Configuring SAP R/3 for the Oracle® Java CAPS SAP BAPI Adapter

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Contents

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.

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.

The SAP R/3 images 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.

▼ To Create the RFC Destination for the Adapter

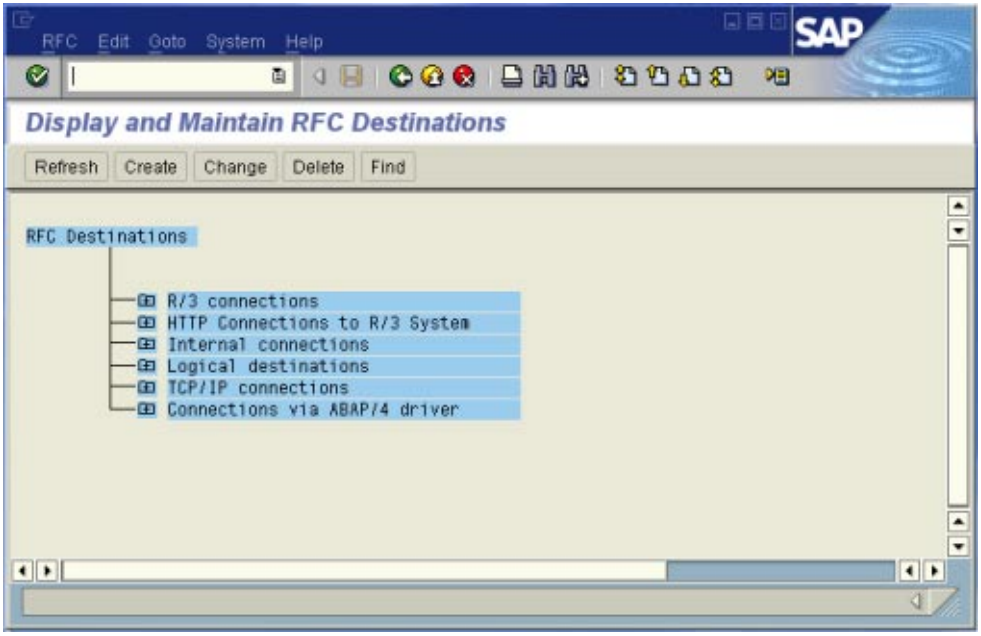
1 **In the SAP R/3 window, click the forward arrow to display the navigation box if necessary.**

2 **Type `SM59` into the text field and press Enter.**

FIGURE 1 Navigating to the SM59 Transaction

The RFC Destination Maintenance window appears.

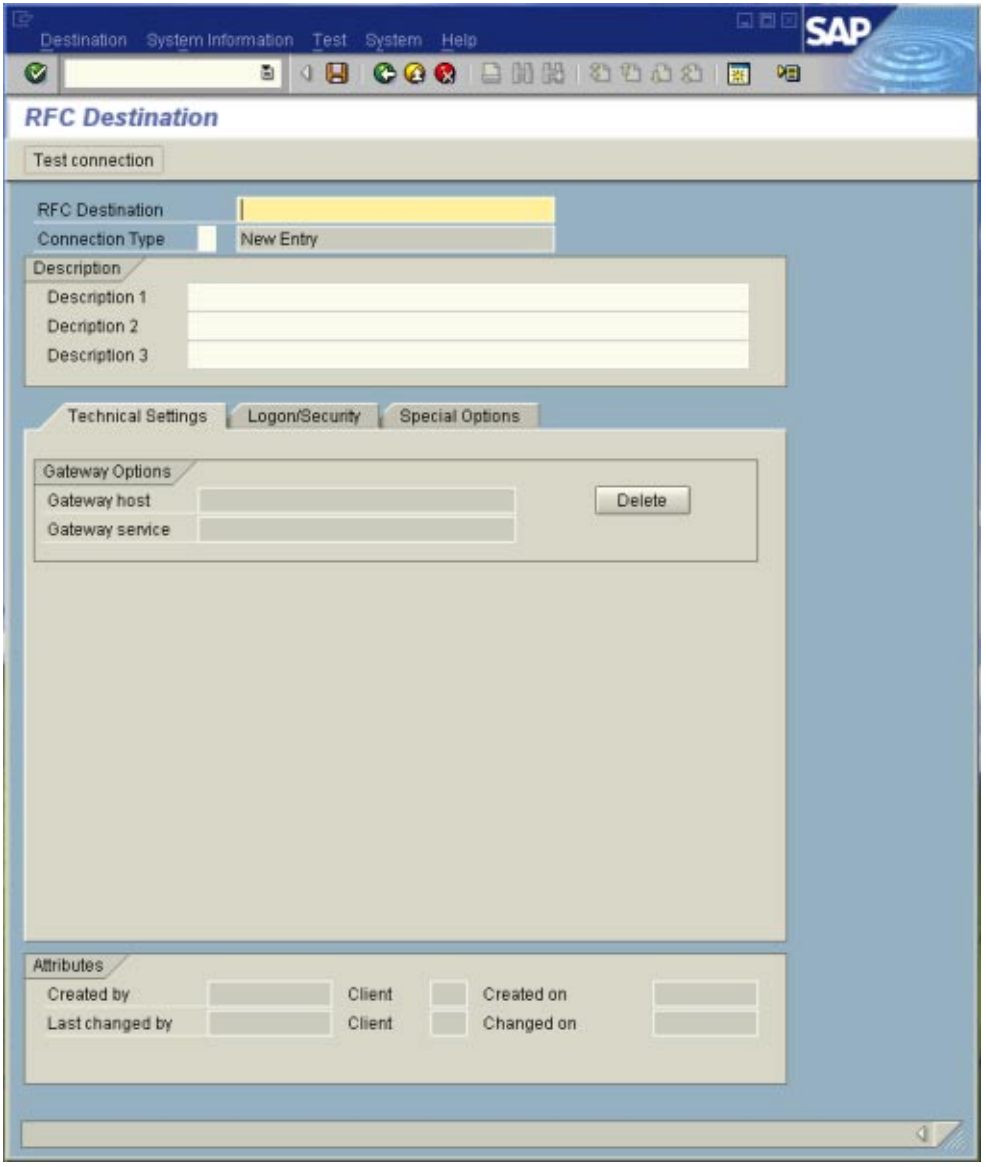
FIGURE 2 RFC Destination Maintenance Window



3 **Click TCP/IP connections and then click Create.**

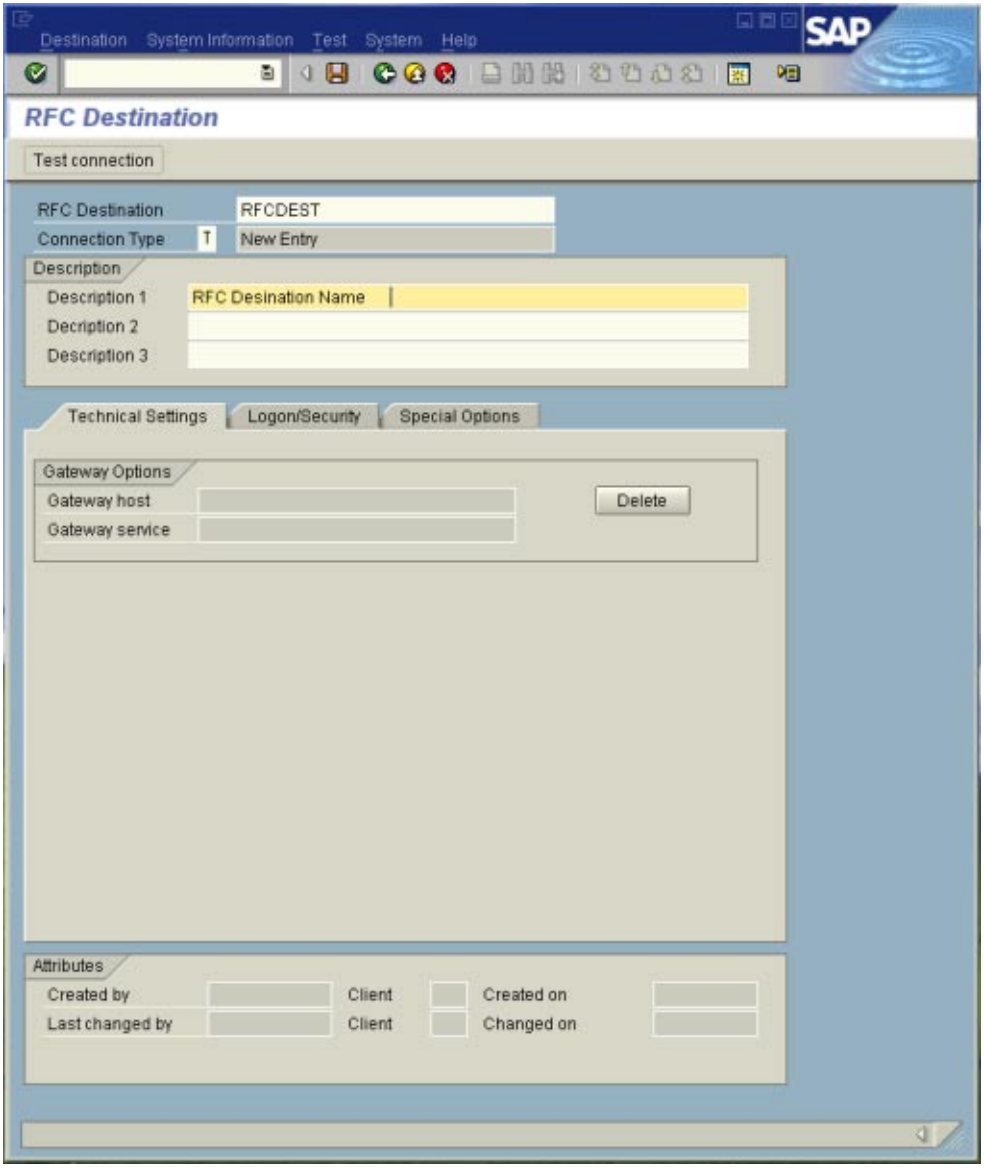
The RFC Destination window appears.

FIGURE 3 RFC Destination Window



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

FIGURE 4 RFC Destination



5 Click Save.

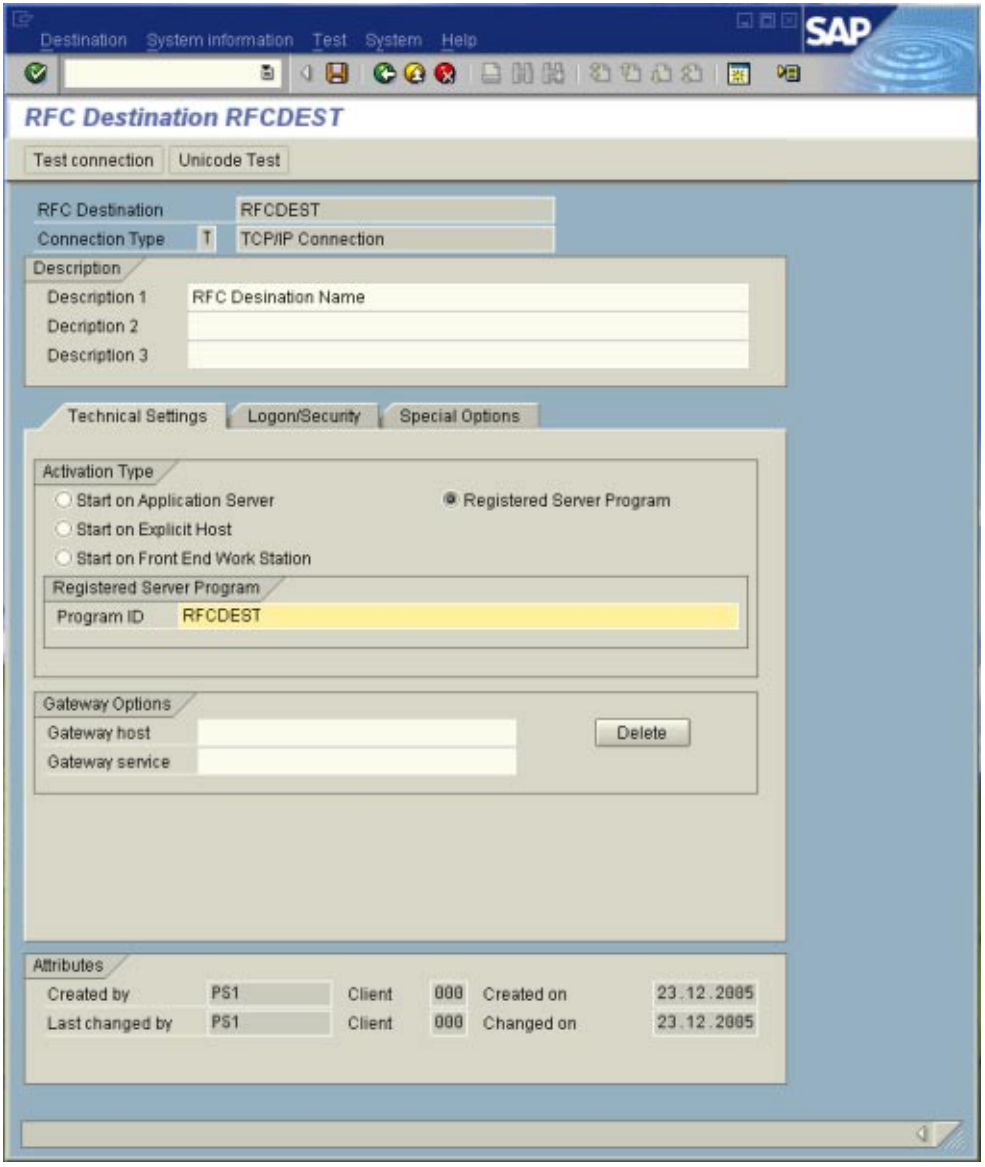
The RFC Destination window corresponding to your entry appears.

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's Program ID property. This value is case sensitive. For more information, see "Server Connection Settings" in *Configuring Environment Components for Oracle Java CAPS Application Adapters*.

FIGURE 5 RFC Destination Window



8 **Click Test Connection, which tests the connection for login 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.

FIGURE 6 Connection Test Results

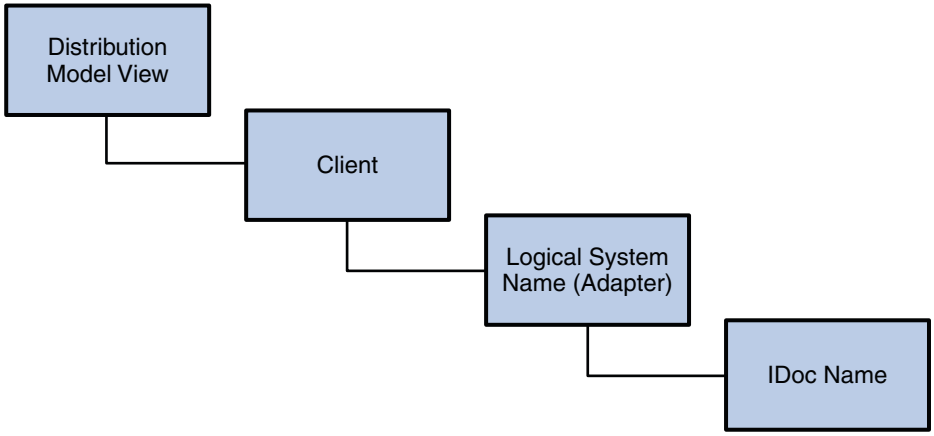
Connection test STCDGW	
Connection type:	TCP/IP connection
Logon:	255 msec
0 KB:	496 msec
10 KB:	491 msec
20 KB:	504 msec
30 KB:	505 msec

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.

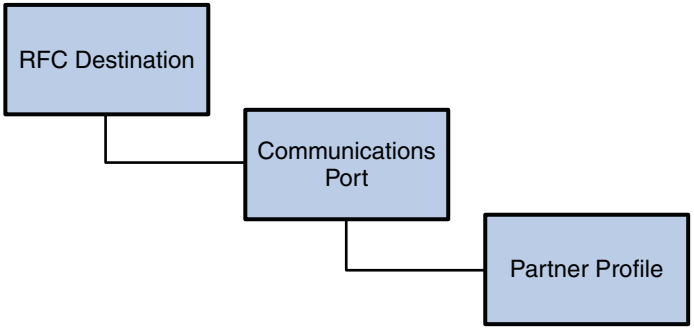
The SAP R/3 images in this topic correspond to SAP GUI version 6.2, and SAP R/3 version 4.0. They are included to illustrate the general nature of the procedures, and contain only example values. Refer to the documentation supplied with your SAP R/3 system to determine the exact procedures.

FIGURE 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 8 Communications Hierarchy



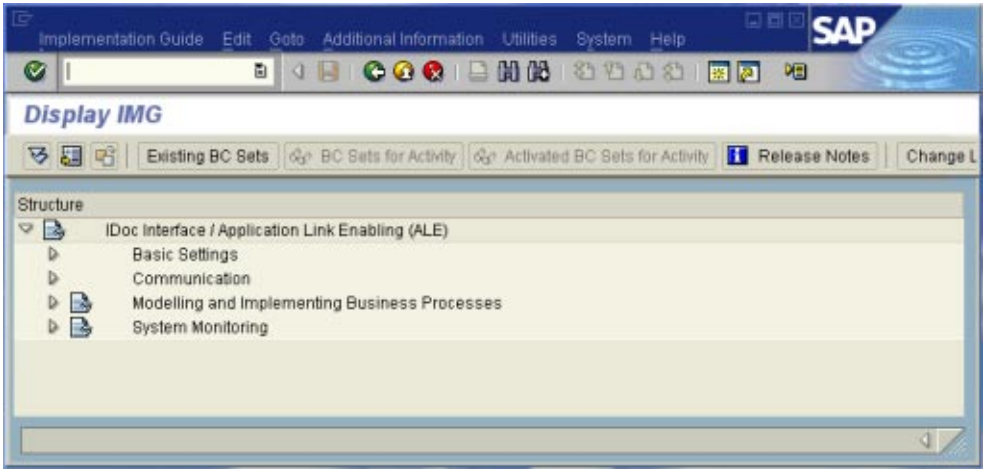
The RFC Destination defines the entity to which Remote Function Calls (RFCs) can be made; it is the same as the Logical System in the Distribution Model. The Communications Port defines a channel for communication of IDocs. The Partner Profile acts as an identifier for the Java CAPS system, and provides 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 13
- "To Specify the Distribution Model" on page 16

FIGURE 9 SAP R/3 System Window

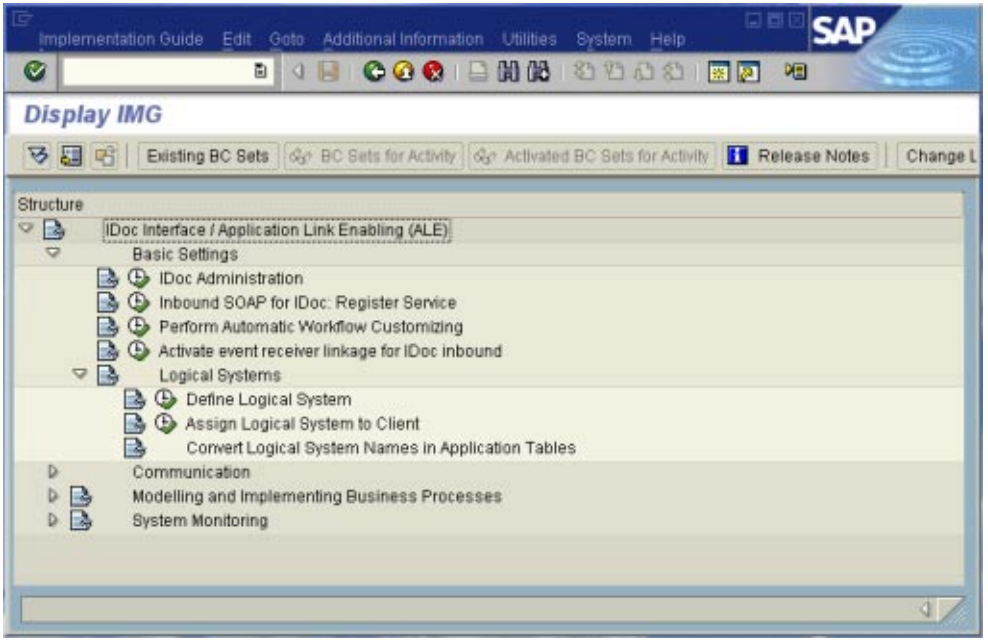


▼ To Name the Logical System

Transaction: **SALE**

1 **In the SAP R/3 System home window (shown above), type SALE into the command field and click Enter.**

The Distribution (ALE) Structure window appears.



2 **Expand IDoc Interface / Application Link Enabling (ALE) > Basic Settings > Logical Systems > Define Logical System.**

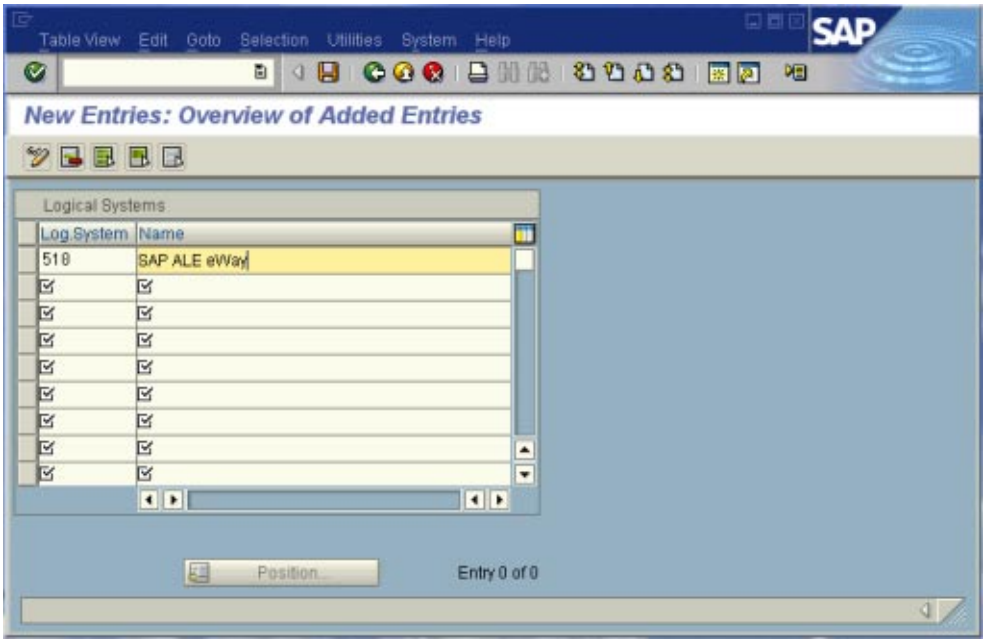
3 **Click the Activity button and select Define Logical System.**

The Logical Systems Overview window appears.

4 **Click the New entries button.**

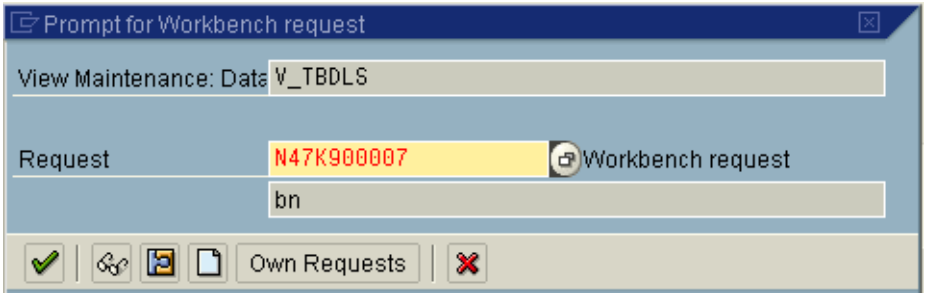
The New Entries window appears.

5 **Enter the logical name for your SAP Adapter using capital letters and a brief descriptive name.**



6 **Click Save.**

The Change Request Entry window appears.



7 **Click the Create request button.**

The Create Request window appears.

8 **Enter a short description (for example, 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**

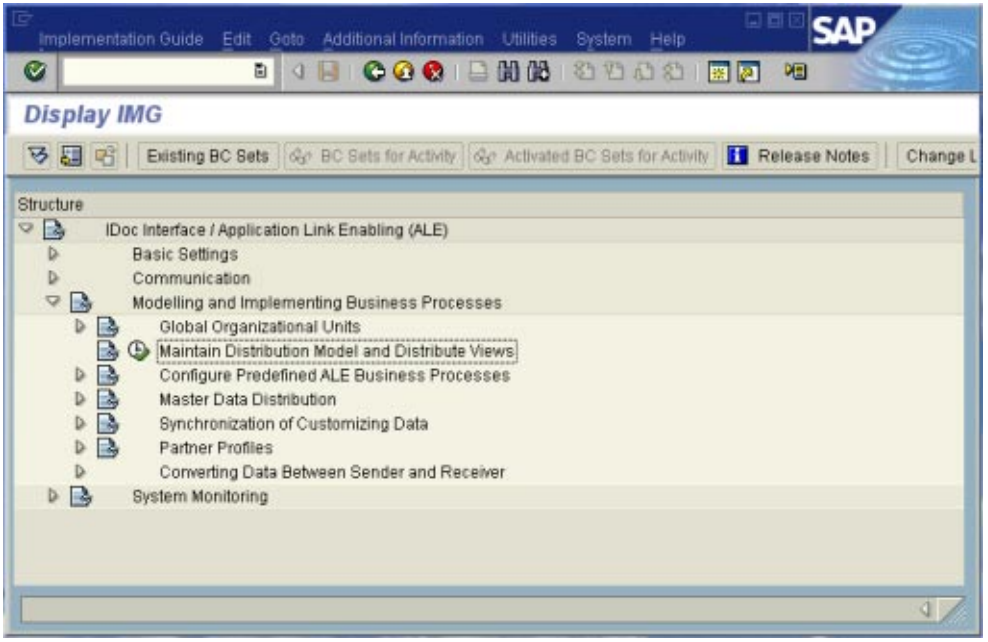
▼ To Specify the Distribution Model

Caution – It is recommended 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**

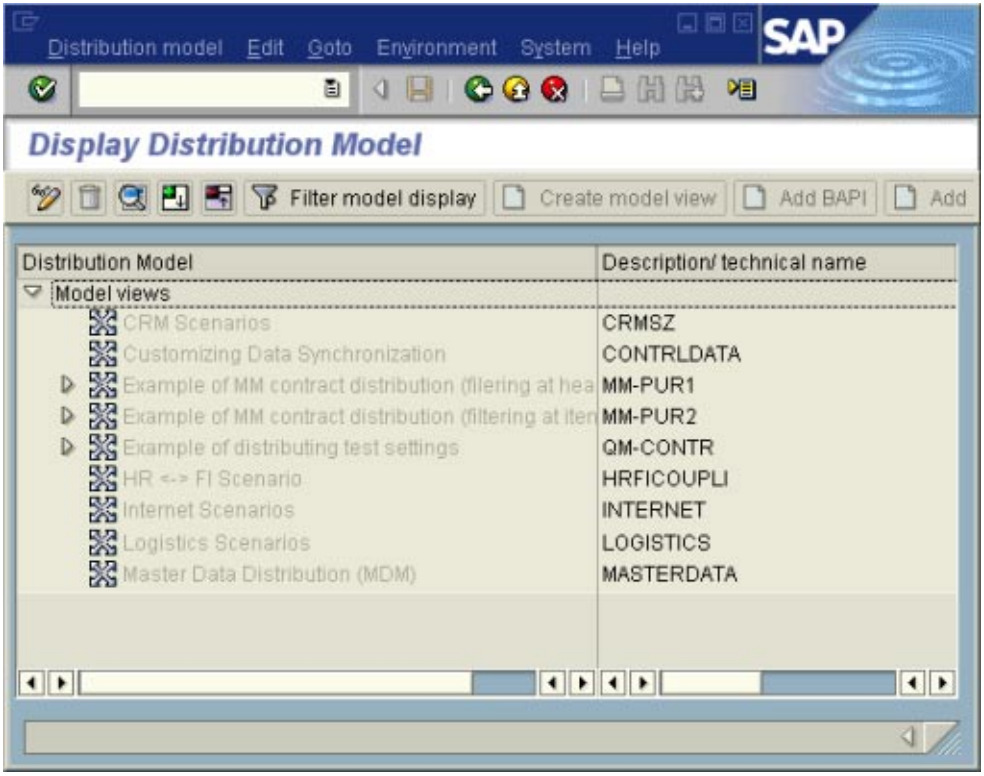
1 **In the SAP R/3 System home window, type SALE into the command field and click Enter.**

The Distribution (ALE) Structure window appears.



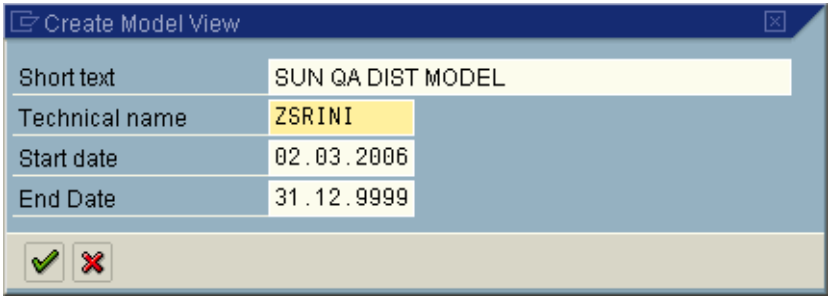
2 **Click the Activity button next to Maintain Distribution Model and Distribute Views.**

The Maintain Distribution Model window appears.



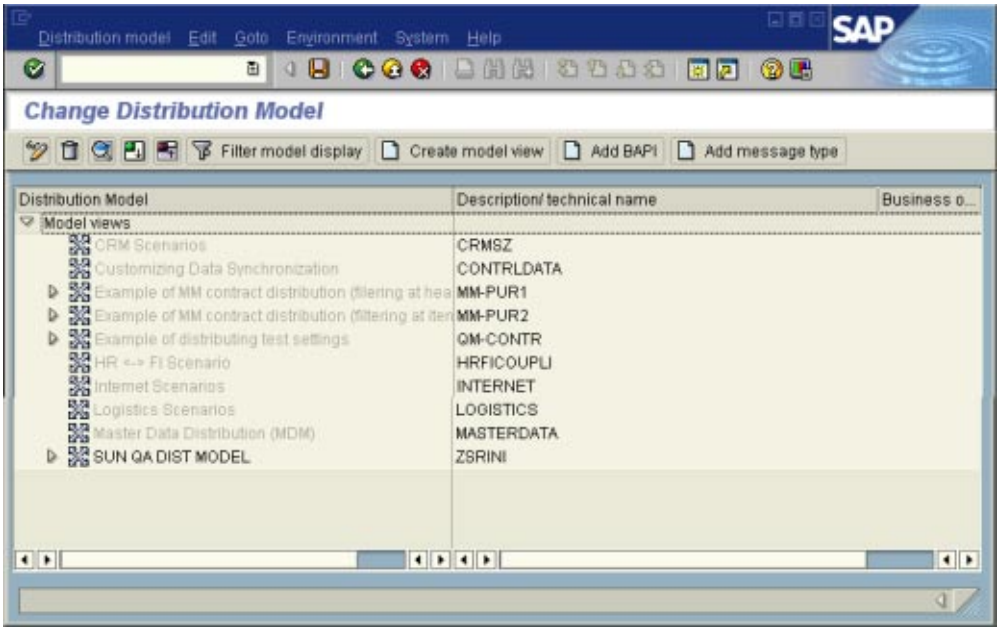
3 **Select the Menu path Edit > Model View > Create.**

The Create Model View dialog box appears.



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).**

5 **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.**



6 **Highlight the new entry and select Add Message Type.**

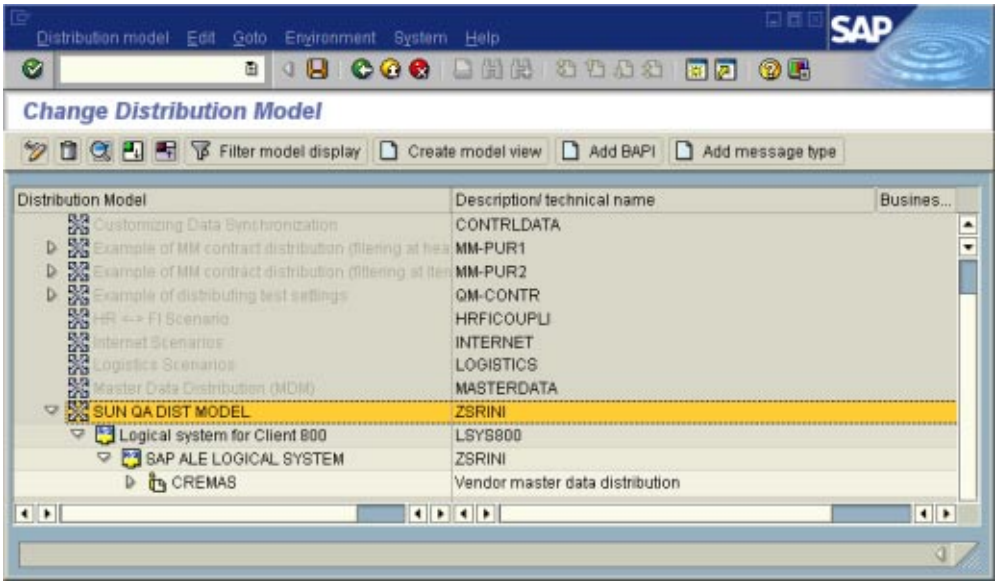
The Add Message Type dialog box appears.

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.



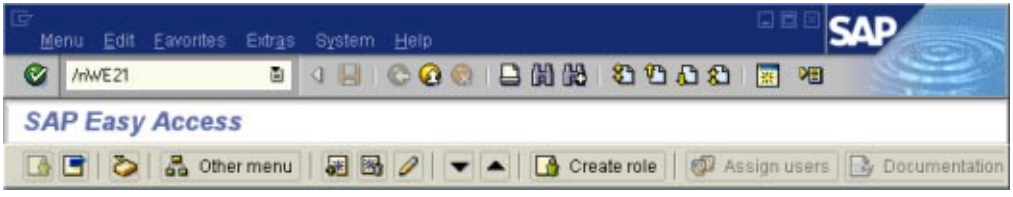
9 **Save your entry, click Back and then Cancel to return to the Distribution Structure window.**

Configuring Communications

This section describes the following communication configuration tasks.

- "To Define the Communications Port" on page 20
- "To Create a Partner Profile" on page 21
- "To Configure a Partner Profile" on page 24

FIGURE 10 SAP R/3 System Window



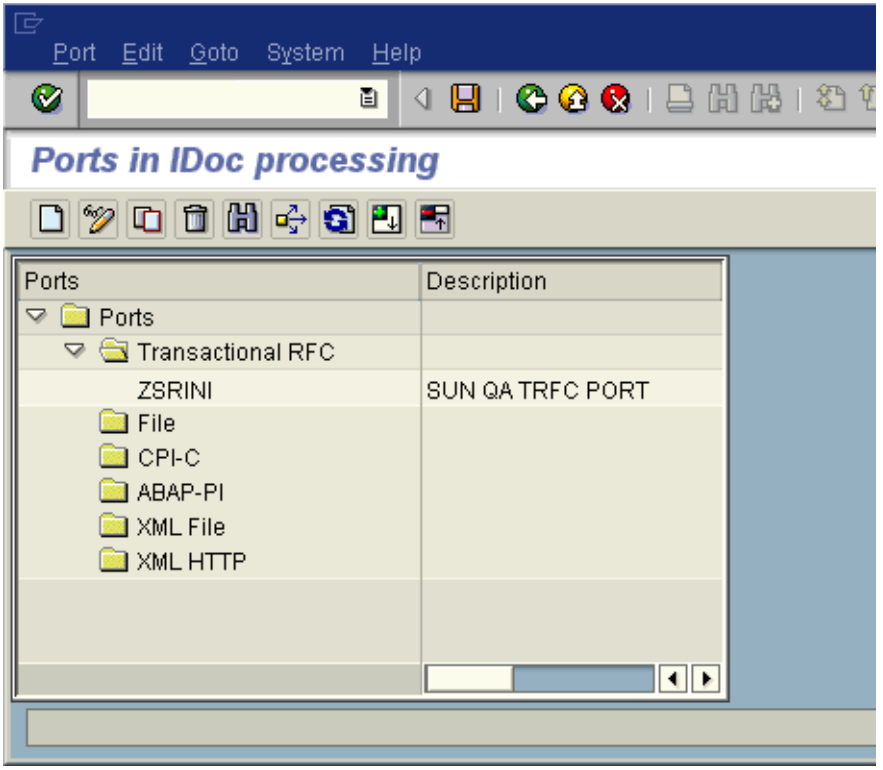
▼ To Define the Communications Port

The Communications Port defines the type of connection with the Partner (see "To Create a Partner Profile" on page 21). This task is used to specify the outbound file name, directory path, and any associated function modules.

Transaction: **WE21**

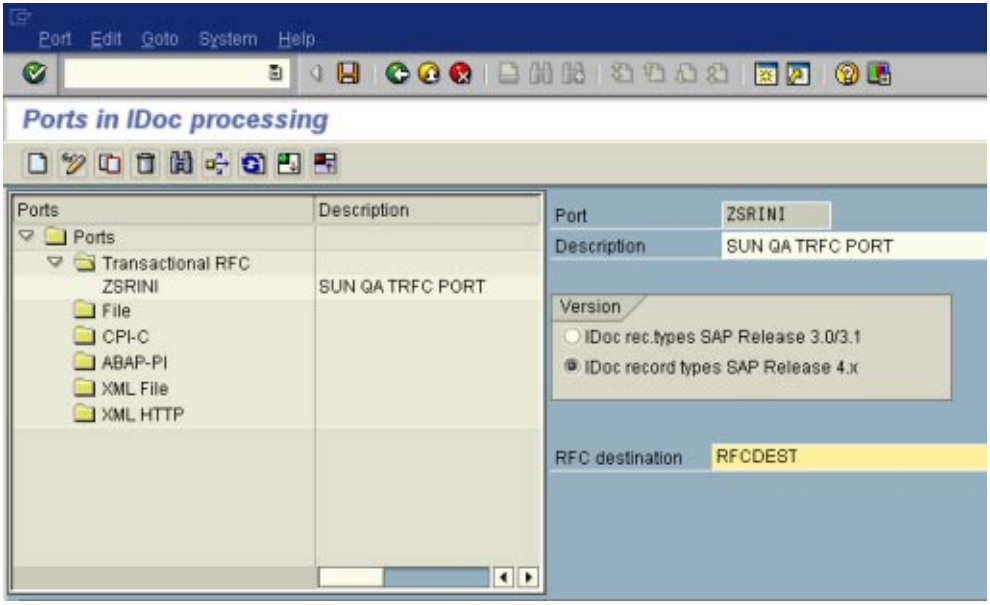
1 **In the SAP R/3 System home window, type WE21 into the command field and click Continue (Enter).**

The WF-EDI Port Definition window appears.



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 **Enter a Version (to specify the IDoc record type), Logical destination, and Description, matching the entries made previously.**

5 **Select Enter.**

The Change Request Query dialog window appears. Note that you must have CTS (Correction and Transport System) turned on for this screen to appear.

6 **Select Create Request.**

The Create Request dialog window appears.

7 **Enter a Short description and click Save.**

8 **Select Back repeatedly to return to the SAP R/3 System window.**

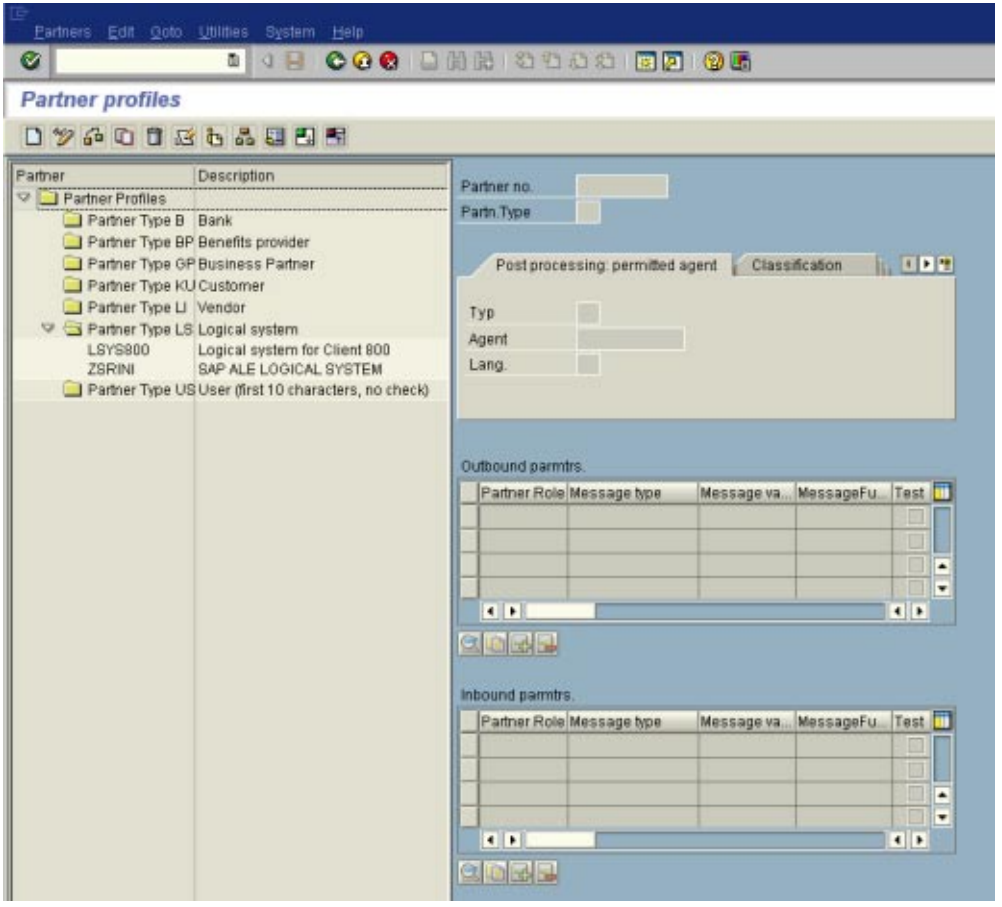
▼ To Create a Partner Profile

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.

Transaction: **WE20**

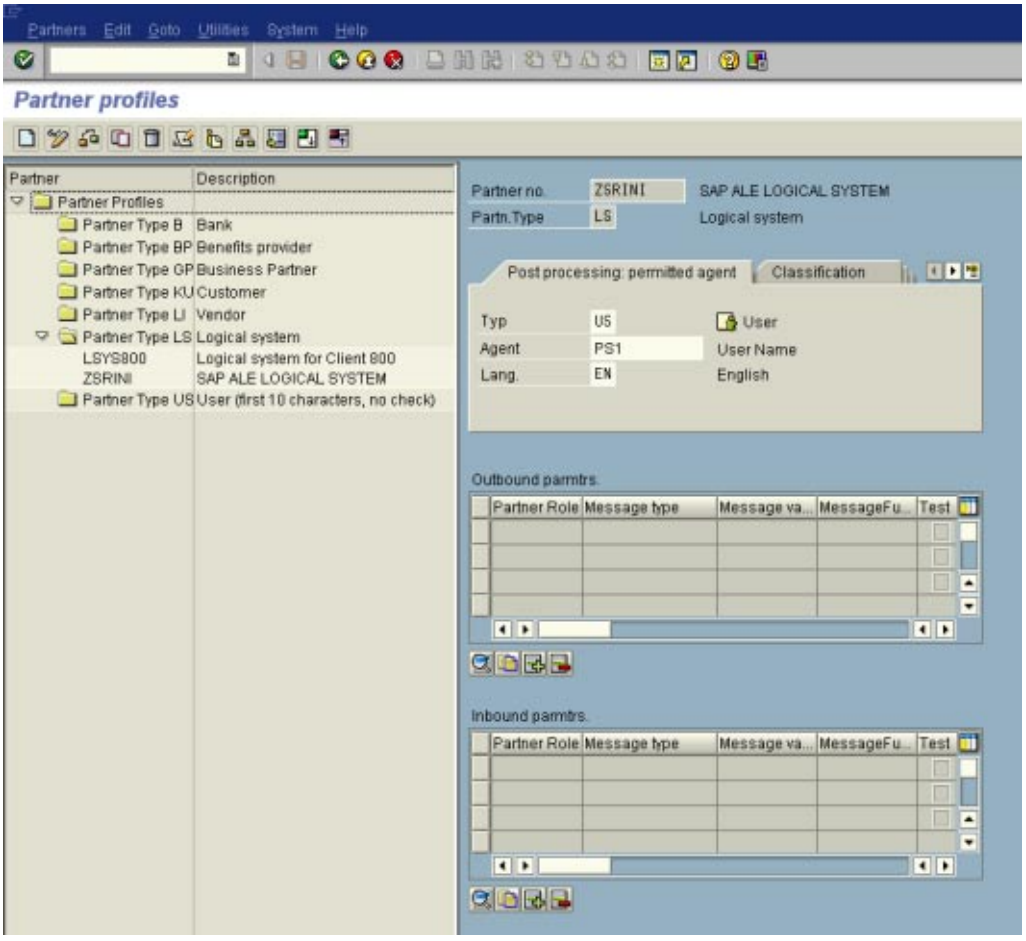
1 **In the SAP R/3 System home window, type `WE20` into the command field and then click Continue (Enter).**

The Partner Profile: Initial Screen window appears.



2 **Enter the name of the logical system created previously in the Partner number field, select LS for the Partner type, and select Create.**

The Partner is created and the Create Partner Profile <Partner Number> window appears.



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.

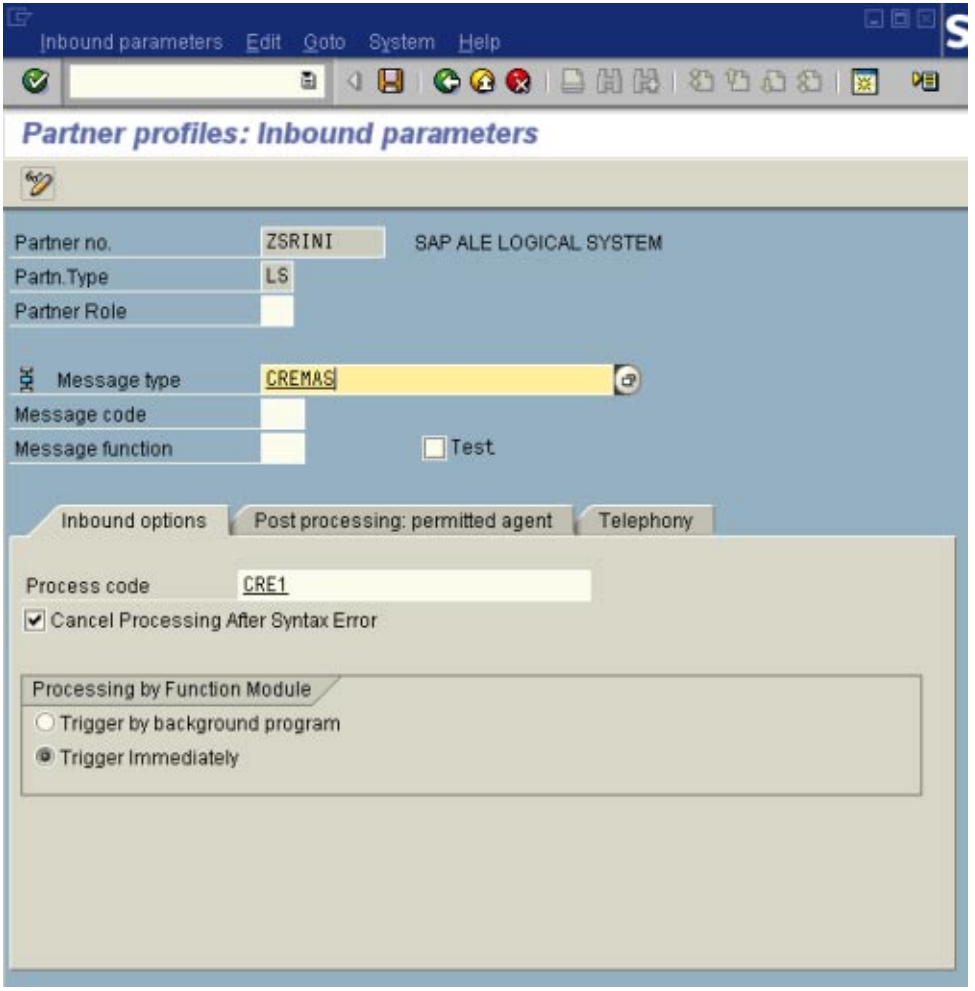
▼ To Configure a Partner Profile

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

Transaction: **WE20**

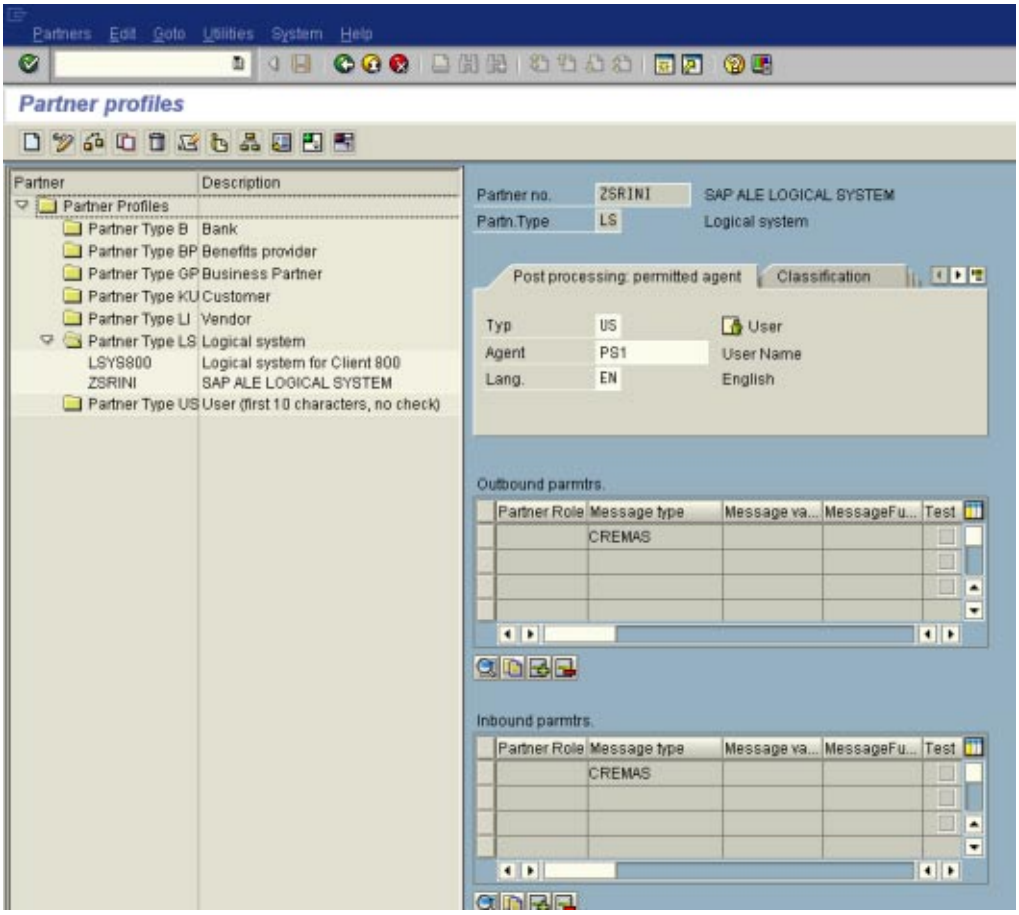
1 **In the Partner Profile: Initial Screen window, select the desired Partner Number, for example ZSRINI.**

2 **Select the Inbound parameters.**

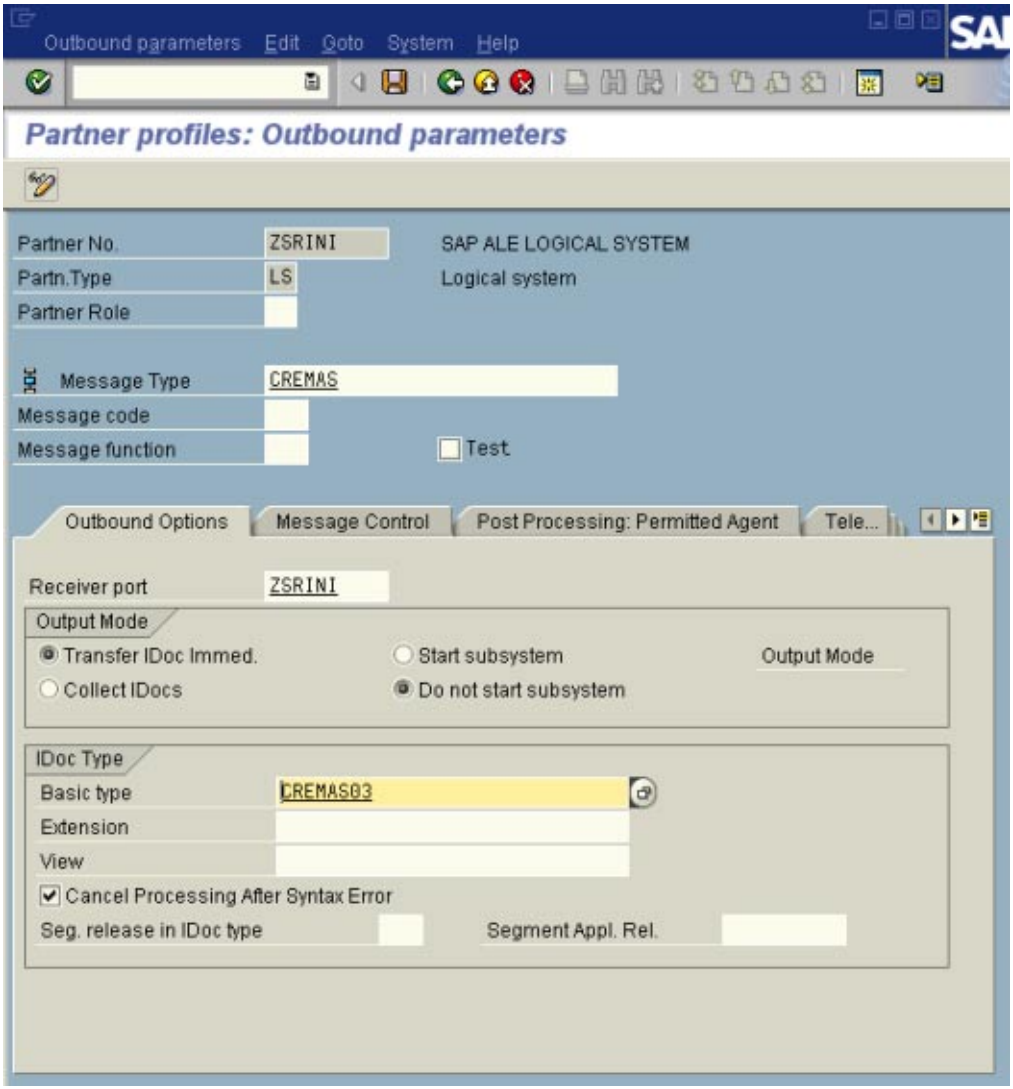


3 Select CREMAS as a Message type and CRE1 as a Process code from the drop-down menus, then click Save.

The entries now appear in the list in the EDI Partner Profile: Inbound Parameters Overview window.



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



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