Configuring SAP R/3 for the SAP BAPI Adapter

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Contents

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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

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.**

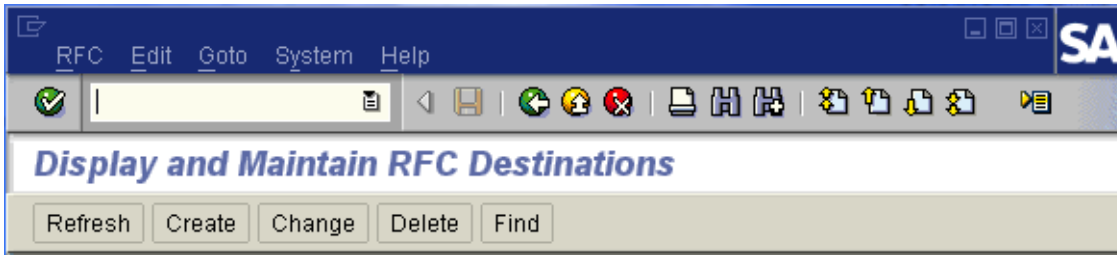


FIGURE 1–1 Navigating to the SM59 Transaction

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

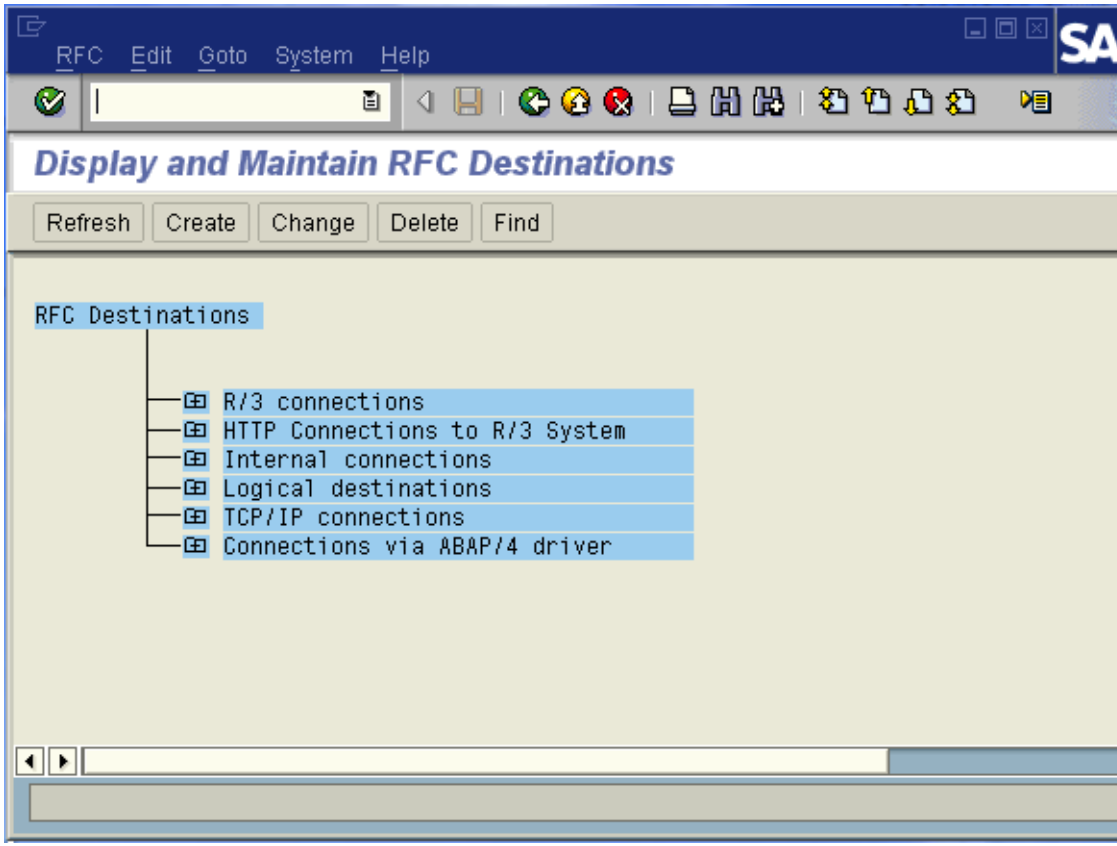
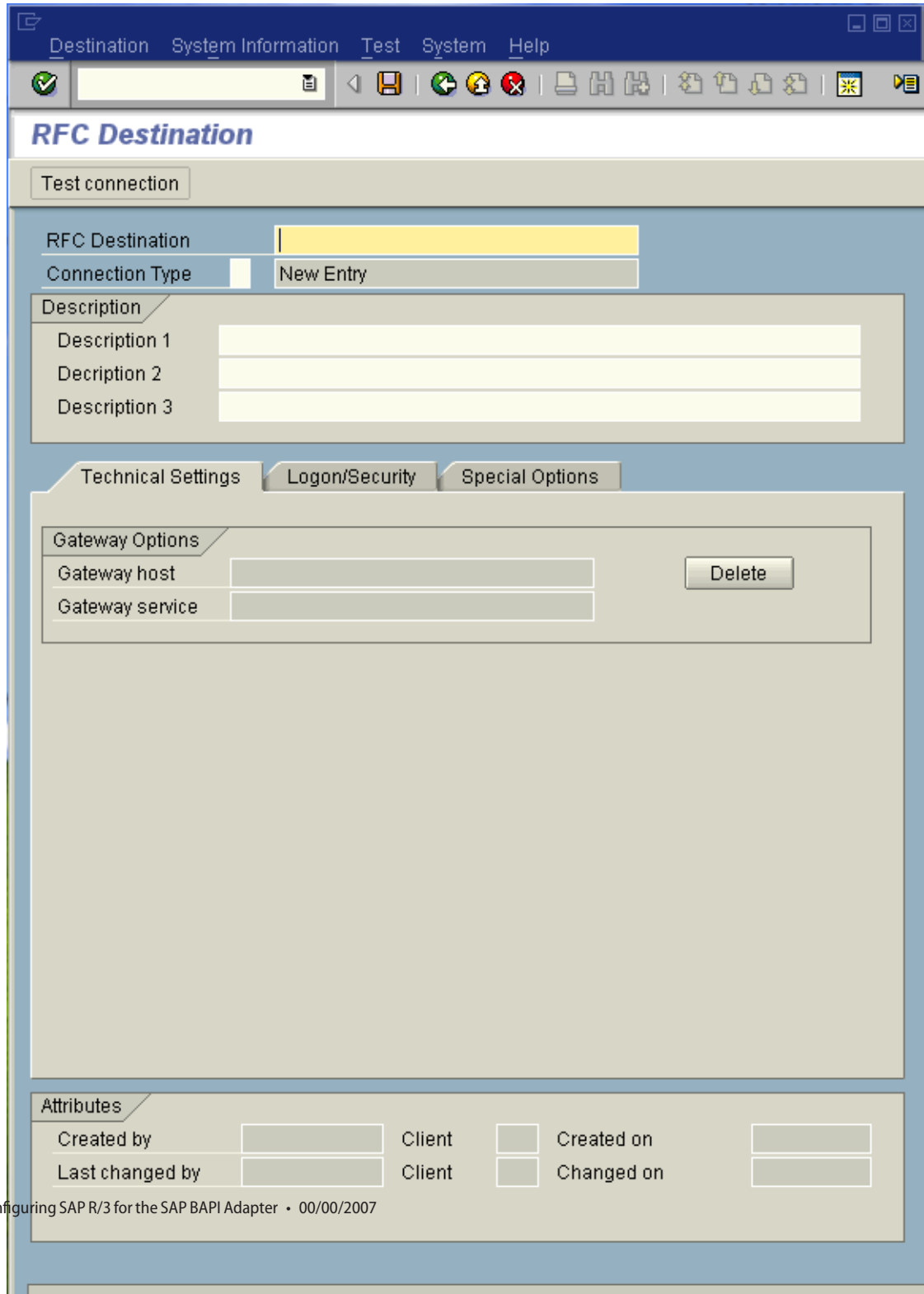
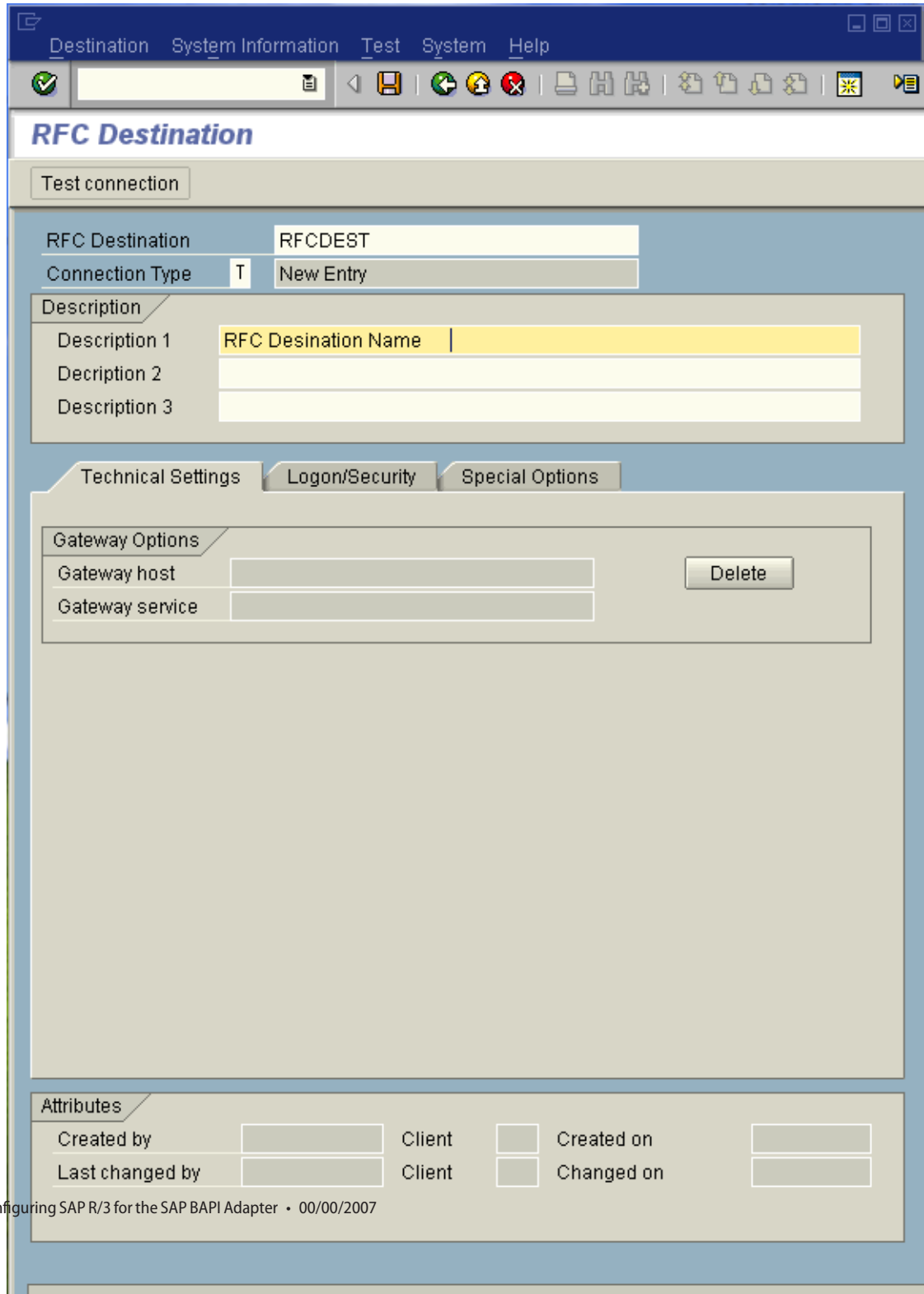


FIGURE 1–2 RFC Destination Maintenance Window

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


Destination
System Information
Test
System
Help
RFC Destination
Test connection
RFC Destination
Connection Type
New Entry
Description
Description 1
Decription 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).

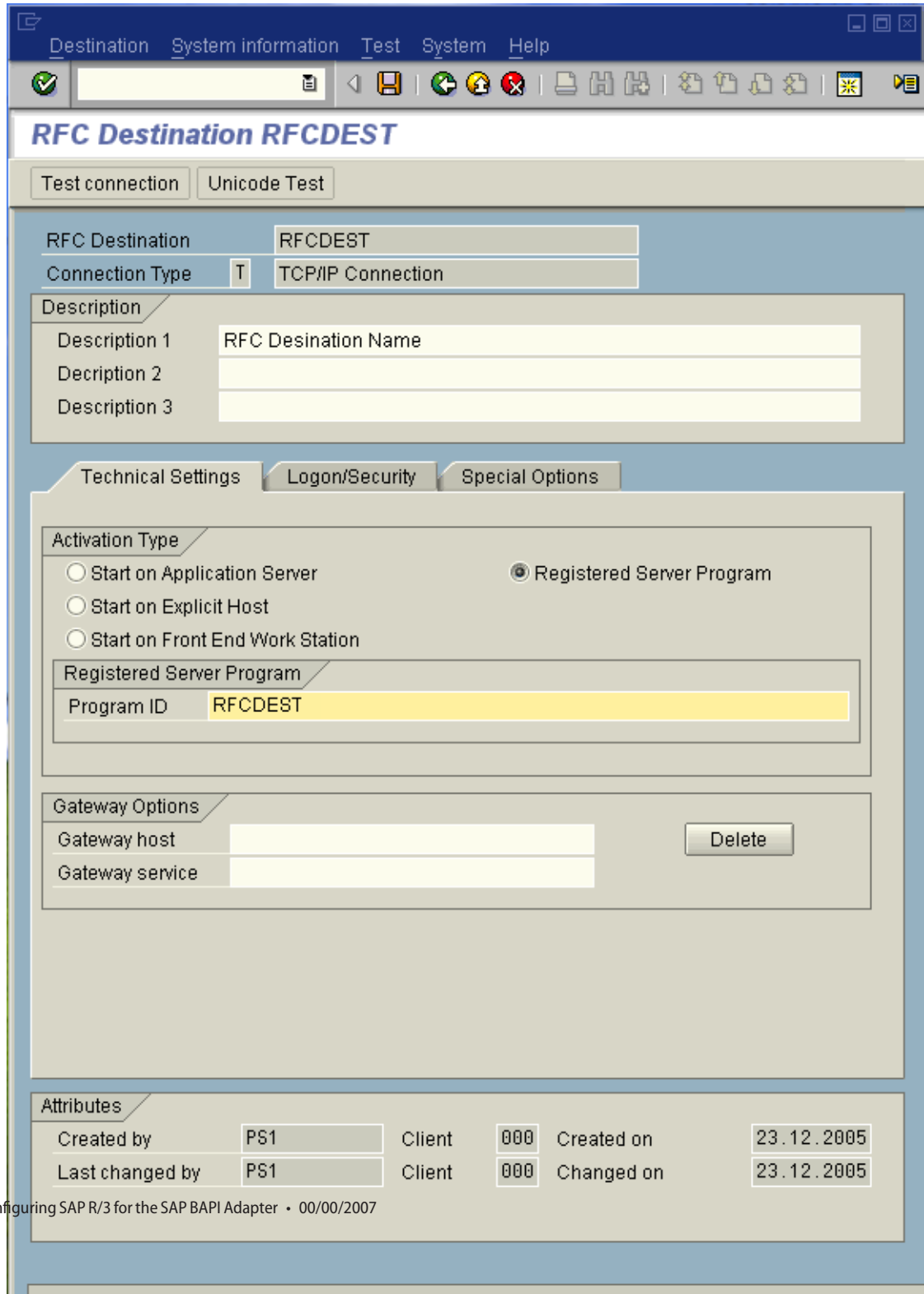

Destination
System Information
Test
System
Help
RFC Destination
Test connection
RFC Destination
RFCDEST
Connection Type
T
New Entry
Description
Description 1
RFC Desination Name
Decription 2
Description 3
Technical Settings
Logon/Security
Special Options
Gateway Options
Gateway host
Gateway service
Delete
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.**

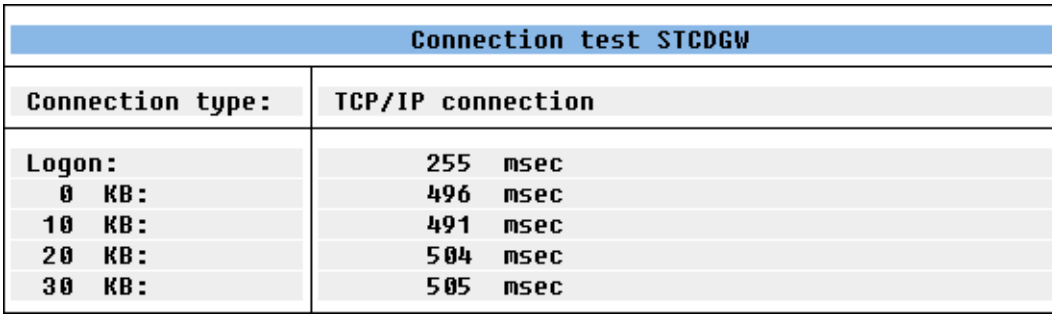
6 **Select the Registered as Server Program option.**

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
RFCDEST
Connection Type
T
TCP/IP Connection
Description
Description 1
RFC Desination Name
Decription 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
RFCDEST
Gateway Options
Gateway host
Gateway service
Delete
Attributes
Created by
PS1
Client
000
Created on
23.12.2005
Last changed by
PS1
Client
000
Changed on
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.

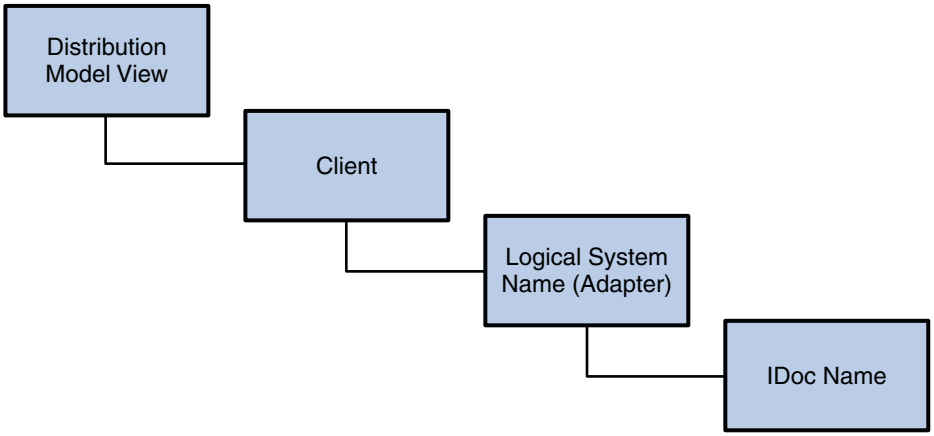


FIGURE 1–7 Distribution Model Hierarchy

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.

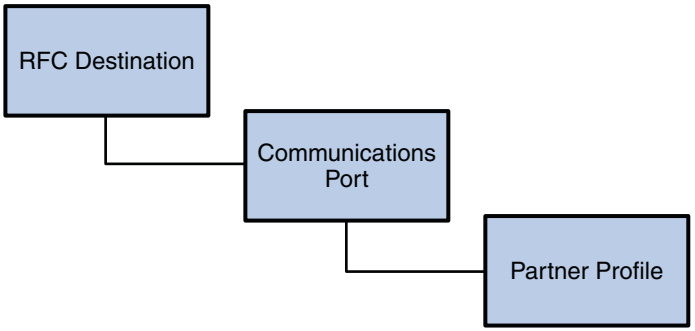


FIGURE 1–8 Communications Hierarchy

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.

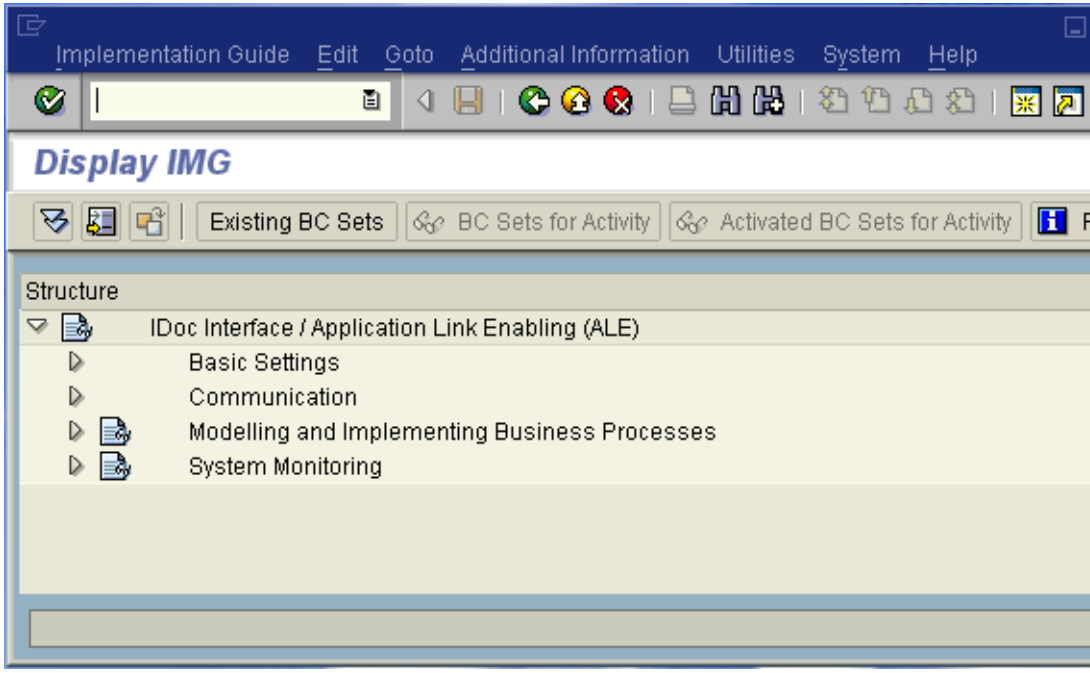
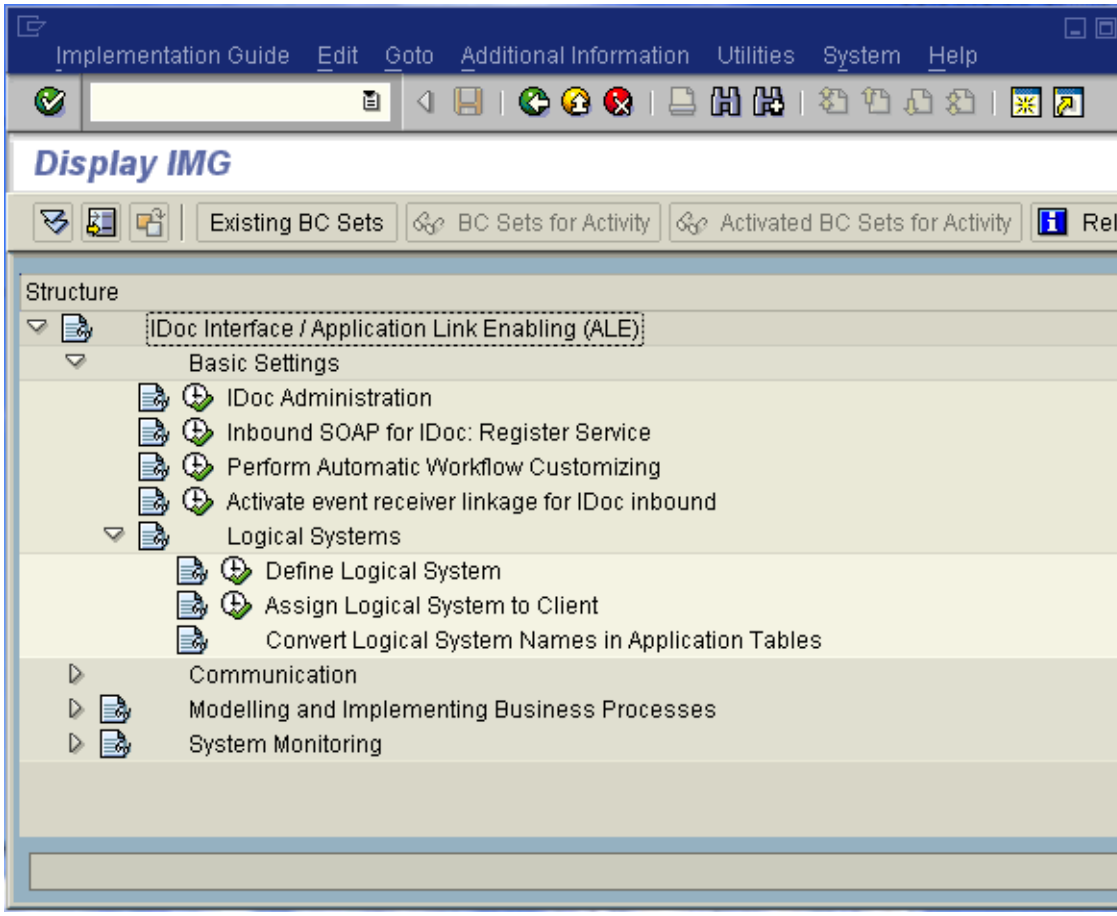


FIGURE 1–9 SAP R/3 System Window

▼ 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.**

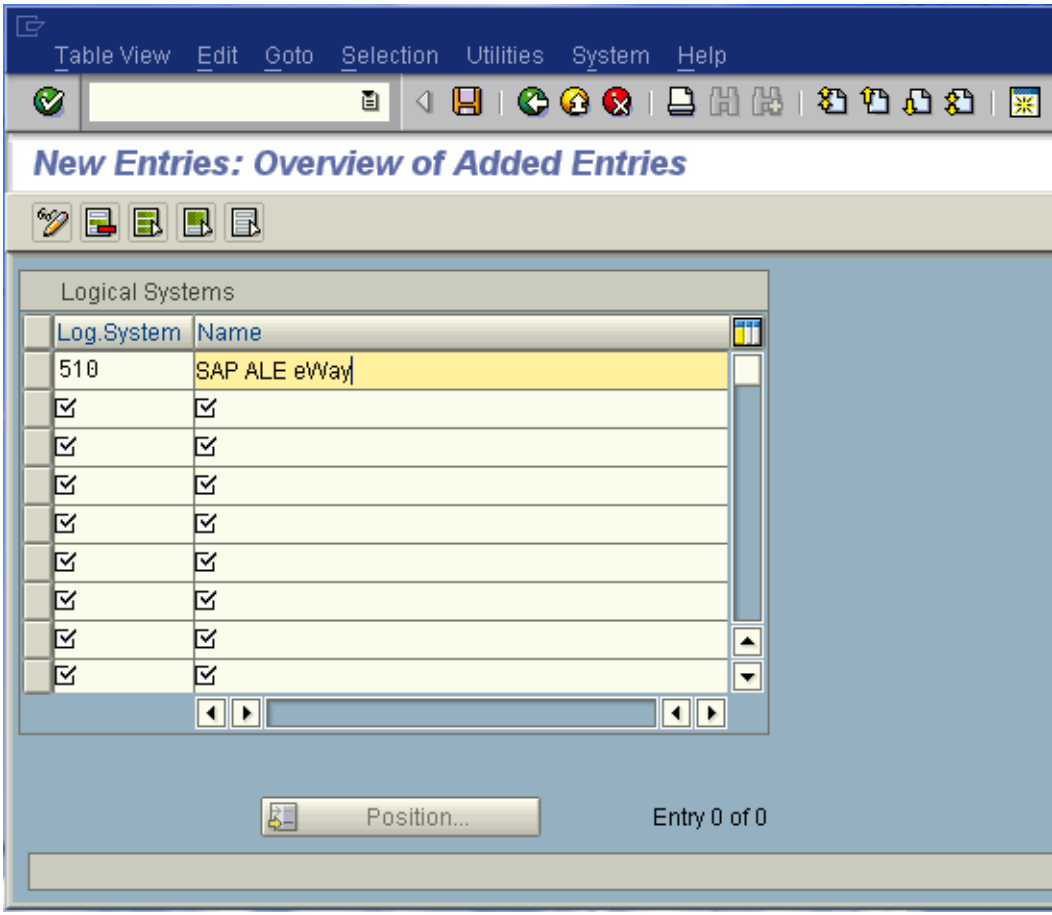


2 **Expand the tree to display IDoc Interface / Application Link Enabling (ALE) > Basic Settings > Logical Systems > Define Logical System.**

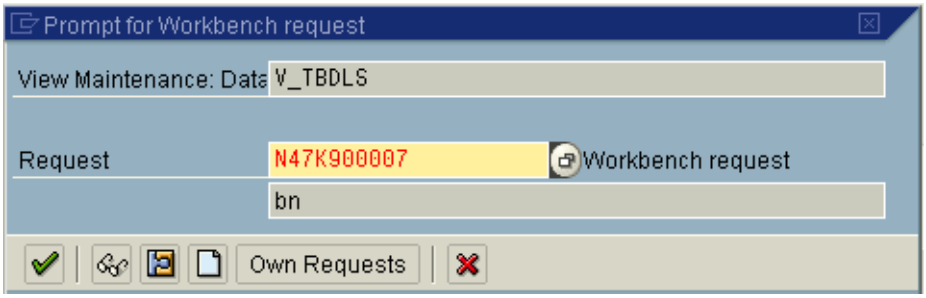
3 **Click the Activity button to select Define Logical System. This displays the Logical Systems Overview window.**

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.**



6 Click Save. The Change Request Entry window appears.



7 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.**

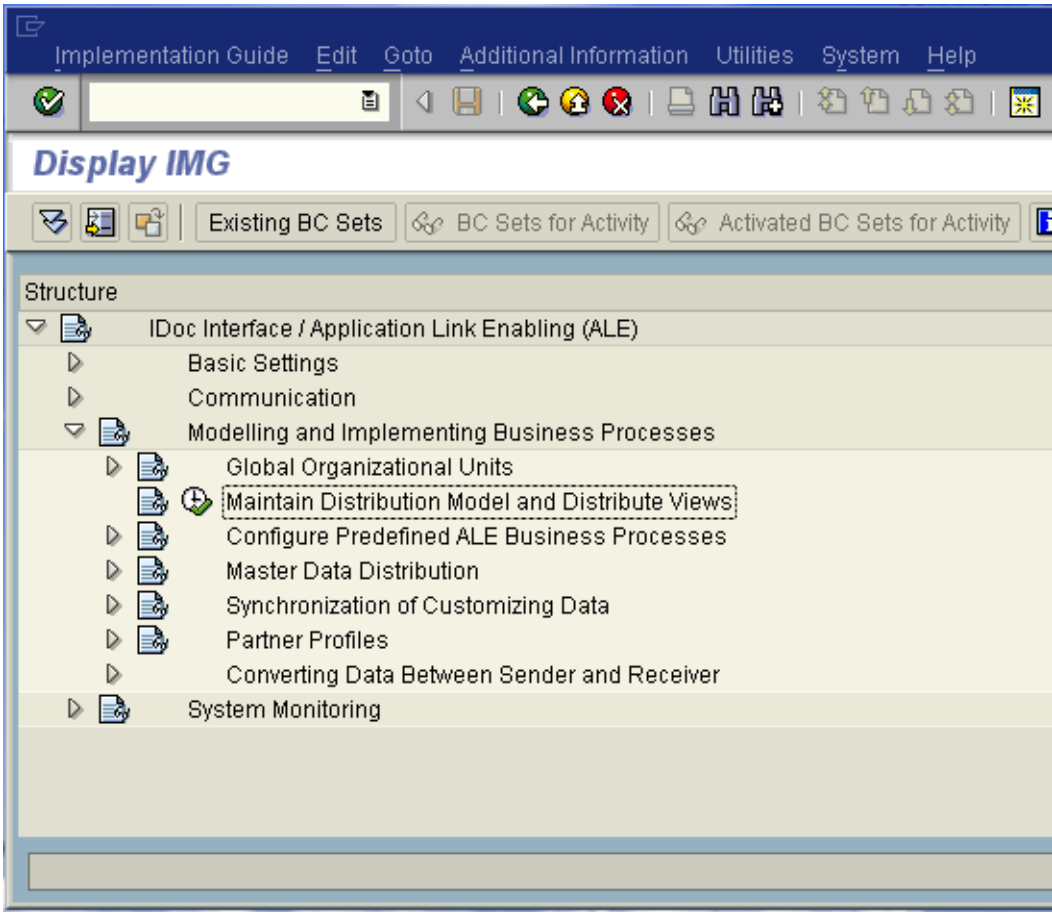
10 **Click Save and select the Back button repeatedly until the SAP R/3 System window appears**

▼ To Specify the Distribution Model

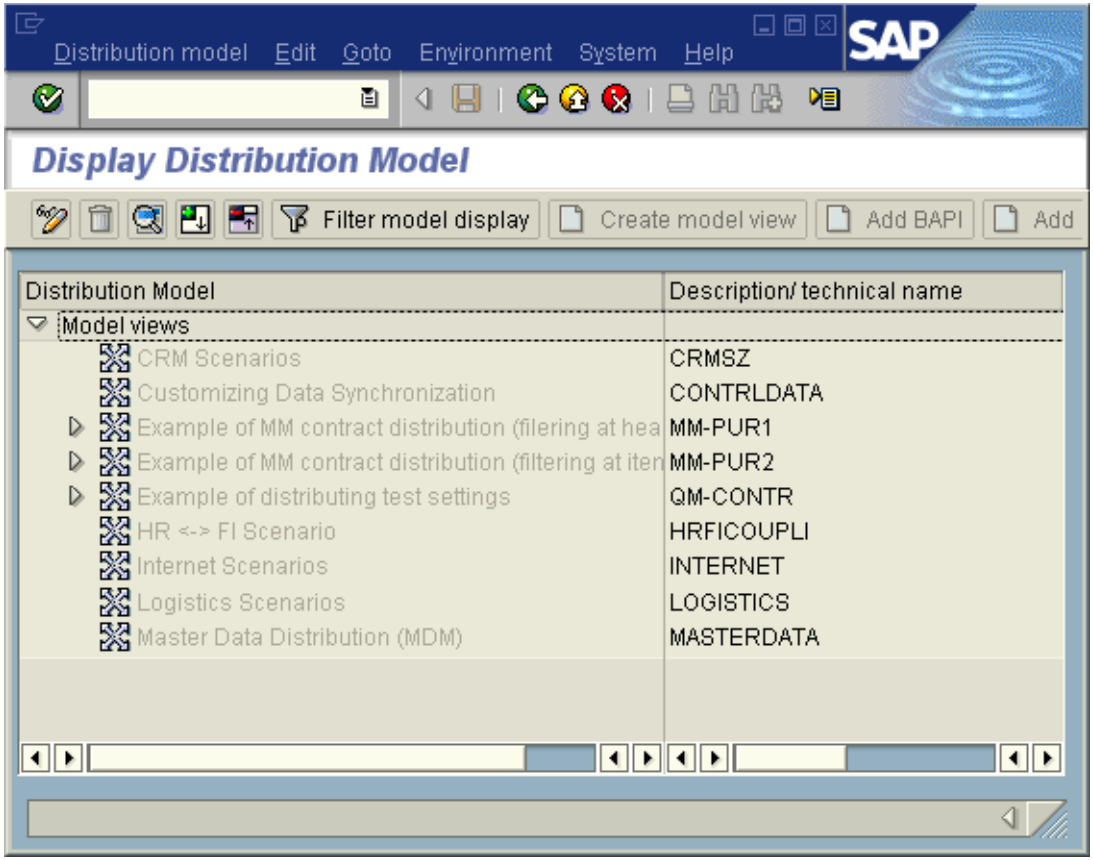
Caution – We recommend that you use the Z prefix when defining a name. This prefix is reserved for external use, and will not conflict with any SAP naming conventions. Using the Z prefix will also prevent any interference with standard SAP functionality or conflicts with standard SAP terminology.

Transaction: **SALE**

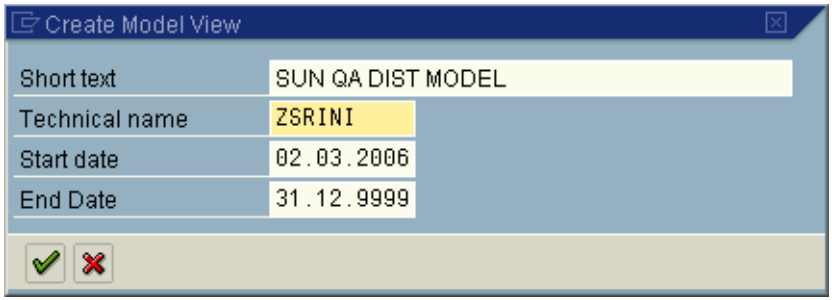
1 **In the SAP R/3 System home window, type SALE into the command field and click Enter to display the Distribution (ALE) Structure window.**



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

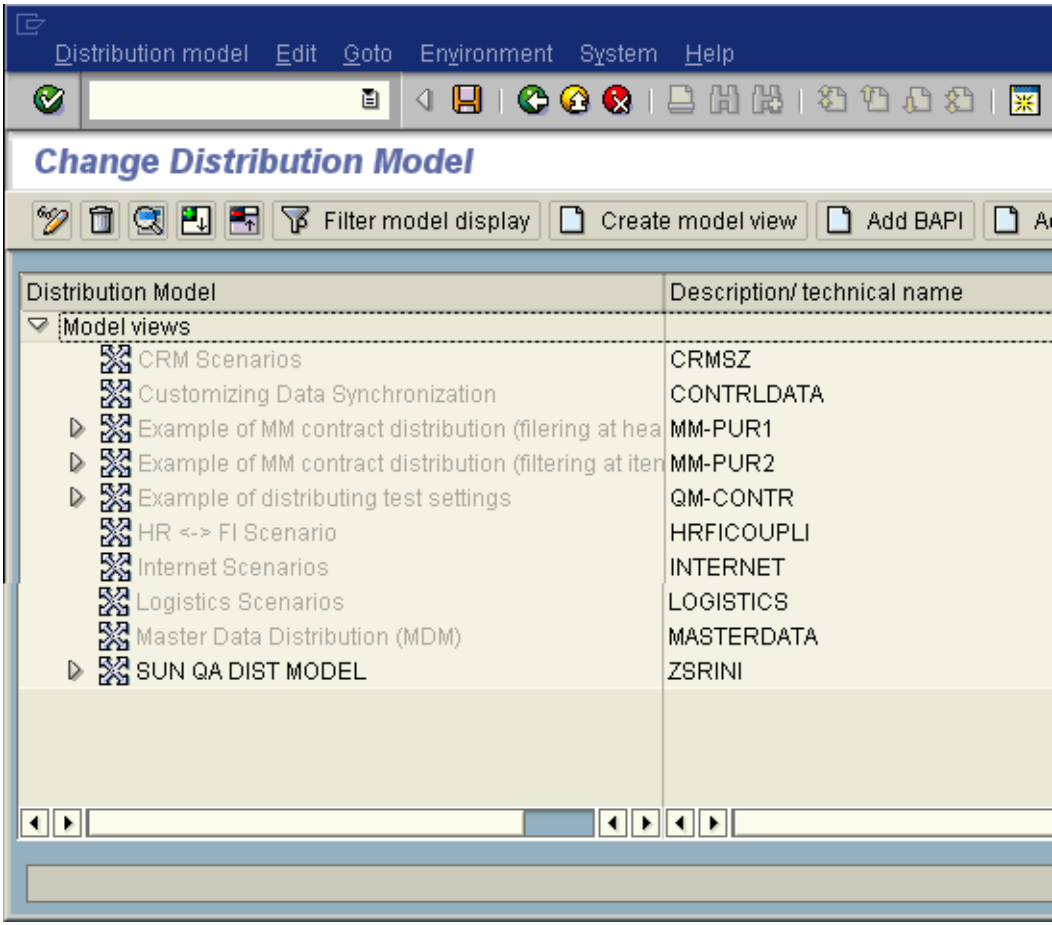


3 **Select the Menu path Edit > Model View > Create to display the Create Model View dialog box.**



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).**

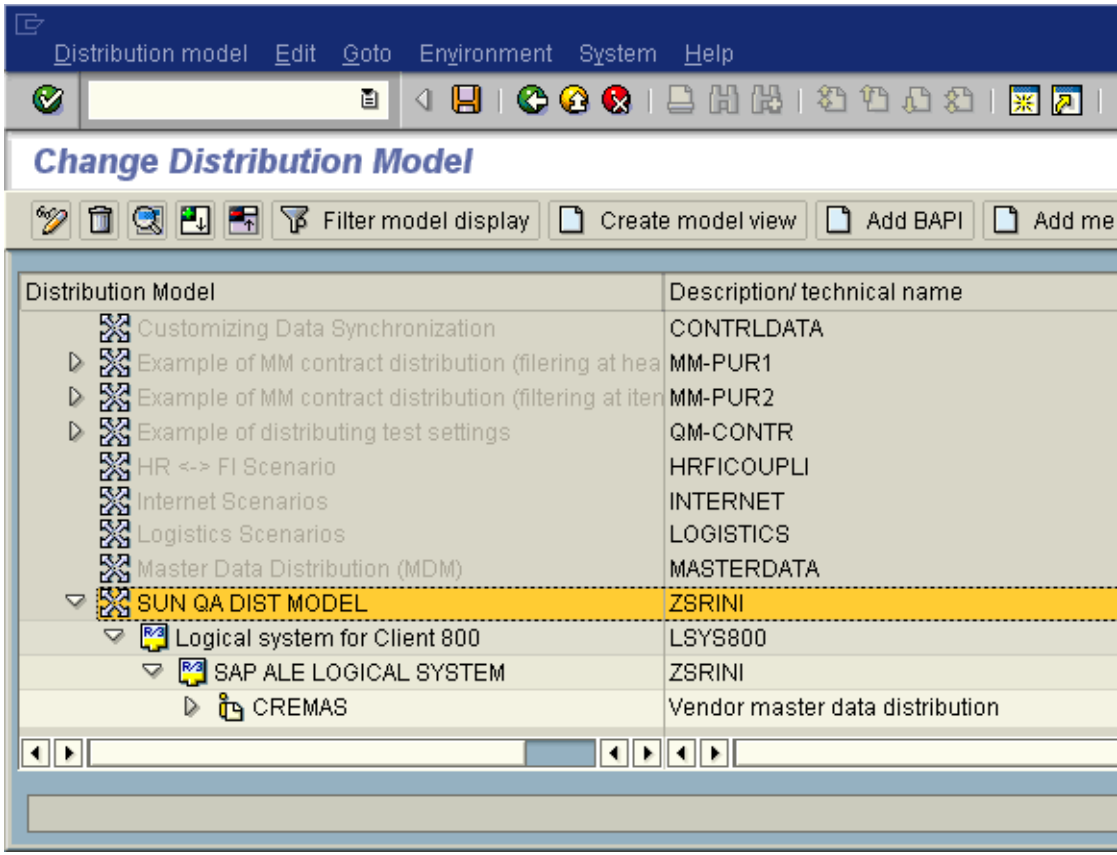
5 **Click Continue (Enter), which returns you to the previous window. Your new Model View now appears in the tree, as shown in the following figure.**



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

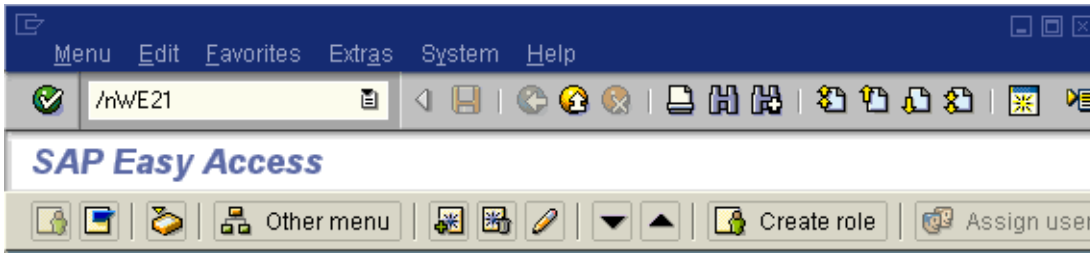


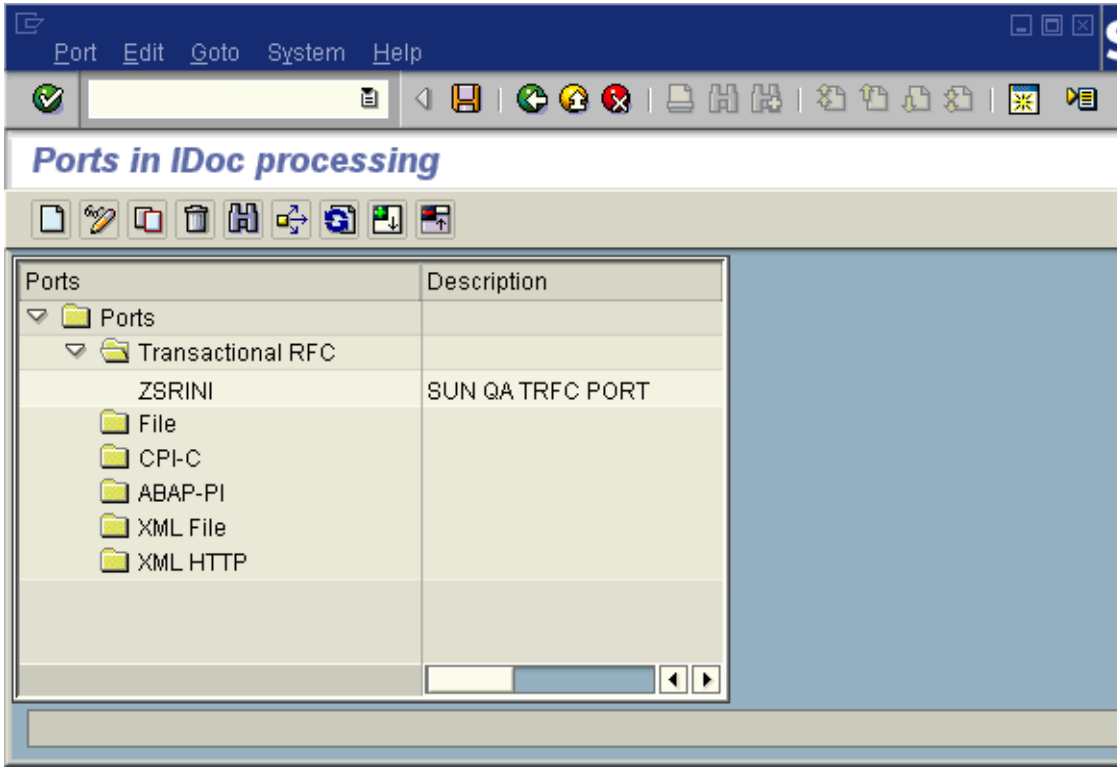
FIGURE 1–10 SAP R/3 System Window

To Define the Communications Port

Transaction: **WE21**

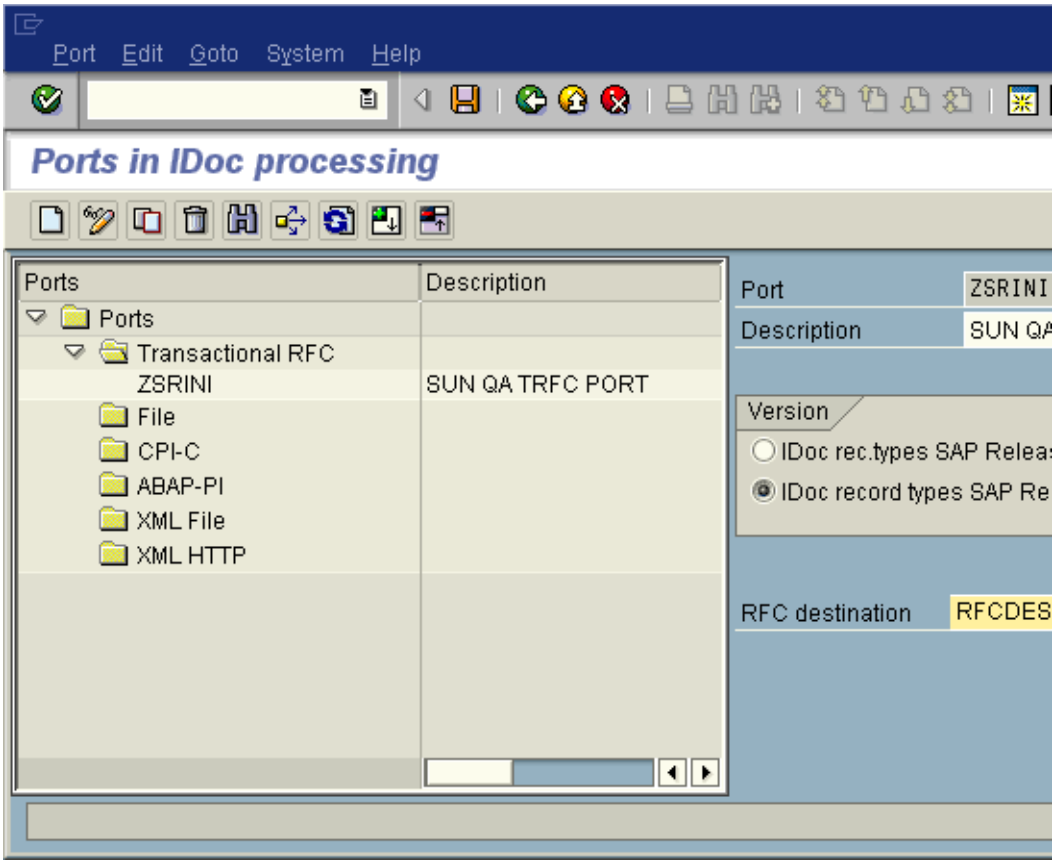
The Communications Port defines the type of connection with the Partner (see "To Create a Partner Profile" on page 25). This task is used to specify the outbound file name, directory path, and any associated function modules.

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.**

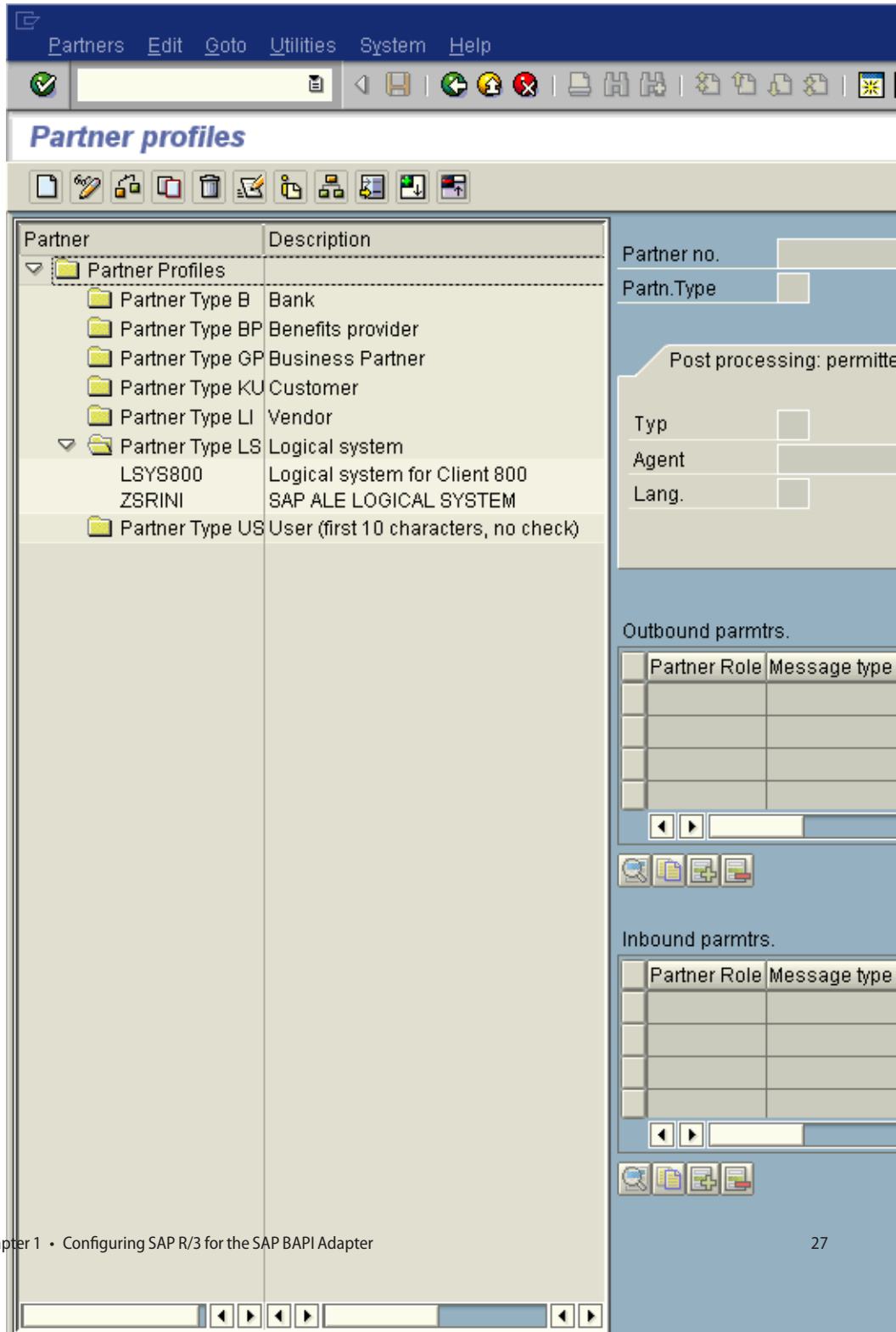
8 **Select Back repeatedly to return to the SAP R/3 System window.**

▼ To Create a Partner Profile

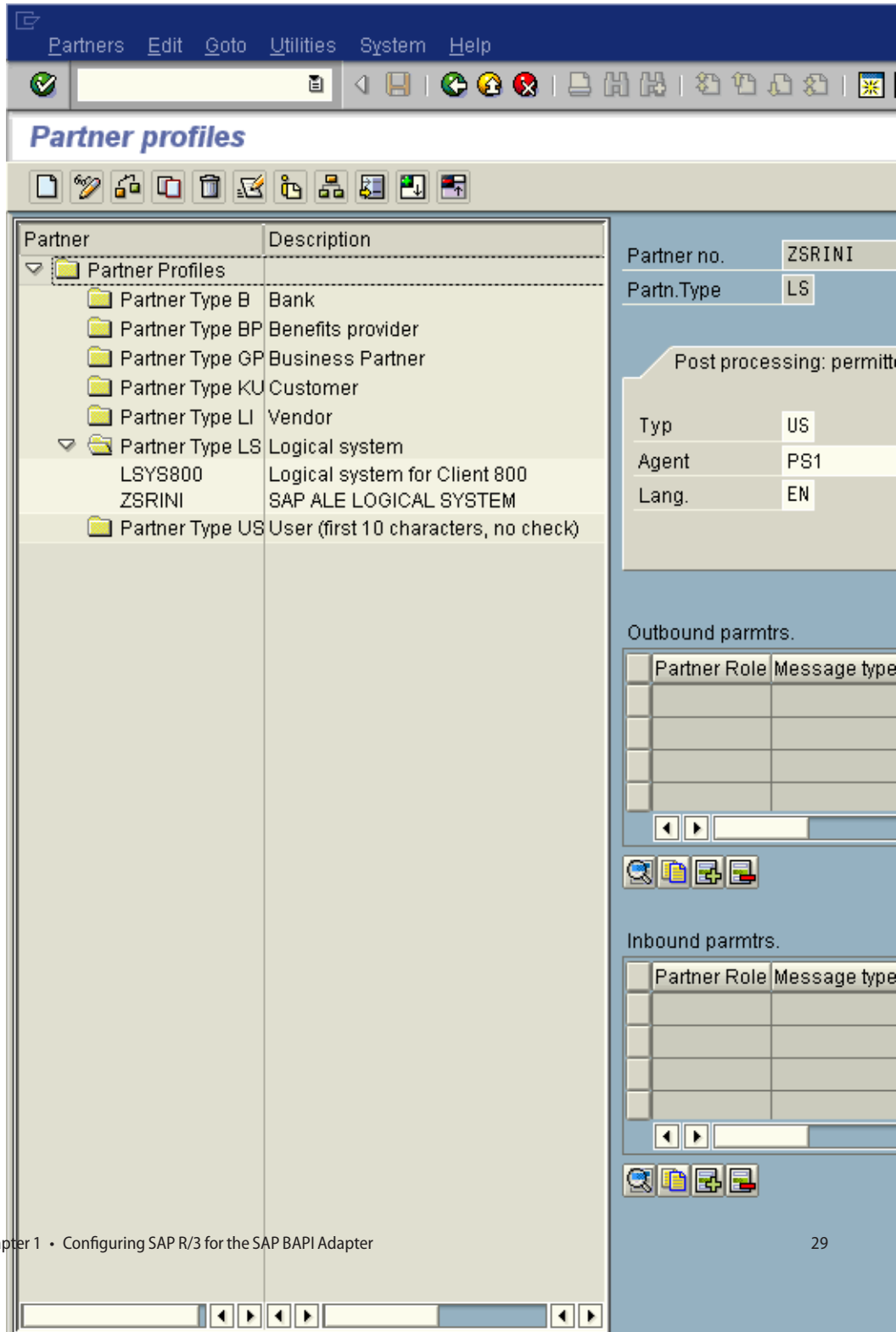
Transaction: **WE20**

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.


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.
Partn.Type
Post processing: permitte
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.**

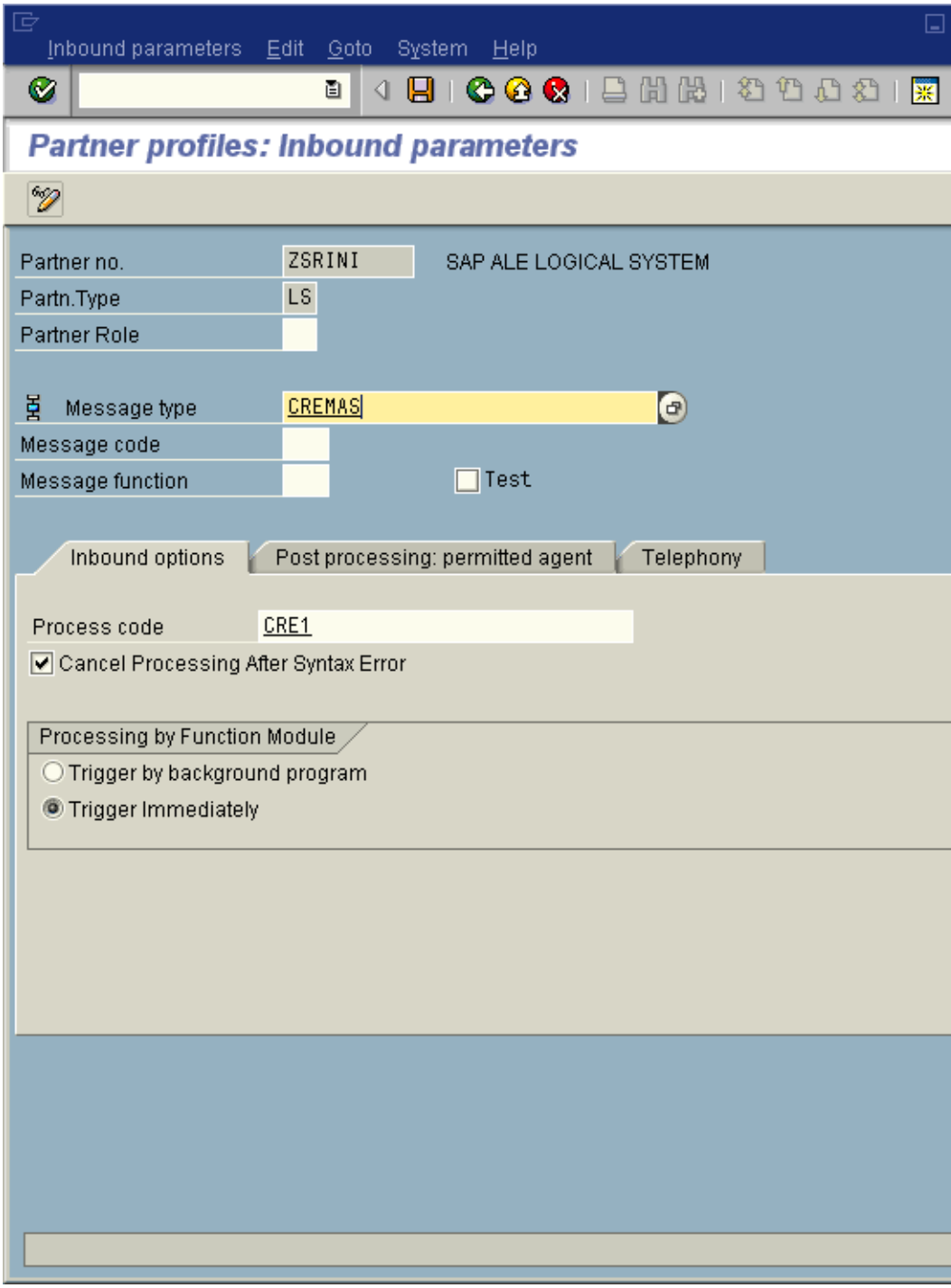
▼ To Configure a Partner Profile

Transaction: **WE20**

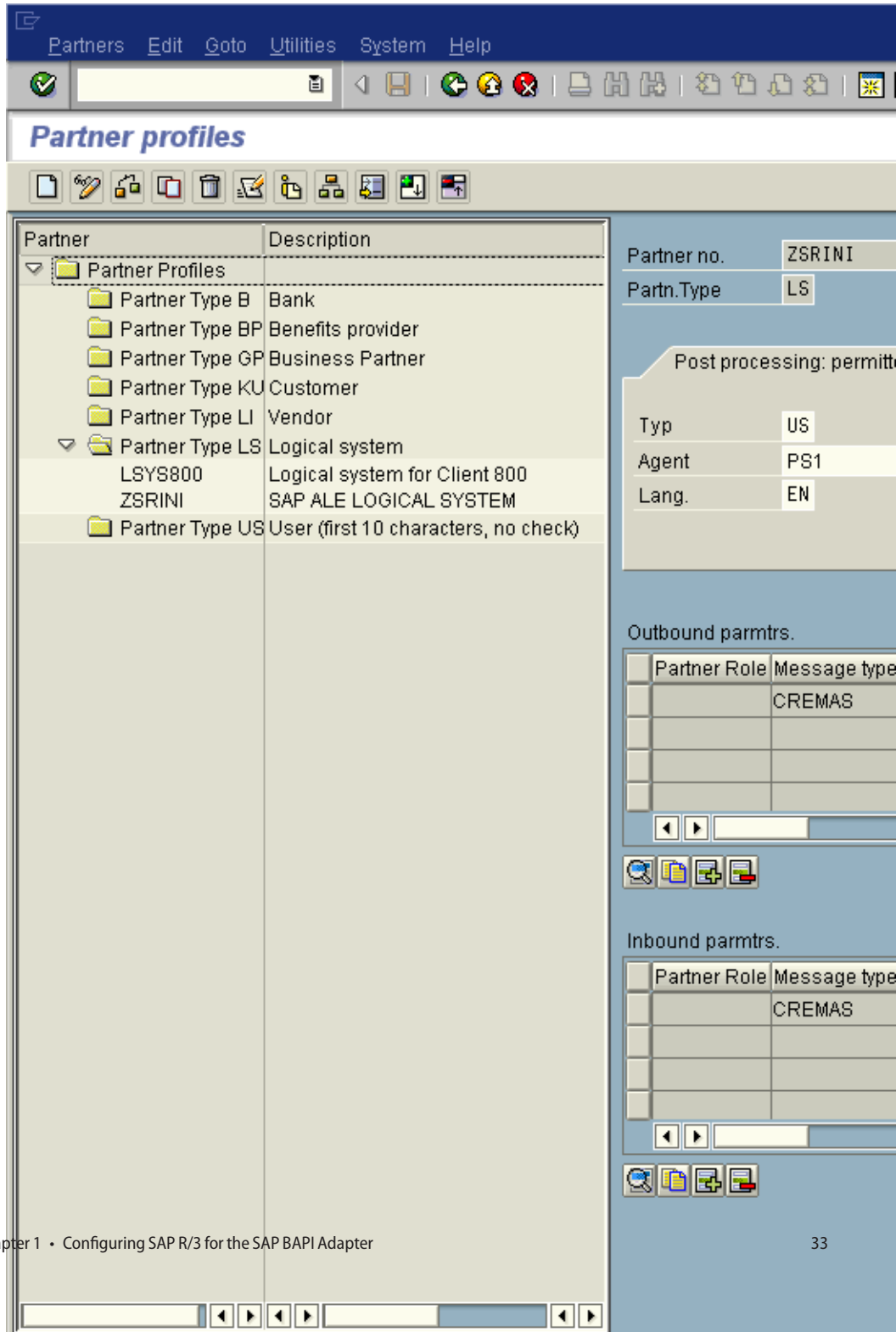
This task is used to demonstrate how you configure the Inbound/Outbound Parameters in the Partner Profile.

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

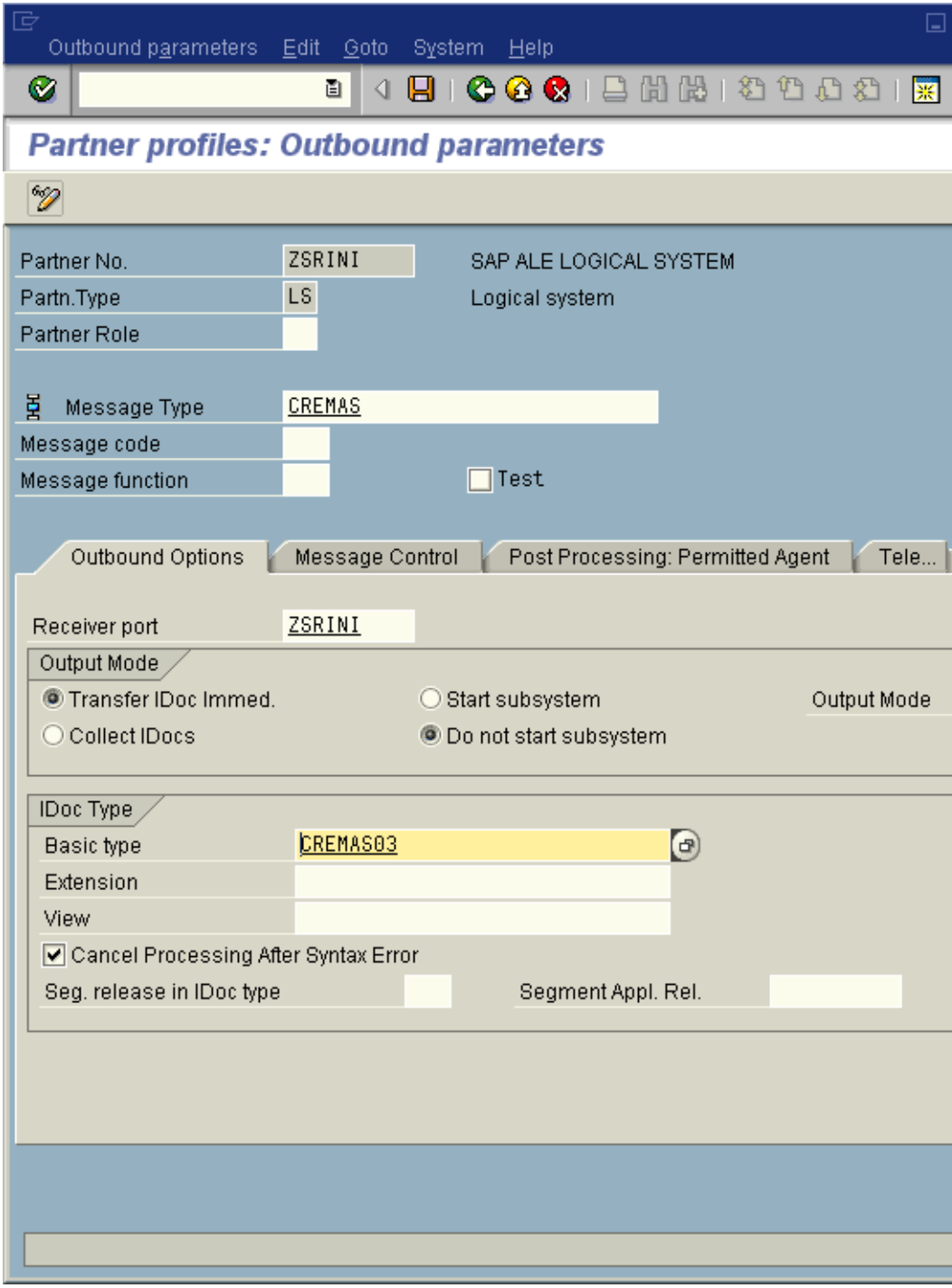
2 **Select the Inbound parameters**


Inbound parameters
Edit
Goto
System
Help
Partner profiles: Inbound parameters
Partner no.
ZSRINI
SAP ALE LOGICAL SYSTEM
Partn.Type
LS
Partner Role
Message type
CREMAS
Message code
Message function
Test
Inbound options
Post processing: permitted agent
Telephony
Process code
CRE1
Cancel Processing After Syntax Error
Processing by Function Module
Trigger by background program
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.**


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
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.