SAP® Exchange Infrastructure 3.0: Demo Examples

Document Version 1.2 – July 20, 2004

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Typographic Conventions

Type Style	Represents
Example Text	**Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options.**
	Cross-references to other documentation
Example text	**Emphasized words or phrases in body text, titles of graphics and tables**
EXAMPLE TEXT	**Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.**
`Example text`	**Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, source code as well as names of installation, upgrade and database tools.**
Example text	**Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.**
<Example text>	**Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.**
EXAMPLE TEXT	**Keys on the keyboard, for example, function keys (such as F2) or the ENTER key.**

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

1 Preface

Constraints

The texts, references, and graphics contained in this manual have been compiled with utmost care; nevertheless, it is impossible to guarantee that they are fully without error. SAP cannot assume any responsibility for the correctness or completeness of the following documentation; the user alone is responsible for verifying the information contained therein.

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Definition

This configuration guide describes all the configuration steps that are necessary to execute the SAP Exchange Infrastructure (SAP XI) demo examples on the basis of SAP XI 3.0.

> The information provided in this guide refers to the most up-to-date support package (patch) of SAP XI 3.0 at the time this document version was created.

Intended Audience

The *Demo Examples Configuration Guide SAP Exchange Infrastructure 3.0* is intended to be used by both technology and application consultants.

Structure

The structure of this configuration guide follows the sequence of steps required to configure and run the SAP XI demo examples.

Additional Documentation

List of related documentation

Title	Purpose	Where to find
SAP NetWeaver Library documentation: *Demo Examples*	Introduction to SAP XI 3.0 Demo Examples and description of the business scenarios	SAP Help Portal at **help.sap.com**, under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Overview → Demo Examples*.
Master Guide – SAP NetWeaver '04	Starting point for implementing SAP NetWeaver™.	SAP Service Marketplace at **service.sap.com**, quick link **/instguidesNW04**.
Installation Guide – SAP Web AS ABAP and *Java*	Installing SAP Web Application Server (Web AS) 6.40	SAP Service Marketplace at **service.sap.com**, quick link **/instguidesNW04**.
Configuration Guide – SAP Exchange Infrastructure 3.0	Configuring SAP Exchange Infrastructure	SAP Service Marketplace at **service.sap.com**, quick link **/instguidesNW04**.
SAP System Landscape Directory User Manual for Web AS 6.40 /	Detailed user manual for the System Landscape Directory	SAP Service Marketplace at **service.sap.com**, quick link **/netweaver**; *SAP NetWeaver in Detail → Solution Life-Cycle*

NetWeaver 04		Management → System Landscape Directory → Media Library SLD.

The SAP XI Demo Examples Configuration Guide is updated on a regular basis on the SAP Service Marketplace (http://service.sap.com/xi -> *Media Library -> Guides*).

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Make sure you have the latest version of the SAP XI Demo Examples Configuration Guide by checking SAP Service Marketplace before you begin the configuration.

2 Introduction

The SAP XI demo examples (referred to simply as demo examples) are part of SAP Exchange Infrastructure. The demo examples demonstrate the basic communication scenarios of SAP Exchange Infrastructure and guide you step-by-step through the technical concepts and tools.

The demo examples comprise a set of simple business scenarios. These business scenarios are shipped as part of SAP XI 3.0.

You must configure the demo examples before you can execute them. This guide describes the configuration steps for all the available demo examples.

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We recommend that you use the standard configuration described in this documentation. Since the demo examples are only intended to demonstrate SAP Exchange Infrastructure and are not scenarios for productive use, SAP only provides support for the standard configuration.

Note that you must configure the demo examples exactly as described in this guide and in the specified sequence.

3 Overview

3.1 Prerequisites

List of required steps

Step	Documentation
1. You have installed SAP Exchange Infrastructure.	*Master Guide – SAP NetWeaver* *Installation Guide – SAP Web AS ABAP* and *Java* *Installation Guide – SAP Exchange Infrastructure 3.0*
2. You have installed the latest support package/patch of SAP Exchange Infrastructure 3.0.	SAP Note 670388 (only available in German) 💡 This note specifies further notes that you must import to use Business Process Management (business scenario *MultipleFlightBooking*).

3.	You have imported the content for the Integration Repository corresponding to the latest support package/patch.	SAP Note 705541 (only available in German) The demo examples are located in the Integration Repository in the software component *SAP BASIS*, software component version *SAP BASIS 6.40*, in the namespaces *http://sap.com/xi/XI/Demo /Agency* and *http://sap.com/xi/XI/Demo /Airline*.
4.	You have configured SAP Exchange Infrastructure.	*Configuration Guide – SAP Exchange Infrastructure 3.0*
5.	You have configured the System Landscape Directory (SLD).	*Installation Guide – SAP Exchange Infrastructure 3.0*
6.	You have activated the necessary ICF services (Internet Communication Framework) to enable you to execute the BSP application (see 4.6).	SAP Note 517484

Note that you set up the demo examples in your development or test system, but not in your productive system.

3.2 Overview of the Configuration Procedure

This section contains an overview of the configuration of the demo examples. For a detailed description of the individual configuration steps for each demo example, see the respective chapter.

The configuration of the demo examples consists of the following:

- General configuration steps

  The general configuration steps form the basis for the configuration of the individual business scenarios.

- Configuration of the individual business scenarios

General Configuration Steps

Providing the Necessary Users and Authorizations

To be able to call the transactions in the SAP system of the Integration Server that are required for configuration, you must have the relevant authorizations. Furthermore, to configure receiver communication channels you require particular system users so that you can call the relevant functions in the target application.

For more information, see 4.

Setting Up the System Landscape

The demo examples (business scenarios) shipped with SAP XI 3.0 are defined in the Integration Repository independently of a specific system landscape. During configuration, you configure the business scenarios for a particular system landscape. The SAP standard configuration is based on a system landscape comprising a travel agency system and two airline systems. This system landscape is simple enough to be easily understood yet complex enough to illustrate the most important concepts of SAP Exchange Infrastructure. To set up this system landscape with a minimum of effort, we recommend that you simulate the different business systems by using different clients of one SAP system.

> Note that all the configuration steps specified in this guide are based on the implementation of this system landscape.

To generate the clients for the different business systems, you use client copy.

For more information, see 0.

Describing the System Landscape in the System Landscape Directory

To be able to access the metadata for the business systems in the later configuration steps, you must describe the system landscape in the System Landscape Directory.

> During configuration of the individual business scenarios in the Integration Directory, you define how messages are to be exchanged between the business systems involved (and executable business systems, if applicable).

For more information, see 0.

Configuring the Business Systems as the Local Integration Engine

You must configure the involved business systems (clients) of the system landscape as the *local* Integration Engine and define the connection to the central Integration Server.

For more information, see   .

Defining Services and Communication Channels

To be able to address business systems as the sender or receiver of messages, you must define them as services (business system services) in the Integration Directory.

> If you want to use a business process as the sender or receiver of messages at runtime, you must also define the business process as a service (business process service). The demo examples include a business scenario that uses a business process (*MultipleFlightBooking*). The configuration instructions for this business scenario include instructions for defining a business process service.

To define the outbound processing of messages (from the Integration Server to a receiver business system), you must assign a communication channel to the corresponding service. The communication channel contains the technical information that is used for outbound processing of the message. The adapter type of the communication channel depends on the type of the receiver adapter. The SAP standard configuration uses communication channels with the adapter type *XI* (for communication using the proxy runtime) and *IDoc* (for communication using the IDoc adapter).

For more information, see 6.

Activating the BSP Application and Generating the Flight Data

A BSP (Business Server Pages) application is available in the SAP system for executing the demo examples once configuration is complete. You must activate this BSP application.

To be able to access flight data during execution of the demo examples, you first have to generate it. You can use a data generation program to do this.

For more information, see 4.6 and 0.

Configuration Settings for Using Special Adapters

Settings for IDoc Communication

To demonstrate the integration of SAP Exchange Infrastructure with older SAP systems, you can configure a demo example (booking a single flight) so that one of the involved business systems communicates with the Integration Server using the IDoc adapter. The special settings that are necessary to configure this variant are described in 0.

Configuring the Business Scenario

The business scenarios for the demo examples and all the corresponding objects (such as interface objects and mapping objects) are shipped with SAP XI 3.0. A business scenario contains the business logic for a particular cross-system process. This includes interfaces for message exchange, mappings for message transformation, and executable business processes.

The business scenarios are defined independently from the system landscape in which they are executed. During configuration of the demo examples, you map the relevant business scenarios to the specific system landscape that you set up and described in the general configuration steps.

During configuration of a business scenario, you define the following:

- The senders and receivers of messages

  These can be executable business processes or business systems. To use the business systems of the underlying system landscape as senders and receivers of messages, you access the defined business system services.

- The receiver interfaces (and mappings, if used) of messages

- The details for inbound and outbound message processing for particular sender/receiver pairs

  To specify the details for inbound and outbound message processing, you use the defined communication channels.

To define the relevant objects in the Integration Directory, use the business scenario configurator. This tool enables you to automate most of the configuration steps for a business scenario.

For more information, see 0.

3.3 Estimating Configuration Duration

The time estimates below indicate approximately how long it will take you to configure the demo examples:

General Configuration Steps

Configuration Step	Duration Estimate
Setting Up Users/Authorizations	30 minutes

Setting Up the System Landscape (Client Copy)	15 (+30) minutes for each client
	The user activities for entering the necessary information take approximately 15 minutes for each client. Note that once these activities have been completed, the client copy itself then takes approximately 30 minutes (for each client).
	Note also that you can only execute one client copy in a system at one time.
	⚠️
	Take this into account and schedule the later configuration steps accordingly.
Configuring the Business Systems as the Local Integration Engine	15 minutes (total time for all three application clients)
Describing the System Landscape in the System Landscape Directory	1 hour
Defining the business system services and the communication channels	30 minutes
Generating the flight data and activating the BSP application	20 minutes (total)
Settings for IDoc Communication	2 hours

Configuring the Business Scenario

Business Scenario (Variant)	Estimate of Configuration Duration
Flight Availability Check (Proxy-to-Proxy)	30 minutes
Flight Availability Check (Proxy-to-RFC)	30 minutes
Booking a Single Flight (Proxy-to-Proxy)	30 minutes
Booking a Single Flight (Proxy-to-IDoc)	30 minutes
Booking Connecting Flights (Proxy-to-Proxy)	45 minutes
Distributing Booking Order Data (Proxy-to-File System)	1 hour
	40 minutes (preparatory tasks) + 20 minutes (configuring the business scenario)

⚠️

The times given above are approximate and are intended as a guide to help you with planning.

3.4 Notes on Tools and Transactions

You use different tools to execute the individual configuration steps.

- Transactions in the SAP system of the Integration Server

💡

To log on to the SAP system and call the required transactions, use the user XISUPER. This user is created during the installation of SAP Exchange Infrastructure.

💡

Note that you can call the transactions in the SAP system in the user menu or in the SAP menu. To call the user menu, choose *User menu* (🗔) in the

pushbutton bar. To call the SAP menu, choose *SAP menu* ( ) in the pushbutton bar.

- System Landscape Directory

- Integration Builder (Integration Directory)

  You only use the configuration part of the Integration Builder (Integration Directory) to configure the demo examples. You do not need the design part of the Integration Builder (Integration Repository). Wherever the term *Integration Builder* is used below, this refers to the Integration Builder (Integration Directory).

  > You call the System Landscape Directory and the Integration Builder (Integration Directory) on the initial screen of SAP Exchange Infrastructure. To call the initial screen of SAP Exchange Infrastructure, choose *Exchange Infrastructure → Start Integration Builder* in the user menu.

For more information about calling the relevant tools and transactions, see the descriptions of the respective configuration steps.

4 General Configuration Steps

4.1 Providing the Necessary Users and Authorizations

4.1.1 Authorizations for Configuration Steps in the SAP System

To log on to the SAP system of the Integration Server to configure the demo examples, you can use the user *XISUPER*. This user is created during the installation of SAP Exchange Infrastructure.

> For more information, see *Installation Guide – SAP Exchange Infrastructure 3.0* under *Post-Installation Activities → Activities for SAP Exchange Infrastructure*.

4.1.2 Authorizations for Configuring the IDoc Variant

To configure the *SingleFlightBooking (Proxy-to-IDoc-Communication)* variant, you must make specific ALE settings in the SAP system (see 5). To call the transactions necessary to do this, you must create an additional user that is assigned the following roles:

- *SAP_BC_MID_ALE_IDOC_ADMIN*

- *SAP_BC_MID_ALE_IDOC_DEVELOPER*

  > Note that these roles are only available as of SAP Exchange Infrastructure 3.0 Support Package 02. If you want to configure the demo example *SingleFlightBooking (with IDoc)* before this release, use a user with the authorization SAP_ALL (for example, DDIC) for the configuration steps described in 5.

4.1.3 Authorizations for Configuring the RFC Variant

To configure the *Flight Availability Check (Proxy-to-RFC-Communication)* variant, you require a system user that is assigned the role SAP_BC_JSF_COMMUNICATION_RO (see 0 under *Editing the Communication Channel with Adapter Type RFC*).

4.2 Setting Up the System Landscape

This section contains all the configuration steps for setting up the system landscape.

4.2.1 System Landscape

The figure below shows the system landscape that is used for the configuration of the demo examples:
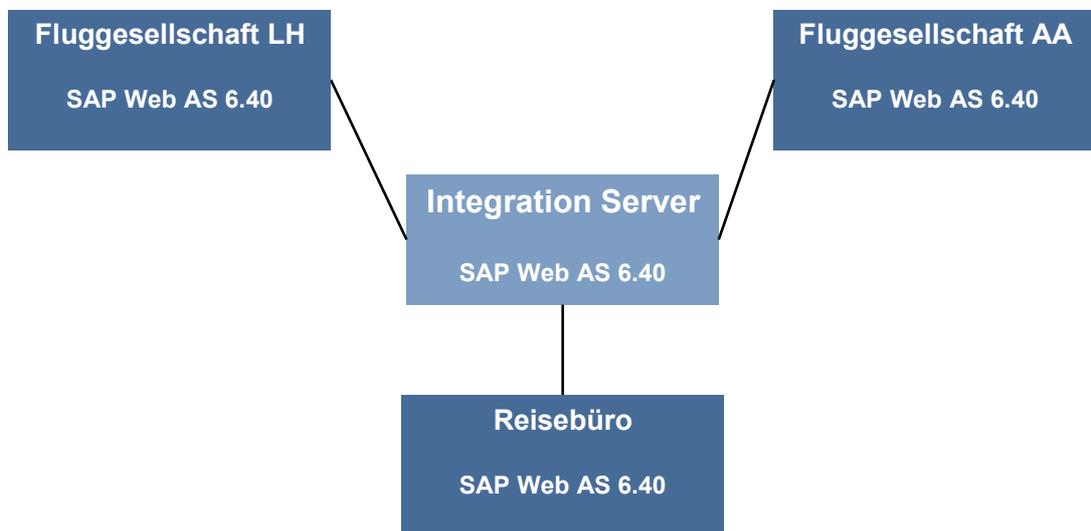
Figure 1: System Landscape for the Demo Examples

The system landscape comprises the Integration Server and three other application systems (business systems). One business system implements the travel agency system and the other two business systems each implement an airline system (Lufthansa and American Airlines).
In the SAP standard configuration, you set up an additional client for each of the three business systems on the SAP system of the Integration Server.

Note that you are not permitted to implement and run additional productive applications on the SAP system of the Integration Server. The main reason for this is that connecting a productive application to the Integration Server in this way makes it impossible to upgrade the application or the Integration Server separately.

This guideline does not apply to the demo examples. The reasoning behind this exception is as follows:

> - The demo examples are not a productive application and are only for use in development or test systems.
>
> - The demo examples are part of SAP Exchange Infrastructure and, therefore, do not have their own release cycle.
>
> Setting up separate business systems would significantly increase the technical requirements for the demo examples. To keep the examples simple and easy to use, you are therefore permitted to use additional clients on the SAP system of the Integration Server for the demo examples.

Use the following clients for the required business systems:

System	Client
Travel agency	105
Airline Lufthansa	106
Airline American Airlines	107

> The client for the Integration Server is set up during installation of SAP Exchange Infrastructure. In this configuration guide, the client `100` is assigned to the Integration Server. You must set up additional clients for the business systems of the travel agency and the two airlines. These clients are referred to as *application clients* below.

You generate the application clients from the SAP reference client 000 by using *client copy*.

To do this, execute the following steps in the SAP system of the Integration Server:

- Set up the logical systems (for travel agency and airlines)
- Assign client and logical system
- Client Copy

> The three-figure ID of the SAP system on which the Integration Server is installed is referred to below as `<SID>`.

4.2.2 Setting Up the Logical Systems

To be able to configure a business system as a sender or receiver of IDocs, you must assign a logical system to it.

> You must specify (ALE) logical systems for the configuration of the variant *SingleFlightBooking (with IDoc)*. However, you also require the logical systems for the client copy (step 4.2.4). It is not possible to add or change the logical systems later. Therefore, you should execute steps 0 and 5 even if you are not currently planning to use the IDoc demo example.

Define a logical system for each business system.

1. Choose the transaction *Display IMG* (transaction code `SALE`).

2. Choose *Basic Settings* → *Logical Systems* → *Define Logical System*.

> Ignore the message: `Caution: The table is cross-client.`

3. In the *Log.System* column, specify the logical systems for all three clients. Adhere to the naming convention `<SID>CLNT<Client>`.

4. In the *Name* column, enter a name for each logical system.
    Use a meaningful name. Make the following entries in the *Log.System* and *Name* columns:

Log.System	Name
<SID>CLNT100	Integration Server
<SID>CLNT105	Travel Agency
<SID>CLNT106	Airline Lufthansa
<SID>CLNT107	Airline American Airlines

5. Save your entries (🖫).

4.2.3 Assigning the Logical Systems to Clients

Since the business systems in the SAP standard configuration are implemented using different clients, you must assign a logical system to each client.

1. In the SAP menu, choose *Tools → Administration → Administration → Client Administration → Client Maintenance* (`SCC4`).

2. Choose *Display -> Change* (🖎).

> Ignore the message: `Caution: The table is cross-client.`

3. Choose *New Entries*.

4. In the *New Entries: Details of Added Entries* dialog box, enter the following information for client 105:

Field	Entry
Client	105
Description (Field to the left of *Client* field)	Travel Agency
Logical System	<SID>CLNT105

> Select the entry in the dropdown list box.

5. Save your entries (🖫).

6. Choose *Back* (⬅).

7. Add an entry for each of the other clients. In the *New Entries: Details of Added Entries* dialog box, enter the following information:

Client	Description (field to the right of the *Client* field)	Logical System
100	INTEGRATION_SERVER	<SID>CLNT100
105	Travel Agency	<SID>CLNT105
106	Airline Lufthansa	<SID>CLNT106
107	Airline American Airlines	<SID>CLNT107

4.2.4 Client Copy

You use the steps below to enter additional attributes for the specified clients and execute the client copy.

Execute the following steps separately for each of the clients 105, 106, and 107.

1. Log on in client 105. Use the user SAP* and the password PASS.

2. In the SAP menu, choose *Tools → Administration → Administration → Client Administration → Client Copy → Local Copy* (SCCL).

3. In the *Select Profile* field, select SAP_UCSV.

4. In the *Client* and *Source Client* fields, select the client of the Integration Server as the source client (client 100 in this configuration guide).

5. In the menu bar, choose *Client Copy → Start*.

6. Once the client copy is complete, execute the client copy for clients 106 and 107 **one after the other**.

Note that the user activities for entering the necessary information take approximately 15 minutes for each client. Once you have completed these activities, you must then allow approximately 30 minutes for the actual client copy (for each client). Take this into account and schedule the later configuration steps accordingly.

Note that other users cannot work in the system at the same time.

4.3 Describing the System Landscape in the System Landscape Directory

This section contains all the steps for describing the system landscape in the System Landscape Directory.

All the configuration steps that you must make in the System Landscape Directory to configure the *Distributing Booking Order Data (Proxy-to-File System)* variant (6.4.2), are described separately in *Settings for Communicating with a File System* (**Fehler! Verweisquelle konnte nicht gefunden werden.**). This is because these steps are only required when configuring special variants.

The description of the system landscape consists of:

- The technical system landscape

- The business system landscape

You access this data in the System Landscape Directory when executing the further configuration steps in the Integration Directory.

1. To call the System Landscape Directory, choose *Exchange Infrastructure → Start Integration Builder* in the user menu.

2. On the initial screen of SAP Exchange Infrastructure, choose the hyperlink *System Landscape Directory*.

3. Log on using your user and password.

4.3.1 Technical System Landscape

Since the involved business systems are each simulated by a different client of the same SAP system, you only need **one technical system** (the system of the Integration Server).

The system of the Integration Server registers itself as a technical system in the System Landscape Directory automatically during installation of SAP Exchange Infrastructure (according to the *Installation Guide – SAP Exchange Infrastructure 3.0*).

You must assign the application clients to this technical system.

1. On the initial screen of the System Landscape Directory, choose *Technical Landscape*. The system displays all the technical systems in a table. The technical system of the Integration Server has the following name: `<SID> on <Server Name>`.

> If you have called the system `<SID>`, the name of the server (`<Server Name>`) is displayed in the corresponding status field in the status bar of the SAP window (for the system `<SID>`) (for example, `PWDF1234`).

2. Open the technical system `<SID> on <Server Name>`. To do this, click the corresponding entry.

   The system opens the technical system browser.

3. Assign the travel agency client to the technical system. To do this, in the *Clients* line, choose *Add*.

4. In the *List, add, delete, and maintain technical systems* dialog box, enter the following information:

5.

Field	Description	Entry
Client Number	Client	`105`
Logical System Name	Logical system for IDoc communication	`<SID>CLNT105`
Description	Description	`Travel Agency`

> The specification of logical systems is relevant for the variant *SingleFlightBooking (with IDoc)*. For more information about setting up the logical systems, see 0.

6. To save your entries, choose *Save*.

7. Repeat this step for the other application clients (`106` for the airline Lufthansa and `107` for the airline American Airlines). Specify the following logical systems for the clients:

Client Number	Logical System Name
`106`	`<SID>CLNT106`
`107`	`<SID>CLNT107`

8. Save your entries (choose *Save*).

4.3.2 Business System Description

The business system description comprises the following:

- A business system for the Integration Server

  The business system for the Integration Server is defined in the System Landscape Directory during installation of SAP Exchange Infrastructure (see *Installation Guide – SAP Exchange Infrastructure 3.0* under *Performing System Landscape Directory (SLD) Configuration* → *Maintaining a Business System for the Integration Server*).

- Business systems for the clients of the travel agency and airlines (application clients)

You must create a business system in the System Landscape Directory for each *application* client (105, 106, and 107). You must assign the technical system of the Integration Server to each business system.

Execute the following steps separately for each application client (105, 106, and 107).

1. On the initial screen of the System Landscape Directory, choose *Business Landscape*.

2. Choose *New Business System*. The system opens the business system wizard.

3. On the *Business System Wizard – Details* screen, enter the name of the business system.

   Use the following names:

Client	Business System Name
105 (Travel Agency)	`<SID>_105`
106 (Airline *Lufthansa*)	`<SID>_106`
107 (Airline *American Airlines*)	`<SID>_107`

4. Choose *Next*.

5. On the *Business System Wizard - Technical System Type* screen, select the system type `Web AS ABAP` with the corresponding radio button.

6. Choose *Next*.

7. On the *Business System Wizard - Select System* screen, first specify the technical system. In the dropdown list box for the *System* field, select the name of the technical system. The name of the technical system is `<SID> on <Server Name>`.

8. In the *Client* field, select the client that implements the application system:

   - `105` for the travel agency

   - `106` for the airline *Lufthansa*

   - `107` for the airline *American Airlines*

9. Choose *Next*.

10. On the *Business System Wizard - Installed Products* screen, select all the specified products. The *Software Components For Selected Products* screen area displays all software component versions resulting from the product selection.

11. Choose *Next*.

12. On the *Business System Wizard - Integration Server* screen, enter the following information:

- In the *Business System Role* field, specify the role of the business system. Specify the role *Application System* for the clients of the application systems.

- In the *Related Integration Server* field, specify the technical system of the Integration Server (`<SID> on <Server Name>`).

- To save your entries, choose *Finish*.

4.4 Configuring the Business Systems as the Local Integration Engine

Each business system has a local Integration Engine, which controls the message exchange with other systems. You use the steps below to configure the involved business systems as the local Integration Engine and define the connection to the central Integration Server (client 100).

Execute the following steps separately for each application client (105, 106, and 107).

1. In the respective application client, choose *Exchange Infrastructure → Administration → Integration Engine – Administration* (`SXMB_ADM`) in the user menu.

2. Choose *Integration Engine Configuration*.

3. In the menu bar, choose *Edit → Change Global Configuration Data*.

4. In the *Global Configuration Data* frame, choose *Application System* as the role of the business system.

5. In the *Corresponding Integ. Server* field, specify the HTTP destination that the business system uses to address the central Integration Server. Use the following syntax:
   `dest://<HTTP Destination>`

   Specify the HTTP destination of the Integration Server that you created during the technical configuration of SAP Exchange Infrastructure. For more information, see the SAP XI 3.0 Configuration Guide under *Connecting Business Systems with an Integration Engine to the Central Integration Server*.

6. Save your entries (💾).

4.5 Defining Services and Communication Channels (Integration Directory)

To prepare the configuration of the business scenario, you must do the following:

- Define the involved business systems as services (business system services) in the Integration Directory

  Only then can you address the business systems as senders or receivers of messages.

  If you want to use a business process as the sender or receiver of messages at runtime, you must also define the business process as a service (business process service). The demo examples include a business scenario that uses a business process (*MultipleFlightBooking*). The configuration instructions for this business scenario include instructions for defining a business process service (see 0).

- Define communication channels for outbound message processing (for all relevant receiver business systems)

  You must define a communication channel for all communication types that you want to use (proxy-to-proxy and proxy-to-IDoc) and for all potential receiver systems.

You define services and communication channels in the Integration Directory.

Therefore, to execute the activities described below, call the Integration Builder (Integration Directory).

1. To call the Integration Builder (Integration Directory), choose *Exchange Infrastructure → Start Integration Builder* in the user menu.

2. On the initial screen of SAP Exchange Infrastructure, choose the hyperlink *Integration Directory*.

3. Log on using your user and password. The system opens the Integration Builder (Integration Directory).

4.5.1 Defining Business System Services and Creating Communication Channels Automatically

You use the steps below to define a service (business system service) in the Integration Directory for each business system. You can also create communication channels for the involved business systems automatically.

> The definition of the business system services for the *Distributing Booking Order Data (Proxy-to-File System)* variant is described in the section about configuring this variant (see 6.4.2).

1. In the Integration Builder navigation area, on the *Objects* tab page, position the cursor on the *Services Without Party* node.

2. To call the wizard for assigning business systems, choose *Assign Business System* in the context menu.

3. Choose *Continue*.

4. On the next screen, choose *Continue*.
   The business system services are not assigned to a party.

5. On the next screen, select the following business systems by using the corresponding checkboxes:

   - <SID>_105

   - <SID>_106

   - <SID>_107

6. Make sure that the *Create Communication Channels Automatically* checkbox is selected. In this case, the receiver communication channels for the selected business systems are created automatically.

7. Choose *Finish*.

The system displays the services in the Integration Builder navigation area, on the *Objects* tab page, under *Services Without Party → Business System*.

The communication channels that are generated automatically are assigned to the selected services and displayed in the Integration Builder navigation area under *Services Without Party → Business System → <SID>_<Client> → Communication Channel*. Communication

channels with adapter type *XI* have the name *GeneratedReceiverChannel_XI* and those with adapter type *IDoc* have the name *GeneratedReceiverChannel_IDoc*. Communication channels with adapter type *RFC* have the name *GeneratedReceiverChannel_RFC.*

You need receiver communication channels with adapter type *XI*, *IDoc*, and *RFC* for the standard configuration. To be able to use the communication channels, you have to edit them manually.

In the case of the *Distributing Booking Order Data (Proxy-to-File System)* variant, you need a receiver communication channel with the adapter type *File*. There is a communication channel template for this communication channel included in the shipment; you must assign it when configuring using the business scenario configurator. For more information, see 6.4.2.

4.5.2 Editing the Communication Channels

Generating the communication channels automatically (6) creates receiver communication channels with adapter type XI, IDoc, RFC, and HTTP.

You require the following communication channels for the standard configuration:

- Each of the three application systems is used at least once as a proxy receiver. Therefore, you must define a receiver communication channel with adapter type *XI* for each business system service (`<SID>_105`, `<SID>_106`, and `<SID>_107`).
- In the business scenario *Flight Availability Check (Proxy-to-RFC Communication)*, the application system of the airline *American Airlines* is used as an RFC receiver. Therefore, you must define a receiver communication channel with adapter type *RFC* for the business system service <SID>_107.
- In the business scenario *Single Flight Booking (Proxy-to-IDoc Communication)*, the application system of the airline *American Airlines* is used as an IDoc receiver. Therefore, you must define a receiver communication channel with adapter type *IDoc* for the business system service <SID>_107.

To ensure an error-free configuration, you must edit these (automatically created) communication channels manually.

Editing the Communication Channels with Adapter Type XI

To ensure that the outbound message processing (in the direction of a proxy receiver) can be executed without errors, you must edit the automatically generated communication channels *GeneratedReceiverChannel_XI* manually as follows:

You must execute the following steps for all three communication channels *GeneratedReceiverChannel_XI* for the services `<SID>_105`, `<SID>_106`, and `<SID>_107`.

Execute the following steps separately for each communication channel.

1. In the Integration Builder navigation area, under *Services Without Party* → *Business System*, navigate to the respective business system service. Expand the subtree for the service and position the cursor on the communication channel. In the context menu, choose *Open* ( ).

2. The system opens the communication channel in the Integration Builder work area.

3. Switch to change mode. To do this, choose *Switch between display and edit mode* ( ).

4. Enter the following values for the communication channel attributes.

The table contains the correct entries for all fields in the communication channel. Note that some fields will be completed by the system when communication channels are created automatically. The *Specify Manually* column indicates which fields remain to be completed.

Entries for Communication Channels

Specify Manually	Attribute	Value
	Transport Protocol	HTTP 1.0
	Message Protocol	XI 3.0
	Addressing Type	URL Address
	Target Host	Name of the server of the target host (for example, pwdf0005)
X	Service Number	Number of the HTTP port

To find out the number of the HTTP port (service number), see the ICM Monitor of the relevant Integration Server (call transaction SMICM and then *Goto → Services*). Select the Service Name/Port for the Protocol HTTP.

Specify Manually	Attribute	Value
	Path	/sap/xi/engine?type=entry

Authentication Data

Specify Manually	Attribute	Value
x	Authentication Type	Use Logon Data for SAP System
x	User Name	XIAPPLUSER
x	User Password	XIPASS
x	Logon Language	EN
x	Client	• 105 (for channel in service <SID>_105) • 106 (for channel in service <SID>_106) • 107 (for channel in service <SID>_107)

5. Save the communication channel ().

Sender agreements are *not* necessary for adapter type *XI* and XI 3.0 protocol. Therefore, no sender communication channels are necessary.

Editing the Communication Channels with Adapter Type IDoc

To configure the variant *SingleFlightBooking (Proxy-to IDoc Communication)*, you must edit the receiver communication channel *GeneratedReceiverChannel_IDoc* (with adapter type *IDoc*) in service *<SID>_107*.

If you only want to configure the variants for proxy-to-proxy communication, you can omit the following steps.

1. In the Integration Builder navigation area, under *Services Without Party*, navigate to the business system service *<SID>_107*. Expand the subtree under the service and position the cursor on the communication channel *GeneratedReceiverChannel_IDoc*. In the context menu, choose *Open* ().

2. The system opens the communication channel in the Integration Builder work area.

3. Switch to change mode ().

4. In the *RFC Destination* field, specify the RFC destination for client 107: `<SID>_107`.

   For more information, see 0.

5. In the *SAP Release* field, enter `640`.

6. Save the communication channel ().

   Sender agreements are *not* necessary for adapter type *IDoc* and XI 3.0 protocol. Therefore, no sender communication channels are necessary.

The communication channel must be defined as follows:

Entries for the Communication Channel

Specify Manually	Attribute	Value
	Transport Protocol	IDoc
	Message Protocol	IDoc
	Adapter Engine	Integration Server
x	RFC Destination	`<SID>_107`
x	Segment Version	
	Interface Version	SAP Release 4.0 or higher
	Port	SAP<SID>
x	SAP Release	640

Editing the Communication Channel with Adapter Type RFC

To configure the *Flight Availability Check (Proxy-to-RFC-Communication)* variant, you must configure the receiver RFC adapter. For this purpose, edit the receiver communication channel *GeneratedReceiverChannel_RFC* (with adapter type *RFC*) in the *<SID>_107* service, as described below.

   For more information about configuring the receiver RFC adapter, see the SAP NetWeaver documentation in the SAP Library under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Runtime → Connectivity → Adapters → RFC Adapter → Configuring the Receiver RFC Adapter*.

If you only want to configure the variants for proxy-to-proxy communication, you can omit the following steps.

1. In the Integration Builder navigation area, under *Services Without Party*, navigate to the business system service *<SID>_107*. Expand the subtree under the service and position the cursor on the communication channel *GeneratedReceiverChannel_RFC*. In the context menu, choose *Open* ( ).

2. The system opens the communication channel in the Integration Builder work area.

3. Switch to change mode ( ).

4. Enter the following values for the communication channel attributes:

Entries for the Communication Channel

Specify Manually	Attribute	Value
	Transport Protocol	RFC Adapter
	Message Protocol	RFC (RFC-XML)
	Adapter Engine	Integration Server
	Adapter Status	Active

RFC Client Parameter

Specify Manually	Attribute	Value
	Load balancing	Checkbox deactivated
	Application server	<Host name of the SAP system>
	System number	<System number>
	Authentication mode	Use logon data to SAP system
x	Logon user	Enter a user that is assigned the *SAP_BC_JSF_COMMUNICATION_RO* role (see 0). The authorizations assigned to this role are required to read the RFC metadata in the receiver system.
x	Logon password	<Password for the user specified>
x	Logon language	EN
x	Logon client	107
	Maximum connections	1
	Advanced mode	Checkbox deactivated

RFC Metadata Repository

The *Use Alternative RFC Metadata Repository* checkbox must be deactivated.

Activating Services and Communication Channels

You must activate the services and communication channels.

When the communication channels are generated automatically, communication channels with adapter type HTTP are also generated for the selected business

systems. These communication channels are not required for the configuration of the demo examples, but they are saved in the user's standard change list. Since these communication channels are not fully specified, you cannot activate them along with the other channels (adapter type XI, IDoc, and RFC).

The same applies to the communication channels *GeneratedReceiverChannel_IDoc* and *GeneratedReceiverChannel_RFC* for the services *<SID>_105* and *<SID>_106*. These are also not required for the further configuration steps.

Therefore, you must delete the communication channels that are not required before activating.

1. In the Integration Builder navigation area, select the *Change Lists* tab page.

2. If you have created more than one change list, expand the change lists and check which one the communication channels are assigned to.

3. Delete the communication channels that are not required (adapter type HTTP) separately.

> To delete an object in a change list, you must first open it (double-click). Then, choose *Communication Channel* → *Delete* (🗑) in the menu bar of the object editor.

4. Position the cursor in the change list with the communication channels and choose *Activate* in the context menu.

4.6 Further Steps for Configuring the Demo Examples

4.6.1 Activating the BSP Application

A BSP (Business Server Pages) application is available to enable you to execute the demo examples. You use this application to make the necessary entries and display the results. To be able to execute the demo examples after configuration, you must activate the BSP application.

> For more information about the necessary ICF (Internet Communication Framework) services, see SAP Note 517484.

1. Log on to the SAP system in client 100 (Integration Server).

2. Call the transaction *Maintain Service*. To do this, choose *Tools* → *Administration* → *Administration* → *Network* → *HTTP Service Hierarchy Maintenance* (`SICF`) in the SAP menu.

3. In the *Virt.Hosts / Services* column, expand the following nodes: *default host* → *sap* → *bc* → *bsp* → *sap*. Select the entry `sxidemo_agcy_ui`.

4. In the context menu, choose *Activate Service*.

> Entry in gray font: Service is not activated. Entry in black font: Service is activated.
>
> A service can only be activated if all nodes above it are activated.

5. To open the service, double-click it.

6. Switch to change mode. To do this, choose *Change* (✏️).

7. In the *Anonymous Logon Data* frame, make the following entries:

   - In the *Client* field, specify the client of the travel agency: `105`.

   - In the *User* field, enter `XISUPER`.

   - In the *Password* field, enter the password for this user.

     The user `XISUPER` is created during the installation of SAP Exchange Infrastructure.

     For more information about this user, see the *Installation Guide – SAP Exchange Infrastructure 3.0* under *Post-Installation Activities* → *Activities for SAP Exchange Infrastructure*.

     The entries for user and password are optional. If you do not enter a user and password, you must log on separately with your user and password when you call the BSP application.

8. Choose *Input* (✔️).

   The system automatically creates a transport request for your change. A dialog box appears, in which you confirm this transport request.

4.6.2 Generating the Flight Data

To be able to access flight data during execution of the demo examples, you first have to generate it. A data generation program is available to enable you to generate data for flights with different airlines on different days.

The data for a flight is made up of "static" data (for example, airline, flight date, flight number) and "dynamic" data (seat availability in the three flight classes). The "dynamic" data is dependent on the business system (client). Therefore, you must generate the data separately in all three clients.

The data generation process generates flight data for flights in a time interval from 40 weeks before until 40 weeks after the date of data generation. It also generates **flights for the first day of every month** for the year following the date of data generation for each airline and flight number. This simplifies the execution of the demo examples: When you select the first day of the month as the flight date, it is guaranteed that a flight is available for each airline and connection number.

Generate the data in all three clients on the same day. This guarantees that the (static) flight data (that is, the set of flights offered) is identical in all three clients.

The data generation does not generate any booking data.

To represent the distribution of the data management tasks between the travel agency and the two airlines as realistically as possible, the data generation program generates the following results:

- If data generation takes place in the client of one airline, the maximum number of seats for the flights of the other airline is set to zero, depending on the client.
- If data generation takes place in the client of the travel agency, the maximum number of seats is set to zero for all flights.

This guarantees that you can only ever book the appropriate flights (for the respective client).

Execute the following steps separately in each application client (105, 106, and 107).

1. Log on to the SAP system in the respective client.

2. In the user menu, choose *Exchange Infrastructure* → *Demo Examples* → *Settings: Generate Flight Data*.

3. In the *Specify the airlines for this system* frame, specify the role of the respective application client.

   - You are logged on in client `105`: Select the *No* radio button.

   - You are logged on in client `106` or `107`: Select the *Yes* radio button and specify the respective airline ID in the *Airline* field (`LH` for Lufthansa in client 106 and `AA` for American Airlines in client 107).

   You can leave the *to* field empty.

4. In the *Select data range* frame, specify the range of the generated data set. Select the *Optimized Flight Data* radio button.

   > We strongly recommend that you select the *Optimized Flight Data* radio button. In this case, a manageable number of flight connections is generated (for `LH 0400, LH 0401, AA 0017, AA 0064`).
   >
   > Only select the *Complete Flight Data* option if you want to use the generated flight data for other demo examples that require access to a more extensive data set. In this case, flight data is generated for other airlines that do not belong to the system landscape of the demo examples. However, note that in this case you must adjust the configuration of the demo examples to the more extensive data set (for example, by adjusting the routing conditions). The configuration steps below are based on the data set generated using the *Optimized Flight Data* option.

5. Choose *Execute* ( ).

5 Configuration Settings for Using Special Adapters

This chapter describes the adapter-type-specific configuration steps that you must make **in addition** to the configuration of the relevant communication channel in the Integration Directory.

5.1 Settings for IDoc Communication

You must make the following additional settings in the SAP system for the *SingleFlightBooking (Proxy-to-IDoc Communication)* variant.

If you only want to configure the variants for proxy-to-proxy communication, you can skip this section.

For more information about IDoc communication and the integration technology Application Link Enabling (ALE), see the documentation for SAP NetWeaver under *SAP NetWeaver → Application Platform → Connectivity → Components of SAP Communication Technology → Classical SAP Technologies (ABAP) → IDoc Interface/ALE*).

To call the transactions that are required for the configuration steps below, use a user that is assigned the following roles:

- SAP_CA_BFA_DATATRANSFER

- SAP_IDOC_ADMINISTRATION

5.1.1 Specifying RFC Destinations

To enable the business system of the airline *American Airlines* (business system *<SID>_107*) to communicate with the Integration Server by using IDocs, you must do the following:

- Specify an R/3 connection to the Integration Server (client 100) in the client of the airline *American Airlines* (107)

- Specify an R/3 connection to the client of the airline *American Airlines* (107) in the system of the Integration Server (client 100)

Enter the required information as an RFC destination.

R/3 Connection to the Integration Server

1. In client 107, call the transaction *Display and Maintain RFC Destinations*. To do this, choose *Exchange Infrastructure → Environment → RFC Destinations (Display and Maintenance)* (SM59) in the user menu.

2. Select the *R/3 connections* node.

3. In the pushbutton bar, choose *Create*.

4. In the *RFC destination* field, enter the following name for the RFC destination for the Integration Server: `<SID>_100`.

5. In the *Connection type* field, in the dropdown list box, select `3 - Connection to R/3 System`.

6. In the *Description* frame, in the *Description 1* field, enter the following: `Connection to Integration Server`.

7. Choose *Return*.

8. On the *Technical settings* tab page, enter the following information:
   In the *Target host* field, enter `localhost`.
   In the *System Number* field, specify the system number of the SAP system (for example, `73`).

To find the system number, choose *Properties* in the logon dialog box (SAP Logon). The system number is displayed in the *System Number* field.

9. On the *Logon/Security* tab page, enter the logon data for the target system. In the *Logon* frame, enter the following information:

    - In the *Client* field, specify the client of the Integration Server: `100`.

    - In the *User* field, enter `XIAPPLUSER`.

    - In the *Password* field, enter `XIPASS`.

10. Save the RFC destination (choose the *Save* pushbutton).

11. To test the RFC destination, choose *Test connection* in the pushbutton bar.

12. Choose *Back* ( ).

R/3 Connection to the Application System of the Airline American Airlines

1. In client 100, call the transaction *Display and Maintain RFC Destinations*. To do this, choose *Exchange Infrastructure* → *Environment* → *RFC Destinations (Display and Maintenance)* (`SM59`) in the user menu.

2. Select the *R/3 connections* node.

3. In the pushbutton bar, choose *Create*.

4. In the *RFC destination* field, enter the following name for the RFC destination for the Integration Server: `<SID>_107`.

5. In the *Connection type* field, in the dropdown list box, select `3 - Connection to R/3 System`.

6. In the *Description* frame, in the *Description 1* field, enter the following: `Connection to American Airlines`.

7. Choose *Return*.

8. On the *Technical settings* tab page, enter the following information:
    In the *Target host* field, enter `localhost`.
    In the *System Number* field, specify the system number of the SAP system (for example, `73`).

To find the system number, choose *Properties* in the logon dialog box (SAP Logon). The system number is displayed in the *System Number* field.

13. On the *Logon/Security* tab page, enter the logon data for the target system. In the *Logon* frame, enter the following information:

    - In the *Client* field, specify the client of the application system for American Airlines: `107`.

    - In the *User* field, specify a user that is assigned the role `SAP_XI_IS_SERV_USER` and a role `<Own Role>` that you define yourself.
      Assign the following authorization objects to the `<Own Role>` role:

        o   `S_RFC` (Activity `Execute`, RFC object `EDIN`, object type `Function Group`)

o `B_ALE_RECV` (Message type `FLIGHTBOOKING_CREATEANDRESP`)

⚠️

Only then can the system (client) of the airline *American Airlines* receive and process IDocs.

- In the *Password* field, enter a password for this user.

14. Save the RFC destination (choose the *Save* pushbutton).

15. To test the RFC destination, choose *Test connection* in the pushbutton bar.

16. Choose *Back* (🔄).

5.1.2 Specifying the IDoc Port

To be able to send the IDocs from the application system of American Airlines to the system of the Integration Server, you must specify the port of the Integration Server.

1. In client 107, call the transaction *Ports in IDoc Processing*. To do this, choose *Tools* → *ALE* → *ALE Administration* → *Runtime Settings* → *Port Maintenance* (`WE21`) in the SAP menu.

2. Select the *Ports* → *Transactional RFC* node and choose *Create* (📄).

3. In the *Ports in IDoc processing* dialog box, select the *own port name* radio button.

4. Enter the following port name: `SAP<SID>`.

5. Choose *Continue* (✔).

6. In the *Description* field, enter `Integration Server`.

7. In the *RFC destination* field, specify the RFC destination of the Integration Server: `<SID>_100`.

8. Save your entries (💾).

5.1.3 Specifying IDocs

To define the involved IDocs, you must execute the following steps.

Messages from the Travel Agency to the Airline American Airlines

First, define the IDocs for the messages from the travel agency to the airline American Airlines (client 105 → client 107).

1. Call the transaction *Partner Profiles* in client *107*. To do this, choose *Tools* → *ALE* → *ALE Administration* → *Runtime Settings* → *Partner Profiles* (`WE20`) in the SAP menu.

2. In the *Partner no.* field, specify the logical system of the travel agency: `<SID>CLNT105`.

3. In the *Partn.Type* field, in the dropdown list box, select `LS` (for logical system).

4. On the *Post processing: permitted agent* tab page, specify the user for the IDoc administrator. The IDoc administrator can then execute the IDoc monitoring.
In the *Type* field, specify the user type (for example, organizational unit, normal user).

5. Save your entries (💾).

6. In the *Inbound parmtrs.* table, add a new line (*Create inbound parameter* (➕)).

7. In the *Partner profiles: Inbound parameters* dialog box, in the *Message Type* field, specify the inbound IDoc. In the dropdown list box, select FLIGHTBOOKING_CREATEANDRESP.

8. On the *Inbound options* tab page, in the *Process code* field, select the entry BAPI in the dropdown list box.

9. Save your entries (🖫).

10. Choose *Back* (⬅).

Messages from the Airline American Airlines to the Integration Server

Define the IDocs for the messages from the airline American Airlines to the Integration Server (client 107 → client 100).

> Note that the receiver in this send direction is the Integration Server (that is, the IDoc adapter) and not the travel agency. The actual receiver system (the travel agency) is not defined by the Integration Server until routing (receiver determination).

1. In the *Partner Profiles* dialog box, choose *Create* (🗋).

2. In the *Partner no.* field, specify the logical system of the Integration Server: <SID>CLNT100.

3. In the *Partn.Type* field, in the dropdown list box, select LS (for logical system).

4. On the *Post processing: permitted agent* tab page, specify the user for the IDoc administrator. The IDoc administrator can then execute the IDoc monitoring. In the *Type* field, specify the user type (for example, organizational unit, normal user).

5. Save your entries (🖫).

6. In the *Outbound parmtrs.* table, add a new line (*Create outbound parameter* (📑)).

7. In the *Partner profiles: Outbound parameters* dialog box, in the *Message Type* field, specify the outbound IDoc. In the dropdown list box, select FLIGHTBOOKING_SENDRESPONSE.

8. On the *Outbound Options* tab page, in the *Receiver Port* field, select the IDoc port of the Integration Server: <SID>100.

9. In the *Output Mode* frame, choose *Transfer IDoc immed*. (radio button).

10. In the *IDoc Type* frame, in the *Basic Type* field, select the basic type of the outbound IDoc: FLIGHTBOOKING_SENDRESPONSE01.

11. Save your entries (🖫).

5.1.4 Specifying the ALE Distribution Model (SALE)

Specifying the Sender, Receiver, and Underlying BAPI

Execute the following steps in client 107.

1. Call the transaction *Display IMG* (transaction code SALE).

2. Choose *Modeling and Implementing Business Processes* → *Maintain Distribution Model and Distribute Views*.

3. Switch to change mode. To do this, choose *Switch between display and edit mode* (✏).

4. Choose *Create model view*.

5. In the *Short Text* field, enter XI - IDoc.

6. In the *Technical Name* field, enter XIDEMO.

7. Choose *Continue* (✔).

8. The system displays the distribution model as another node under *Model views*. Select the node *XI – IDoc*.

9. Choose *Add BAPI*.

10. Call the input help in the *Sender/client* field.

11. Select the logical system <SID>CLNT107 and choose *Copy* (✔).

12. In the *Receiver/server* field, select the logical system <SID>CLNT100.

13. In the *Obj. name/interface* field, select the business object *FlightBooking* (by using the input help).

14. In the *Method* field, select the BAPI *SendResponse* (as a method of the business object *FlightBooking*).

15. Choose *Continue* (✔).

Generating the Partner Profile

1. Choose *Change Distribution Model*.

2. In the menu bar, choose *Environment → Generate partner profiles*.

3. Choose *Execute* (🕐).

5.1.5 Defining the Ports in the IDoc Adapter

The IDoc adapter requires metadata to be able to convert the IDocs sent to it into IDoc XML.

> For more information about the IDoc adapter, see the documentation for SAP NetWeaver in SAP Library under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Runtime → Connectivity → Adapters → IDoc Adapter*.

To establish an RFC connection to the system that contains the metadata, you must execute the following steps.

1. In client 100, call the transaction *Port Maintenance in IDoc Adapter* (IDX1). To do this, choose *Exchange Infrastructure → Configuration → Port Maintenance in IDoc Adapter* in the user menu.

2. Choose *Create* (📄).

3. In the *Port* field, enter SAP<SID>.

4. In the *Client* field, enter 107.

5. In the *Description* field, enter Airline American Airlines.

6. In the *RFC destination* field, specify the RFC destination of the airline American Airlines: <SID>_107.

7. Save your entries (💾).

> 💡
>> The name of the port is generated automatically: `SAP<SID>_107`.

To define the direction from the IDoc adapter to the application system of the airline American Airlines, enter the following information.

1. In the user menu, choose *Exchange Infrastructure → Configuration → Overview of All Loaded Metadata for IDoc Adapter*.

2. Choose *Create* (📄).

3. In the *Reload a type description* dialog box, in the *IDoc Type* field, specify the **basic type** of the outbound IDoc: `FLIGHTBOOKING_SENDRESPONSE01`.

4. In the *Source Port* field, enter `SAP<SID>_107`

5. Choose *Continue*.

5.2 Settings for RFC Communication

No further settings are required once the relevant communication channel has been configured (see 6).

6 Configuring the Business Scenario

This section contains all the information you need to configure the available demo business scenarios.

> 💡
>> The configuration instructions for each business scenario are preceded by a brief business description and a flowchart (component view).
>>
>> For a detailed description of the individual business scenarios, see the SAP NetWeaver documentation in SAP Library under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Overview → Demo Examples*.

You configure the individual business scenarios in the Integration Directory. Therefore, to execute the activities described below, call the Integration Builder (Integration Directory).

1. In the user menu (in the SAP system of the Integration Server), choose *Exchange Infrastructure → Start Integration Builder*.

2. On the initial screen of SAP Exchange Infrastructure, choose the hyperlink *Integration Directory*.

3. Log on using your user and password. The system opens the Integration Builder.

> ⚠️
>> Below are detailed instructions for configuring the business scenarios. However, these instructions are only correct if
>>
>> - No parts of the demo examples have been configured previously
>>
>> - The business scenarios are configured in the specified order
>>
>> It is possible to configure the business scenarios in a different order; if you decide to do so, the situation in your system will no longer correspond exactly with this configuration guide and it can no longer be guaranteed that the demo examples will run error-free.

> To ensure a simple and error-free configuration, we therefore recommend that you adhere to the specified order.

The central tool is the business scenario configurator. For more information about the business scenario configurator, see the SAP NetWeaver documentation in SAP Library under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Design And Configuration Time → Configuration → Definition of Scenarios → Business Scenario Configurator*.

6.1 Checking Flight Seat Availability

> This demo example is implemented as the business scenario *CheckFlightSeatAvailability*. The business scenario is located in the Integration Repository, in the software component *SAP BASIS*, software component version *SAP BASIS 6.40*, in the namespace *http://sap.com/xi/XI/Demo/Agency*.

The following two configuration variants are supported for the business scenario:

- *Flight Availability Check (Proxy-to-Proxy Communication)* (see 6.1.2)

- *Flight Availability Check (Proxy-to-RFC Communication)* (see 0)

6.1.1 Business Description (Brief)

A travel agency uses the business scenario *CheckFlightSeatAvailability* to check the seat availability of a flight with an airline. The maximum number of seats and the number of available seats in the three flight classes (economy, business, and first class) are specified for the flight.

You use this business scenario to check the current seat availability before booking.
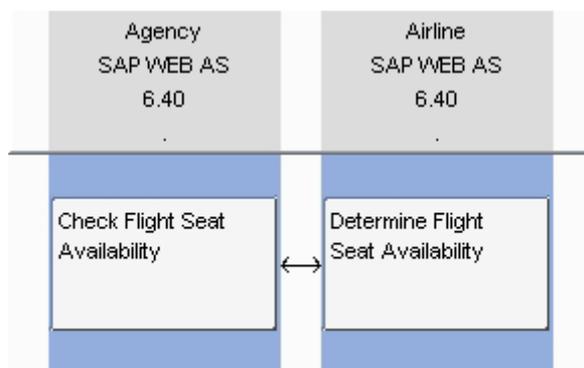
SAP Exchange Infrastructure, Business Scenario Editor

6.1.2 Checking Flight Seat Availability (Proxy-to-Proxy Communication)

This section describes how to configure the *Flight Availability Check* business scenario in the *Proxy-to-Proxy Communication* variant. In this case, you configure the business systems of both airlines as receivers of proxies.

Selecting the Business Scenario (Component View)

You use the steps below to do the following:

- Select the business scenario and the component view from the Integration Repository

- Create the scenario in the Integration Directory to group all the relevant configuration objects

1. To call the business scenario configurator, choose *Tools → Transfer Business Scenario from Integration Repository* in the Integration Builder (Integration Directory) menu bar. This calls a wizard, which you use to select a business scenario and create a scenario in the Integration Directory.

2. In the *Select Business Scenario from Integration Repository* dialog box, choose the input help (for the *Name* field). This calls an input help, which displays all business scenarios from the Integration Repository in a list.

3. Select the business scenario *CheckFlightSeatAvailability* (software component version *SAP Basis 6.40*, namespace *http://sap.com/xi/XI/Demo/Agency*), and choose *OK*.

4. In the wizard, choose *Continue*.

5. On the next screen, you edit the predefined name of the scenario. Change the name to *XIDemo_CheckFlightSeatAvailability*.

6. Choose *Finish*.
   The system creates the scenario.

7. Choose *Close*.
   The system calls the business scenario configurator. The business scenario *CheckFlightSeatAvailability* is displayed in a graphical editor.

8. In the *Configuration Steps* bar, choose step 1 *Select Component View*.

9. In the *Select Component View* dialog box, in the preview area of the graphical editor, select the component view `ABAP_Proxy_2_ABAP_Proxy` and choose *Apply*.

Assigning Services

You use the steps below to assign services to the application components of the business scenario.

1. In the *Configuration Steps* bar, choose step 2 *Assign Services*. This calls the *Assign Services* dialog box for the *Agency* application component.

2. In the *Assign Services* dialog box, on the *Service Assignment* tab page, insert a line ().

3. Click in the input field in the *Service* column and call the input help ().
   The system displays all services of type *Business System*.

4. Select the service *<SID>_105* and choose *Apply*.

5. In the *Assign Services* dialog box, click the navigation arrow () to switch to the application component *Airline*.

6. On the *Service Assignment* tab page, choose the input help () in the pushbutton bar.

7. On the *Select Business System Services* screen, select the services *<SID>_106* and *<SID>_107*.

8. Choose *OK*.

9. In the *Assign Services* dialog box, on the *Service Assignment* tab page, choose *Assign*.

Configuring the Connection

You use the steps below to configure the connection of the business scenario.

1. In the *Configuration Steps* bar, choose step 3 *Configure Connections*. This calls the *Configure Connection* dialog box for the connection between the actions *Check Flight Seat Availability* and *Determine Flight Seat Availability*.

2. In the *Configure Connection* dialog box, check that all sender/receiver relations are activated. All checkboxes must be selected.

3. To specify a receiver communication channel for the relation between sender service *<SID>_105* and receiver service *<SID>_106*, click in the input field in the *Communication Channel* column (for receiver service *<SID>_106*).

4. Call the input help ( ).

> If there are not yet any configuration objects in the system, the system displays all communication channels that are assigned to the service *<SID>_106*. If receiver agreements already exist for the inbound interface of the connection, the system only displays the communication channel assigned to this receiver agreement.

5. Select the communication channel *GeneratedReceiverChannel_XI* and choose *OK*.

6. In the same way, assign the receiver communication channel *GeneratedReceiverChannel_XI* (assigned to the service *<SID>_107*) to the relation between the sender service *<SID>_105* and the receiver service *<SID>_107*.

7. In the *Configure Connection* dialog box, choose *Apply*.

Generating the Configuration Objects

You use the steps below to generate the relevant configuration objects.

1. In the *Configuration Steps* bar, choose step 4 *Generate*. This calls the *Create Configuration Objects* dialog box.

2. Under *General*, select the *Generation* radio button.

3. Under *Scope of Generation*, select the checkboxes *Receiver Determination*, *Interface Determination*, and *Receiver Agreement*.

4. Under *Change List for Generated Objects*, select the *Create New* radio button. This means that the changes resulting from the generation are saved in a separate change list with the name of the scenario.

> The scenario itself is saved in the standard change list.

5. Choose *Start*.
   The objects are generated. The generation log is called.

The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

> If the generation log displays error situations, this may be because parts of the demo examples had been configured previously in your system, or because you have not configured the business scenarios in the specified sequence. In this case, the log contains information on why the generation was not successful. You must correct the problems manually.

Manual Editing

You use the steps below to execute the necessary manual editing for the generated configuration objects.

To define exactly how a message is to be forwarded from the travel agency to the two airlines, you must add routing conditions to the receiver determination.

1. In the generation log, expand the *Connections* area.

2. Navigate to the receiver determination |`<SID>_105`|
   `FlightSeatAvailabilityQuery_Out`.

> The yellow traffic light symbol signifies that manual editing may be necessary for this object.

3. To open the receiver determination, click the key |`<SID>_105`|
   `FlightSeatAvailabilityQuery_Out`.
   The system opens the receiver determination.

4. To switch to change mode, choose the function *Switch Between Display and Edit Modes* ( ) in the pushbutton bar of the *Display Receiver Determination* editor. In the *Configured Receivers* area, insert the conditions for forwarding messages to the two receiver services.

5. In the line containing the service *<SID>_106*, click in the input field in the *Condition* column and call the input help ( ). The system calls the condition editor.

6. In the condition editor, click in the input field in the *Left Operand* column and call the input help ( ). The system calls the expression editor.

7. In the expression editor, select the *Context Object* radio button.

8. In the dropdown list box, choose the context object *AirlineID*.

9. Choose *OK*.

10. In the condition editor, enter `LH` (for the airline Lufthansa) in the input field in the *Right Operand* column.

11. In the *Op.* column, choose the operator `=`.

12. Choose *OK*.
    You have specified the routing condition `AirlineID=LH` for the receiver *<SID>_106*.

13. In the same way, insert the condition `AirlineID=AA` for the receiver *<SID>_107*.

14. Save the receiver determination ( ).

Final Steps

Execute the following steps:

1. Close the generation log.

> You can save the generation log as a file.

2. Close the business scenario configurator. The system displays the message *Do you want to keep the changes?* Confirm with *Apply*.

3. Save the scenario *XIDemo_CheckFlightSeatAvailability*.

4. Activate the scenario *XIDemo_CheckFlightSeatAvailability* and all objects that it uses.

> Note that there are two change lists:
>
> - Standard change list (containing the scenario *XIDemo_CheckFlightSeatAvailability*)
>
> - Change list *XIDemo_CheckFlightSeatAvailability* (containing all objects of the scenario)
>
> You must activate both change lists.

6.1.3 Checking Flight Seat Availability (Proxy-to-RFC Communication)

This section describes how to configure the *Flight Availability Check* business scenario in the *Proxy-to-RFC-Communication* variant.

The *Flight Availability Check (Proxy-to-Proxy Communication)* variant (6.1.2) is configured so that both airlines communicate with the Integration Server by using proxies. In this variant, the existing configuration is changed so that the airline American Airlines communicates with the Integration Server by using RFCs. Therefore, all configuration data defining the proxy communication for American Airlines is overwritten.

> It is a prerequisite that you configure the *Flight Availability Check (Proxy-to-Proxy Communication)* variant (6.1.2) and activate the corresponding objects before configuring this variant. The following instructions only apply when you have done so.

> Note that in the following configuration steps you will make changes to parts of the configuration of the *Flight Availability Check (Proxy-to-Proxy Communication)* variant. Once you have completed the configuration of the *Flight Availability Check (Proxy-to-Proxy Communication)* variant, in the business scenario *Flight Availability Check*, the system of the airline American Airlines only communicates with the Integration Server by using RFCs.
>
> All the configuration objects for this variant are saved in the same scenario that was used for the Proxy-to-Proxy variant (`XIDemo_CheckFlightSeatAvailability`)

Deleting Obsolete Configuration Objects

First, delete the following interface determination:

| <SID>_105 | FlightSeatAvailabilityQuery_Out | | <SID>_107 |

> If you delete the interface determination, the business scenario configurator creates a new interface determination (with the correct RFC as the inbound interface). This saves you from having to change the existing interface determination manually.

1. In the Integration Builder (Integration Directory), select the *Scenarios* tab page.

2. Expand the *XIDemo_CheckFlightSeatAvailability* scenario.

3. Expand the *Interface Determination* node.

4. Delete the interface determination | `<SID>_105` |
   `FlightSeatAvailabilityQuery_Out` | | `<SID>_107`. To do this, position the
   cursor on the interface determination and choose *Delete* ( ) in the context menu.

5. Activate the change list containing the deleted interface determination (on the *Change
   Lists* tab page).

Selecting the Business Scenario (Component View)

You use the steps below to select the business scenario and the component view from the
Integration Repository.

> Note that the following steps only configure the changes to the *Flight Availability
> Check (Proxy-to-Proxy Communication)* variant. Parts of the existing scenario
> *XIDemo_CheckFlightSeatAvailability* are overwritten in this process.

1. Open the scenario *XIDemo_CheckFlightSeatAvailability*.

2. Switch to change mode ( ).

3. In the pushbutton bar of the object editor, choose *Business Scenario Configurator* ( ).

4. In the *Configuration Steps* bar, choose step 1 *Select Component View*.

5. In the *Select Component View* dialog box, in the preview area of the graphical editor,
   select the component view `ABAP_Proxy_2_RFC` and choose *Apply*.

Assigning Services

You use the steps below to assign services to the application components of the business
scenario.

1. In the *Configuration Steps* bar, choose step 2 *Assign Services*. This calls the *Assign
   Services* dialog box for the *Agency* application component.

2. In the *Assign Services* dialog box, on the *Service Assignment* tab page, insert a line ( ).

3. Click in the input field in the *Service* column and call the input help ( ).
   The system displays all services of type *Business System*.

4. Select the service *<SID>_105* and choose *Apply*.

5. In the *Assign Services* dialog box, click the navigation arrow ( ) to switch to the
   application component *Airline*.

6. On the *Service Assignment* tab page, insert a line ( ).

7. Click in the input field in the *Service* column and call the input help ( ).

8. Select the service *<SID>_107* and choose *OK*.

> In this variant, you are **only** configuring the communication between the travel
> agency (proxy) and American Airlines (RFC). The communication between the
> travel agency (proxy) and Lufthansa (proxy) uses the configuration objects
> created for *Flight Availability Check (Proxy-to-Proxy Communication)* (see
> 6.1.2).

---

9. Choose *Assign*.

Configuring the Connection

You use the steps below to configure the connection of the business scenario.

1. In the *Configuration Steps* bar, choose step 3 *Configure Connections*. This calls the *Configure Connection* dialog box for the connection between the actions *Check Flight Seat Availability* and *Determine Flight Seat Availability*.

2. In the *Configure Connection* dialog box, check that the sender/receiver relation is activated (checkbox).

3. To specify a receiver communication channel for the relation between sender service *<SID>_105* (proxy) and receiver service *<SID>_107* (RFC), click in the input field in the *Communication Channel* column (for receiver service *<SID>_107*).

4. Call the input help ().

5. Select the communication channel *GeneratedReceiverChannel_RFC* and choose *OK*.

> No sender agreement with a sender channel is required for this variant since an RFC is only expected on the receiver side.

Generating the Configuration Objects

You use the steps below to generate the relevant configuration objects.

1. In the *Configuration Steps* bar, choose step 4 *Generate*. This calls the *Create Configuration Objects* dialog box.

2. Under *General*, select the *Generation* radio button.

3. Under *Scope of Generation*, select the checkboxes *Receiver Determination*, *Interface Determination*, and *Receiver Agreement*.

4. Under *Change List for Generated Objects*, select the *Create New* radio button. This means that the changes resulting from the generation are saved in a separate change list with the name of the scenario.

5. Choose *Start*.
   The objects are generated. The generation log is called.

The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

> If the generation log displays error situations, this may be because parts of the demo examples had been configured previously in your system, or because you have not configured the business scenarios in the specified sequence. In this case, the log contains information on why the generation was not successful. You must correct the problems manually.

Manual Editing

No manual editing is necessary.

Final Steps

Execute the following steps:

1. Close the generation log.

2. Close the business scenario configurator. The system displays the message *Do you want to keep the changes?* Confirm with *Apply*.

3. Save the scenario *XIDemo_CheckFlightSeatAvailability*.

4. Activate the scenario *XIDemo_CheckFlightSeatAvailability* and all objects that it uses.

> ⚠️
>
> Note that there are two change lists:
>
> - Standard change list (containing the scenario *XIDemo_CheckFlightSeatAvailability*)
>
> - Change list *XIDemo_CheckFlightSeatAvailability* (containing all objects of the scenario)
>
> You must activate both change lists.

6.1.4 Executing and Testing

There is a BSP application in the SAP system of the Integration Server (client *105*) that you can use to test the business scenario (for both configurations).

> 💡
>
> For more information about executing the business scenario, see the SAP Help Portal (`help.sap.com`) under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Overview → Demo Examples → Checking Flight Seat Availability → Checking Flight Seat Availability (Proxy-to-Proxy) → Executing the Business Scenario*.

6.2 Booking a Single Flight

> 💡
>
> This demo example is implemented as the business scenario *SingleFlightBooking*. The business scenario is located in the Integration Repository, in the software component *SAP BASIS*, software component version *SAP BASIS 6.40*, in the namespace *http://sap.com/xi/XI/Demo/Agency*.

The following configuration variants are supported for the business scenario:

- *Single Flight Booking (Proxy-to-Proxy Communication)* (see 6.2.2)

- *Single Flight Booking (Proxy-to-IDoc Communication)* (see 0)

6.2.1 Business Description (Brief)

A travel agency uses the *SingleFlightBooking* business scenario to book a flight with an airline. The booking refers to exactly one flight for exactly one passenger. The airline sends a response stating whether the booking was successful or not.
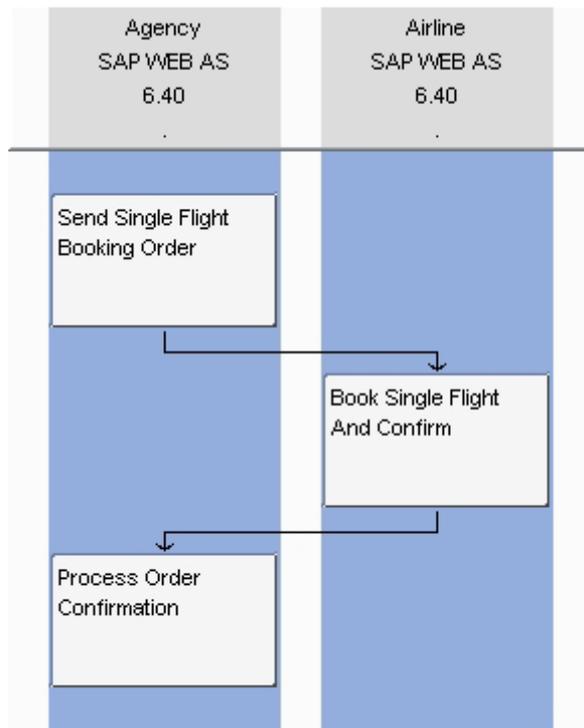
SAP Exchange Infrastructure, Business-Scenario-Editor

6.2.2 Booking a Single Flight (Proxy-to-Proxy Communication)

This section describes how to configure the *Single Flight Booking* business scenario in the *Proxy-to-Proxy Communication* variant. In this case, you configure the business systems of both airlines as receivers of proxies.

Selecting the Business Scenario (Component View) and Creating the Scenario

You use the steps below to do the following:

- Select the business scenario and the component view from the Integration Repository

- Create the scenario in the Integration Directory to group all the relevant configuration objects

1. To call the business scenario configurator, choose *Tools → Transfer Business Scenario from Integration Repository* in the Integration Builder (Integration Directory) menu bar. This calls a wizard, which you use to select a business scenario and create a scenario in the Integration Directory.

2. In the *Select Business Scenario from Integration Repository* dialog box, choose the input help (for the *Name* field). This calls an input help, which displays all business scenarios from the Integration Repository in a list.

3. Select the business scenario *SingleFlightBooking* (software component version *SAP Basis 6.40*, namespace *http://sap.com/xi/XI/Demo/Agency*), and choose *OK*.

4. In the wizard, choose *Continue*.

5. On the next screen, you edit the predefined name of the scenario. Change the name to *XIDemo_SingleFlightBooking*.

   Choose *Finish*.

   The system creates the scenario.

6. Choose *Close*.
   The system calls the business scenario configurator. The business scenario *SingleFlightBooking* is displayed in a graphical editor.

7. Check that the component view `ABAP_Proxy_2_ABAP_Proxy` is selected. If not, in the menu bar of the business scenario configurator, choose *Scenario Settings → Business Scenario from the Integration Repository → Select Component View*.

8. In the preview area of the graphical editor, select the component view `ABAP_Proxy_2_ABAP_Proxy` and choose *Apply*.

Assigning Services

You use the steps below to assign services to the application components of the business scenario.

1. In the *Configuration Steps* bar, choose step 2 *Assign Services*. This calls the *Assign Services* dialog box for the *Agency* application component.

2. In the *Assign Services* dialog box, on the *Service Assignment* tab page, insert a line ().

3. Click in the input field in the *Service* column and call the input help ().
   The system displays all services of type *Business System*.

4. Select the service *<SID>_105* and choose *Apply*.

5. In the *Assign Services* dialog box, click the navigation arrow () to switch to the application component *Airline*.

6. On the *Service Assignment* tab page, choose the input help () in the pushbutton bar.

7. On the *Select Business System Services* screen, select the services *<SID>_106* and *<SID>_107*.

8. Choose *OK*.

9. In the *Assign Services* dialog box, on the *Service Assignment* tab page, choose *Assign*.

Configuring the Connection

You use the steps below to configure the connections of the business scenario.

1. In the *Configuration Steps* bar, choose step 3 *Configure Connections*. This calls the *Configure Connection* dialog box for the connection between the actions *Send Single Flight Booking Order* and *Book Single Flight And Confirm*.

2. In the *Configure Connection* dialog box, check that the sender/receiver relations are activated (checkboxes).

3. To specify a receiver communication channel for the relation between sender service *<SID>_105* and receiver service *<SID>_106*, click in the input field in the *Communication Channel* column (for receiver service *<SID>_106*).

4. Call the input help ().

5. Select the communication channel *GeneratedReceiverChannel_XI* and choose *OK*.

6. In the same way, select the communication channel *GeneratedReceiverChannel_XI* (assigned to the receiver service *<SID>_107*) for the relation between the sender service *<SID>_105* and the receiver service *<SID>_107*.

7. Click the navigation arrow (➡️) to switch to the connection between the actions *Book Single Flight And Confirm* and *Process Order Confirmation*.

8. Check that the sender/receiver relations are activated (checkboxes).

9. To specify a receiver communication channel for the relation between sender service *<SID>_106* and receiver service *<SID>_105*, click in the input field in the *Communication Channel* column (for receiver service *<SID>_105*).

10. Call the input help (🔍).

11. Select the communication channel *GeneratedReceiverChannel_XI* and choose *OK*.

12. In the same way, select the communication channel *GeneratedReceiverChannel_XI* for the relation between sender service *<SID>_107* and receiver service *<SID>_105*.

13. In the *Configure Connection* dialog box, choose *Apply*.

Generating the Configuration Objects

You use the steps below to generate the relevant configuration objects.

1. In the *Configuration Steps* bar, choose step 4 *Generate*. This calls the *Create Configuration Objects* dialog box.

2. Under *General*, select the *Generation* radio button.

3. Under *Scope of Generation*, select the checkboxes *Receiver Determination*, *Interface Determination*, and *Receiver Agreement*.

4. Under *Change List for Generated Objects*, select the *Create New* radio button. This means that the changes resulting from the generation are saved in a separate change list with the name of the scenario.

⚠️

The scenario itself is saved in the standard change list.

5. Choose *Start*.
   The objects are generated. The generation log is called.

The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

💡

If the generation log displays error situations, this may be because parts of the demo examples had been configured previously in your system, or because you have not configured the business scenarios in the specified sequence. In this case, the log contains information on why the generation was not successful. You must correct the problems manually.

Manual Editing

You use the steps below to execute the necessary manual editing for the generated configuration objects.

To define exactly how a message is to be forwarded from the travel agency to the two airlines, you must add routing conditions to the receiver determination | `<SID>_105` | `BookingOrderRequest_Out`.

1. In the generation log, expand the *Connections* area.

2. Select the connection between the actions *Send Single Flight Booking Order* and *Book Single Flight And Confirm*.

3. Navigate to the receiver determination | `<SID>_105` | `BookingOrderRequest_Out`.

4. To open the receiver determination, click the key | `<SID>_105` | `BookingOrderRequest_Out`.
   The system opens the receiver determination.

5. To switch to change mode, choose the function *Switch Between Display and Edit Modes* (🖉) in the pushbutton bar of the *Display Receiver Determination* editor. In the *Configured Receivers* area, insert the conditions for forwarding messages to the two receiver services.

6. In the line containing the service *<SID>_106*, click in the input field in the *Condition* column and call the input help (❔). The system calls the condition editor.

7. In the condition editor, click in the input field in the *Left Operand* column and call the input help (❔). The system calls the expression editor.

8. In the expression editor, select the *Context Object* radio button.

9. In the dropdown list box, choose the context object *AirlineID*.

10. Choose *OK*.

11. In the condition editor, enter `LH` in the input field in the *Right Operand* column.

12. In the *Op.* column, choose the operator `=`.

13. Choose *OK*.
    You have specified the routing condition `AirlineID=LH` for the receiver *<SID>_106*.

14. In the same way, insert the condition `AirlineID=AA` for the receiver *<SID>_107*.

15. Save the receiver determination (💾).

> 💡
>
> The log also displays a yellow traffic light (for the receiver determination) for the other connections of the business scenario. However, no further manual editing is necessary in this case.

Final Steps

Execute the following steps:

1. Close the generation log.

   > 💡
   >
   > You can save the generation log as a file.

2. Close the business scenario configurator. The system displays the message *Do you want to keep the changes?* Confirm with *Apply*.

3. Save the scenario *XIDemo_SingleFlightBooking*.

4. Activate the scenario *XIDemo_SingleFlightBooking* and all objects that it uses.

⚠️

Note that there are two change lists:

- Standard change list (containing the scenario *XIDemo_SingleFlightBooking*)

- Change list *XIDemo_SingleFlightBooking* (containing all objects of the scenario)

You must activate both change lists.

6.2.3 Booking a Single Flight (Proxy-to-IDoc Communication)

This section describes how to configure the *Single Flight Booking* business scenario in the *Proxy-to-Proxy Communication* variant. In this case, you configure the business systems of both airlines as receivers of proxies.

In the variant *SingleFlightBooking (Proxy-to-IDoc Communication)*, you configure the business system of an airline as a receiver of IDocs.

💡

This demo example is implemented as the business scenario *SingleFlightBooking*. The business scenario is located in the Integration Repository, in the software component *SAP BASIS*, software component version *SAP BASIS 6.40*, in the namespace *http://sap.com/xi/XI/Demo/Agency*.

For a brief business description, see   .

⚠️

You must have performed the steps described in *Settings for IDoc Communication* (0) before you can configure this variant.

⚠️

It is a prerequisite that you configure the *Single Flight Booking (Proxy-to-Proxy Communication)* variant (6.2.2) and activate the corresponding objects before configuring this variant. The following instructions only apply in their entirety if this is the case.

💡

Note that in the following configuration steps you will make changes to parts of the configuration of the variant *SingleFlightBooking (proxy communication)*. Once you have completed the configuration of the variant *SingleFlightBooking (with IDoc)*, in the business scenario *SingleFlightBooking* the system of the airline American Airlines can only communicate with the Integration Server by using IDocs.

All configuration objects for this variant are saved in the same scenario as used for the proxy-to-proxy variants (XIDemo_SingleFlightBooking).

The *Single Flight Booking (Proxy-to-Proxy Communication)* variant (6.2.2) is configured so that both airlines communicate with the Integration Server by using proxies. In this variant, the existing configuration is changed so that the airline American Airlines communicates with the Integration Server by using IDocs. Therefore, all configuration data defining the proxy communication for American Airlines is overwritten.

First, delete the following interface determination:

| <SID>_105 | BookingORderRequest_Out | | <SID>_107 |

> If you delete the interface determination, the business scenario configurator creates a new interface determination (with the correct IDoc as the inbound interface). This saves you from having to change the existing interface determination manually.

6. In the Integration Builder (Integration Directory), select the *Scenarios* tab page.

7. Expand the scenario *XIDemo_SingleFlightBooking*.

8. Expand the *Interface Determination* node.

9. Delete the interface determination | <SID>_105 | BookingOrderRequest_Out | | <SID>_107. To do this, position the cursor on the interface determination and choose *Delete* (🗑) in the context menu.

10. Activate the change list containing the deleted interface determination (on the *Change Lists* tab page).

Selecting the Business Scenario (Component View)

You use the steps below to select the business scenario and the component view from the Integration Repository.

> Note that the following steps only configure the change to the variant *SingleFlightBooking*. Parts of the existing scenario *XIDemo_SingleFlightBooking* are overwritten in this process.

6. Open the scenario *XIDemo_SingleFlightBooking*.

7. Switch to change mode (✏️).

8. In the pushbutton bar of the object editor, choose *Business Scenario Configurator* (🌐).

9. In the *Configuration Steps* bar, choose step 1 *Select Component View*.

10. In the *Select Component View* dialog box, in the preview area of the graphical editor, select the component view ABAP_Proxy_2_IDoc and choose *Apply*.

Assigning Services

You use the steps below to assign services to the application components of the business scenario.

10. In the *Configuration Steps* bar, choose step 2 *Assign Services*. This calls the *Assign Services* dialog box for the *Agency* application component.

11. In the *Assign Services* dialog box, on the *Service Assignment* tab page, insert a line (➕).

12. Click in the input field in the *Service* column and call the input help (❓).
    The system displays all services of type *Business System*.

13. Select the service *<SID>_105* and choose *Apply*.

14. In the *Assign Services* dialog box, click the navigation arrow (➡️) to switch to the application component *Airline*.

15. On the *Service Assignment* tab page, insert a line (➕).

16. Click in the input field in the *Service* column and call the input help ().

17. Select the service *<SID>_107* and choose *OK*.

> In this variant, you are **only** configuring the communication between the travel agency (proxy) and American Airlines (IDoc). The communication between the travel agency (proxy) and Lufthansa (proxy) uses the configuration objects created for *SingleFlightBooking* (see 0).

18. Choose *Assign*.

Configuring the Connection

You use the steps below to configure the connections of the business scenario.

6. In the *Configuration Steps* bar, choose step 3 *Configure Connections*. This calls the *Configure Connection* dialog box for the connection between the actions *Send Single Flight Booking Order* and *Book Single Flight And Confirm*.

7. In the *Configure Connection* dialog box, check that the sender/receiver relation is activated (checkbox).

8. To specify a receiver communication channel for the relation between sender service *<SID>_105* (proxy) and receiver service *<SID>_107* (IDoc), click in the input field in the *Communication Channel* column (for receiver service *<SID>_107*).

9. Call the input help ().

10. Select the communication channel *GeneratedReceiverChannel_IDoc* and choose *OK*.

11. Click the navigation arrow () to switch to the connection between the actions *Book Single Flight And Confirm* and *Process Order Confirmation*.

12. Check that the sender/receiver relation is activated (checkbox).

13. To specify a receiver communication channel for the relation between sender service *<SID>_107* (IDoc) and receiver service *<SID>_105* (proxy), click in the input field in the *Communication Channel* column (for receiver service *<SID>_105*).

14. Call the input help (). The system displays all communication channels that are assigned to the service *<SID>_105*.

15. Select the communication channel *GeneratedReceiverChannel_XI* and choose *OK*.

16. In the *Configure Connection* dialog box, choose *Apply*.

Generating the Configuration Objects

You use the steps below to generate the relevant configuration objects.

6. In the *Configuration Steps* bar, choose step 4 *Generate*. This calls the *Create Configuration Objects* dialog box.

7. Under *General*, select the *Generation* radio button.

8. Under *Scope of Generation*, select the checkboxes *Receiver Determination*, *Interface Determination*, and *Receiver Agreement*.

9. Under *Change List for Generated Objects*, select the *Create New* radio button. This means that the changes resulting from the generation are saved in a separate change list with the name of the scenario.

10. Choose *Start*.
    The objects are generated. The generation log is called.

The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

> If the generation log displays error situations, this may be because parts of the demo examples had been configured previously in your system, or because you have not configured the business scenarios in the specified sequence. In this case, the log contains information on why the generation was not successful. You must correct the problems manually.

Manual Editing

No manual editing is necessary.

Final Steps

Execute the following steps:

1. Close the generation log.

2. Close the business scenario configurator. The system displays the message *Do you want to keep the changes?* Confirm with *Apply*.

3. Save the scenario *XIDemo_SingleFlightBooking*.

4. Activate the scenario *XIDemo_SingleFlightBooking* and all objects that it uses.

> Note that there are two change lists:
>
> - Standard change list (containing the scenario *XIDemo_SingleFlightBooking*)
>
> - Change list *XIDemo_SingleFlightBooking* (containing all objects of the scenario)
>
> You must activate both change lists.

6.2.4 Executing and Testing

There is a BSP application in the SAP system of the Integration Server (client *105*) that you can use to test the business scenario (for both configurations).

> For more information about executing the business scenario, see the SAP Help Portal (`help.sap.com`) under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Overview → Demo Examples → Booking a Single Flight → Booking a Single Flight (Proxy-to-Proxy) → Executing the Business Scenario.*

6.3 Booking Connecting Flights

> This demo example is implemented as the business scenario *MultipleFlightBooking.* The business scenario is located in the Integration

Repository, in the software component *SAP BASIS*, software component version *SAP BASIS 6.40*, in the namespace *http://sap.com/xi/XI/Demo/Agency*.

⚠️

It is a prerequisite that you configure both business scenarios *CheckFlightSeatAvailability* (0) and *SingleFlightBooking* (0) and activate the corresponding objects before configuring this variant. The following instructions only apply in their entirety if this is the case.

6.3.1 Business Description (Brief)

A travel agency uses the business scenario *MultipleFlightBooking* to book a flight and a connecting flight (for a passenger).

The travel agency requests flight bookings for both legs of the trip (flight and connecting flight) with the respective airlines. The two legs of the trip can be with different airlines. The booking of a flight and a connecting flight is only successful if both individual flights are booked successfully.

Therefore, it is necessary to coordinate the results of both flight bookings. This is done by an application between the travel agency and airline applications. Technically speaking, this coordinating application is an executable business process.
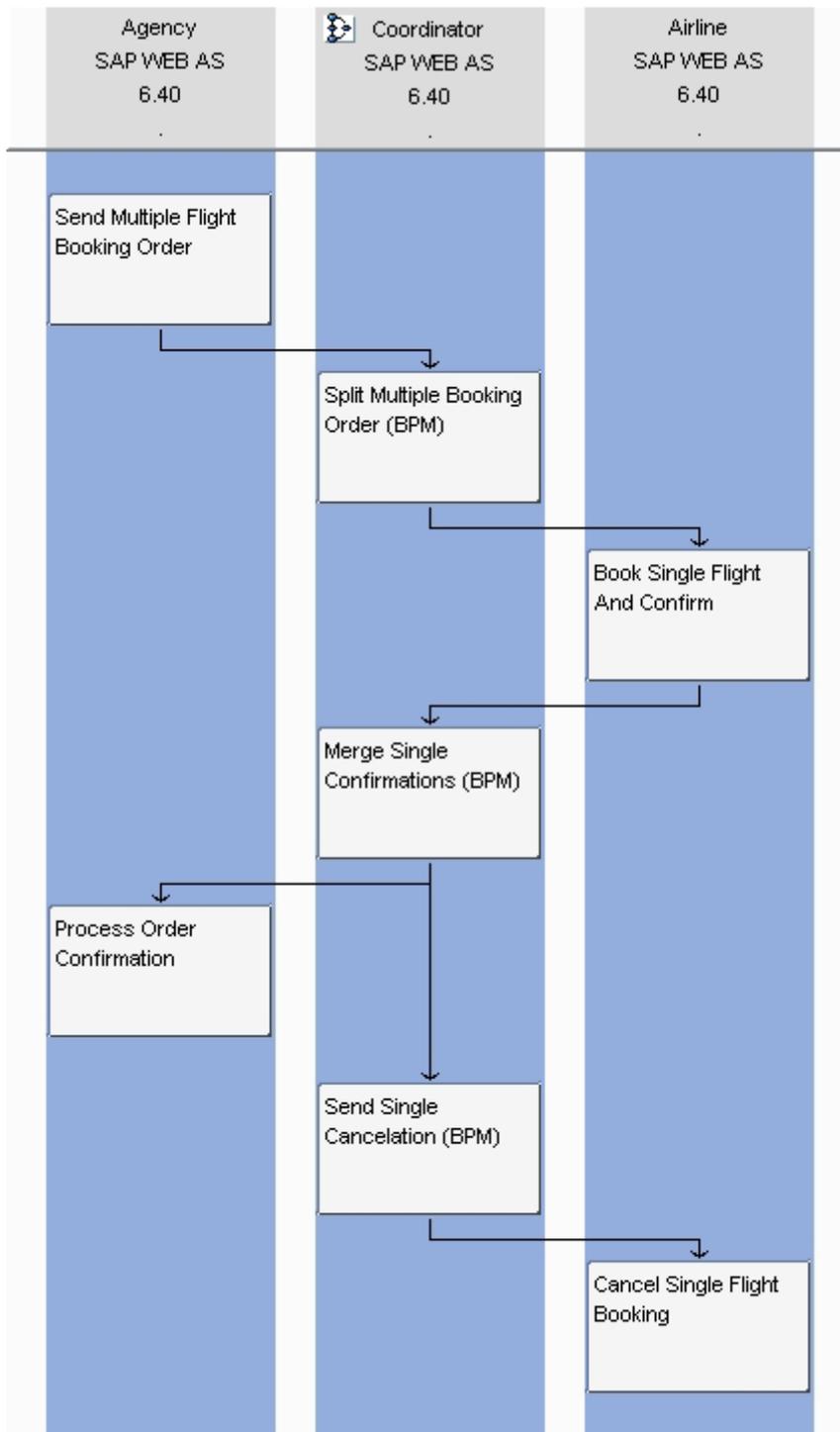
SAP Exchange Infrastructure, Business-Scenario-Editor

6.3.2 Booking a Connecting Flight (Proxy-to-Proxy Communication)

Defining the Business Process Service

The executable business process *MultipleFlightBookingCoordination* (with a separate application component) is integrated in the business scenario *MultipleFlightBooking*. To be able to address the business process as a sender or receiver of messages, you must create a service for the business process in the Integration Directory.

1. In the Integration Builder (Integration Directory), select the *Objects* tab page.

2. Expand the *Service Without Party* node.

3. Position the cursor on the *Business Process* node and choose *New…* (🗋) in the context menu.
   The system calls the wizard for creating a business process service.

4. Choose *Continue*.

5. The next screen displays all business processes from the Integration Repository in a list. Select the business process *MultipleFlightBookingCoordination* (software component version *SAP Basis 6.40*, namespace *http://sap.com/xi/XI/Demo/Agency*).

6. Choose *Continue*.

7. On the next screen, enter the following in the *Name* field:
   MultipleFlightBookingCoordinator.

8. Choose *Finish*.

9. Activate the change list containing the service *MultipleFlightBookingCoordinator*.

Selecting the Business Scenario (Component View) and Creating the Scenario

You use the steps below to do the following:

- Select the business scenario and the component view from the Integration Repository

- Create the scenario in the Integration Directory to group all the relevant configuration objects

1. To call the business scenario configurator, choose *Tools → Transfer Business Scenario from Integration Repository* in the Integration Builder (Integration Directory) menu bar. This calls a wizard, which you use to select a business scenario and create a scenario in the Integration Directory.

2. In the *Select Business Scenario from Integration Repository* dialog box, choose the input help (for the *Name* field). This calls an input help, which displays all business scenarios from the Integration Repository in a list.

3. Select the business scenario *MultipleFlightBooking* (software component version *SAP Basis 6.40*, namespace *http://sap.com/xi/XI/Demo/Agency*), and choose *OK*.

4. Im Assistenten wählen Sie *Continue*.

5. On the next screen, you edit the predefined name of the scenario. Change the name to *XIDemo_MultipleFlightBooking*.

   Choose *Finish*.

   The system creates the scenario.

6. Choose *Close*.
    The system calls the business scenario configurator. The business scenario
    MultipleFlightBooking is displayed in a graphical editor.

7. In the menu bar of the business scenario configurator, choose *Scenario Settings →
    Business Scenario from the Integration Repository → Select Component View*.

8. In the preview area of the graphical editor, select the component view
    `ABAP_Proxy_2_ABAP_Proxy` and choose *Apply*.

Assigning Services

You use the steps below to assign services to the application components of the business
scenario.

1. In the *Configuration Steps* bar, choose step 2 *Assign Services*. This calls the *Assign
    Services* dialog box for the *Agency* application component.

2. In the *Assign Services* dialog box, on the *Service Assignment* tab page, insert a line (⊞).

3. Click in the input field in the *Service* column and call the input help (❓).
    The system displays all services of type *Business System*.

4. Select the service *<SID>_105* and choose *Apply*.

5. In the *Assign Services* dialog box, click the navigation arrow (➡) to switch to the
    application component *Coordinator*.

6. On the *Service Assignment* tab page, choose the input help (❓).

    💡

    The input help icon (❓) is to the **right** of the *Party* and *Service* input fields.

7. In the *Select Business Process Service* dialog box, select the service
    MultipleFlightBookingCoordinator and choose *OK*.

    The service *MultipleFlightBookingCoordinator* is entered in the *Service* field.

8. In the *Assign Services* dialog box, click the navigation arrow (➡) to switch to the
    application component *Airline*.

9. Like in steps 2. – 4., assign the services *<SID>_106* and *<SID>_107* to the application
    component *Airline*.

10. Choose *Assign*.

Configuring the Connection

You use the steps below to configure the connections of the business scenario.

1. In the *Configuration Steps* bar, choose step 3 *Configure Connections*. This calls the
    Configure Connection dialog box for the connection between the actions *Send Multiple
    Flight Booking* and *Split Multiple Booking Order (BPM)*.

2. In the *Configure Connection* dialog box, check that the sender/receiver relation is
    activated (checkbox).

    💡

    It is not necessary to assign a receiver communication channel when a
    business process is the receiver of messages.

3. Click the navigation arrow (➡) to switch to the connection between the actions *Split Multiple Booking Order (BPM)* and *Book Single Flight And Confirm*.

4. Check that the sender/receiver relations are activated (checkboxes).

5. Assign the communication channel *GeneratedReceiverChannel_XI* (assigned to the receiver service *<SID>_106*) to the relation between the sender service *MultipleFlightBookingCoordinator* and the receiver service *<SID>_106*. To do this, call the input help (🔍) in the *Communication Channel* field.

6. In the same way, select the communication channel *GeneratedReceiverChannel_XI* (assigned to the receiver service *<SID>_107*) for the relation between the sender service *MultipleFlightBookingCoordinator* and the receiver service *<SID>_107*.

7. Click the navigation arrow (➡) to switch to the connection between the actions *Book Single Flight And Confirm* and *Merge Single Confirmations (BPM)*.

8. Check that the sender/receiver relations are activated (checkboxes).
   It is not necessary to assign a receiver communication channel for either relation (between sender service *<SID>_106* or *<SID>_107* and the receiver service *MultipleFlightBookingCoordinator)*.

9. Click the navigation arrow (➡) to switch to the connection between the actions *Merge Single Confirmations (BPM)* and *Process Order Confirmation*.

10. Check that the sender/receiver relation is activated (checkbox).

11. Assign the receiver communication channel *GeneratedReceiverChannel_XI* (assigned to the receiver service *<SID>_105*) to the relation between the sender service *MultipleFlightBookingCoordinator* and the receiver service *<SID>_105*.

12. Click the navigation arrow (➡) to switch to the connection between the actions *Send Single Cancellation (BPM)* and *Cancel Single Flight Booking*.

13. Check that the sender/receiver relations are activated (checkboxes).

14. Assign the receiver communication channel *GeneratedReceiverChannel_XI* (assigned to the receiver service *<SID>_106*) to the relation between the sender service *MultipleFlightBookingCoordinator* and the receiver service *<SID>_106*.

15. Assign the receiver communication channel *GeneratedReceiverChannel_XI* (assigned to the receiver service *<SID>_107*) to the relation between the sender service *MultipleFlightBookingCoordinator* and the receiver service *<SID>_107*.

16. In the *Configure Connection* dialog box, choose *Apply*.

Generating the Configuration Objects

You use the steps below to generate the relevant configuration objects.

1. In the *Configuration Steps* bar, choose step 4 *Generate*. This calls the *Create Configuration Objects* dialog box.

2. Under *General*, select the *Generation* radio button.

3. Under *Scope of Generation*, select the checkboxes *Receiver Determination*, *Interface Determination*, and *Receiver Agreement*.

4. Under *Change List for Generated Objects*, select the *Create New* radio button. This means that the changes resulting from the generation are saved in a separate change list with the name of the scenario.

⚠️

The scenario itself is saved in the standard change list.

5. Choose *Start*.
   The objects are generated. The generation log is called.

The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

> If the generation log displays error situations, this may be because parts of the demo examples had been configured previously in your system, or because you have not configured the business scenarios in the specified sequence. In this case, the log contains information on why the generation was not successful. You must correct the problems manually.

Manual Editing

You use the steps below to execute the necessary manual editing for the generated configuration objects.

To define exactly how a message is to be forwarded from the executable business process to the two airlines, you must add routing conditions to the following two receiver determinations.

- | MultipleFlightBookingCoordinator | FlightBookingOrderCancelationRequest_Abstract

- | MultipleFlightBookingCoordinator | FlightBookingOrderRequest_Abstract

Insert the following routing conditions in the two receiver determinations respectively. Use the context object *AirlineID*:

- (AirlineID=LH) for receiver *<SID>_106*

- (AirlineID=AA) for receiver *<SID>_107*

> For detailed information about the procedure for editing the receiver determinations, see 0 (in the business scenario *CheckFlightSeatAvailability*).

To define whether the message from the airline systems is forwarded to the executable business process (business scenario *MultipleFlightBooking*) or to the travel agency system (business scenario *SingleFlightBooking*), you must add conditions to the following two receiver determinations:

- | <SID>_106 | FlightBookingOrderConfirmation_Out

- | <SID>_107 | FlightBookingOrderConfirmation_Out

> The airlines use the same receiver determination for both variants *SingleFlightBooking* and *MultipleFlightBooking*. This differentiation is necessary in routing to enable both scenarios to be used simultaneously.

The forwarding of the message depends on whether you are booking a single flight or a flight and a connecting flight. This is defined by the booking type (OrderType).

- If `OrderType=Single`, the booking is for a single flight.

- If `OrderType=Multiple`, the booking is for a flight and a connecting flight.

Add the following routing conditions to the two receiver determinations. Use the context object *OrderType*:

- `(OrderType=Multiple)` for receiver MultipleFlightBookingCoordinator

- `(OrderType=Single)` for receiver <SID>_105

Save the receiver determinations.

Final Steps

1. Close the generation log.

   You can save the generation log as a file.

2. Close the business scenario configurator. The system displays the message *Do you want to keep the changes?* Confirm with *Apply*.

3. Save the scenario *XIDemo_MultipleFlightBooking*.

4. Activate the scenario *XIDemo_MultipleFlightBooking* and all objects that it uses.

   Note that there are two change lists:

   - Standard change list (containing the scenario *XIDemo_MultipleFlightBooking*)

   - Change list *XIDemo_MultipleFlightBooking* (containing all objects of the scenario)

   You must activate both change lists.

6.3.3 Executing and Testing

There is a BSP application in the SAP system of the Integration Server (client *105*) that you can use to test the business scenario.

   For more information about executing the business scenario, see the SAP Help Portal (`help.sap.com`) under *SAP NetWeaver → Process Integration → SAP Exchange Infrastructure → Overview → Demo Examples → Booking Connecting Flights → Booking Connecting Flights (Proxy-to-Proxy) → Executing the Business Scenario*.

6.4 Distributing Booking Order Data

   This demo example is implemented as the business scenario *DistributeBookingOrderInformation*. The business scenario is located in the Integration Repository, in the software component *SAP BASIS*, software component version *SAP BASIS 6.40*, in the namespace *http://sap.com/xi/XI/Demo/Agency*.

   You must have performed the steps described in *Settings for Communicating with a File System* (0) before you can configure this variant.

This section describes how to configure the *Distribute Booking Order Data* business scenario in the *Proxy-to-File System-Communication* variant. You configure two file stores as the

receivers of the messages for this purpose. The received messages are stored in XML format in the one file store, and in CSV (Comma Separated Values) format in the other file store.

In the Integration Repository, two component views are defined in the *DistributeBookingOrderInformation* business scenario for this purpose:

- Component view *ABAP_Proxy_2_File_XML* describes how data about flight booking orders is received in XML format.

- Component view *ABAP_Proxy_2_File_CSV* describes how data about flight booking orders is received in CSV format.

Using the instructions below, configure both component views in turn. At runtime, the data about flight booking orders sent from the travel agency to the file system is written to one file in XML format and another file in CSV format simultaneously (message splitting).

6.4.1 Business Description (Brief)

A travel agency uses the business scenario *DistributeBookingOrderInformation* to send data about flight booking orders to subscribed receivers (publish and subscribe).

A possible receiver is a travel agency file system. The travel agency performs statistical evaluations of its flight booking orders using a spreadsheet program (for example, Microsoft Excel).
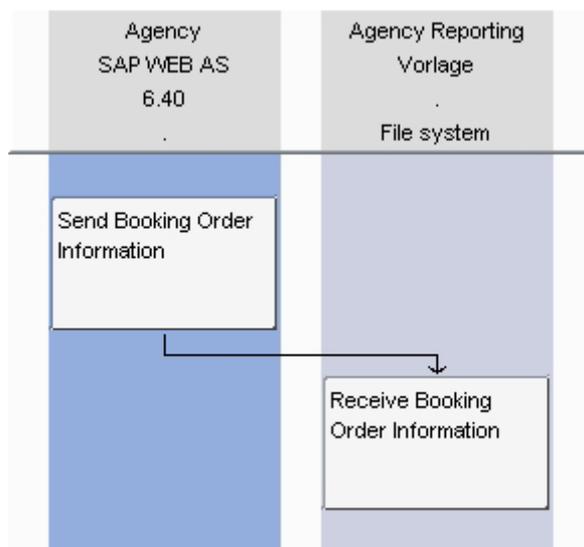
SAP Exchange Infrastructure, Business Scenario Editor

6.4.2 Preliminary Steps

Before you can begin configuring the business scenario, you must first perform the following steps for the configuration of the *Distributing Booking Order Data (Proxy-to-File System)* variant (6.4.2).

- Create a file directory on the Integration Server

- System Landscape Directory: Define a technical system for the file directory

- System Landscape Directory: Define a second business system for the file directory

- Integration Directory: Define the business system services for the file system

Creating a File Directory

You require a file directory on the Integration Server host where you can save the documents received.

> In an actual customer installation, the two file stores are probably replaced by two directories. SAP recommends that you instead only use one physical directory so you can compare the XML and CSV files with each other easier.

For this purpose, create the `XIDemo` directory at the appropriate position in the file directory of the host.

> A `work` directory already exists on many computers that can be used for this purpose and under which you can create the `XIDemo` directory.

> You must have authorization to access this directory to be able to test the business scenario. Bear this in mind when you define the directory, and, if applicable, contact your system administrator.

System Landscape Directory: Definition eines technischen Systems für das Dateiverzeichnis

To define a technical system for the target directory in the System Landscape Directory, proceed as follows:

1. Log on to the System Landscape Directory (see 0).

2. Choose *Technical Landscape*.

3. Choose *New Technical System.*

4. In the *Technical System Wizard - Technical System Type* dialog, select the *Standalone Java* radio button.

    > The file system is not an application system; therefore, select this option.

5. Choose *Next*.

6. In the *Technical System Wizard - System Details* dialog, enter the following: Field *Technical System Identification*: `<SID>_FileSystem`, Field *System Host Name*: `<Host Name of Integration Server>` (for example, `pwdf00001`).

    > You can determine the host name from the list of technical systems in the System Landscape Directory (*Technical System Browser* dialog). The naming convention for technical systems of type *Web AS ABAP* is: `<SID> on <Host-Name>`. To determine the host name of the Integration Server, search for the technical systems with the system ID (`<SID>`) of the Integration Server.

7. Choose *Finish*.

System Landscape Directory: Define a second business system for the file directory

In the *Distributing Booking Order Data (Proxy-to-File System)* variant (6.4.2), the data can be received in two ways on the database: in XML format and in Comma Separated Value (CSV) format.

In the following steps you define:

- A business system for the file system to receive the data in XML format
- A business system for the file system to receive the data in CSV format

1. On the initial screen of the System Landscape Directory, choose *Business Landscape*.

2. Choose *New Business System*.

3. On the *Business System Wizard – Details* screen, enter the following name for the business system: `<SID>_FileSystem_XML`.

4. Choose *Next*.

5. On the *Business System Wizard - Technical System Type* screen, select the system type *Standalone Java* with the corresponding radio button.

6. Choose *Next*.

7. On the *Business System Wizard - Select System* screen, enter the technical system that you defined previously (0). In the dropdown list box for the *System* field, select the name of the technical system. The name of the technical system is `<SID>_FileSystem` on `<Host Name of Integration Server>`.
   You do not need to specify the logical system.

8. Choose *Next*.

9. In the *Business System Wizard - Integration Server* dialog, specify the assigned Integration Server. Select the entry: `<SID> on <Server Name>`.

10. Choose *Finish*.

11. Following the same procedure, define a business system with the name `<SID>_FileSystem_CSV`.

Integration Directory: Define the business system services for the file system

To define services in the Integration Directory for the business systems created in 7, proceed as follows:

1. In the Integration Builder (Integration Directory), select the *Objects* tab page.

2. Expand the *Service Without Party* node.

3. Position the cursor on the *Business System* node and choose *New…* ( ) in the context menu.
   The system calls the wizard for creating a business system service.

4. Choose *Assign Business System*.

5. In the business system wizard, choose *Continue*.

6. In the *Assign Partner* step, choose *Continue*.

7. In the *Select Business Systems* step, select the business systems `<SID>_FileSystem_XML` and `<SID>_FileSystem_CSV` by using the check boxes.

8. Deselect the *Create Communication Channels Automatically* check box.

10. Choose *Finish*.

9. Activate the change list containing the services `<SID>_FileSystem_XML` and `<SID>_FileSystem_CSV`.

6.4.3 Distributing Booking Order Data (Proxy-to-File System for XML File)

This section describes how to configure the *Distributing Booking Order Data* business scenario to receive files in XML format.

Selecting the Business Scenario (Component View)

You use the steps below to do the following:

- Select the business scenario from the Integration Repository

- Create the scenario in the Integration Directory to group all the relevant configuration objects

1. To call the business scenario configurator, choose *Tools → Transfer Business Scenario from Integration Repository* (🌐) in the Integration Builder (Integration Directory) menu bar.
   This calls a wizard, which you use to select a business scenario and create a scenario in the Integration Directory.

2. In the *Select Business Scenario from Integration Repository* dialog box, choose the input help (for the *Name* field). This calls an input help, which displays all business scenarios from the Integration Repository in a list.

3. Select the business scenario *DistributeBookingOrderInformation* (software component version *SAP Basis 6.40*, namespace *http://sap.com/xi/XI/Demo/Agency*), and choose *OK*.

4. In the wizard, choose *Continue*.

5. On the next screen, you edit the predefined name of the scenario. Change the name to *XIDemo_DistributeBookingOrderInformation*.

6. Choose *Finish*.
   The system creates the scenario.

7. Choose *Close*.
   The system calls the business scenario configurator. The business scenario *DistributeBookingOrderInformation* is displayed in a graphical editor.

8. In the *Configuration Steps* bar, choose step 1 *Select Component View*.

9. In the *Select Component View* dialog box, in the preview area of the graphical editor, select the component view `ABAP_Proxy_2_XML` and choose *Apply*.

Assigning Services

You use the steps below to assign services to the application components of the business scenario.

1. In the *Configuration Steps* bar, choose step 2 *Assign Services*. This calls the *Assign Services* dialog box for the *Agency* application component.

2. In the *Assign Services* dialog box, on the *Service Assignment* tab page, insert a line (📇).

3. Click in the input field in the *Service* column and call the input help (❓).
   The system displays all services of type *Business System*.

4. Select the service *<SID>_105* and choose *Apply*.

5. In the *Assign Services* dialog box, click the navigation arrow (➡️) to switch to the application component of the file system.

6. On the *Service Assignment* tab page, insert a line (🖼️).

7. Click in the input field in the *Service* column and call the input help (❓).

8. Select the *<SID>_FileSystem_XML* service and choose *Apply*.

9. Choose *Assign*.

Configuring the Connection

You use the steps below to configure the connections of the business scenario.

1. In the *Configuration Steps* bar, choose step 3 *Configure Connections*. This calls the *Configure Connection* dialog box for the connection between the actions *Send Booking Order Information* and *Receive Booking Order Information*.

2. In the *Configure Connection* dialog box, check that the sender/receiver relation is activated (checkbox).

3. To specify a receiver communication channel for the relation between sender service *<SID>_105* (proxy) and receiver service *<SID>_FileSystem_XML*, position the cursor on the input field in the *Communication Channel* column (for receiver service *<SID>_FileSystem_XML*).

4. Call the context menu and choose *Create Communication Channel* (🖼️) → *Create Communication Channel with Template*.
    A wizard for creating a communication channel on the basis of a communication channel template is started.

5. Choose *Continue*.

6. In the *Select Template* step, select the `XIDemoChannel_FileXML` communication channel template (software component version `SAP BASIS 6.40`, namespace `http://sap.com/xi/XI/Demo`).

7. Choose *Continue*.

8. In the *Create New Communication Channel* step, confirm all entries by clicking *Finish*.
    The system creates a communication channel with the name `XIDemoChannel_FileXML`.

9. In the *Configure Connection* dialog box, choose *Apply*.

Generating the Configuration Objects

You use the steps below to generate the relevant configuration objects.

1. In the *Configuration Steps* bar, choose step 4 *Generate*. This calls the *Create Configuration Objects* dialog box.

2. Under *General*, select the *Generation* radio button.

3. Under *Scope of Generation*, select the checkboxes *Receiver Determination*, *Interface Determination*, and *Receiver Agreement*.

4. Under *Change List for Generated Objects*, select the *Create New* radio button. This means that the changes resulting from the generation are saved in a separate change list with the name of the scenario.

5. Choose *Start*.
    The objects are generated. The generation log is called.

The generation log contains an overview of all information relating to the generation and indicates if any manual editing is necessary for the generated objects.

> If the generation log displays error situations, this may be because parts of the demo examples had been configured previously in your system, or because you have not configured the business scenarios in the specified sequence. In this case, the log contains information on why the generation was not successful. You must correct the problems manually.

Manual Editing

You still have to define the `XIDemoChannel_FileXML` communication channel.

You use the steps below to execute the necessary manual editing for the generated configuration objects.

1. In the generation log, expand the *Connections* area.

2. Navigate to the receiver agreement |`<SID>_105`| |`<SID>_FileSystem_XML` | `BookingOrderDataInformation_Ext`.

> The yellow traffic light symbol signifies that manual editing may be necessary for this object.

3. To open the receiver agreement, click the key | `<SID>_105` | `<SID>_FileSystem_XML` | `BookingOrderDataInformation_Ext`.
    The receiver agreement is opened.

4. In the *Receiver Communication Channel* field, click the `XIDemoChannel_FileXML` entry. The `XIDemoChannel_FileXML` communication channel is opened.

5. To switch to change mode, choose the function *Switch Between Display and Edit Modes* (🖉) in the pushbutton bar of the *Display Communication Channel* editor.

6. Make the following entries:

    -   Field *Adapter Engine*: `Integration Server`

    -   Field *Target Directory*: Enter the directory defined in 6.4.2 in this field.

> In UNIX systems, it is possible that the default relative path in the communication channel already points to your directory. However, in Windows systems you must always specify an absolute path.

Final Steps

Execute the following steps:

1. Close the generation log.

2. Close the business scenario configurator.

3. Save the *XIDemo_DistributeBookingOrderInformation* business scenario.

6.4.4 Distributing Booking Order Data (Proxy-to-File System for CSV File)

This section describes how to configure the *Distributing Booking Order Data* business scenario to receive files in CSV format.

Note that you must also configure the second component View (*ABAP_Proxy_2_File_CSV*).

To configure this component view, perform the following steps:

1. In the object editor of the *XIDemo_DistributeBookingOrderInformation* business scenario, choose *Business Scenario Configurator* (🌐) from the toolbar.

2. In the *Configuration Steps* bar, choose step 1 *Select Component View*.

3. In the *Select Component View* dialog box, in the preview area of the graphical editor, select the component view `ABAP_Proxy_2_File_CSV` and choose *Apply*.

4. Following the same procedure as for the first component view, now configure the second component view (starting with *Assigning the Services*).

For the following, proceed as described in 9.

Note the following differences:

- When assigning the services, assign the service `<SID>_FileSystem_CSV` to the application component of the file system.

- When configuring the connection, select the `XIDemoChannel_FileCSV` communication channel template (software component version *SAP BASIS 6.40*, namespace *http://sap.com/xi/XI/Demo/Agency*). Use this template to then create the `XIDemoChannel_FileCSV` communication channel.

- During manual editing, make the **same** additional entries in the `XIDemoChannel_FileCSV` communication channel as in the `XIDemoChannel_FileXML` communication channel.

Final Steps

Execute the following steps:

1. Close the generation log.

2. Close the business scenario configurator.

3. Save the *XIDemo_DistributeBookingOrderInformation* business scenario.

4. Activate the scenario *XIDemo_DistributeBookingOrderInformation* and all objects that it uses.

> ⚠️
>
> Note that there are two change lists:
>
> - Standard change list (containing the scenario *XIDemo_DistributeBookingOrderInformation*)
>
> - Change list *XIDemo_DistributeBookingOrderInformation* (containing all objects of the scenario)
>
> You must activate both change lists.

> ⚠️
>
> Note that you save the configurations of **both** component views
> (*ABAP_Proxy_2_File_XML* and *ABAP_Proxy_2_File_CSV*) in scenario
> *XIDemo_DistributeBookingOrderInformation*.

6.4.5 Executing and Testing

There is a BSP application in the SAP system of the Integration Server (client *105*) that you can use to test the business scenario.

> 💡
>
> For more information about executing the business scenario, see the SAP Help
> Portal (`help.sap.com`) under *SAP NetWeaver → Process Integration → SAP
> Exchange Infrastructure → Overview → Demo Examples → Distributing
> Booking Order Data → Distributing Booking Order Data (Proxy-to-File System)
> → Executing the Business Scenario*.