Using SAPconnect Support for Fax-Out and Fax-In

SAPconnect is the successor to the SAP Communications Server (SAPcomm). By using remote function call (RFC) technology, SAPconnect allows SAP R/3 users to access a variety of communication systems – including fax servers – directly from R/3. The Fax feature of Infoprint Manager allows the Infoprint AIX server to act as a fax server.

With Infoprint Manager SAPconnect support, a SAP user can log onto a SAP system from his or her personal computer and either send or receive a fax through Infoprint Manager. This SAP user can create a document in their SAP Office outbox, select attachments, and send a fax through Infoprint Manager. When ready, the user can select the Fax icon and enter a fax number. The SAPconnect interface on the SAP system forwards the job to Infoprint Manager's SAPconnect daemon, which passes the job through an Infoprint server to an Infoprint Fax actual destination. For more information about how to use this support, see "Using SAPconnect for Fax Out Support (Sending Faxes)" on page 3.
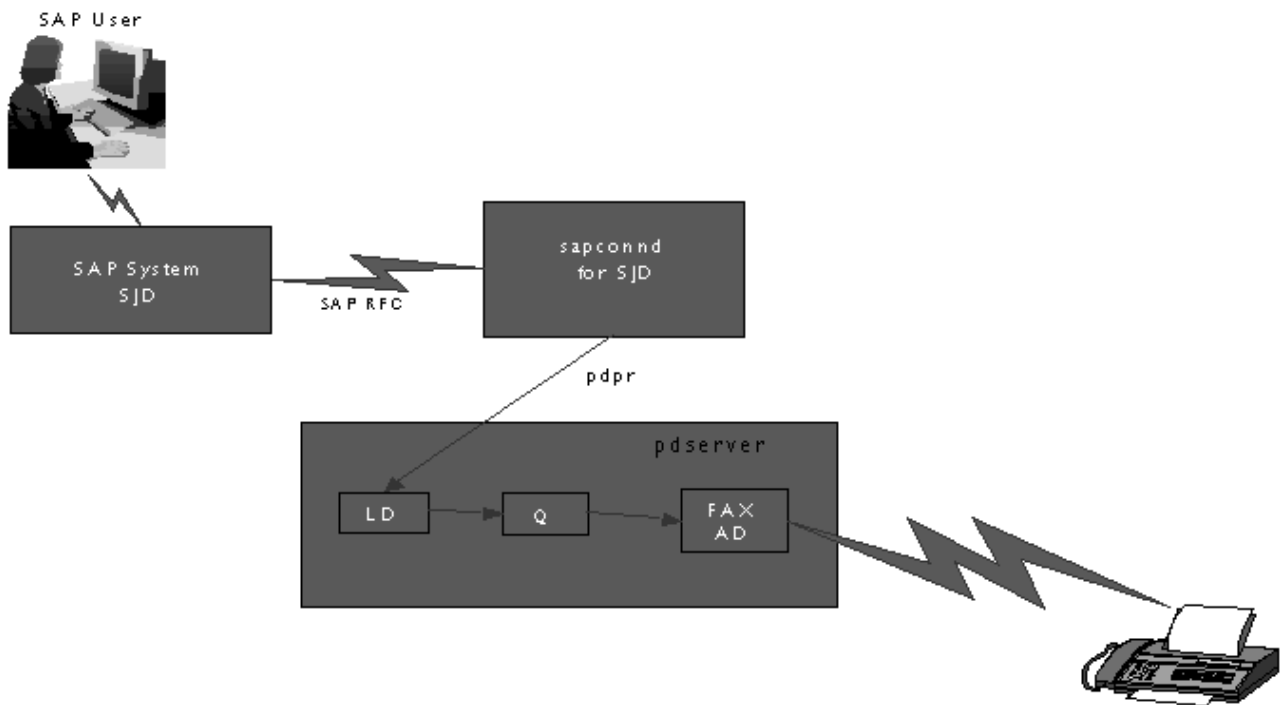

Figure 1. SAPconnect Fax-Out Overview.

SAPconnect support also allows a SAP user to receive incoming fax messages from others through Infoprint Manager. Another person can fax something to a SAP user's fax number, which is being monitored by Infoprint Manager. Infoprint Manager Fax In support forwards the fax through an Infoprint Manager server to a **sapconnect** actual destination, which delivers the fax to the user's SAP system. The SAP system receives the fax request for a particular fax number through the SAPconnect interface and delivers it to that SAP user's SAP Office in box. For more information about how to use this support, see "Using SAPconnect for Fax In Support (Receiving Faxes)" on page 23.
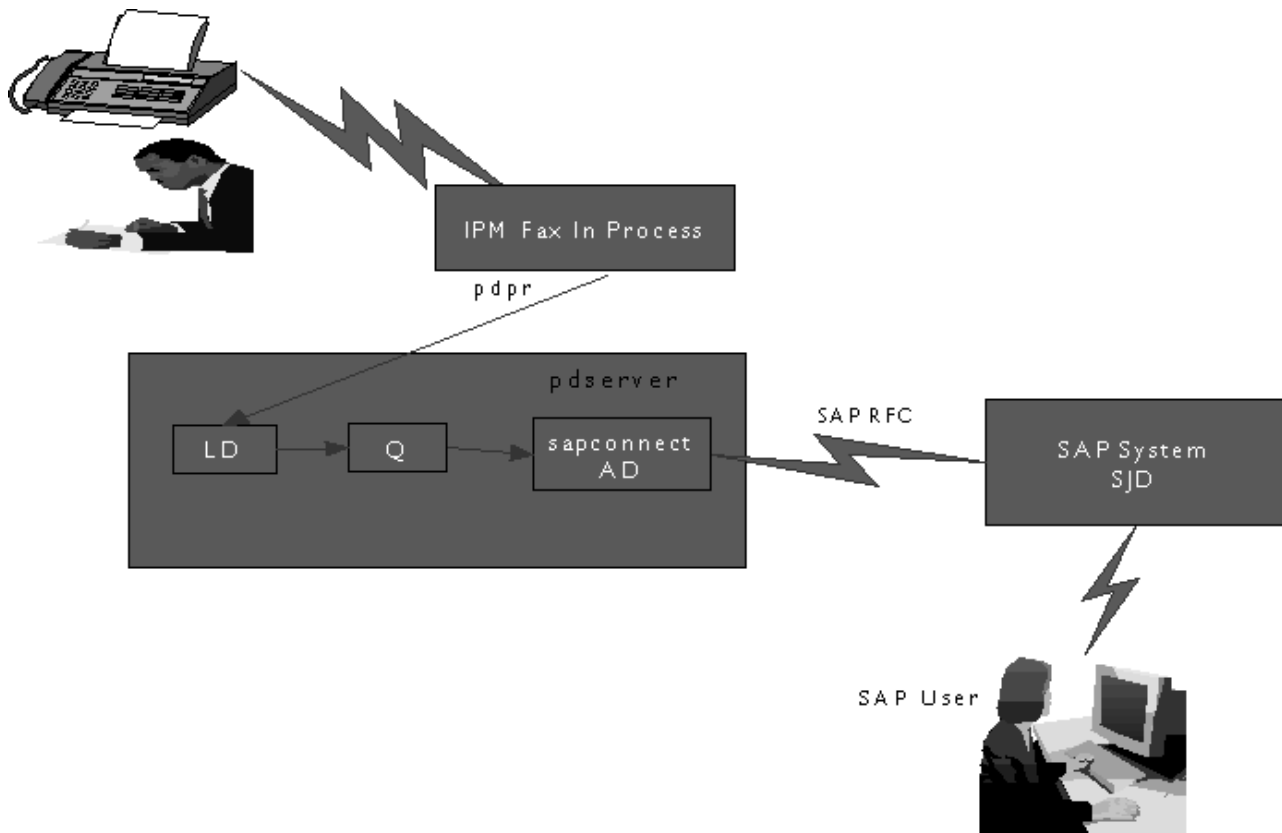
1

Figure 2. SAPconnect Fax-In Overview.

Using examples from the New Visual Design SAP GUI on a Release 4.6c system, this topic provides the following information:

1. "Installing the SAPconnect Support" on page 3.
2. "Using SAPconnect for Fax Out Support (Sending Faxes)" on page 3.
   a. "Preparing to Connect the SAP System to an Infoprint Manager SAPconnect daemon" on page 4.
   b. "Customizing SAPconnect" on page 8.
   c. "Using the Infoprint Fax Actual Destination for Fax-Out" on page 4.
   d. "Configuring the SAPconnect Daemon on Infoprint Manager" on page 11.
   e. "Testing the RFC from SAP R/3" on page 15.
   f. "Preparing and Sending Faxes from R/3" on page 16.
3. "Using SAPconnect for Fax In Support (Receiving Faxes)" on page 23.
   a. "Creating a CPIC or System Type Userid for the Infoprint Manager sapconnect Actual Destination" on page 24.
   b. "Creating Infoprint Manager Objects" on page 24.
   c. "Logging the Infoprint Actual Destination onto the SAP System" on page 25.
   d. Configure the Fax-in lines to feed the appropriate SAPconnect actual destination on an Infoprint AIX server.

Installing the SAPconnect Support

To use the SAPconnect support for either fax-out or fax-in support, you need to install the following on your Infoprint AIX server(s) before performing the configuration tasks described in this publication

- SAP Print feature.

  You must install this feature through the Infoprint Installer in order to use the SAPconnect daemon for fax-out support and the **sapconnect** DSS for fax-in support. For more information about installing the SAP Print feature, see ″Starting the Infoprint Installer for version 3.2″ from *Installing Infoprint Manager on Your AIX System* (**sapr332.pdf**) on the Infoprint Manager for AIX 3.2 Product Library web page (http://www.printers.ibm.com/R5PSC.NSF/Web/ipmrefinfo32).

- Infoprint Fax feature.

  You must install this feature through the Infoprint Installer in order to access the fax component of Infoprint Manager. For more information about the Fax feature, see *Configuring and Using Infoprint Fax* (**32ipmfax.pdf**) on the Infoprint Manager for AIX Administrator Tasks web page (**http://www.printers.ibm.com/R5PSC.NSF/Web/aixadmin**).

  Note: If you have multiple interoperating AIX servers running Infoprint servers, the Infoprint Fax feature can be installed on a different Infoprint AIX server than the server that runs the SAP Print feature.

- Infoprint Manager service update PTF U474311 (October 2001)

  For more information about the applying service, see ″Starting the Infoprint Installer for version 3.2″ from Installing Infoprint Manager on your AIX System (**aixinsr32.pdf**) on the Infoprint Manager for AIX Administrator Tasks web page (**http://www.printers.ibm.com/R5PSC.NSF/Web/aixadmin**).

Using SAPconnect for Fax Out Support (Sending Faxes)

By configuring SAP to use the new Infoprint Manager SAPconnect support, the SAP System sends the request in the form of a SAP RFC call to the Infoprint Manager SAPconnect daemon that is running on the Infoprint AIX server. The SAPconnect daemon converts the RFC call into a print request (an Infoprint Manager **pdpr** command), which is sent to an Infoprint Manager Fax destination. The Fax destination faxes this job to the fax number specified by the SAP user.

An Infoprint Manager SAPconnect daemon supports a single SAP system. Start one SAPconnect daemon for each SAP system that you plan to support.

Once you have ensure that the prerequisites are installed on your Infoprint AIX server (see "Installing the SAPconnect Support"), you must complete the following configuration tasks in order for SAP users to send faxes:

- "Using the Infoprint Fax Actual Destination for Fax-Out" on page 4.
- "Preparing to Connect the SAP System to an Infoprint Manager SAPconnect daemon" on page 4.
- "Customizing SAPconnect" on page 8.
- "Configuring the SAPconnect Daemon on Infoprint Manager" on page 11.
- "Testing the RFC from SAP R/3" on page 15.
- "Preparing and Sending Faxes from R/3" on page 16.

> **Note:** To make this task more manageable, you may want to access "Appendix. SAPconnect Fax-Out Configuration Worksheet" on page 27 and print out copies so you can keep track of the different values specified throughout your configuration.

Using the Infoprint Fax Actual Destination for Fax-Out

Before you configure the SAPconnect daemon, you must have an Inforprint actual destination to send fax output. In order to send faxes through Infoprint Manager, you must first purchase, configure, and install the Infoprint Manager Fax feature, using the *Configuring and Using Infoprint Fax* document (**32ipmfax.pdf**) that is available from the web at the Infoprint Manager for AIX Administrator Tasks page. Ensure that this Fax DSS Infoprint actual destination works correctly. Use the Infoprint logical destination that feeds this actual destination, or create a new one for SAPconnect fax output. Record the name of this destination for use later when you define the start command for the SAPconnect daemon.You specify the name of this destination for the **IPMLogicalDestinationName** parameter value in "Starting the SAPconnect daemon" on page 13.

You can find the **32ipmfax.pdf** document on the web at the Infoprint Manager for AIX Administrator Tasks page.

Preparing to Connect the SAP System to an Infoprint Manager SAPconnect daemon

The following three procedures must be completed in order before your Infoprint Manager Fax support can be connected to your SAP R/3 system:

1. "Creating a CPIC or System Type User for the Infoprint Manager SAPconnect Daemon".
2. "Creating a SAP RFC Destination" on page 5.
3. "Activating Fax Function in SAP Office" on page 8.

Creating a CPIC or System Type User for the Infoprint Manager SAPconnect Daemon

Because the Infoprint Manager SAPconnect daemon (**sapconnd**) daemon must logon to the SAP system to make RFC calls to the SAP system sending fax output, you must create a user for it. This userid allows the SAPconnect daemon to send asynchronous data about the results of the fax back to the SAP system.

To create a user for the Infoprint Manager SAPconnect daemon (**sapconnd**) daemon, use transaction su01 to access the **User Maintenance: Initial Screen** window.

The user must be either a **CPIC** or **System** type and have authorizations provided in the **S_A.SCON** profile. Record the user, password, and client values for use later when you define the start command for the SAPconnect daemon in "Starting the SAPconnect daemon" on page 13.

If you ever modify this SAP user, remember to make the changes to the **rc.iprsap** file in the **/etc** directory on the Infoprint AIX server where the SAPconnect daemon is running.

Creating a SAP RFC Destination

Before you can submit faxes from SAP R/3 using Infoprint Manager fax support, you must create a Remote Function Call (RFC) destination. You will need this destination for "Configuring the SAPconnect Daemon on Infoprint Manager" on page 11.

1. Login to the SAP R/3 GUI.

2. Type SM59 in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the left side of the menu bar, between the **Enter** (green checkmark) key and diskette icons.

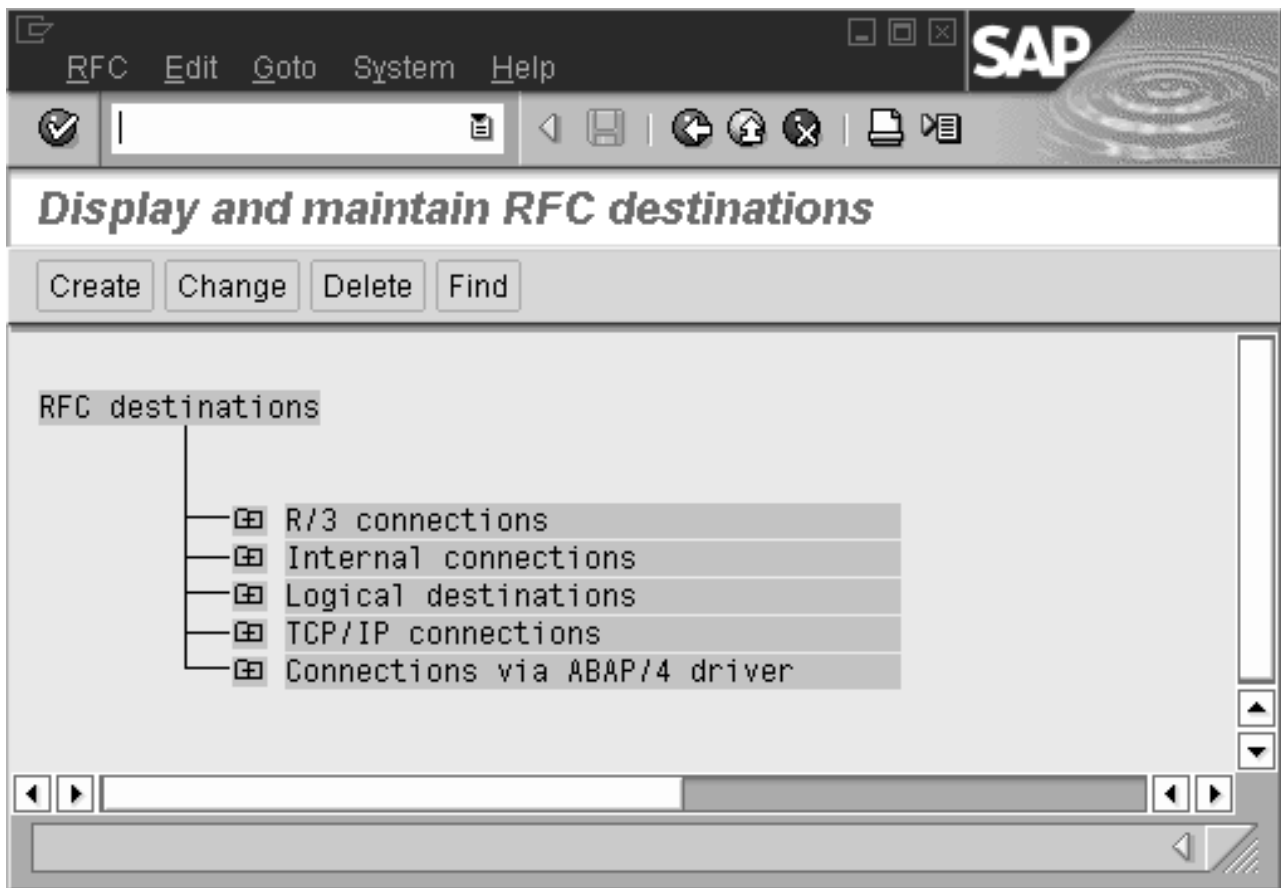3. From the **Display and maintain RFC destinations** window (shown below), click on the **Create** button.

Figure 3. Display and maintain RFC destinations window.

4. From the **RFC destination** window, you must:

   a. Enter the name of the destination in the **RFC destination** field.

   Record the destination name for use later when you define the start command for the SAPconnect daemon in "Starting the SAPconnect daemon" on page 13 and in "Configuring the RFC Initialization File on Infoprint Manager" on page 11. Note that this value must match the **DEST=** parameter value in the **saprfc.ini** file that resides on your Infoprint AIX server.

   b. Specify T in the **Connection type** field to indicate an external TCP/IP connection.

c. Specify a short description (such as IPM FAX destination) in the **Description** field.
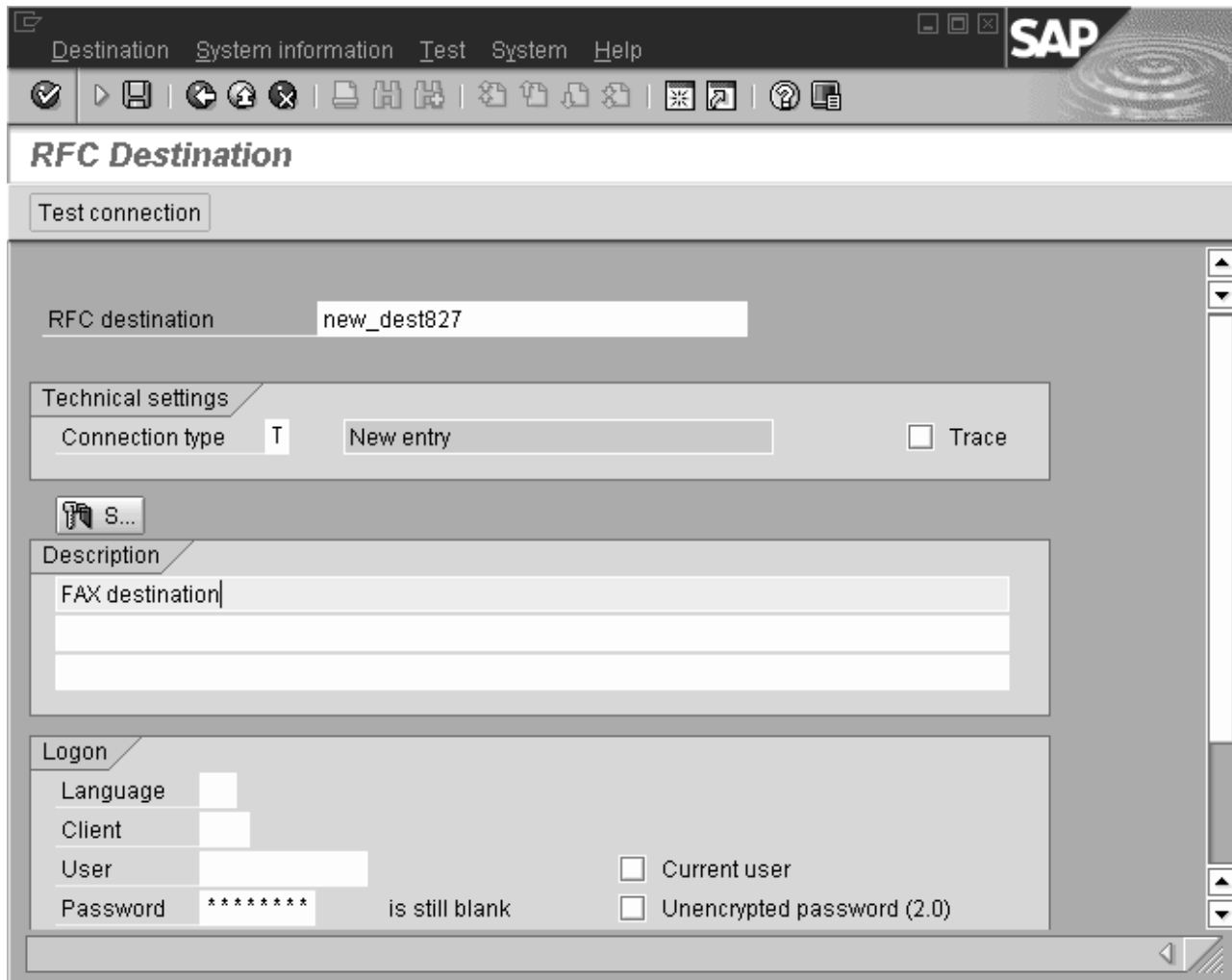
d. Press the **Enter** key.

Figure 4. RFC Destination window.

5. From the **RFC Destination NEW_DEST_827** window, access the **Activation Type** and press the **Registration** push-button next to **Activation Type**.
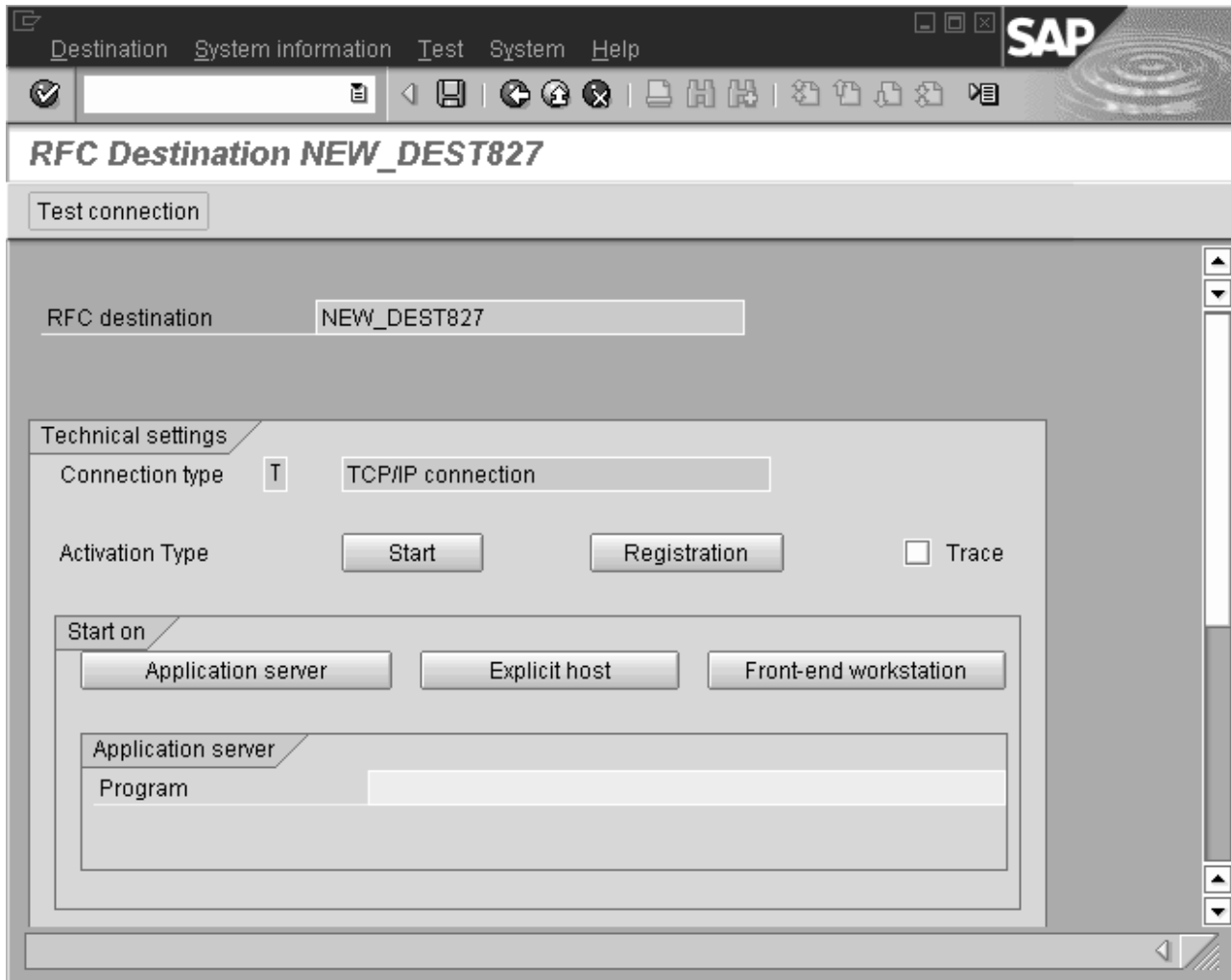
Figure 5. RFC Destination window for registration.

6. Enter a **Program ID** field value for the Infoprint Manager SAPconnect daemon in the format *sysname.program_name*, such as `info1.sapconnd` where `info1` is the name of the Infoprint AIX server where the SAP Print feature was installed and `sapconnd` is the name of the program.

    Record this value for use in "Configuring the RFC Initialization File on Infoprint Manager" on page 11. Note that this value must match the **PROGID=** parameter value in the **saprfc.ini** file that resides on your Infoprint AIX server.

7. From the **RFC Destination NEW_DEST827** window main menu, take the **Destination**—>**Gateway** options path.

8. From the **RFC Destination NEW_DEST827** pop-up dialog, specify values for both the **Gateway host** and the **Gateway service** fields.

    Record this value for use in "Configuring the RFC Initialization File on Infoprint Manager" on page 11. Note that these values must match the **GWHOST=** and the **GWSERV=** parameter values respectively in the **saprfc.ini** file that resides on your Infoprint AIX server.

9. Select the **OK** button to save these values.

10. Use **F11** to save your entries.

At the very bottom of the window to the right of, the green checkbox, you
should see a message similar to the following:

```
Destination NEW_DEST827 saved
```

Activating Fax Function in SAP Office

You must activate the Fax function in the SAP Office component of your SAP R/3
application, using the following procedure if you are running with a SAP R/3
Release 4.0. If you are using a SAP R/3 Release 4.5 system or higher, this
procedure is unnecessary, but you should still verify the fax component is selected
after customizing SAPconnect for faxing.

1. Login to the SAP R/3 GUI.
2. Type S016 in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the
   left side of the menu bar, between the **Enter** (green checkmark) and diskette
   icons.
3. From the **Shared office settings** window, select the **Send** tab and click the
   checkbox for the Fax component.
4. Press the **F11** key to save your entries.

Customizing SAPconnect

Before you can use the Infoprint SAPconnect daemon to send faxes from a SAP
R/3 system, you must perform the following two customization tasks on your SAP
system:

1. "Customize SAPconnect for Faxing".
2. "Creating a SAPconnect Node".

Customize SAPconnect for Faxing

1. From the SAP R/3 GUI, type SCOT in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the
   left side of the menu bar, between the **Enter** (green checkmark) and diskette
   icons.
2. From the **SAPconnect:Administration(jobs)** window, take the
   Settings—>Communication methods options path.
3. From the **Change View "SAPconnect: Maintenance view — communication
   methods":...** window,
   - Set the **Typ** field value to FAX.
   - Set the **Method** field value to SAPCONNECT.
4. Press the **F11** key to save your entries.

Creating a SAPconnect Node

In R/3, a node is a logical view of a communication system which can represent a
fax system, an e-mail system, or another R/3 system. This SAP node is being
created to represent the Infoprint Manager fax server.

1. Login to the SAP R/3 GUI.
2. From the SAP R/3 GUI, type SCOT in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the
   left side of the menu bar, between the **Enter** (green checkmark) and diskette
   icons.
3. From the **SAPconnect:Administration(jobs)** window, take the **View—>Node
   (F7)** options path.

4. From the **SAPconnect:Administration(nodes)** window, select the **Create** icon (piece of paper; **Ctrl** + **F5**) on the far left.

5. From the **Create nodes** pop-up dialog:
   - Set the **Node** field value to the name you select for this node, such as IPMFAX.
   - Set the **Description** field value to IPMFAX Node for Fax Support.

6. Click the **continue** button and specify the object you created in "Creating a SAP RFC Destination" on page 5 (NEW_DEST827) in the **RFC destination** field.

   If defined correctly, you should be able to click on the circular icon of two superimposed pages to the right of this field to select this value instead of just typing it into the field.

7. Click the **continue** button and ensure that the **Fax** radio button is selected.

8. Click the **continue** button and ensure that the **Address area** field contains a *.

   By specifying a *, you ensure that this node will send faxes to any series of numbers. If you were limiting this node to a particular number, you would specify it in the form of *ctry num* where *ctry* specifies the abbreviation for faxes sent to a particular country and *num* specifies the fax number without any special characters. To ensure that you correctly specify these fax numbers, IBM recommends that you select the Click here for further information.... link.

9. Click the **continue** button, ensure that the **Only the fll formats** radio button is clicked, and type in each of the following as separate entries in the **Format** table:

Table 1. Entries for the Format Table when Defining a Node for Fax Support.

PDF
PS
RAW
GIF
JPEG
PCL

10. Click the **continue** button and specify a valid PostScript device type, such as POST2, in the **Dev. type** field.

    This defines the SAP device type for which SAPscript documents are prepared if SAPconnect data is converted into a print format.

11. Click the **continue** button and click on the check box next to **Country** so you can use the drop down list to select the appropriate country code for sending fax output.

    From the Country key pop-up dialog, use the cursor to select the appropriate country abbreviation, then click on the **Enter** (green checkmark) key to save your value and exit the dialog.

    Before deciding on whether or not to check the **Node-specific fax number changes** check box, IBM recommends that you select the Click here for further information.... link. Selecting this check box allows you to define general replacement rules for nodes that replace one row of digits with another, such as deleting the area code for all faxes submitted from the local area.

12. Click the **continue** button and select the radio button N next to the question Set further address types?

13. Click the **continue** button and specify the **Maximum waiting time for repeat send attempt procedure:** in the **Hours** and **Minutes** fields.

14. Click the **continue** button and specify the appropriate radio buttons to indicate that this node cannot resolve path references.

15. Click the **continue** button and specify the **Node is ready for use** radio button.

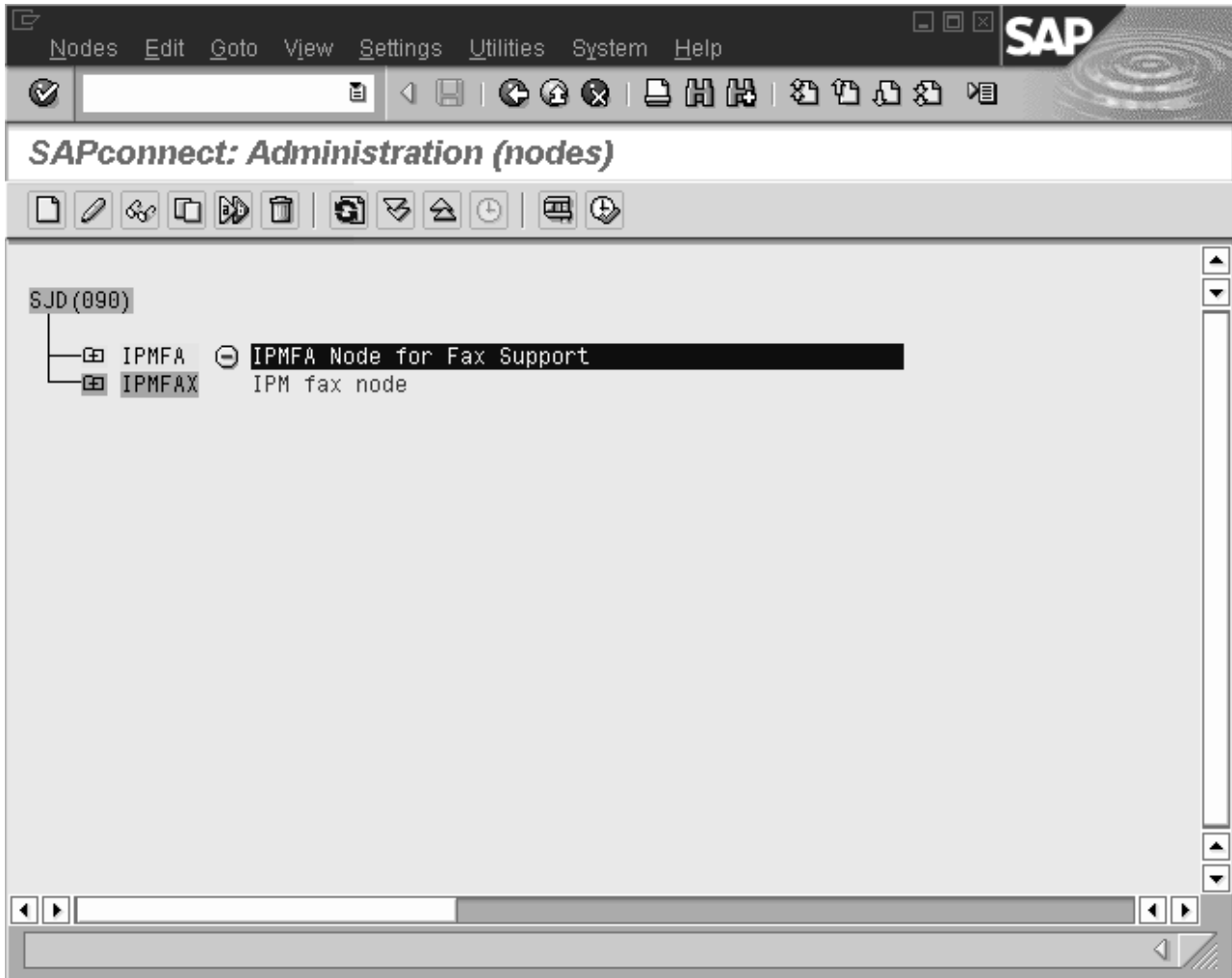   Once you set this value, you receive a status panel that shows your node defined to the SAP R/3 system:

Figure 6. Display of Defined Node on SAP System.

Configuring the SAPconnect Daemon on Infoprint Manager

Before you can begin to send faxes from your SAP R/3 system to Infoprint Manager, you must perform the following steps to configure the SAPconnect daemon on your Infoprint Manager AIX server:

1. "Configuring the RFC Initialization File on Infoprint Manager".
2. "Starting the SAPconnect daemon" on page 13.
3. "Configuring to Start SAPconnect daemons on System Reboot" on page 14.

Configuring the RFC Initialization File on Infoprint Manager

Before your Infoprint AIX server can begin to receive SAPconnect RFC requests from a particular SAP R/3 system, you must edit and configure both the RFC Server Information (see step 2 below) and the RFC Client Information (see step 4 below) found in the **saprfc.ini** file. Use the following procedure to perform this task on your Infoprint AIX server.

1. From an AIX command line, copy the default **saprfc.ini** file from its default location to the **/var/pd** directory where it must be installed by typing :

   ```
   cp /usr/lpp/pd/bin/saprfc.ini /var/pd/saprfc.ini
   ```

   If you are reinstalling, ensure that you copy any customization you've made from your existing **/var/pd/saprfc.ini** file to the new file so it is not lost.

2. From the **/var/pd** directory, edit the **saprfc.ini** file and copy the following sample block of server information to the bottom of the file:

   ```
   # RFC Server Information

   #DEST=<SAP defined Destination>
   #TYPE=R
   #PROGID=<SAP defined Program ID>
   #GWHOST=<HostName of the SAP Gateway>
   #GWSERV=<Service Name of the SAP Gateway>
   #RFC_TRACE=1
   ```

3. Remove the comment indicator (#) in front of each line that follows the `# RFC Server Information` line, and fill in the appropriate values for these fields by replacing the terms defined with the angle brackets with the actual values that you used on your SAP R/3 system in "Creating a SAP RFC Destination" on page 5 (as displayed below).

   Please note that these values must match exactly the values you used in creating your RFC Destination.

   ```
   # RFC Server Information

   DEST=NEW_DEST827
   TYPE=R
   PROGID=info1.sapconnd
   GWHOST=cpmat00
   GWSERV=sapgw10
   RFC_TRACE=1
   ```

4. Copy one of the following sample blocks of SAP client information to the bottom of the file.

   If you copy the ....`Load Balancing` block, SAP R/3 will determine which SAP application server the SAPconnect daemon logs onto at runtime, using the load balancing feature of SAP R/3.

   Copy either ....

   ```
   # RFC Client Information - Specific Application Server

   #DEST=<SAP System Name>
   #TYPE= A
   #ASHOST=<SAP Application Server Host>
   ```

```
#SYSNR=<SAP System Number>
#GWHOST=<optional, default:  gateway on Application Server>
#GWSERV=<optional, default:  gateway on Application Server>
#RFC_TRACE=1
#ABAP_DEBUG=0
#USE_SAPGUI=0
```

or ....

```
# RFC Client Information - Load Balancing

#DEST=<SAP System Name>
#TYPE=B
#R3NAME=<SAP System Name>
#MSHOST=<Host Name of the Message Server>
#GROUP=<Application Servers group name, optional, default:  PUBLIC>
#RFC_TRACE=1
#ABAP_DEBUG=0
#USE_SAPGUI=0
```

5. Remove the comment indicator (#) in front of each line that follows the `# RFC Server Information` line, and fill in the appropriate values for these fields by replacing the terms defined with the angle brackets with the actual values that you used on your SAP R/3 system (below you will see the particular client example displayed).

   Please note that these values must match exactly to those set on the SAP system. The only exception to this rule are the **GWHOST** and **GWSERV** parameters, which can be left commented out.

```
# RFC Client Information - Specific Application Server

DEST=SJD
TYPE=A
ASHOST=cpmat00
SYSNR=10
#GWHOST=cpmat00
#GWSERV=sapgw10
RFC_TRACE=1
ABAP_DEBUG=0
USE_SAPGUI=0
```

6. Exit the **saprfc.ini** file and save your changes.

7. To ensure that the Infoprint SAPconnect daemon will be able to communicate with whatever SAP application server, SAP Gateway server, and SAP Message server that you refer to in the **saprfc.ini** file, you must be able to issue a **ping** command against these servers by name (not an IP address in dotted decimal notation format).

   If you cannot ping the various SAP hosts by name (for example, `ping cpmat00`), you must

   a. From an AIX command line, move to the **/etc** directory: `cd /etc`

   b. Using your AIX editor of choice, edit the **hosts** file and copy the host names of the SAP Gateway (`GWHOST=cpmat00`), the SAP application server (`ASHOST=cpmat00`), and the message server (`MSHOST=cpmat00`) in the format:

   ip_address `cpmat00 # SAP Gateway hostname address`

   Note: It is not sufficient to be able to issue a ping command using the dotted decimal notation IP address of the SAP application server.

Starting the SAPconnect daemon

Each SAP R/3 system using the Infoprint Manager SAPconnect Fax support needs to have one SAPconnect daemon running. To start the SAPconnect daemon, you must edit and run the **/etc/rc.iprsap** file from the AIX command line. This procedure takes place on the Infoprint AIX server.

1. From the AIX command line, copy the following lines of this file from the **/usr/lpp/pd/bin/rc.iprsap** that you just installed to the **/etc/rc.iprsap** file, being careful not to overwrite any previous definitions:

   ```
   # echo Starting sapconnectd <System Name>

   # /usr/lpp/pd/bin/startsapconnectd <SAPDestinationName <SAPSystemName>
   <IPMLogicalDestinationName> <User> <Client> <Password> <Language>
   ```

2. From the AIX command line, access the **rc.iprsap** file in the **/etc** directory. Edit the file to copy and uncomment the two lines for the SAPconnect daemon:

   a. An echo statement that states that the SAPconnect daemon has been started:

   ```
   echo Starting sapconnectd <System Name>
   ```

   b. The **startsapconnectd** command:

   ```
   /usr/lpp/pd/bin/startsapconnectd <SAPDestinationName <SAPSystemName>
   <IPMLogicalDestinationName> <User> <Client> <Password> <Language>
   ```

3. Specify the appropriate values for the items in angle brackets .

   SAPDestinationName
   > Specifies the name of the destination that you defined in "Creating a SAP RFC Destination" on page 5 and put in the server **DEST=** field value in the **saprfc.ini** file.

   SAPSystemName
   > Specifies the three-character name of the SAP system. This value must match the client **DEST=** field value in the **saprfc.ini** file.

   IPMLogicalDestinationName
   > Specifies the name of the logical destination on your Infoprint AIX server which will feed faxes to the Infoprint Manager fax acutal destination.
   >
   > You create this destination on the Infoprint AIX server, using the procedure described in the *Configuring and Using Infoprint Fax* document (**32ipmfax.pdf**), which resides on the web at the Infoprint Manager for AIX Administrator Tasks page.

   User The SAP user name defined in "Creating a CPIC or System Type User for the Infoprint Manager SAPconnect Daemon" on page 4.

   Client The SAP client name.

   Password
   > The SAP R/3 system password.

   Language
   > The two-character language value.

4. Once you have saved and exited the file, start the SAPconnect daemon from the command line by specifying:

   ```
   /etc/rc.iprsap
   ```

   If the SAPconnect daemon starts correctly, you should see the following response:

   ```
   Starting sapconnectd SJD
   5010-405 Successfully started server sapconnd.SJD
   ```

where SJD represents the name of your SAP system.

If you receive any other message, the daemon has not started correctly. To resolve the problem, refer to the **/var/pd/sapconnd.**_sysname_**/error.log** file (where _sysname_ is the SAP R/3 system name to which the SAPconnect daemon is connected), correct the problems cited, and try to start the SAPconnect daemon again. If it still does not start correctly, contact your Printing Systems technical support representative.

Configuring to Start SAPconnect daemons on System Reboot

The SAPconnect daemon needs to run all the time. To ensure that the daemon is restarted if the AIX system that it runs on is rebooted, you need to perform one more step to add the **rc.iprsap** file to the **/etc/inittab** directory, if it has not already been added.

To ensure that the SAPconnect daemons are restarted automatically whenever the system they are running on is restarted, use the Infoprint **SMIT** interface:

Infoprint Printing Systems-->**Infoprint Utilities**-->**SAP Daemons**

From the **SAP Daemons** panel, select the **Start SAP daemons at reboot** option. This action affects SAP Callback daemons (**sapcbd**) as well and only needs to be performed once.

If you prefer the command line, you can also enter the following at the AIX command line instead:

```
mkitab "rciprsap:2:once:/etc/rc.iprsap.out 2>&1 # Autostart of Infoprint SAP daemons"
```

Both the SMIT interface and this command ensure that the SAP daemons (**sapconnectd**) are restarted automatically whenever the systems they are running on are restarted.

As you add more SAPconnect daemons to your Infoprint Manager configuration, you do not have to perform this step, but you do need to add a new **echo** and **startsapconnectd** entry in the **/etc/rc.iprsap** file and type /etc/rc.iprsap on the AIX command line. This line starts your new SAPconnect daemons and causes any running SAPconnect daemons or SAP Callback daemons to report that they are already running.

Shutting Down the SAPconnect daemon

The following procedure describes how you can shut down the SAPconnect daemon. This procedure is useful if you are migrating the SAPconnect daemon from one Infoprint AIX server to another, or if the SAP R/3 system it supports is not going to be used for awhile.

From an AIX command line on the system where the SAPconnect daemon is currently running, type:

stopsapconnectd _systemname_

where _systemname_ is your 3-character SAP R/3 system name.

If you do not want a reboot of the system to restart the SAPconnect daemon, remove its entry from the **/etc/rc.iprsap** file.

To ensure that neither SAPconnect daemons or SAP Callback daemons are restarted automatically whenever the systems they are running on are restarted, use the Infoprint SMIT interface:

Infoprint Printing Systems-->**Infoprint Utilities**-->**SAP Daemons**

From the **SAP Daemons** panel, select the **Do not start SAP daemons at reboot** option.

Note: Remember that this action also means that the SAP Callback daemon (**sapcbd**) are not restarted when the Infoprint AIX server reboots.

Testing the RFC from SAP R/3

Once you have performed the configuration tasks on both the SAP R/3 system and your Infoprint AIX server for sending Remote Function Calls (RFCs) consisting of fax data, it is time to test your installation. Use the following two procedures:

- "Verify Your RFC Connection".
- "Verify that Node Can Route Fax Numbers".

Once you have verified that your Infoprint Manager AIX server and your SAP R/3 server can communicate, you can begin sending faxes from your SAP R/3 system.

Verify Your RFC Connection

From the **RFC Destination NEW_DEST827** window main menu, take the **Test**—>**Connection** (**F8**) options path to verify the connection. The **RFC — Connection Test** pop-up dialog will display either a working connection or provide an error message to indicate the source of the problem.

Verify that Node Can Route Fax Numbers

To verify that SAP can route fax numbers to the node you created in "Creating a SAPconnect Node" on page 8, use the following procedure to perform a routing test. Note that for our example, we defined an unrestrictive value of *, so all numbers should correctly resolve:

1. Login to the SAP R/3 GUI.
2. Type SCOT in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the left side of the menu bar, between the **Enter** (green checkmark) and diskette icons.

3. From the **SAPconnect: Administration (***view***)**window (it does not matter which view you select), either select the **Utilities**->**Routing test** path or type **Ctrl** + **F10**.

4. From the **SAPconnect: Test routes** window, fill in the following field values:

   Sender
   > Specifies the SAP sender ID from which the fax is to be submitted.

   RecipientAddr.type
   > Select or type in FAX.

   Recipient addr.
   > Specify the complete fax number to which you are submitting the fax job, prepended with the destination country abbreviation..

5. Once you have specified these values, press the **Enter** key to test these values.

   If the number is provided in the correct format (which you defined in Step **8** of "Creating a SAPconnect Node" on page **8**), the **Outbound node and modified**

recipient address portion of the window displays the node to be used in the **Node** field and the number as it is sent to Infoprint Manager in the **Recipient addr.** field. No message appears in the text block at the bottom of the window.

If the number provided is not in the correct format, the text block at the bottom of the page displays a red circle embossed with a white X and a message similar to the following:`No delivery to 99999, invalid recipient address`

6. If you receive an error, either select the magnifying glass icon on the upper-left side of the window or type **F2** to access the **SAPconnect: Explanation of Routing and Address Conversion** window.

   This window explains each step in the SAP routing process and shows any errors and where they appeared. Use this window to diagnose problems connecting to SAP fax numbers.

7. Once you discover the source of your error if you need to modify the node's address area, you should access your Node definition by:

   a. Typing the `SCOT` transaction.
   b. Clicking the **View—>Node** path (**F7**).
   c. Clicking the **Change** (pencil; **Ctrl** + **F2**) icon.
   d. Double-clicking on the value under **FAX** (for our example `*`), and specifying a different set of criterion in the **SAPconnect: Maintain address area** pop-up dialog.

   Once changed, repeat this procedure until you stop receiving an error.

Preparing and Sending Faxes from R/3

Once you have verified the connection, you should use the following procedures from your SAP R/3 system to ensure that you can prepare and send faxes:

1. "Creating Addresses".
2. "Creating Documents" on page 17.
3. "Configuring to Send Faxes Automatically" on page 21.

Once these steps have been verified, you can assign the necessary fax numbers and permissions to SAP users on the system so they can submit faxes through Infoprint Manager.

Creating Addresses

Before sending faxes, a SAP administrator must assign a personal fax number to any SAP user who plans to use this feature. To perform this task, use the following procedure.

1. Login to the SAP R/3 GUI.
2. Type `SU01` in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the left side of the menu bar, between the **Enter** (green checkmark) and diskette icons.

3. From the **User Maintenance: Initial Screen** window, specify the ID from which you will be faxing output in the **User** field and click on the **Change** (pencil; **Shift** + **F6**) icon on the left side of the menu.

4. From the **Maintain User** window, select the **Address** tab, scroll down to the **Fax** field, and type your number.

   For all outgoing calls, this fax number is used as the originator address.

5. Select the **Save** (diskette; **Ctrl** + **S**) icon to save this data.

Creating Documents

To create a document either with or without attachments in the **SAPoffice Outbox**, use the following procedure.

1. Login to the SAP R/3 GUI.

2. Type SBWP in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the left side of the menu bar, between the **Enter** (green checkmark) and diskette icons.

3. Start the Business Workplace application from the **Business Workplace of ...** window, and then access the Workplace pane on the left side, click open the **Outbox**, and double-click on **Documents**.

4. From the resulting right pane view (displayed below), click on the **Create Document** icon (second icon to the left).
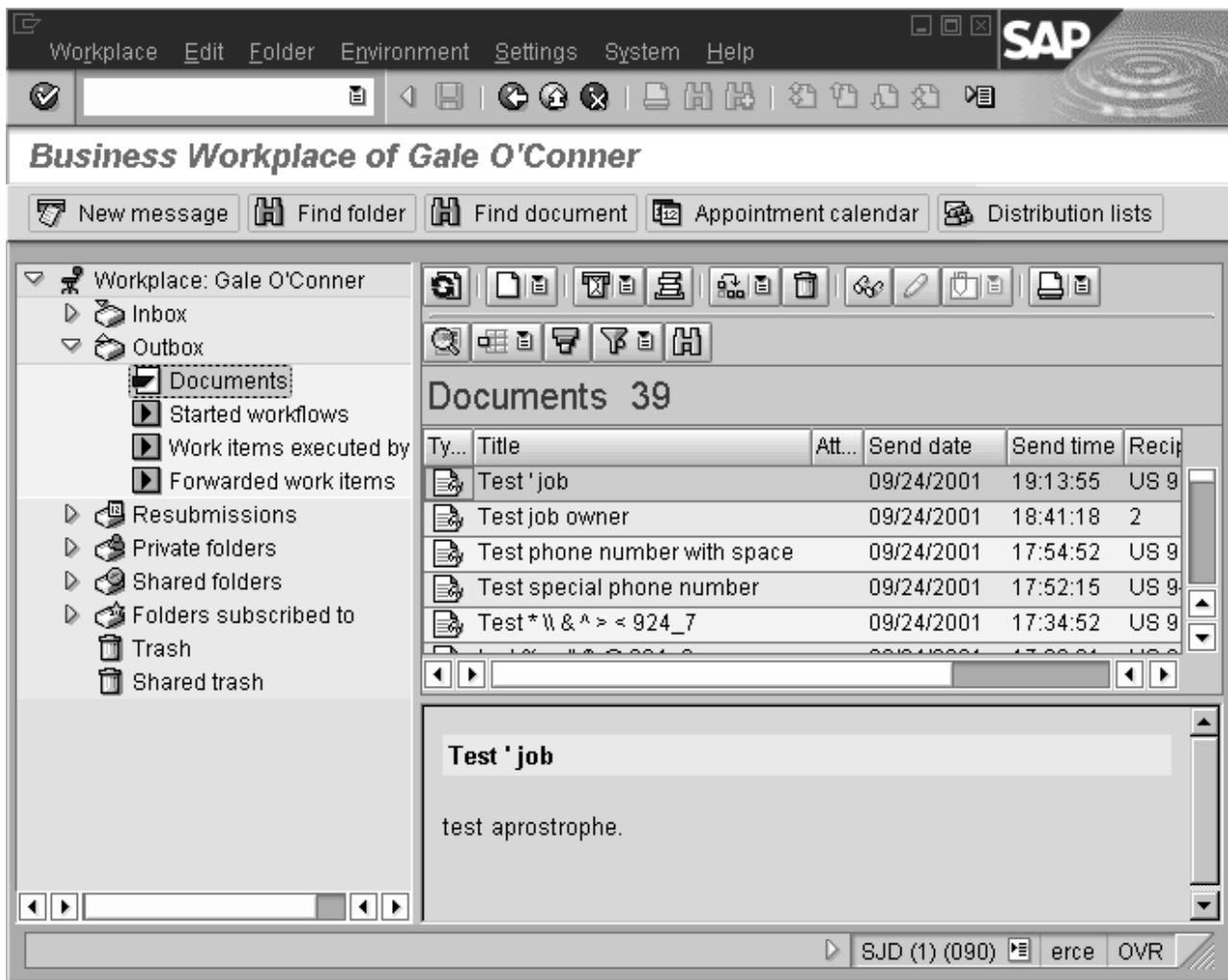
Figure 7. Business Workplace of .... window.

5. From the **Create Document** pop-up dialog, access the **Documents contents** tab and type in your message (see example below):
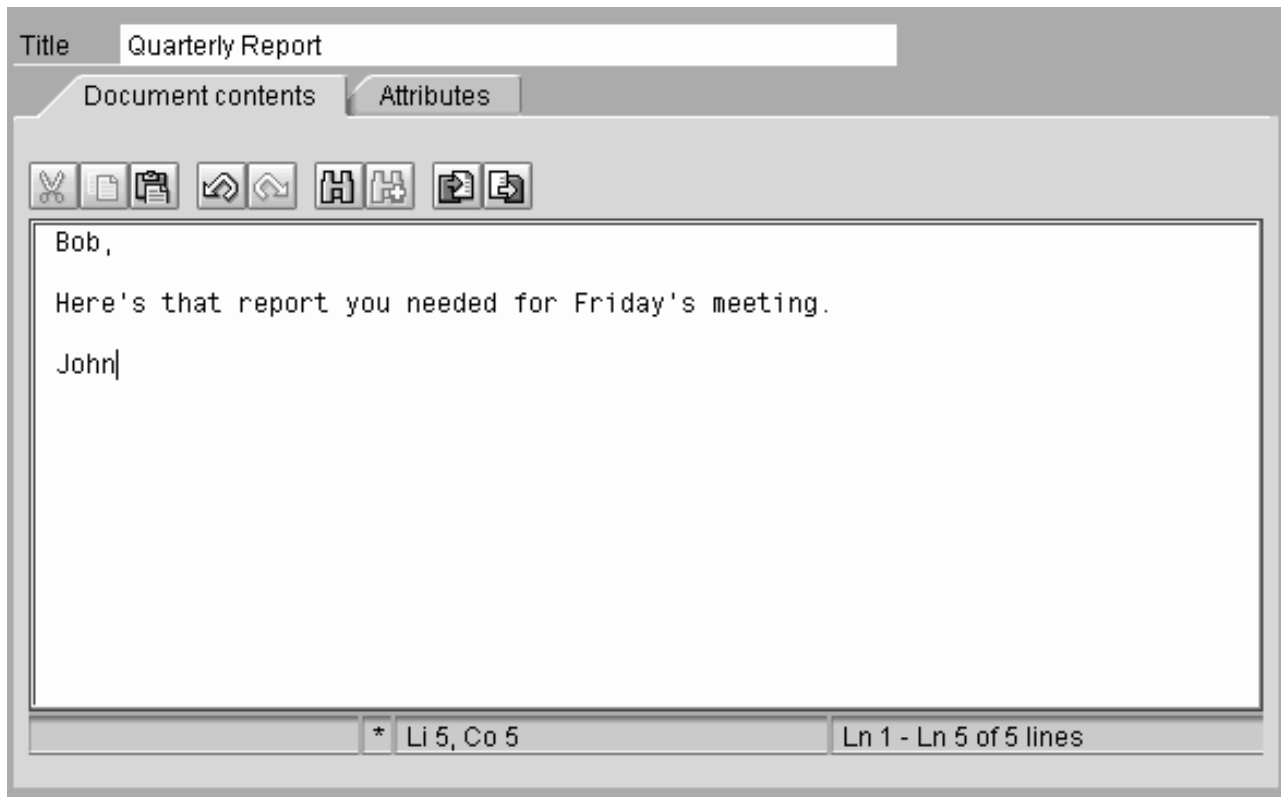
Figure 8. Create Document window.

6. To add an attachment to this document, take the **Document—>Create attachment** options path.

Once selected, you can access the **Attachments** tab and see the result:
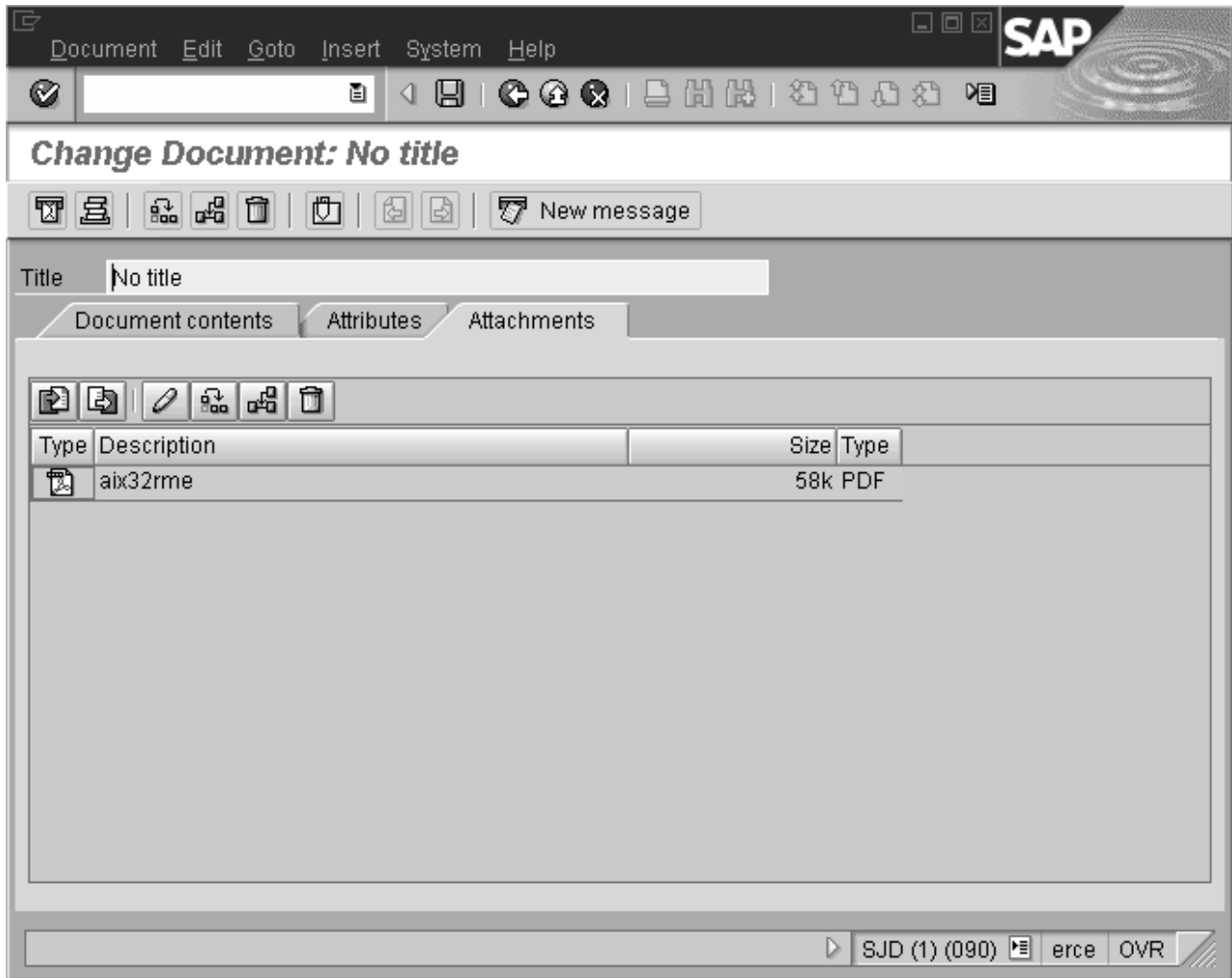
Figure 9. Viewing an Attachment on a Fax Document.

7. Click on the **Send** icon (envelope sticking out of a mail slot on far left).

8. From the **Send Document** pop-up menu (displayed below), you can specify a single recipient for a fax or create a distribution list to use to send the fax. Remember to start with the country code for each recipient. For example, specify us9303123456 and then select either the **Send** icon (envelope sticking out of a mail slot on far left) at the bottom of the window or specify the **shift** + **F8** keys.
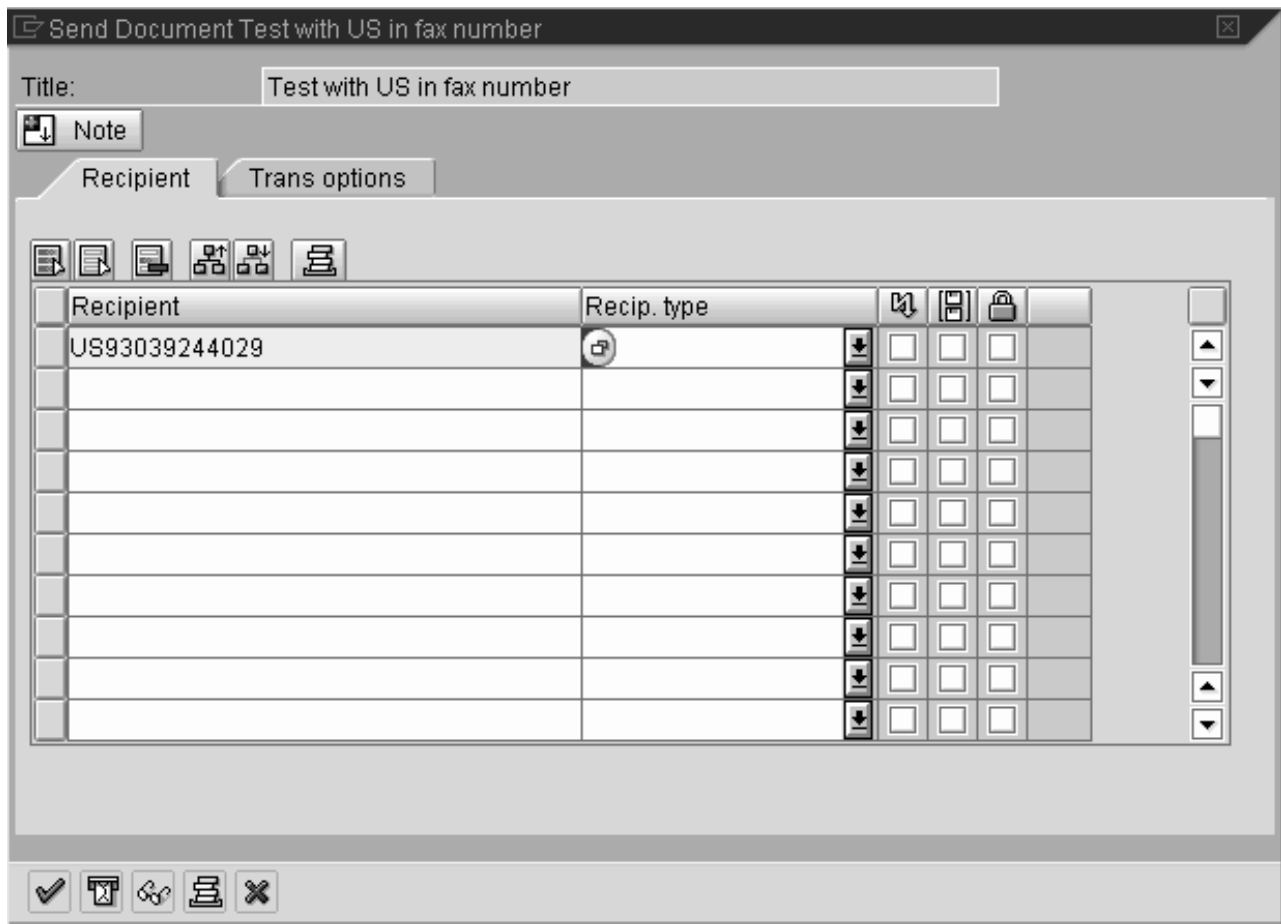
Figure 10. Send Document window.

SAP R/3 submits your job to the SAPconnect queue and puts a message at the bottom of the **Business Workplace of ....** window. This message indicates that the document has been sent to the SAPconnect queue. To move the document to the Infoprint server, you must follow the procedure cited in "Starting the Send Process".

Starting the Send Process

To test fax documents that have been received in the SAPconnect queue on the SAP system are successfully sent onto the Infoprint AIX server, use the following procedure.

Note: Any fax jobs that you have submitted to the SAPconnect queue will be available for selecting.

1. Login to the SAP R/3 GUI.

2. Type SCOT in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the left side of the menu bar, between the **Enter** (green checkmark) and diskette icons.

3. From the **SAPconnect: Administration (jobs)** window (the particular view does not matter), select the **Utilities—>Start send process** path (**Ctrl** + **F7**) from the menu bar.

4. On the **Start send process** pop-up dialog, select an **Addr. type** field value of FAX and click on the green checkmark in the lower left corner.

5. From the **SAPconnect Send Process: List of Objects Selected** window, select the **Choose** icon (**F2**).

   The **Express information** pop-up dialog provides status on your job.

Configuring to Send Faxes Automatically

Once you have verified that you can send faxes through the manual process described above, you will want to configure your SAP system so the send processes are scheduled as a background process that executes automatically on a periodic basis. To schedule the sending of faxes as a background job, use the following procedure:

1. Login to the SAP R/3 GUI.

2. Type SCOT in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the left side of the menu bar, between the **Enter** (green checkmark) and diskette icons.

   Ensure that you select **View—>Jobs** (**F8**) from the drop-down menu.

3. From the **SAPconnect: Administration (jobs)** window, click on the **Dispatch** (piece of paper with upper-right corner folded; **Ctrl** + **F7**) icon.

4. From the **Schedule send process** pop-up dialog, enter a name to represent the batch job for sending faxes, and click the **Enter** key.

5. To schedule, you can either:

   • Click on **FAX** and then click on the **Schedule job** icon.

   or

   • From the **SAPconnect send process: Variants** window, highlight the Fax variant and select the **Schedule job** (second from left) icon.

6. From the **SAPconnect send process Scheduling: Start Time** (displayed below) you can specify the sending characteristics of this job by clicking on the **Schedule Periodically** button and set values for how often you want the fax requests to be sent.
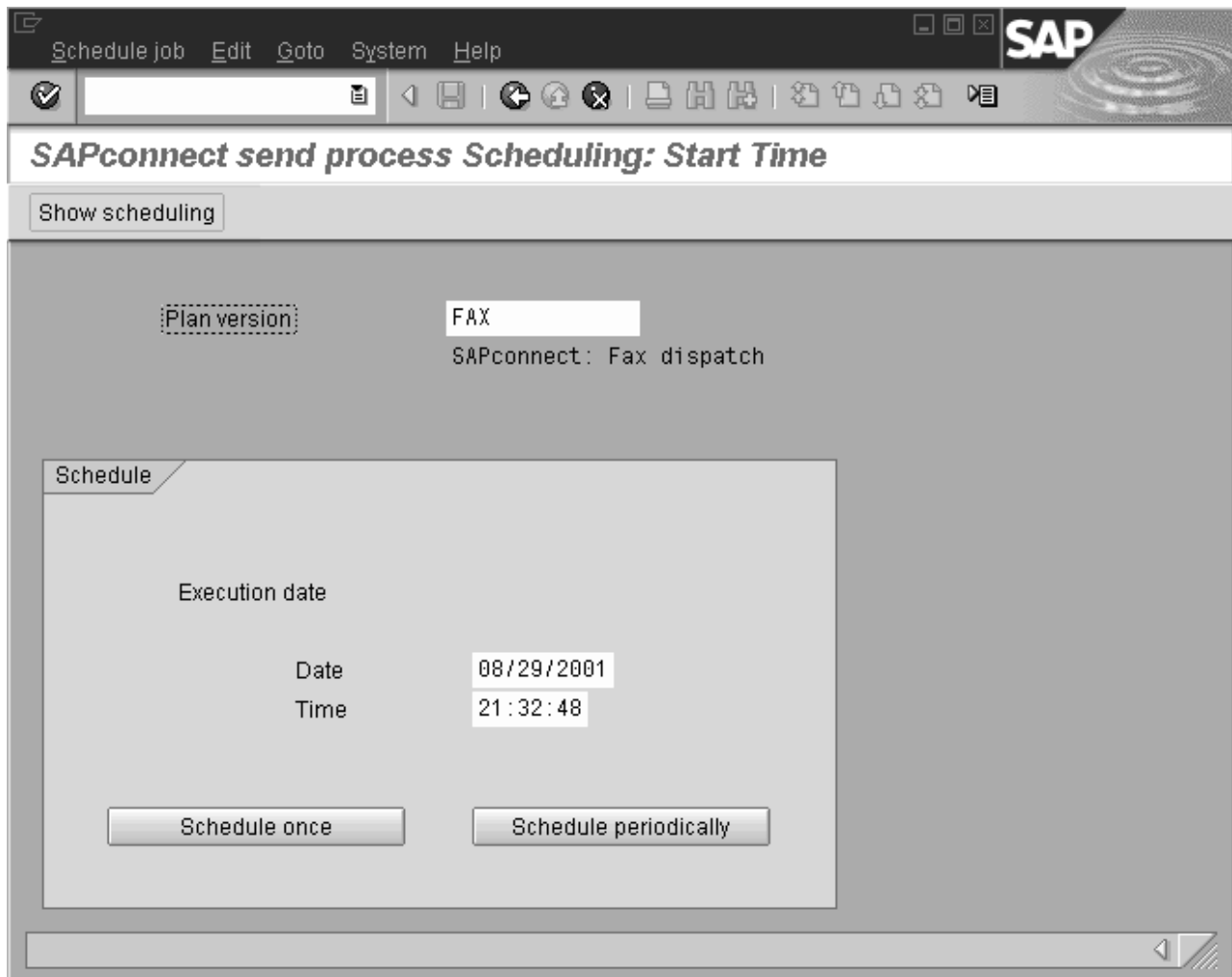
Figure 11. SAPconnect send process Scheduling: Start Time window.

7. From the **Period duration** window, set a time, being sure to move the radio button to select the time designation that you are setting.

For example, note that the window displayed below sets the **Months** field value.

Figure 12. Period duration window.

Once you have set your value, be sure that it is saved by checking the green checkbox at the bottom of the dialog and then accessing the settings again to verify.

Using SAPconnect for Fax In Support (Receiving Faxes)

By configuring SAP to use the new Infoprint Manager SAPconnect support, the SAP System receives the request in the form of a SAP RFC call. The SAP user's fax line uses Infoprint Manager's fax in support to send incoming faxes to an Infoprint Manager logical destination, which forwards faxes to a **sapconnect** actual destination that is running on the Infoprint AIX server. The **sapconnect** actual destination makes SAP RFC calls to the SAP system. When the SAP System receives the fax request for a particular fax number, it delivers the job to that user's In box.

One **sapconnect** actual destination can deliver faxes for all users on one SAP system who have defined fax lines. Create one **sapconnect** destination for each SAP system you plan to support.

Once you have ensure that the prerequisites are installed on your Infoprint AIX server (see "Installing the SAPconnect Support" on page 3), you must complete the following configuration tasks in order to send faxes to a SAP user:

1. "Creating a CPIC or System Type Userid for the Infoprint Manager sapconnect Actual Destination" on page 24.
2. "Creating Infoprint Manager Objects" on page 24.
3. "Logging the Infoprint Actual Destination onto the SAP System" on page 25.
4. "Assigning Fax Numbers to SAP Users" on page 25.
5. "Configure the Fax-in Lines to Feed the SAPconnect Actual Destination on an Infoprint AIX server" on page 26.
6. "Test Sending Faxes to SAP System" on page 26.

Creating a CPIC or System Type Userid for the Infoprint Manager sapconnect Actual Destination

Because the Infoprint Manager **sapconnect** actual destination must logon to the SAP system to deliver RFC requests to the SAP system that is receiving fax input, you must create a SAP userid for it. This userid allows the **sapconnect** actual destination to send data to the SAP system.

To create a user for the **sapconnect** actual destination, use transaction `su01` to access the **User Maintenance: Initial Screen** window.

The user must be a **CPIC** or **System** type and have authorizations provided in the **S_A.SCON** profile. Remember to record the userid, password, and client values for when you create the sapconnect actual destination in "Creating Infoprint Manager Objects".

If you ever modify this SAP userid, remember to make the same changes to the **sapconnect** actual destination on the Infoprint AIX server.

Creating Infoprint Manager Objects

To create the objects on an AIX Infoprint Manager server necessary to send fax jobs to the SAP system, use the following procedure:

1. Collect the information you require to define this actual destination to communicate with a SAP system:

Table 2. SAP System Information Requried for Creating the sapconnect Destination on Infoprint.

Required Information	Example
SAP system name	SJD
SAP system hostname	cpmat00
SAP system number	01
CPIC userid	sapuser1
CPIC userid password	*password*
CPIC userid client	095
SAP Gateway Service	(for future use)
SAP Gateway Host	(for future use)
Program ID	(for future use)

2. Use the **pdcreate** command to define both a queue and a logical destination to feed the **sapconnect** actual destination:
   - For example, to create a queue named **sjd–faxin-queue** on the server **IPM1**, type:

     ```
     pdcreate —c queue IPM1:sjd—faxin-queue
     ```
   - For example, to create a logical destination named **sjd-faxin-ld** that is associated with the **sjd–faxin-queue** queue, type:

     ```
     pdcreate -x "associated-queue=sjd—faxin-queue" IPM1:sjd-faxin-ld
     ```
3. From an AIX command line, access the **SAPconnect** attributes file from the **/usr/lpp/pd/attr** directory.
4. Copy and rename this file in another directory on your system:

   ```
   cp /usr/lpp/pd/attr/SAPconnect /var/pd/SAPconnect1
   ```

5. Use your AIX editor of choice to edit the file (in this case, **SAPconnect1**) and fill in the values you collected in step 1 and the name of the queue that you created in step 2..

   Note that the following contains a copy of the SAPconnect attributes file that is provided with Infoprint Manager:

```
#  This attribute file contains all the attributes you need to
#  create a SAPConnect Actual Destination.
#  Copy this file and add in the required information.
#
#
device-support-system  = sapconnect
printer-realization = physical
associated-queue =
sap-system-name =
sap-system-hostname =
sap-system-number =
sap-logon-userid =
sap-logon-password =
sap-logon-client =
sap-gateway-service =
sap-gateway-host                 =
sap-program-id                   =
```

6. From an AIX command line, enter the following command to create the **sapconnect** actual destination.

```
pdcreate -X SAPconnect1  IPM1:sjd-faxin
```

   where `IPM1` is the name for your Infoprint AIX server and `sjd-faxin` is the name of the **sapconnect** actual destination.

7. From the AIX command line, enable the logical destination:

```
pdenable sjd-faxin-ld
```

Logging the Infoprint Actual Destination onto the SAP System

Before the Infoprint Manager Fax and SAPconnect support can deliver incoming faxes to SAP, the **sapconnect** actual destination must be enabled. Issue a **pdenable** command on this actual destination:

```
pdenable -c destination sjd-faxin
```

When enabled, the **sjd-faxin** actual destination logs onto the SAP system. Once the **sapconnect** DSS actual destination is enabled and logged onto the SAP system, the SAP users on that system can begin receiving faxes.

Note: The SAP logon may appear to work even if the logon information is incorrect. When the first fax is processed, if the **sapconnect** actual destination on the Infoprint Manager AIX server becomes disabled, look at the problem message attribute on the actual destination to see the cause of the problem.

Assigning Fax Numbers to SAP Users

Before receiving faxes, an administrator must assign a personal fax number to any SAP user who plans to use this feature. To perform this task, use the following procedure.

1. Login to the SAP R/3 GUI.
2. Type `SU01` in the field on the left side of the menu bar.

   If this field is closed, you may need to click on the right-facing arrow on the left side of the menu bar, between the **Enter** (green checkmark) and diskette icons.

3. From the **User Maintenance: Initial Screen** window, specify the ID from which you will be faxing output in the **User** field and click on the **Change** (pencil; **Shift** + **F6**) icon on the left side of the menu.

4. From the **Maintain User** window, select the **Address** tab, scroll down to the **Fax** field, and type your number.

   For all outgoing calls, this fax number is used as the originator address.

5. Select the **Save** (diskette; **Ctrl** + **S**) icon to save this data.

These fax numbers are those that must be mapped to channel numbers in "Configure the Fax-in Lines to Feed the SAPconnect Actual Destination on an Infoprint AIX server".

Configure the Fax-in Lines to Feed the SAPconnect Actual Destination on an Infoprint AIX server

In order to receive incoming faxes through Infoprint Manager, you must first purchase, configure, and install the Infoprint Fax feature.

To perform this task, refer to the ″Configuring Fax In (Receiving)″ chapter from the *Configuring and Using Infoprint Fax* (**32ipmfax.pdf**) on the Infoprint Manager for AIX Administrator Tasks web page (**http://www.printers.ibm.com/R5PSC.NSF/Web/aixadmin**).

Test Sending Faxes to SAP System

You should use the following procedures from your SAP R/3 system to ensure that you can receive faxes:

To verify that you have configured the system correctly, send a fax to one of the SAP users defined fax numbers and verify that the fax appears in their SAP Business Workplace Inbox.

Appendix. SAPconnect Fax-Out Configuration Worksheet

While configuring the SAP system for fax-out, use the following worksheet to record the values that will be needed to configure and start the Infoprint Manager SAPconnect daemon.

Table 3. SAPconnect Configuration Worksheet Values.

Parameter	Value	Used in /etc/rc.iprsap	Used in /var/pd/saprfc.ini
IPMLogicalDestinationName		x	
Logon User		x	
Logon Password		x	
Logon Client		x	
RFC Destination		x	x
Program ID			x
Gateway Host			x
Gateway Server			x
SAP System Name		x	x
SAP System Number			(for specific application server)
SAP Application Server Host			(for specific application server)
SAP Message Server			(for load balancing)
SAP Application Server Group			(for load balancing)

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Special Characters

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