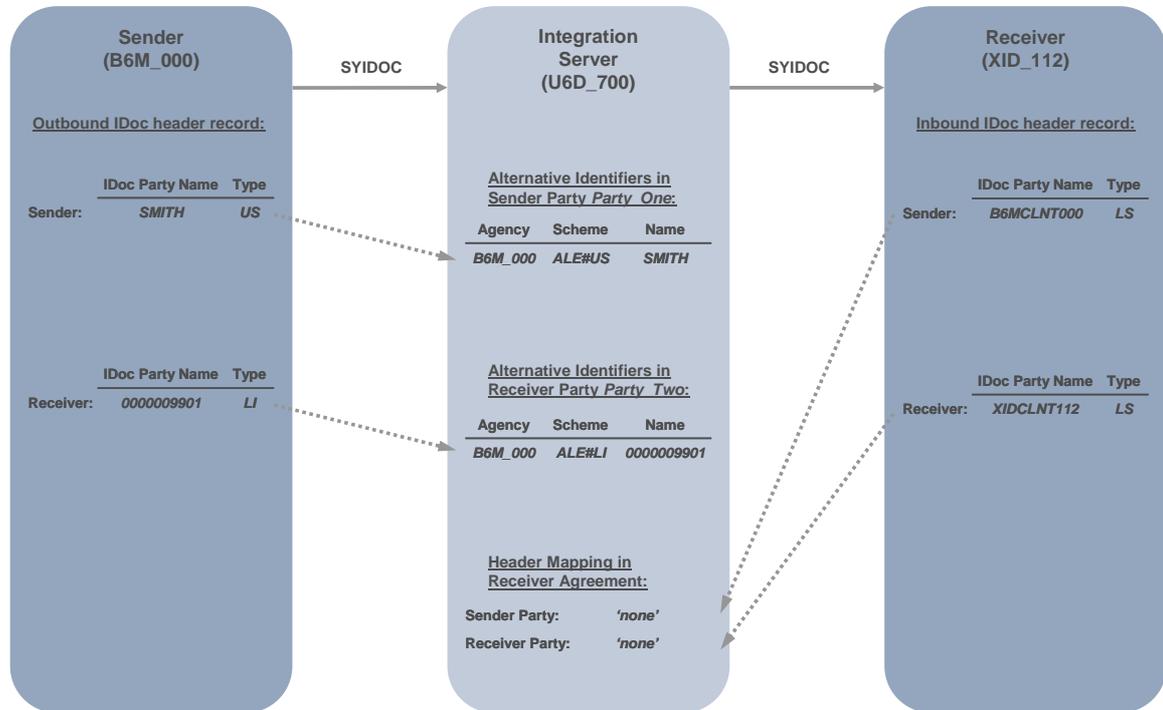
2. As you can see in the message monitoring, IDoc partner type and number remain unchanged.

The screenshot shows the 'XML-Message-Versionen anzeigen' (XML Message Versions Display) window. The left pane shows a tree view of the message structure, with 'IDocOutbound' highlighted under the 'SOAP Header' section. The right pane displays the XML content, showing the IDoc partner information in the header and body.

```
<SAP:IDOC01/>
<SAP:CIIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MEFCT />
<SAP:SNDPOR>SAPB6M</SAP:SNDPOR>
<SAP:SNDRPN>MILLER</SAP:SNDRPN>
<SAP:SNDRPT>US</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAPU6D</SAP:RCVPOR>
<SAP:RCVPRN>000029603</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
<SAP:SERIAL />
<SAP:EXPRESS />

<SAP:DIRECT>1</SAP:DIRECT>
<SAP:IDOC01/>
<SAP:CIIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MEFCT />
<SAP:SNDPOR>SAPU6D</SAP:SNDPOR>
<SAP:SNDRPN>MILLER</SAP:SNDRPN>
<SAP:SNDRPT>US</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAPXID</SAP:RCVPOR>
<SAP:RCVPRN>000029603</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
```

6 Case 4: Party (≠LS) → Partyless (LS)



6.1 Integration Builder: Configuration

1. In the communication channel, no identifiers are required.

Edit Communication Channel Status: Active

Communication Channel: IDoc_Cons

Party: Party_Two

Service: XID_112

Description:

Parameters | **Identifiers** | Module

Sender

Agency: Schema:

Receiver

Agency: Schema:

2. In the receiver agreement, header mappings for *sender party*, and *receiver party* are required.

Leave *sender party* and *receiver party* empty.

Edit Receiver Agreement Status **Being Processed**

Sender

Party: Party_One
Service: B6M_000

Receiver

Party: Party_Two
Service: XID_112
Interface: SYIDOC.SYIDOC01
Namespace: urn:sap-com:document:sap:idoc:messages
Description:

Receiver Communication Channel * IDoc_Cons

Header Mapping

Sender Party
 Sender Service
 Receiver Party
 Receiver Service

6.2 Execute the Scenario

1. Send an IDoc with sender partner SMITH of type *User (US)*, and receiver partner 9901 of type *Vendor (LI)*.

The IDoc Outbound header section indicates that the parties are replaced by the corresponding logical systems.

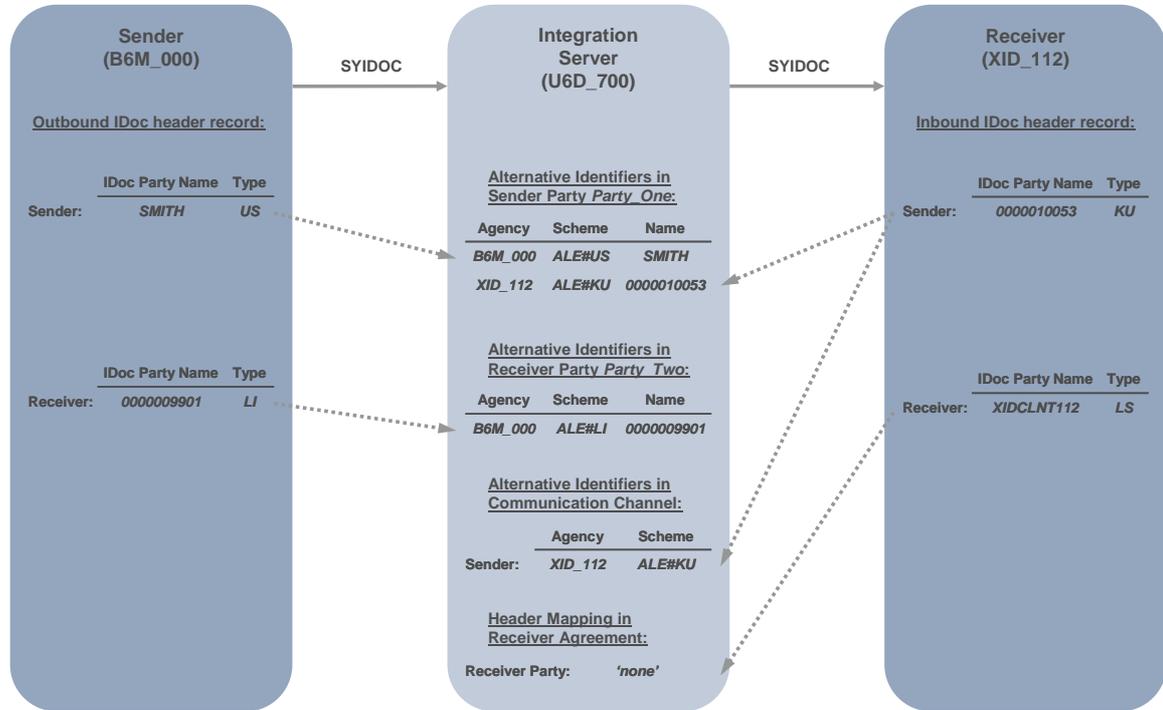
The screenshot displays the 'XML-Message-Versionen anzeigen' (XML-Message Versions Display) tool. The left pane shows a tree view of the message structure, with 'IDocOutbound' highlighted under the 'Response' section. The right pane shows the corresponding XML code, which includes various SAP-specific headers and payload information.

```
<SAP:IDOCCTYP>SYIDOC01</SAP:IDOCCTYP>
<SAP:CIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MESFCT />
<SAP:SNDPOR>SAPB6M</SAP:SNDPOR>
<SAP:SNDRPN>SMITH</SAP:SNDRPN>
<SAP:SNDRPT>US</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAPU6D</SAP:RCVPOR>
<SAP:RCVPRN>000009901</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
<SAP:SERIAL />
<SAP:EXPRS />
<SAP:CTD />
<SAP:CTD />
<SAP:DIRECT>1</SAP:DIRECT>
<SAP:IDOCCTYP>SYIDOC01</SAP:IDOCCTYP>
<SAP:CIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MESFCT />
<SAP:SNDPOR>SAPU6D</SAP:SNDPOR>
<SAP:SNDRPN>B6MCLNT000</SAP:SNDRPN>
<SAP:SNDRPT>LS</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAPXID</SAP:RCVPOR>
<SAP:RCVPRN>XIDCLNT112</SAP:RCVPRN>
<SAP:RCVPRT>LS</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
```

7 Case 5: Party (≠LS) → Partyless Receiver



This case is also relevant to RNIF, since RNIF requires parties (RNIF → IDoc).



7.1 Integration Builder: Configuration

1. In the communication channel, only identifiers for the sender are required.

Edit Communication Channel Status: Active

Communication Channel: IDoc

Party:

Service: XID_112

Description:

Parameters | **Identifiers** | Module

Sender	Agency: <input type="text" value="XID_112"/>	Schema: <input type="text" value="ALE#KU"/>
Receiver	Agency: <input type="text"/>	Schema: <input type="text"/>

2. In the receiver agreement, a header mapping for the *receiver party* is required.

Leave the *receiver party* empty.

Edit Receiver Agreement Status: Being Processed

Sender

Party: Party_One
Service: B6M_000

Receiver

Party: Party_Two
Service: XID_112
Interface: SYIDOC.SYIDOC01
Namespace: urn:sap-com:document:sap:idoc:messages
Description:

Receiver Communication Channel * IDoc_RNIF2IDOC

Header Mapping

Sender Party
 Sender Service
 Receiver Party
 Receiver Service

7.2 Execute the Scenario

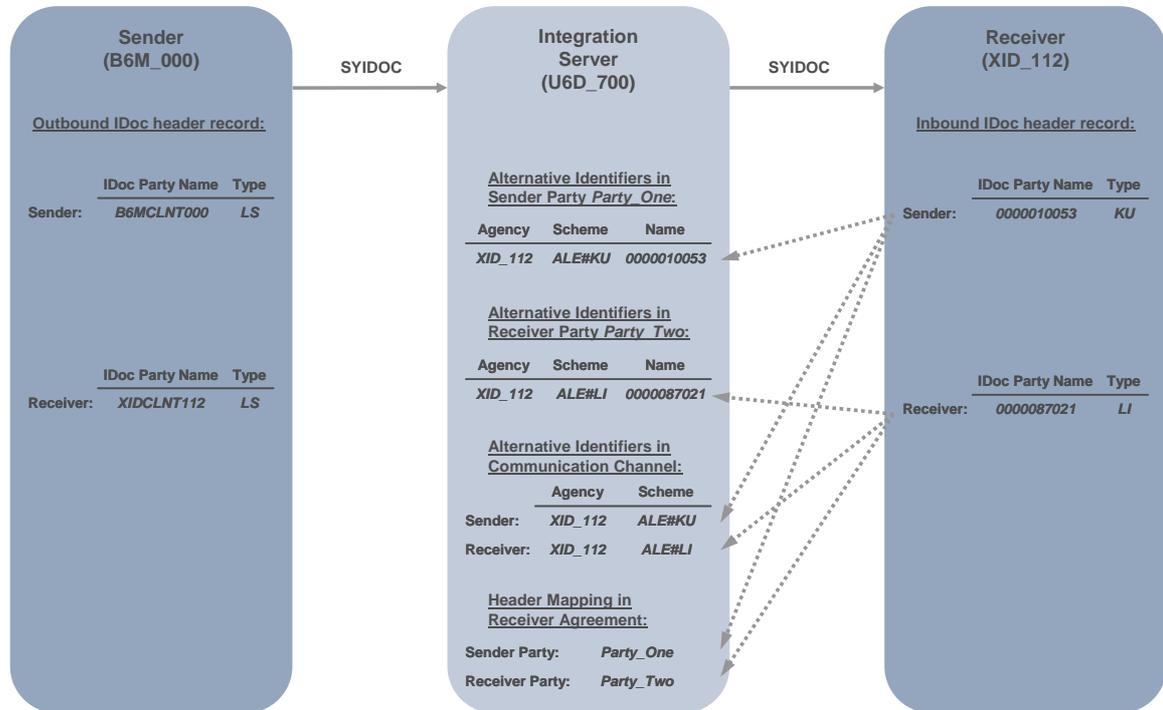
1. Send an IDoc with sender partner SMITH of type *User (US)*, and receiver partner 9901 of type *Vendor (LI)*.

The IDoc Outbound header section indicates that the receiver party is replaced by the corresponding logical systems.

The screenshot displays the 'XML-Message-Versionen anzeigen' tool interface. The left pane shows a tree view of the message structure, with 'IDocOutbound' highlighted under the 'SOAP Header' section. The right pane shows the corresponding XML code for the selected element.

```
<SAP:DOCNUM>000000000040318</SAP:DOCNUM>
<SAP:DIRECT>1</SAP:DIRECT>
<SAP:IDOCTYP>SYIDOC01</SAP:IDOCTYP>
<SAP:CIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MESFCT />
<SAP:SNDPOR>SAPB6M</SAP:SNDPOR>
<SAP:SNDPRN>SMITH</SAP:SNDPRN>
<SAP:SNDPRT>US</SAP:SNDPRT>
<SAP:SNDPFC />
<SAP:RCVPOR>SAPU6D</SAP:RCVPOR>
<SAP:RCVPRN>000009901</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
```

8 Case 6: Partyless (LS) → Party (≠LS)



8.1 Integration Builder: Configuration

1. In the receiver determination, select the party-less sender service B6M_000, the sender interface SYIDOC.SYIDOC01, and the party-less receiver service XID_112.

Edit Receiver Determination Status: Being Processed

Sender

Party:

Service: B6M_000

Interface: SYIDOC.SYIDOC01

Namespace: urn:sap-com:document:sap:idoc:messages

Receiver

Party: *

Service: *

Description:

Configured Receivers

Condition	Party	Service
		XID_112

Configuration Overview for Receiver Determination

Receiver (Partner Service)	Mapping Program	Receiver Agreement (Communication Channel)
XID_112		
	SYIDOC.SYIDOC01	Not specified IDoc

2. In the receiver agreement, header mappings for *sender party* and *receiver party* are required.

Replace the *sender party* with Party_One, and the *receiver party* with Party_Two.

The screenshot shows the 'Edit Receiver Agreement' configuration screen. The status is 'Being Processed'. The 'Sender' section has Party (empty), Service (B6M_000), and Receiver (empty). The 'Receiver' section has Party (empty), Service (XID_112), Interface (SYIDOC.SYIDOC01), Namespace (urn:sap-com:document:sap:idot:messages), and Description (empty). The 'Receiver Communication Channel' is 'IDoc'. The 'Header Mapping' section has four rows: 'Sender Party' (checked, Party_One), 'Sender Service' (unchecked), 'Receiver Party' (checked, Party_Two), and 'Receiver Service' (unchecked).

3. In the communication channel, you have to define identifiers for the sender and receiver.

The screenshot shows the 'Edit Communication Channel' configuration screen, 'Identifiers' tab. The status is 'Being Processed'. The 'Communication Channel' is 'IDoc', Party is empty, Service is 'XID_112', and Description is empty. The 'Sender' section has Agency (XID_112), Schema (ALE#KU), and a dropdown arrow. The 'Receiver' section has Agency (XID_112), Schema (ALE#LI), and a dropdown arrow.

8.2 Execute the Scenario

1. Send an IDoc of partner type *LS* (logical system).

The IDoc Outbound header section indicates that the partner names and types are replaced according to the alternative identifiers.

The screenshot displays the 'XML-Message-Versionen anzeigen' tool interface. The left pane shows a tree view of the message structure, with 'IDocOutbound' highlighted under the 'SOAP Header' section. The right pane shows the corresponding XML code for the selected element.

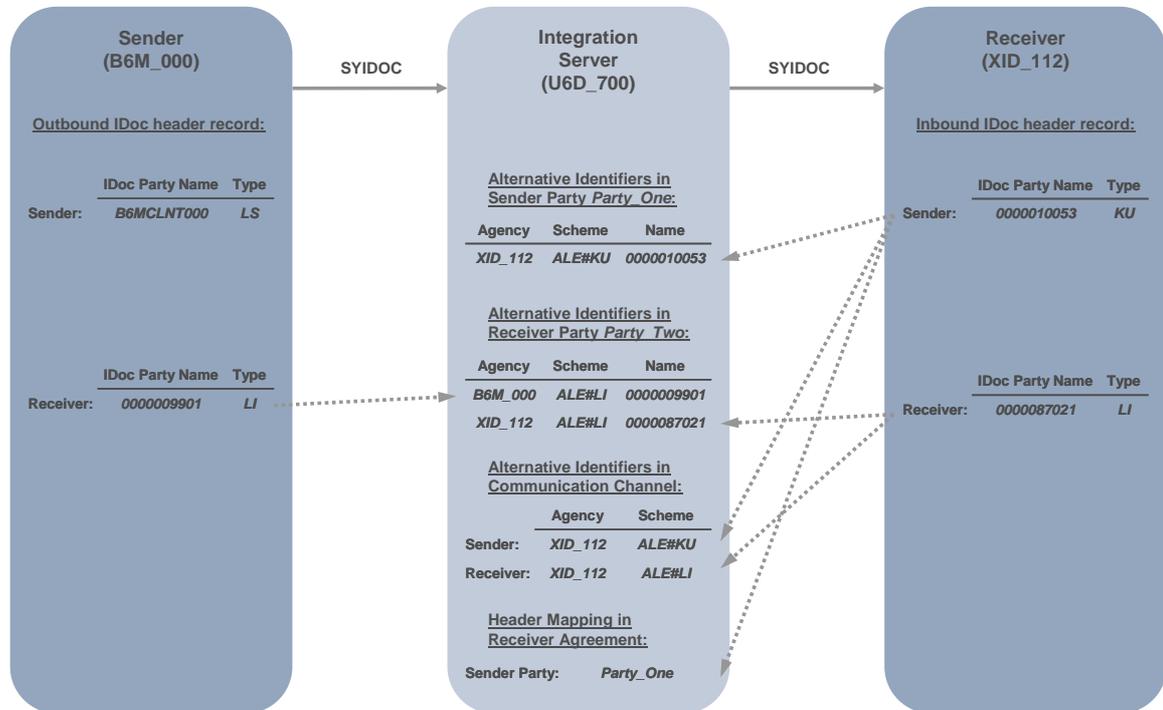
```
<SAP:IDOC01/><SAP:IDOC01/>
<SAP:CIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MESFCT />
<SAP:SNDPOR>SAPB6M</SAP:SNDPOR>
<SAP:SNDPRN>B6MCLNT000</SAP:SNDPRN>
<SAP:SNDPRT>LS</SAP:SNDPRT>
<SAP:SNDPFC />
<SAP:RCVPOR>SAPU6D</SAP:RCVPOR>
<SAP:RCVPRN>CLNT112</SAP:RCVPRN>
<SAP:RCVPRT>LS</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
<SAP:SERIAL />
<SAP:EXPRSS />

<SAP:IDOC01/><SAP:IDOC01/>
<SAP:CIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MESFCT />
<SAP:SNDPOR>SAPU6D</SAP:SNDPOR>
<SAP:SNDPRN>0000010053</SAP:SNDPRN>
<SAP:SNDPRT>KU</SAP:SNDPRT>
<SAP:SNDPFC />
<SAP:RCVPOR>SAPXID</SAP:RCVPOR>
<SAP:RCVPRN>0000087021</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
```

9 Case 7: Partyless Sender → Party (≠LS)



This case is also relevant to RNIF, since RNIF requires parties (IDoc → RNIF).



9.1 Integration Builder: Configuration

1. In the receiver determination, select the party-less sender service B6M_000, the sender interface SYIDOC.SYIDOC01, and the receiver service XID_112 with party Party_Two.

Display Receiver Determination Status Active

Sender

Party:

Service: B6M_000

Interface: SYIDOC.SYIDOC01

Namespace: urn:sap-com:document:sap:idoc:messages

Receiver

Party: *

Service: *

Description:

Configured Receivers

Condition	Party	Service
	Party_Two	XID_112

Configuration Overview for Receiver Determination

Receiver (Partner | Service) / Mapping Program / Receiver Agreement (Communication Channel)

Party_Two XID_112		
SYIDOC.SYIDOC01	Not specified	IDoc

- In the receiver agreement, a header mapping for the *sender party* is required.

Replace the *sender party* with Party_One.

The screenshot shows the 'Edit Receiver Agreement' configuration screen. The status is 'Active'. The 'Sender' section is configured with Party 'B6M_000' and Service 'XID_112'. The 'Receiver' section is configured with Party 'Party_Two', Service 'XID_112', Interface 'SYIDOC.SYIDOC01', and Namespace 'urn:sap-com:document:sap:idot:messages'. The 'Receiver Communication Channel' is 'IDoc'. The 'Header Mapping' section has the 'Sender Party' checkbox checked and mapped to 'Party_One'. Other checkboxes for 'Sender Service', 'Receiver Party', and 'Receiver Service' are unchecked.

- In the communication channel, you have to define identifiers for the sender and receiver.

The screenshot shows the 'Edit Communication Channel' configuration screen, specifically the 'Identifiers' tab. The status is 'Active'. The 'Communication Channel' is 'IDoc', 'Party' is 'Party_Two', and 'Service' is 'XID_112'. The 'Identifiers' section is divided into 'Sender' and 'Receiver' sections. Both sections have 'Agency' set to 'XID_112' and 'Schema' set to 'ALE#KU' for the sender and 'ALE#LI' for the receiver.

9.2 Execute the Scenario

1. Send an IDoc with sender partner type *LS*, and receiver partner type *LI*.

The IDoc Outbound header section indicates that the partner names and types are replaced according to the alternative identifiers.

XML-Message-Versionen anzeigen

The screenshot displays the 'XML-Message-Versionen anzeigen' tool interface. The left pane shows a tree view of the message structure, with 'IDocOutbound' highlighted under the 'SOAP Header' section. The right pane shows the corresponding XML code for the selected element.

```
<SAP:DIRECT>1</SAP:DIRECT>
<SAP:IDOCTYP>SYIDOC01</SAP:IDOCTYP>
<SAP:CIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MEFCT />
<SAP:SNDPOR>SAPB6M</SAP:SNDPOR>
<SAP:SNDRPN>B6MCLNT000</SAP:SNDRPN>
<SAP:SNDRPT>LS</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAPU60</SAP:RCVPOR>
<SAP:RCVPRN>000009901</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
<SAP:SERIAL />
```

```
<SAP:DIRECT>1</SAP:DIRECT>
<SAP:IDOCTYP>SYIDOC01</SAP:IDOCTYP>
<SAP:CIMTYP />
<SAP:MESTYP>SYIDOC</SAP:MESTYP>
<SAP:MESCOD />
<SAP:MEFCT />
<SAP:SNDPOR>SAPU60</SAP:SNDPOR>
<SAP:SNDRPN>0000010053</SAP:SNDRPN>
<SAP:SNDRPT>KU</SAP:SNDRPT>
<SAP:SNDFPC />
<SAP:RCVPOR>SAPXID</SAP:RCVPOR>
<SAP:RCVPRN>0000087021</SAP:RCVPRN>
<SAP:RCVPRT>LI</SAP:RCVPRT>
<SAP:RCVPFC />
<SAP:TEST />
```

www.sdn.sap.com/irj/sdn/howtoguides