



Configuring SAP R/3 for the SAP BAPI Adapter



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Configuring SAP R/3 for the SAP BAPI Adapter

The following sections provide instructions on how to configure the SAP BAPI Adapter to interact successfully with SAP R/3. If you have any questions or problems, see the Java CAPS web site at <http://goldstar.stc.com/support>.

This Section covers the following topic:

- “Configuring SAP R/3 for the SAP BAPI Adapter” on page 5

Configuring SAP R/3 for the SAP BAPI Adapter

For the SAP BAPI Adapter to interact successfully with SAP R/3, you must configure the SAP R/3 application as described in this section.

The SAP R/3 screen captures in this section correspond to SAP GUI version 6.2, and SAP R/3 version 4.7. They are included to illustrate the general nature of the procedures, and contain only example values. Refer to the documentation supplied with your SAP R/3 system to determine the exact procedures.

Creating the RFC Destination for the Adapter

For the SAP BAPI Adapter to receive communications from SAP R/3, you must set the Adapter up as an RFC destination in SAP R/3 as described below.

▼ To create the RFC destination for the Adapter

- 1 In the SAP R/3 window, click the forward arrow to display the navigation box if necessary.
- 2 Type SM59 into the text field and press ENTER.

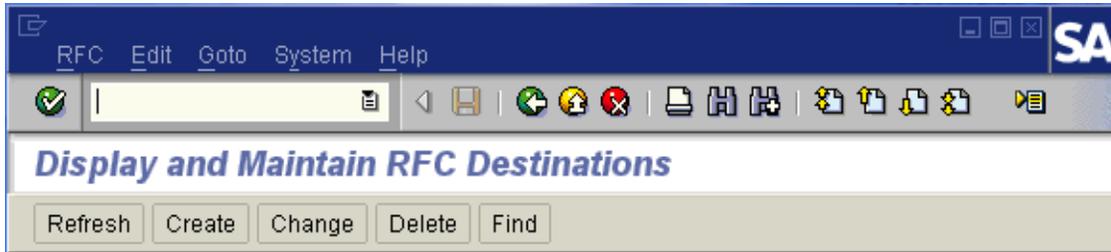


FIGURE 1-1 Navigating to the SM59 Transaction

This displays the **RFC Destination Maintenance** window.

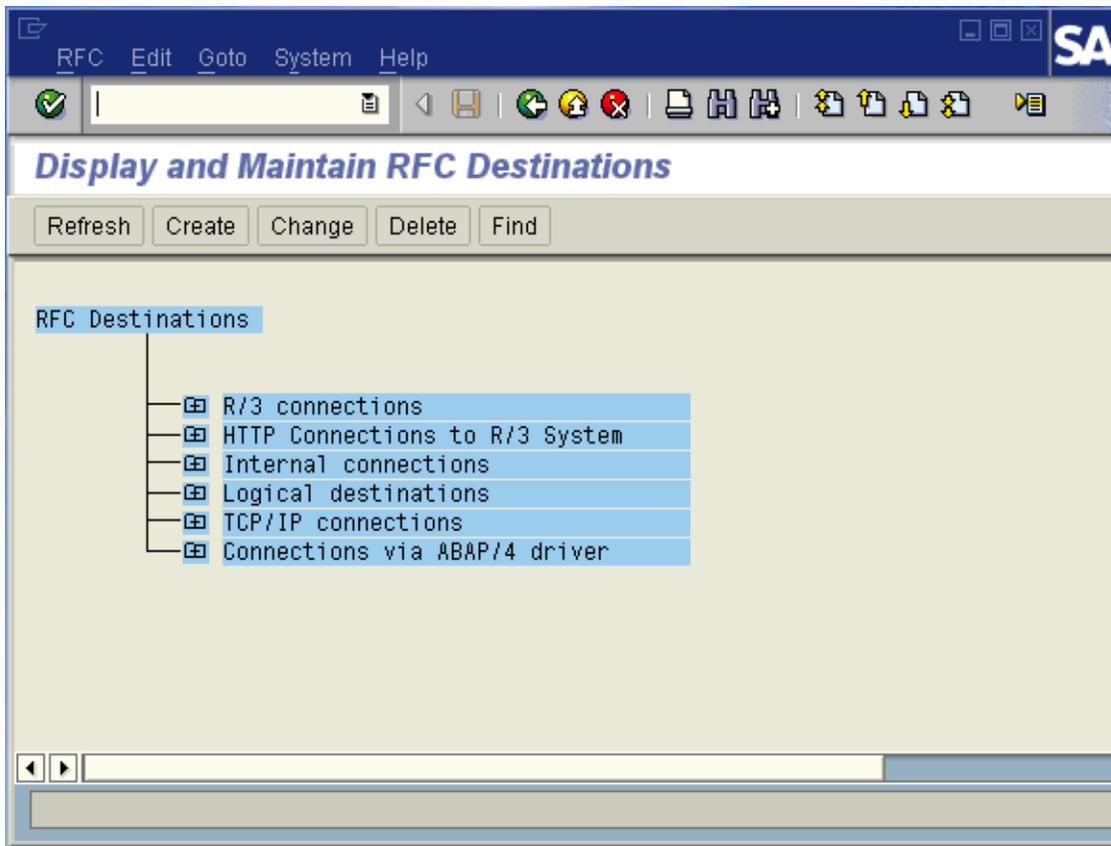


FIGURE 1-2 RFC Destination Maintenance Window

- 3 Click TCP/IP connections and Create to display the RFC Destination entry window.**

RFC Destination

Test connection

RFC Destination

Connection Type

Description

Description 1

Description 2

Description 3

Technical Settings Logon/Security Special Options

Gateway Options

Gateway host

Gateway service

Delete

Attributes

Created by Client Created on

Last changed by Client Changed on

- 4 Type in the name of the RFC Destination (use a Logical System name refer to Name the Logical System), an accompanying Description, and enter <T> for the Connection Type (TCP/IP).**

RFC Destination

Test connection

RFC Destination: RFCDEST

Connection Type: T New Entry

Description

Description 1: RFC Desination Name

Description 2:

Description 3:

Technical Settings | Logon/Security | Special Options

Gateway Options

Gateway host:

Gateway service:

Delete

Attributes

Created by: Client: Created on:

Last changed by: Client: Changed on:

- 5 Click **Save** to display the RFC Destination window corresponding to your entry.
- 6 Select the **Registered as Server Program** option.
- 7 Enter the **Program ID** and click **Save**.

This program ID must be exactly the same as that specified in the Adapter **Program ID** property. This value is case sensitive. For more information, refer to the *Inbound Server Connection Settings*.

Destination System information Test System Help

RFC Destination RFCDEST

Test connection Unicode Test

RFC Destination

Connection Type

Description

Description 1

Description 2

Description 3

Technical Settings Logon/Security Special Options

Activation Type

Start on Application Server Registered Server Program

Start on Explicit Host

Start on Front End Work Station

Registered Server Program

Program ID

Gateway Options

Gateway host

Gateway service

Delete

Attributes

Created by	<input type="text" value="PS1"/>	Client	<input type="text" value="000"/>	Created on	<input type="text" value="23.12.2005"/>
Last changed by	<input type="text" value="PS1"/>	Client	<input type="text" value="000"/>	Changed on	<input type="text" value="23.12.2005"/>

- 8 Click **Test Connection**, which tests the connection for logon speed and message transfer speed. When the inbound Project is deployed and running, the results are displayed in a table; otherwise, return code 3 is displayed.

Connection test STCDGW	
Connection type:	TCP/IP connection
Logon:	255 msec
0 KB:	496 msec
10 KB:	491 msec
20 KB:	504 msec
30 KB:	505 msec

FIGURE 1-6 Connection Test Results

Configuration Needed in SAP R/3 to Send and Receive IDocs

For the SAP BAPI Adapter to interact successfully with the SAP R/3 system, you must configure the SAP R/3 system as described in this chapter.

The SAP R/3 screen captures in this chapter correspond to SAP GUI version 6.2, and SAP R/3 version 4.0. They are included to illustrate the general nature of the procedures, and contain only example values. Refer to the documentation supplied with your SAP R/3 system to determine the exact procedures.

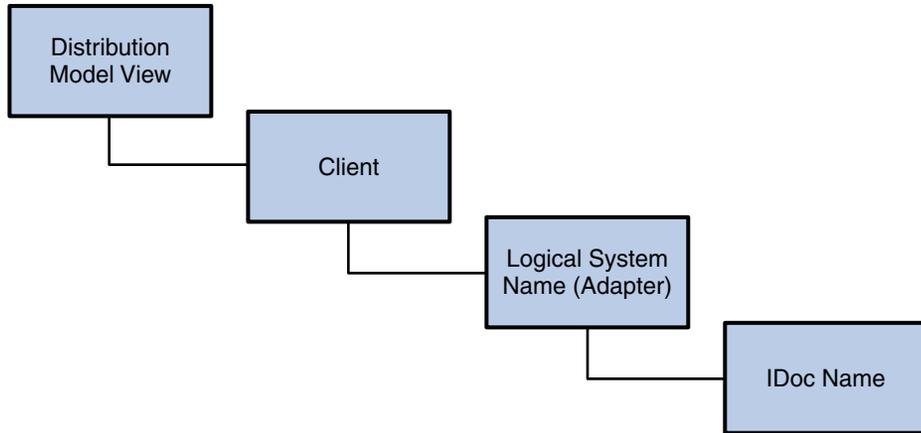


FIGURE 1-7 Distribution Model Hierarchy

Following this high-level setup, you need to define Communications parameters in SAP R/3 to specify the correct routing of IDocs (either inbound to or outbound from SAP R/3). The hierarchy of this Communication system is shown in the following figure.

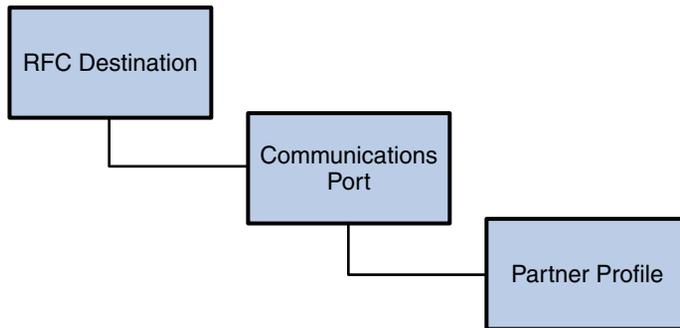


FIGURE 1-8 Communications Hierarchy

The RFC Destination defines the entity to which Remote Function Calls (RFCs) can be made; it is the same as the Logical System in the Distribution Model. The Communications Port defines a channel for communication of IDocs. The Partner Profile acts as an identifier for the eGate system, and provides a communications gateway by incorporating elements of the ALE interface.

Configuring the Distribution Model

You need to complete the following in SAP R/3 to run a RFC BAPI inbound.

- “To Name the Logical System” on page 15
- “To Specify the Distribution Model” on page 18

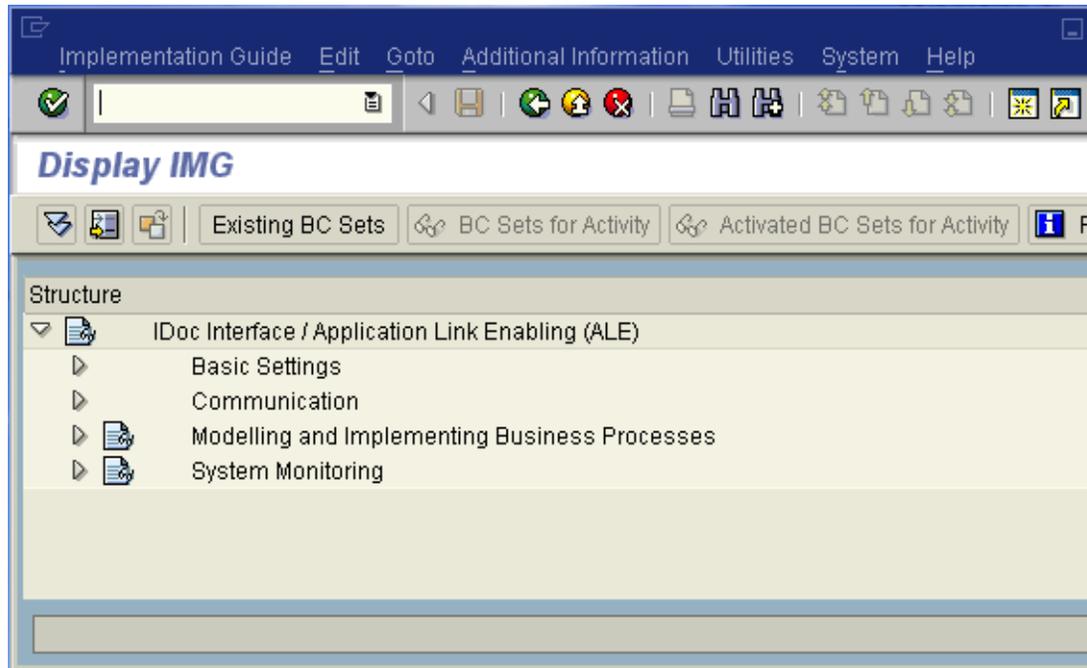
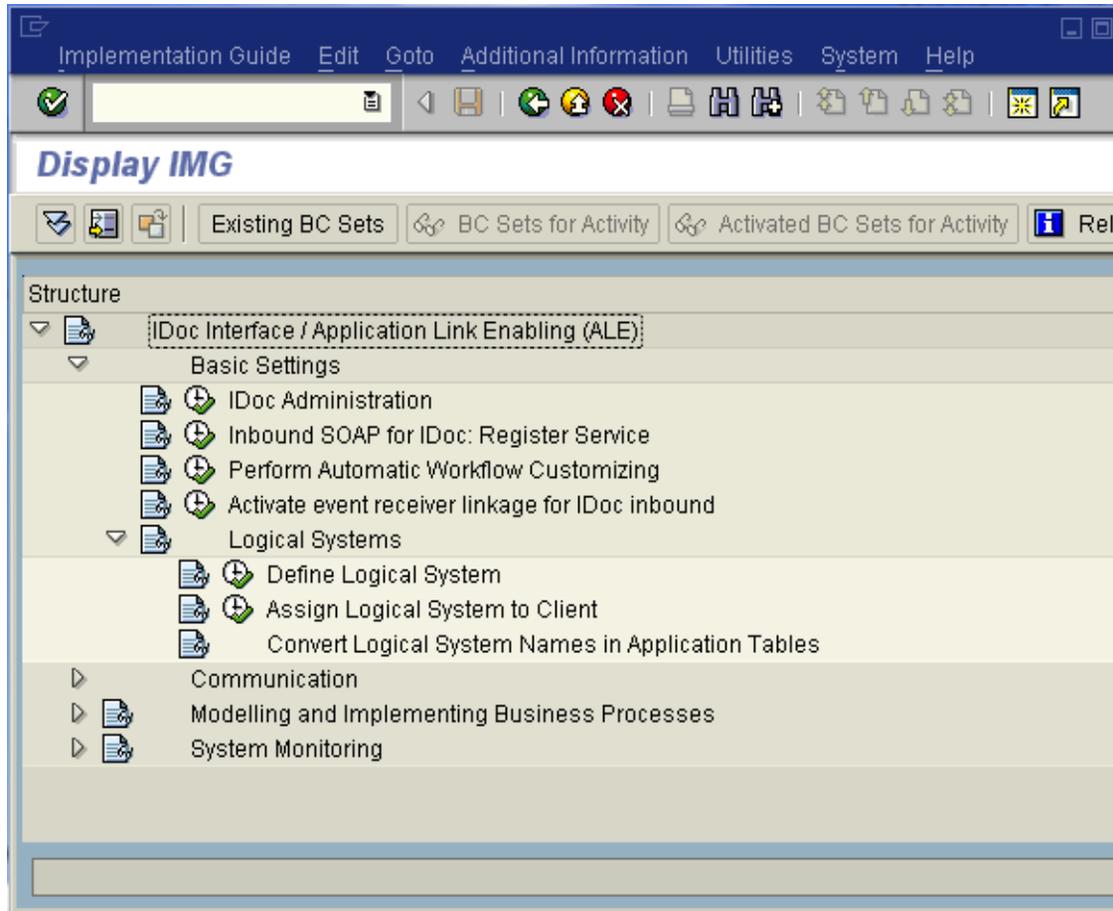


FIGURE 1-9 SAP R/3 System Window

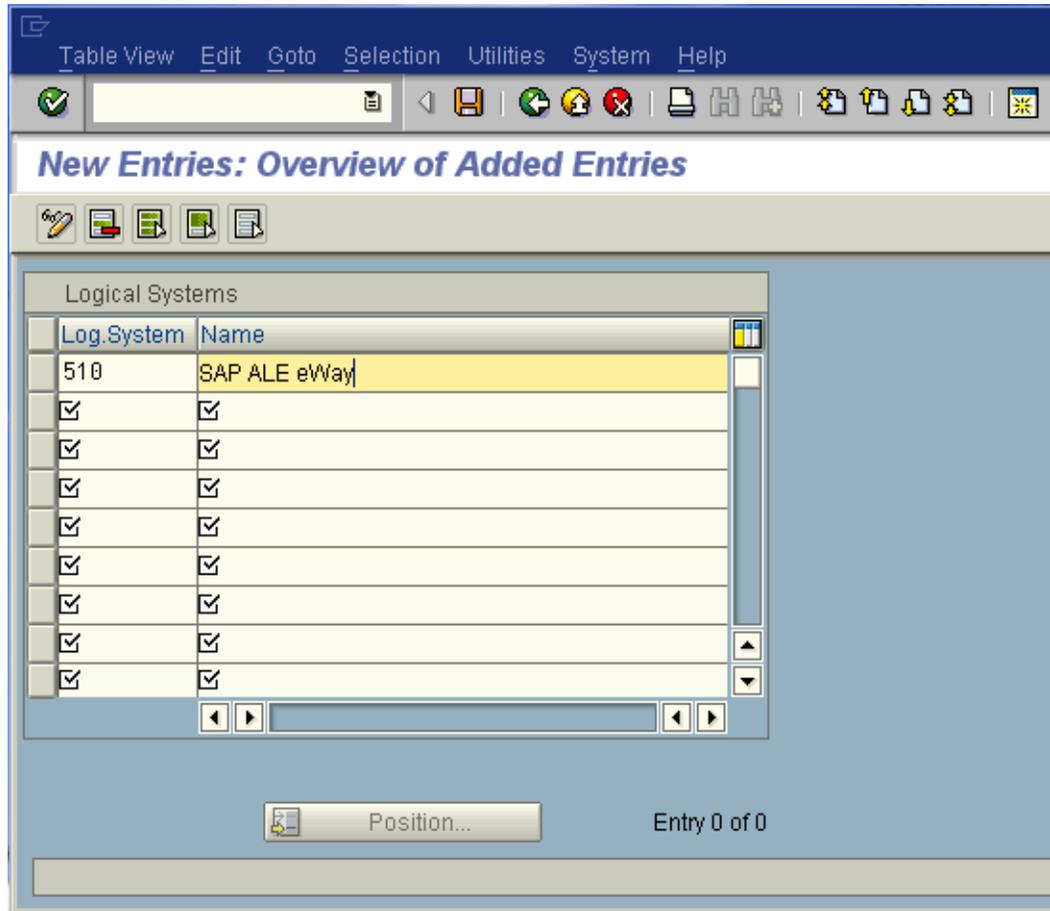
▼ To Name the Logical System

Transaction: SALE

- 1 In the SAP R/3 System home window (shown above), type SALE into the command field and click Enter to display the Distribution (ALE) Structure window.



- 2 Expand the tree to display IDoc Interface / Application Link Enabling (ALE) > Basic Settings > Logical Systems > Define Logical System.
- 3 Click the Activity button to select Define Logical System. This displays the Logical Systems Overview window.
- 4 Click the New entries button to display the New Entries window.
- 5 Enter the logical name for your SAP Adapter using capital letters and a brief descriptive name.



- Click Save. The Change Request Entry window appears.



- Click the Create request button, to display the Create Request window.

- 8 Enter a short description (e.g., Adapter Test) and click Save. The Change Request entry window appears.
- 9 Click Enter to add the new data into the system. You are now returned to the Logical Systems Overview window, and the new Logical System appears in the list.
- 10 Click Save and select the Back button repeatedly until the SAP R/3 System window appears

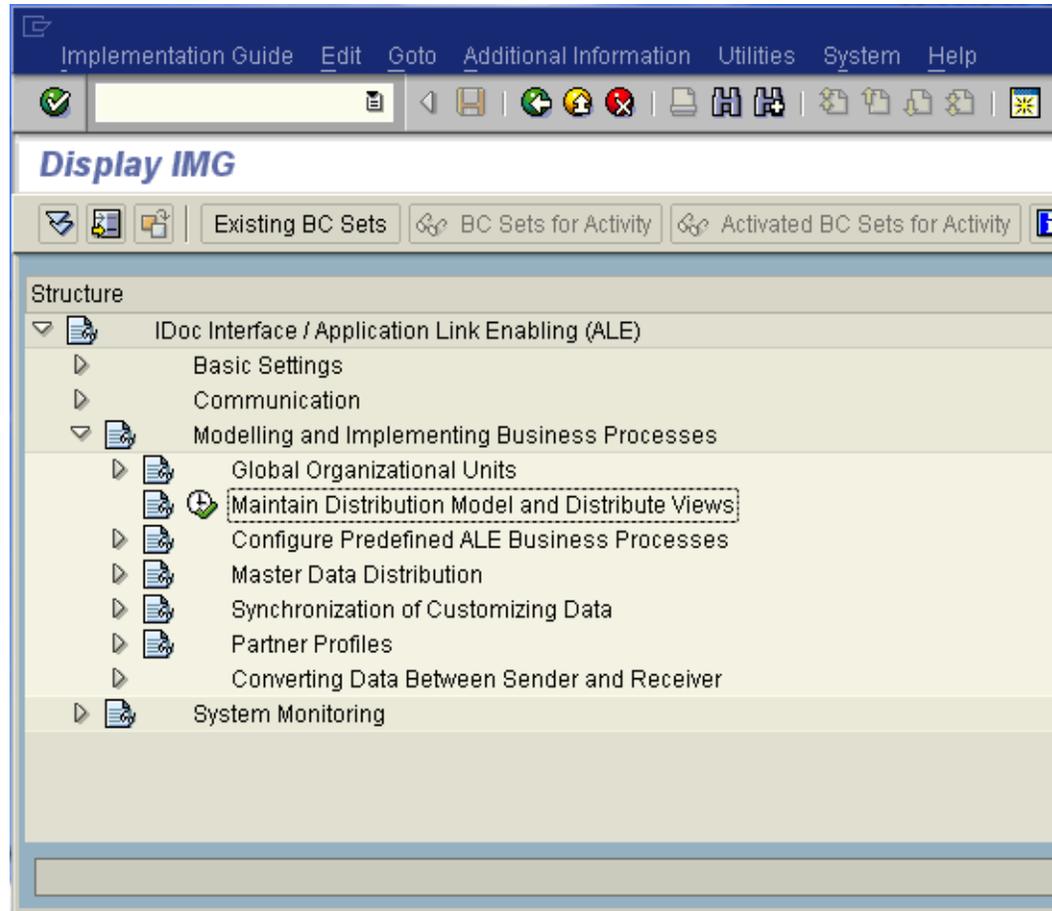
▼ To Specify the Distribution Model



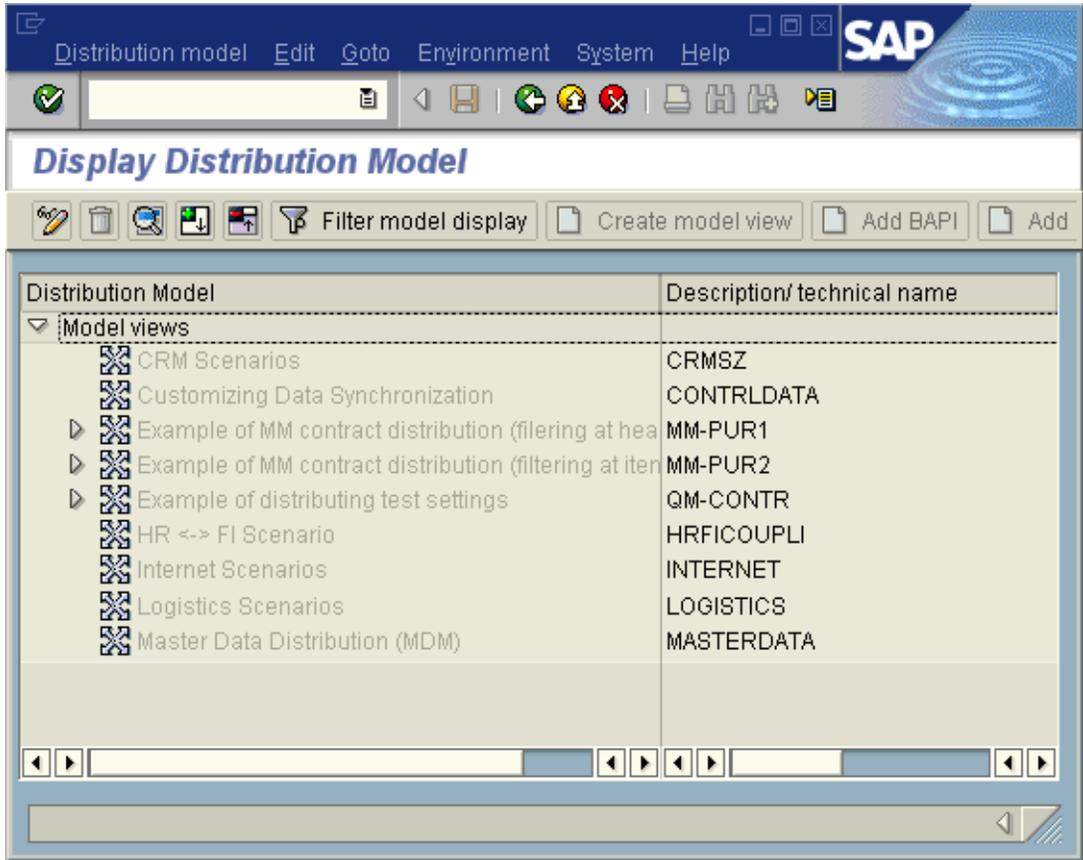
Caution – We recommend that you use the Z prefix when defining a name. This prefix is reserved for external use, and will not conflict with any SAP naming conventions. Using the Z prefix will also prevent any interference with standard SAP functionality or conflicts with standard SAP terminology.

Transaction: **SALE**

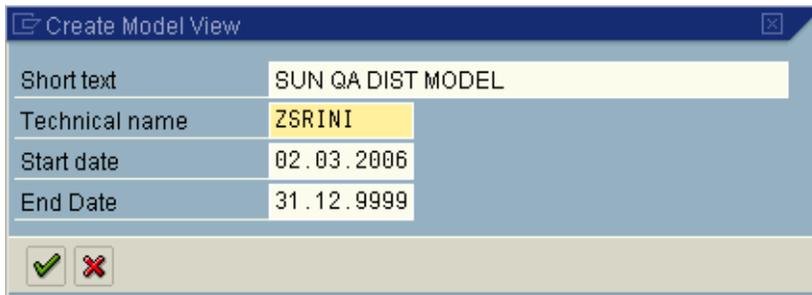
- 1 In the SAP R/3 System home window, type SALE into the command field and click Enter to display the Distribution (ALE) Structure window.



- 2 Click the Activity button next to Maintain Distribution Model and Distribute Views to display the Maintain Distribution Model window.

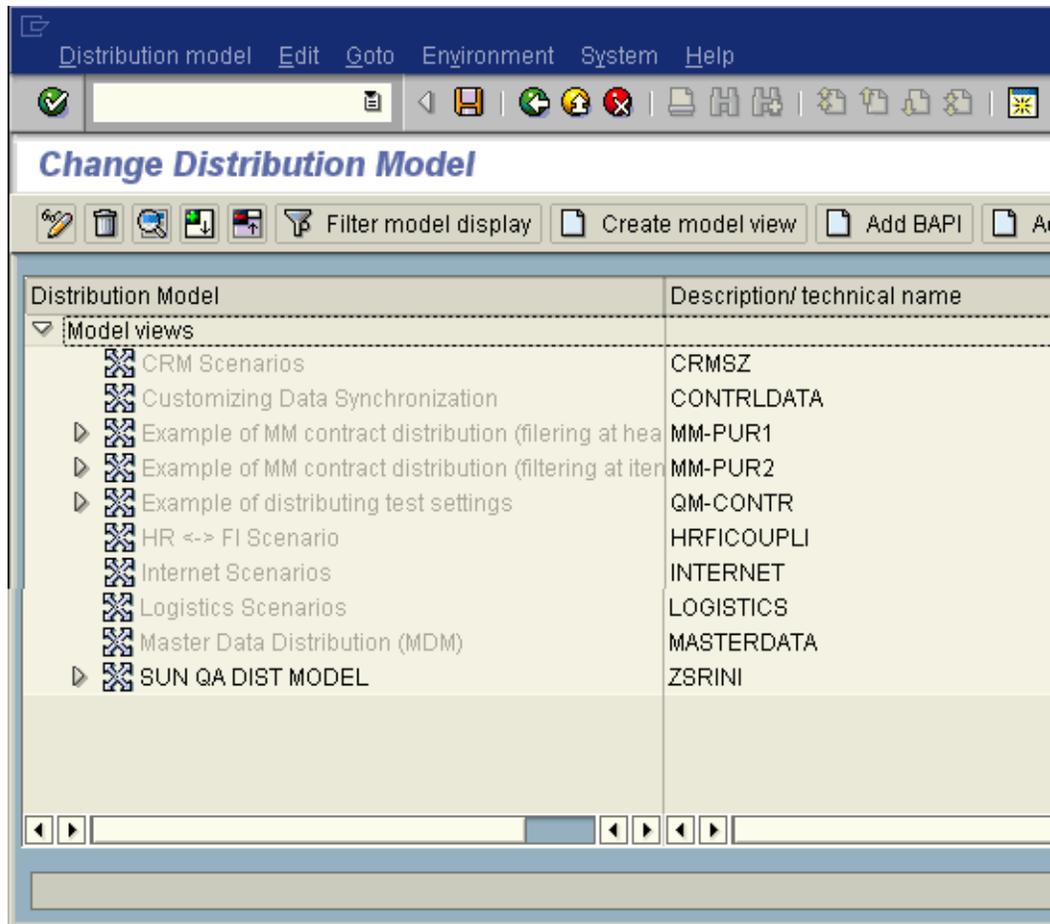


- 3 Select the Menu path Edit > Model View > Create to display the Create Model View dialog box.

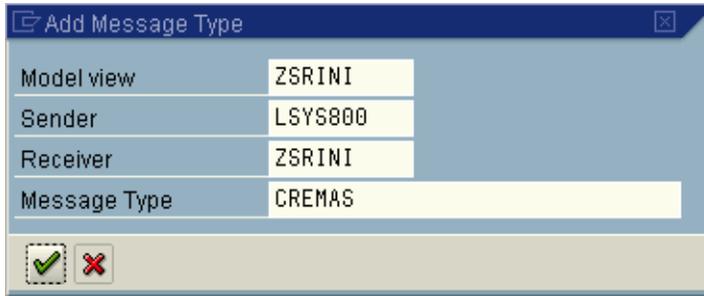


- 4 Enter the logical name you want for the new Distribution Model View, along with a brief descriptive name or message (for your own use).

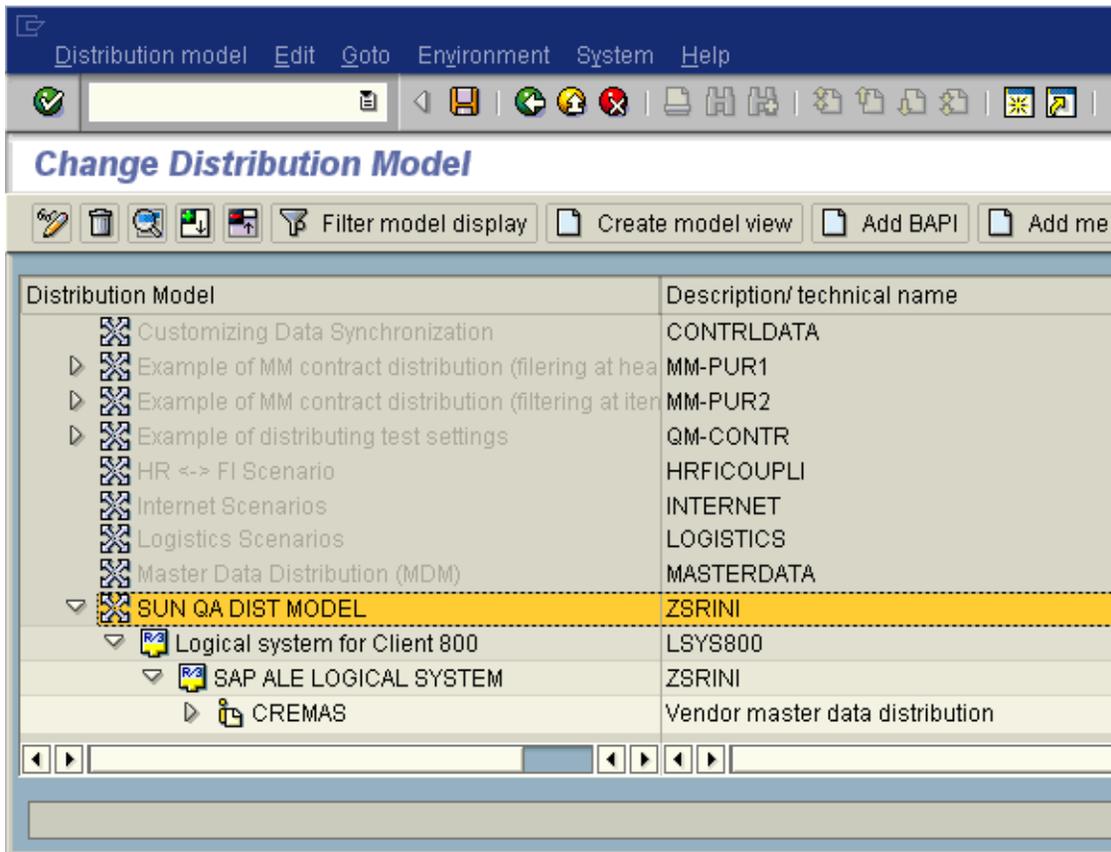
- Click Continue (Enter), which returns you to the previous window. Your new Model View now appears in the tree, as shown in the following figure.



- Highlight the new entry and select Add Message Type. This displays the Add Message Type dialog box.



- 7 Type the desired values for the four parameters into the text boxes, or select them from the drop-down menus. For example, CREMAS is the message type used for Creditor Master Data.
- 8 Select Continue (Enter), which returns you to the previous window. The values you select now appear in the Distribution Model tree, as shown in the following figure.



- 9 Save your entry, click Back and then Cancel to return to the Distribution Structure window.

Configuring Communications

This section describes the following communication configuration tasks.

- “To Define the Communications Port” on page 23
- “To Create a Partner Profile” on page 25
- “To Configure a Partner Profile” on page 30

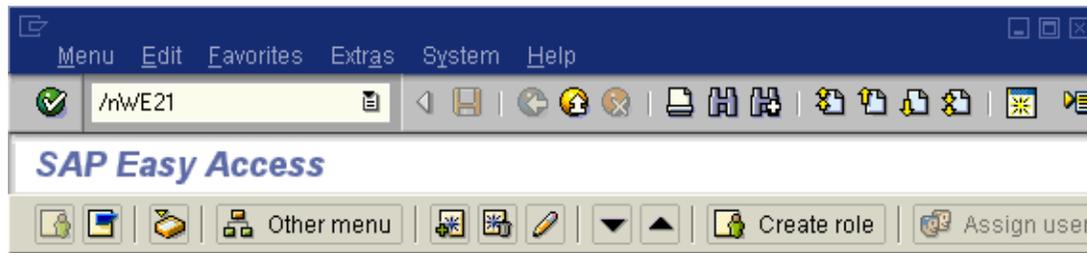


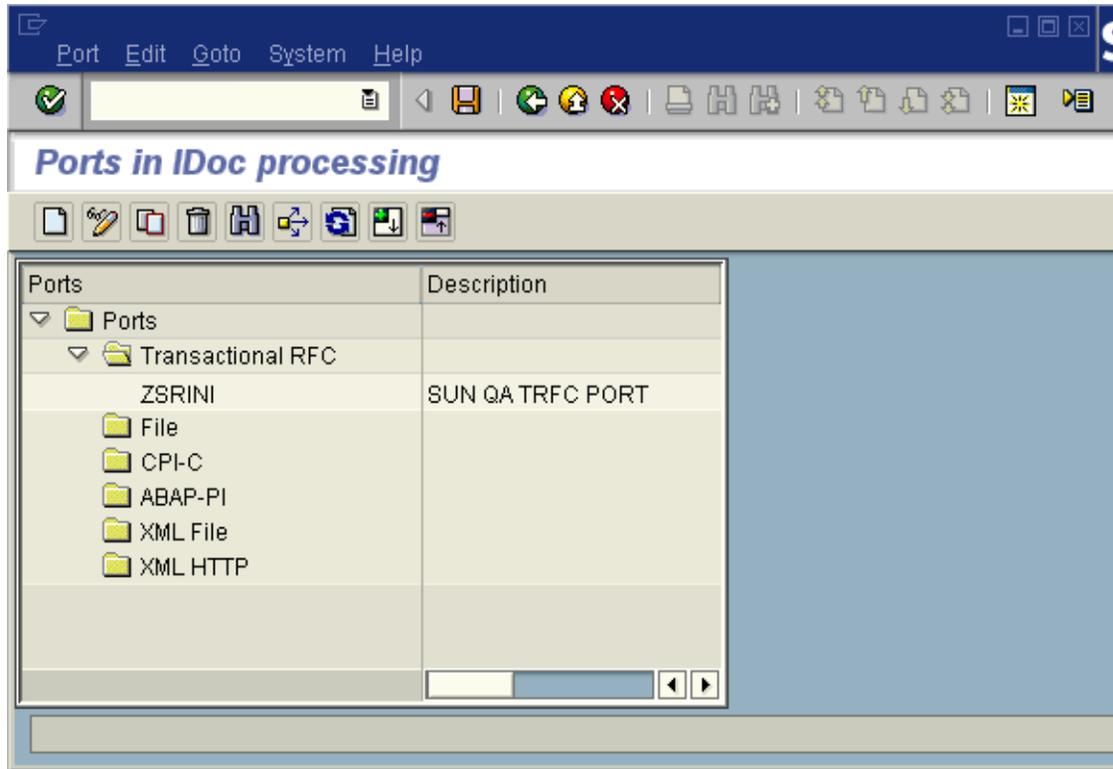
FIGURE 1-10 SAP R/3 System Window

▼ To Define the Communications Port

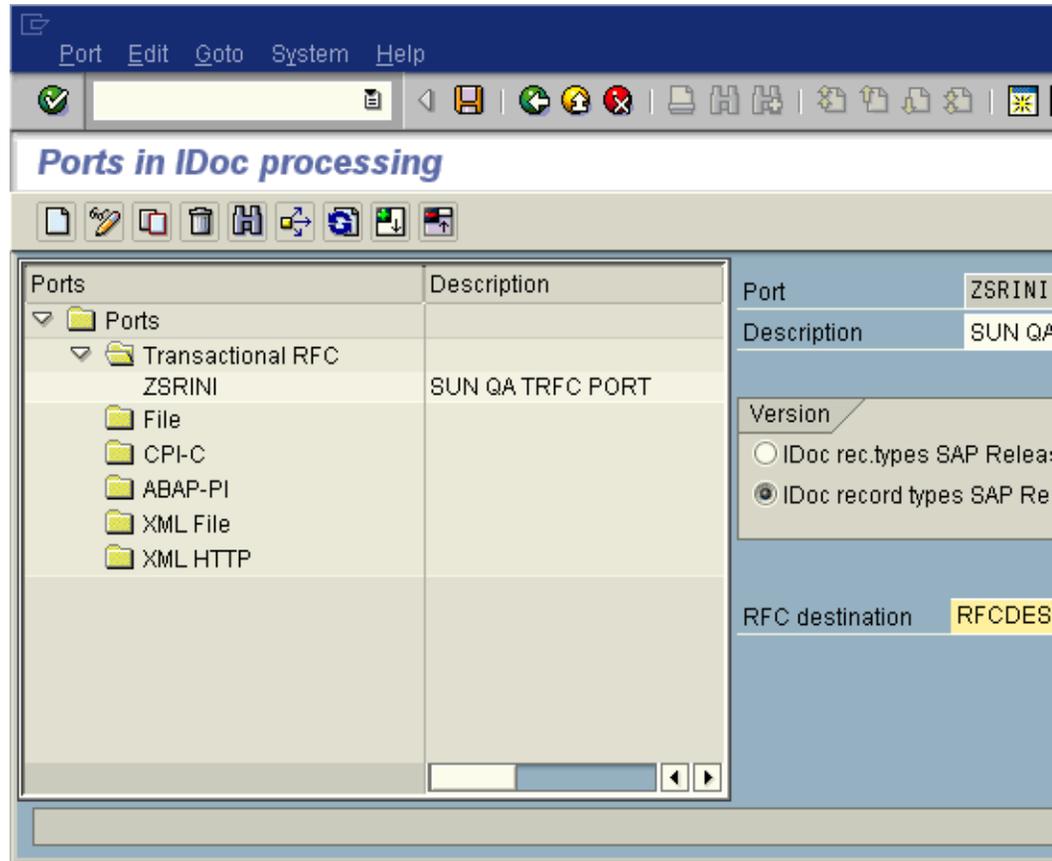
Transaction: WE21

The Communications Port defines the type of connection with the Partner (see “[To Create a Partner Profile](#)” on page 25). This task is used to specify the outbound file name, directory path, and any associated function modules.

- 1 In the SAP R/3 System home window, type WE21 into the command field and click Continue (Enter) to display the WF-EDI Port Definition window.



- 2 Expand the tree under Transactional RFC to display the currently-defined Ports.
- 3 Select the desired Port from the list, or select Change to display the Port Definition for Asynchronous RFC Overview window.



- 4 Type in a Version (specifies IDoc record type), Logical destination, and Description, matching the entries made previously.
- 5 Select Enter, which displays the Change Request Query dialog window. [Note that you must have CTS (Correction and Transport System) turned on for this screen to be displayed.]
- 6 Select Create Request, which displays the Create Request dialog window.
- 7 Enter a Short description and Save.
- 8 Select Back repeatedly to return to the SAP R/3 System window.

▼ To Create a Partner Profile

Transaction: WE20

This task is used to demonstrate how to create the Partner for the Logical System you created earlier. Note that the LS Partner Type is used for all ALE distribution scenarios.

- 1 In the SAP R/3 System home window, type WE20 into the command field and then click Continue (Enter) to display the Partner Profile: Initial Screen window.**

Partner profiles

Partner	Description
Partner Profiles	
Partner Type B	Bank
Partner Type BP	Benefits provider
Partner Type GP	Business Partner
Partner Type KU	Customer
Partner Type LI	Vendor
Partner Type LS	Logical system
LSYS800	Logical system for Client 800
ZSRINI	SAP ALE LOGICAL SYSTEM
Partner Type US	User (first 10 characters, no check)

Partner no.

Partn. Type

Post processing: permitted

Typ

Agent

Lang.

Outbound parmtrs.

Partner Role	Message type

Inbound parmtrs.

Partner Role	Message type

- 2 Type the name of the logical system created previously into the Partner number field, select LS for the Partner type, and select Create. This creates the Partner, and displays the Create Partner Profile <Partner Number> window.**

Partners Edit Goto Utilities System Help

Partner profiles

Partner	Description
Partner Profiles	
Partner Type B	Bank
Partner Type BP	Benefits provider
Partner Type GP	Business Partner
Partner Type KU	Customer
Partner Type LI	Vendor
Partner Type LS	Logical system
LSYS800	Logical system for Client 800
ZSRINI	SAP ALE LOGICAL SYSTEM
Partner Type US	User (first 10 characters, no check)

Partner no. ZSRINI
Partn.Type LS

Post processing: permitt

Typ US
Agent PS1
Lang. EN

Outbound parmtrs.

Partner Role	Message type

Inbound parmtrs.

Partner Role	Message type

- 3 Under the Classification tab, select ALE for the Partner class and A (Active) for the Partner status, then Save. You now have created the Partner, and need to continue to the next section to configure the Partner Profile.**

▼ **To Configure a Partner Profile**

Transaction: **WE20**

This task is used to demonstrate how you configure the Inbound/Outbound Parameters in the Partner Profile.

- 1 In the Partner Profile: Initial Screen window, select the desired Partner Number, for example ZSRINI.**
- 2 Select the Inbound parameters**

The screenshot shows the SAP configuration interface for 'Partner profiles: Inbound parameters'. The window title is 'Inbound parameters' and the menu includes 'Edit', 'Goto', 'System', and 'Help'. The main title is 'Partner profiles: Inbound parameters'. The configuration fields are as follows:

Partner no.	ZSRINI	SAP ALE LOGICAL SYSTEM
Partn.Type	LS	
Partner Role		
Message type	CREMAS	
Message code		
Message function		<input type="checkbox"/> Test

Below the main fields, there are three tabs: 'Inbound options', 'Post processing: permitted agent', and 'Telephony'. The 'Inbound options' tab is active, showing the following settings:

Process code	CRE1
<input checked="" type="checkbox"/> Cancel Processing After Syntax Error	
Processing by Function Module	
<input type="radio"/> Trigger by background program	
<input checked="" type="radio"/> Trigger Immediately	

- 3** Select **CREMAS** as a Message type and **CRE1** as a Process code from the drop-down menus, then click **Save**. The entries now appear in the list in the **EDI Partner Profile: Inbound Parameters Overview** window.

Partner profiles

Partner	Description
Partner Profiles	
Partner Type B	Bank
Partner Type BP	Benefits provider
Partner Type GP	Business Partner
Partner Type KU	Customer
Partner Type LI	Vendor
Partner Type LS	Logical system
LSYS800	Logical system for Client 800
ZSRINI	SAP ALE LOGICAL SYSTEM
Partner Type US	User (first 10 characters, no check)

Partner no.	ZSRINI
Partn.Type	LS
Post processing: permitted	
Type	US
Agent	PS1
Lang.	EN

Outbound parmtrs.

Partner Role	Message type
	CREMAS

Inbound parmtrs.

Partner Role	Message type
	CREMAS

- 4 Follow the same procedure for Outbound parameters, as seen in the following figure.**

Outbound parameters Edit Goto System Help

Partner profiles: Outbound parameters

Partner No. ZSRINI SAP ALE LOGICAL SYSTEM
 Partn.Type LS Logical system
 Partner Role

Message Type CREMAS
 Message code
 Message function Test

Outbound Options Message Control Post Processing: Permitted Agent Tele...

Receiver port ZSRINI

Output Mode
 Transfer IDoc Immed. Start subsystem Output Mode
 Collect IDocs Do not start subsystem

IDoc Type
 Basic type CREMAS03
 Extension
 View
 Cancel Processing After Syntax Error
 Seg. release in IDoc type Segment Appl. Rel.

- 5 After making your entries, Save and then clickBack to get to the main SAP R/3 System window.**