



Version 8.7
Connector for SAP R/3 Guide

Edition

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Chapter 1

Overview and Installation

The mysap.com certified RightFax Connector for SAP™ R/3® is a supplement to the RightFax server that lets you integrate your organization's RightFax network fax system with SAP business systems integration software versions 3.1g and higher. With the RightFax Connector for SAP R/3 you can:

- Send faxes from SAP modules.
- Create and send faxes from SAPoffice™.
- Receive faxes into SAPoffice.
- Receive status messages about sent faxes in SAPoffice.
- Configure delayed fax queues in SAP for after-hours or off-peak-time batch faxing.
- Include native document attachments in outbound faxes.
- Include objects such as forms, signatures, and library documents in outbound faxes.
- Use the automatic cover sheet features of either SAP or RightFax.

With this powerful integration tool, your organization can implement SAP R/3 while continuing to benefit from your RightFax system's state-of-the-art fax server management, load balancing, and least-cost routing technology.

The RightFax Connector for SAP R/3 supports the following SAP R/3 versions:

- SAP R/3 version 3.x
- SAP R/3 version 4.0
- SAP R/3 version 4.5
- SAP R/3 version 4.6

Configuration information is included in this guide for all versions except version 4.5. If you are running this version of SAP R/3, refer to the configuration instructions for versions 4.0 and 4.6.

How the Connector for SAP R/3 Works

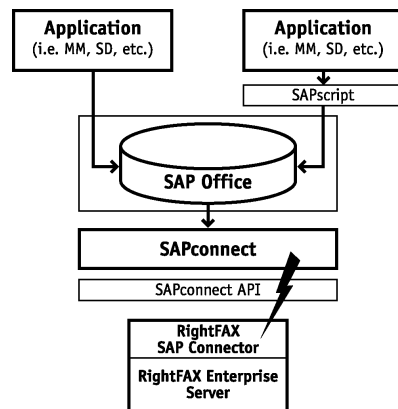
The RightFax Connector for SAP R/3 is designed to offer inbound and outbound fax functionality to SAP R/3 users by means of a gateway between the SAP R/3 system and the RightFax server using the SAPconnect and SAPoffice interfaces provided by SAP.

The connector software is installed on the RightFax server only and is run as a service. No software installation to SAP clients is necessary. You must have a RightFax Enterprise or Satellite server version 5.2 SP1 or greater to install the connector.

Architecture model

The RightFax Connector for SAP R/3 is written to the SAPconnect interface specification, published by SAP. The SAPconnect interface (BC-CON) provides a standard communication channel for all external communication systems, allowing access to the RightFax server directly from R/3 via remote function call (RFC) technology (described in the following section). SAPconnect manages the sending and receiving of fax messages as well as status notifications. The following diagram illustrates the architecture of information flow between RightFax and SAP R/3.

Figure 1.1 Information Flow between RightFax and SAP R/3



Outbound faxes are created either in an SAP R/3 module via SAPscript or in SAPoffice. These faxes are stored in a queue monitored by SAPconnect. SAPconnect periodically picks up queued faxes and sends them via a remote function call to the SAP connector on the RightFax server. RightFax then either sends the fax over its dedicated phone lines or routes the fax to another RightFax server for least-cost routing.

Faxes received into RightFax are passed via remote function call to SAPconnect, which delivers them into each user's individual SAPoffice inbox. Received fax messages contain history information about the fax and a TIFF image of the fax that can be viewed or printed directly from the workstation.

Remote function call model

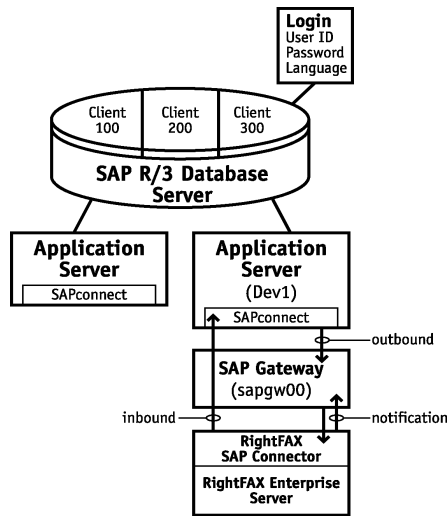
The RightFax Connector for SAP R/3 communicates with the SAP R/3 system via remote function calls (RFCs). RFCs use information gathered during installation and stored in the SAPrfc.ini file on the fax server (see [Appendix A, "Files Installed by the Connector"](#)) to serve as a communication link between RightFax and SAP R/3.

Information necessary for inbound and outbound faxing includes:

- RightFax server name
- Protocol type (e.g., named pipes)
- SAP application server name
- System number (e.g., 01)
- SAP Gateway server name
- SAP Gateway service name (e.g., sapgw00)
- User ID
- Password
- SAP client number (e.g., 100)
- Language
- Load balancing information such as message server, R/3 system name, and group name

The following diagram illustrates how RFCs pass fax data between servers.

Figure 1.2 How RFCs Pass Data



Installing the Connector for SAP R/3

The RightFax Connector for SAP R/3 is installed on your RightFax server and is run as a service. You must have RightFax Enterprise server version 5.2 SP1 or greater installed prior to installing this connector. Do not install the Connector for SAP R/3 if your RightFax Enterprise Server is earlier than 5.2 SP1.

Installing the Connector for SAP R/3 requires the following steps:

- Activate the Connector for SAP R/3 on the RightFax server
- Copy the SAP Services file to the RightFax server
- Configure the Connector for SAP R/3

Activating the Connector for SAP R/3 on the RightFax server

The files required by the Connector for SAP R/3 are installed on all RightFax servers during the server installation. However, the Connector for SAP R/3 must be licensed and activated before its functionality will be enabled. To use the Connector for SAP R/3, no installation on individual client computers is required.

To activate the RightFax Connector for SAP R/3, you must have licensed a RightFax server type that includes this module, or purchased and licensed this module separately. For information on activating new components on the RightFax server, refer to the *RightFax Installation Guide*.

After the RightFax Connector for SAP R/3 has been activated on the RightFax server, you must copy the SAP Services file and configure the connector (described in the following sections).

Copying the SAP Services file to the RightFax server

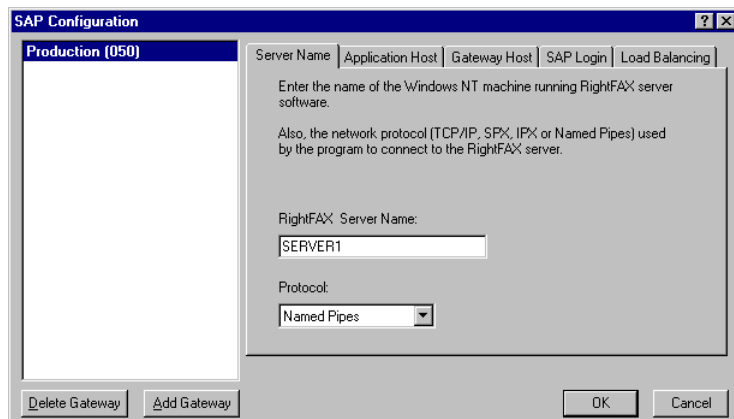
From any SAP client computer running Windows NT 4.0 or later, copy the file Services (no file extension) from the WinNT\System32\Drivers\etc folder to the same folder on the RightFax server. When prompted, overwrite the existing file.

Configuring the Connector for SAP R/3

After the Connector for SAP R/3 has been activated and the Services file has been copied to the RightFax server, you must configure the connector for SAP R/3 to communicate with you

SAP client computers. To run the connector configuration, run the RightFax SAP Gateway program from Windows Control Panel on the RightFax server. This opens the **SAP Configuration** dialog box.

Figure 1.3 The SAP Configuration Server Name Dialog Box



This dialog box lists all connected SAP clients. When this configuration program is run for the first time, one SAP client will be listed. You must configure this SAP client to integrate with the RightFax server, and add more SAP clients if necessary.

For each SAP client, complete each of the boxes on all of the tabs in this dialog box. For a description of any box, click the **[?]** icon in the top right corner of the dialog box, and then click the box you want help with.

To modify the settings for a SAP client, click the SAP client name in the list, and then click the tabs to view each of the client settings.

Click **Add Gateway** and complete the configuration dialog boxes according to the instructions for installing the RightFax Connector for SAP R/3 (page 7).

You can easily disconnect an SAP client from the connector by clicking the SAP client name in the the **SAP Configuration** dialog box and clicking **Delete Gateway**. A dialog box will prompt you to confirm that you want to disconnect the SAP client.

■ ■ ■

Connecting Multiple SAP Clients

The RightFax Connector for SAP R/3 allows you to connect up to 15 SAP clients to the RightFax server. To add additional SAP clients, run "RightFax SAP Gateway" from Control Panel on the RightFax server. This opens the **SAP Configuration** dialog box.

Chapter 2

Configuring a SAP R/3 Version 3.x System

After the RightFax SAP connector has been installed to the RightFax server, you must configure SAP R/3 to communicate properly with the connector. The instructions in this chapter help you configure an SAP R/3 version 3.x system. If your SAP system is version 4.0, see [Chapter 3, “Configuring a SAP R/3 Version 4.0 System”](#). If your SAP system is version 4.6, see [Chapter 4, “Configuring a SAP R/3 Version 4.6 System”](#).

Several steps are required to configure SAP R/3 version 3.x for faxing through RightFax:

1. Create a new CPIC User.
2. Create an RFC destination.
3. Configure SAPconnect.
4. Schedule a SAPconnect background send process.
5. Activate the fax module in SAPoffice.
6. Assign a fax number to each SAP R/3 user.

Each of these steps is described in this chapter.

Create a New CPIC User

This step creates a new user account with the level of control needed by the fax server when communicating with the SAP R/3 system.

To create a new CPIC user

1. Execute SAP transaction SU01. This opens the **Maintain User: Profiles** dialog box.

Figure 2.1 Completing the Maintain User:Profiles Dialog Box

A

B

C

- A. Enter the user name defined in the RightFax SAP Gateway configuration program.
- B. Enter and confirm the password.
- C. Assign the profile “S_A.SCON” to the new user.

2. In the **User** and **Initial Password** boxes, enter the user ID and password you configured for the connector to use when logging on to the SAP R/3 system (page 7).
3. Under **User Type**, click **CPIC**.
4. Under **Authorization Profiles**, click the profile S_A.SCON.
5. To save the new user, click **Save** and complete the **Change Request** dialog box if necessary.

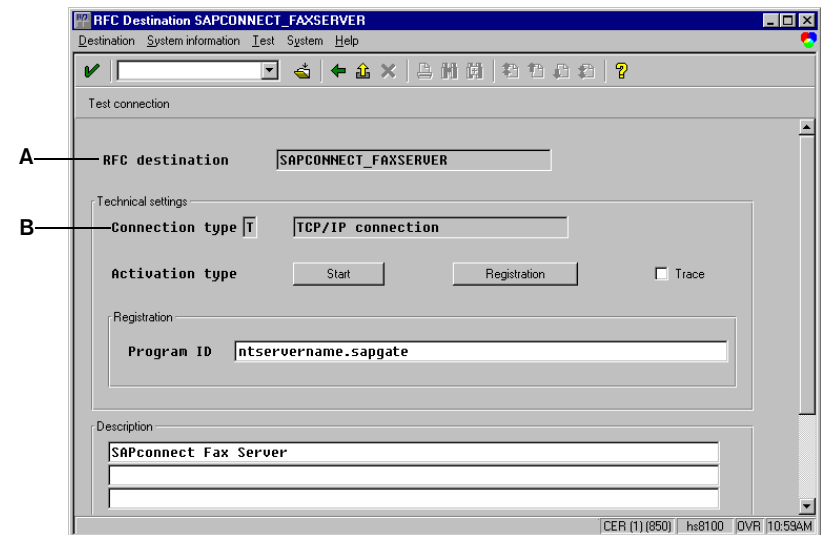
Create an RFC Destination

This step configures the SAP remote function call (RFC) destination for outbound fax calls.

To create an RFC destination

1. Execute SAP transaction SM59. Click **Create** to open the **RFC Destination** dialog box.

Figure 2.2 Completing the RFC Destination Dialog Box



- A. Enter the RFC destination “SAPCONNECT_FAXSERVER”.
 - B. Select “T” for TCP/IP.
2. In the **RFC Destination** box, type **SAPCONNECT_FAXSERVER**. Set the **Connection Type** box to “T” for TCP/IP. Enter a description for the RFC destination in the **Description** box, and then click **Save** [✓].

3. Click **Registration**. In the **Program ID** box, enter the value defined with the "PROGID" parameter in the SAPRFC.INI file on the fax server. In most cases, this will be the Windows NT name of your RightFax server followed by a period and then "sapgate." For example, "rfserver.sapgate."



Note This box must match the exact spelling and case found in the SAPRFC.ini file on the RightFax server or the connector will not properly communicate with the SAP system. For a description and example of the SAPRFC.ini file see [Appendix A, "Files Installed by the Connector"](#).

4. To save the RFC destination, click **Save** and complete the **Change Request** dialog box if necessary.
5. Select **Gateway Options** from the **Destination** menu.

Figure 2.3 The Gateway Host and Service Names

The screenshot shows a dialog box titled "RFC Destination SAPCONNECT_FAXSERVER". It contains the following fields and values:

- RFC destination: SAPCONNECT_FAXSERVER
- Type: TCP/IP connection
- Gateway host: r3host1
- Gateway service: sapgw05

Buttons for "OK" and "Delete" are visible at the bottom.

6. Enter the gateway host and service name of the SAP gateway the connector will be talking to.
7. Click **OK**.

SAPconnect Configuration

This step lets you configure the communication method, conversion rules, and other protocols in SAPconnect to ensure proper communication between the SAP R/3 and RightFax systems.

To configure SAPconnect

1. Execute SAP transaction SCON. Click **Change** (the button with the pencil icon).

Figure 2.4 The Display Configuration Dialog Box

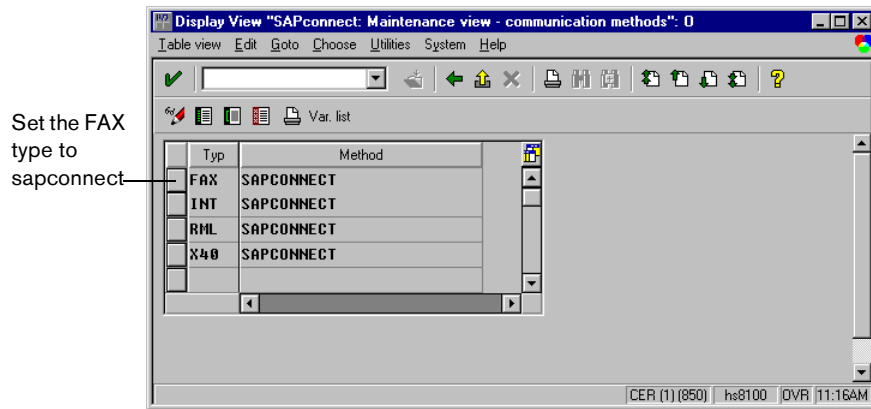
The screenshot shows the "SAPconnect: Display Configuration" dialog box. It has a menu bar (Configuration, Edit, Goto, System, Help) and a toolbar. A pencil icon in the toolbar is highlighted with a label "Click Change". The main area contains several sections of configuration options:

- Overall setting:**
 - Communication methods
 - Format groups
 - Conversion rules
- Infrastructure:**
 - Nodes
 - Node attributes
 - Routing
 - Send attribute classes
- Telephone number:**
 - Country code
 - Country code exceptions
 - Recipient no. change (outgoing)
 - Recipient no. change (incoming)

The status bar at the bottom shows "CER (1) (850) hs8100 OVR 11:14AM".

2. Click **Communications Methods**.

Figure 2.5 Completing the Communication Methods Dialog Box

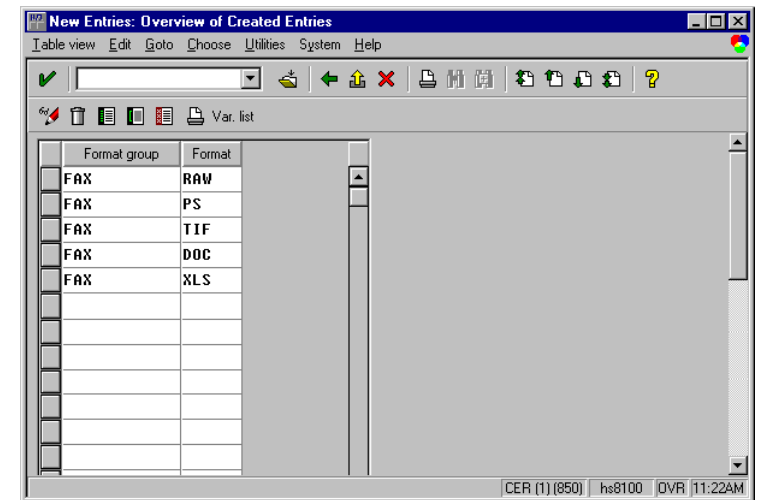


Set the FAX type to sapconnect

3. Set the **FAX** type method to “SAPCONNECT.”
4. Click **Save** and complete the **Change Request** dialog box if necessary. Click **Back** or execute SAP transaction SCON to return to the **SAPconnect: Display Configuration** screen.

5. Click **Format Groups**, and then click **New Entries**.

Figure 2.6 The New Entries Dialog Box



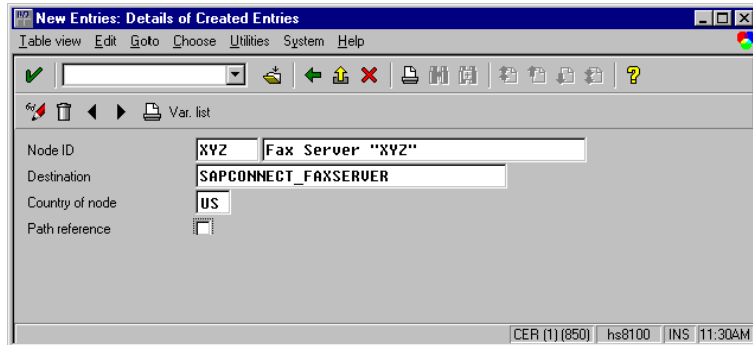
6. For each document type that will be passed to the fax server create, an entry with “FAX” in the **Format Group** column and the document type’s three-letter file extension in the **Format** column. For plain ASCII documents, use the extension “RAW.” For PostScript documents, use the extension “PS.” Do not enter more than one of each type of printer language format, e.g., “PS” (PostScript) or “PCL” (HP-PCL), per **Format Group** type.

Only the document types specified here will be passed to RightFax. If a user faxes a document type not included on this list, SAP will attempt to convert the document to a type that is on the list. If SAP is unable to convert the document, it will return an error message to the user indicating that the fax could not be sent.

7. Click **Save** and complete the **Change Request** dialog box if necessary. Click **Back** or execute SAP transaction SCON to return to the **SAPconnect: Display Configuration** screen.

- Click **Nodes**, and then click **New Entries**.

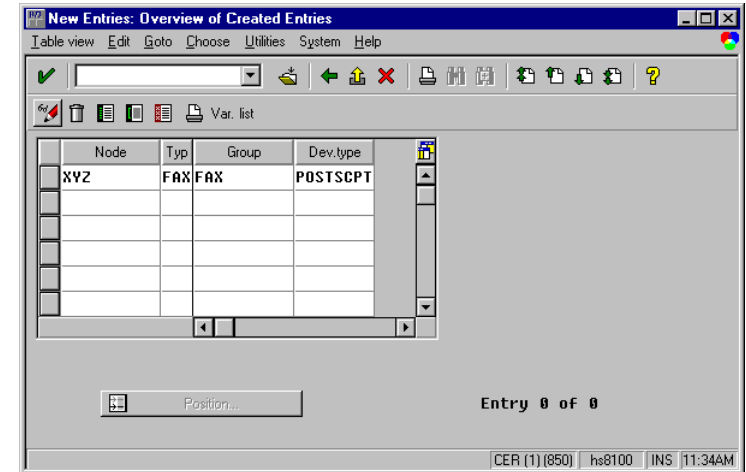
Figure 2.7 Details of Created Entries



- In the **Node ID** box, enter a name and description for the new SAPconnect node for the fax server. In the **Destination** box, enter the RFC destination created earlier. In the **Country of node** box, enter the country code of the node's location. Do *not* select the **Path reference** check box.
- Click **Save** and complete the **Change Request** dialog box if necessary. Click **Back** or execute SAP transaction SCON to return to the **SAPconnect: Display Configuration** screen.

- Click **Node Attributes**, and then click **New Entries**.

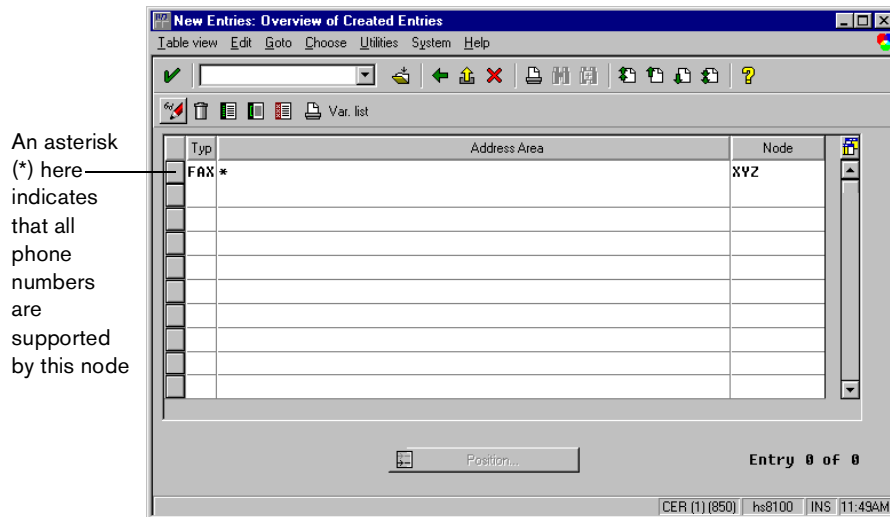
Figure 2.8 Overview of Created Entries



- Under the **Node** column, type the Node ID of the node you created in Step 9. Type "FAX" under both the **Type** and **Group** columns.
- In the **Dev. Type** column, select either "POSTSCPT" or a PCL printer driver such as "HPLJ3" from the list. This is the printer output type that will be used for faxes sent to the RightFax server for conversion. To use PostScript, you must have installed the RightFax PDF optional module on the RightFax server.
- Click **Save** and complete the **Change Request** dialog box if necessary. Click **Back** or execute SAP transaction SCON to return to the **SAPconnect: Display Configuration** screen.

15. Click **Routing**, and then click **New Entries**.

Figure 2.9 Overview of Created Entries



16. In the **Type** column select **FAX**, and in the **Node** column enter the name of the node created in Step 9. Under **Address Area**, define the fax numbers to be serviced by this node. Specify the two-letter country code followed by phone number digits. An asterisk (*) may be used in this box as a wildcard. For example, an asterisk by itself means that all fax numbers will be serviced. Entering "US*" would service only US numbers.

17. To complete the SAPconnect configuration, click **Save** and complete the **Change Request** dialog box if necessary.

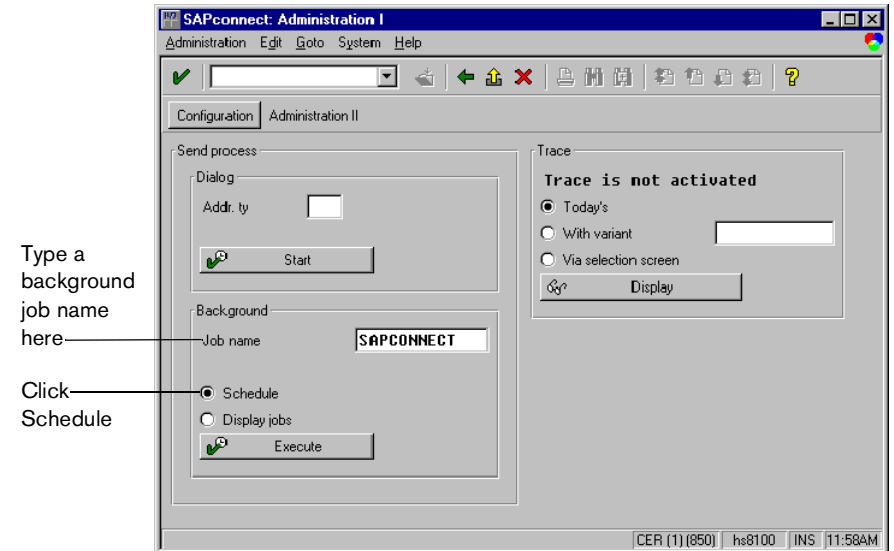
Schedule a SAPconnect Background Send Process

When an outgoing fax is generated by SAP R/3, it is placed in the SAPconnect queue. A background job must be scheduled to move the faxes from this queue to the RightFax server.

To schedule the background send process

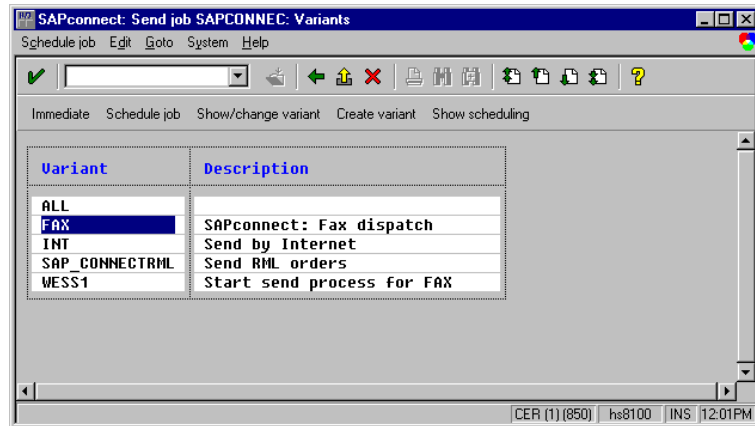
1. Execute SAP transaction SCOA.

Figure 2.10 SAPconnect Administration



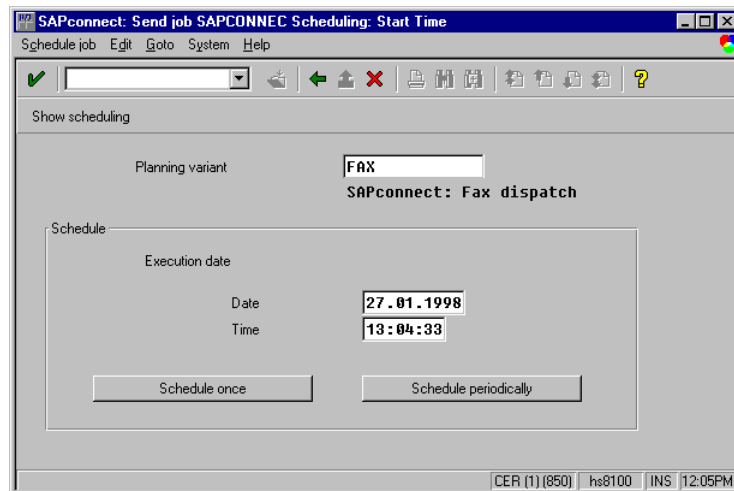
- Under **Background** in the **Job name** box, type a name for the new background job, and then click **Schedule**. Click **Execute**.

Figure 2.11 The Send Job Variants Dialog Box



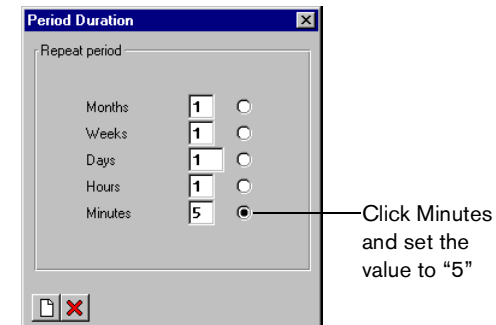
- In the **Send Job** dialog box, in the **Variant** list, click **FAX**, and then click **Schedule Job**.

Figure 2.12 Setting the Start Time



- Under **Execution date**, type a date and time for the first background send event, and then click **Schedule periodically**. This opens the **Period Duration** dialog box.

Figure 2.13 The Period Duration Dialog Box



- Click **Minutes** and enter **5** in the box, and then click **Create**. The period duration will be saved automatically.

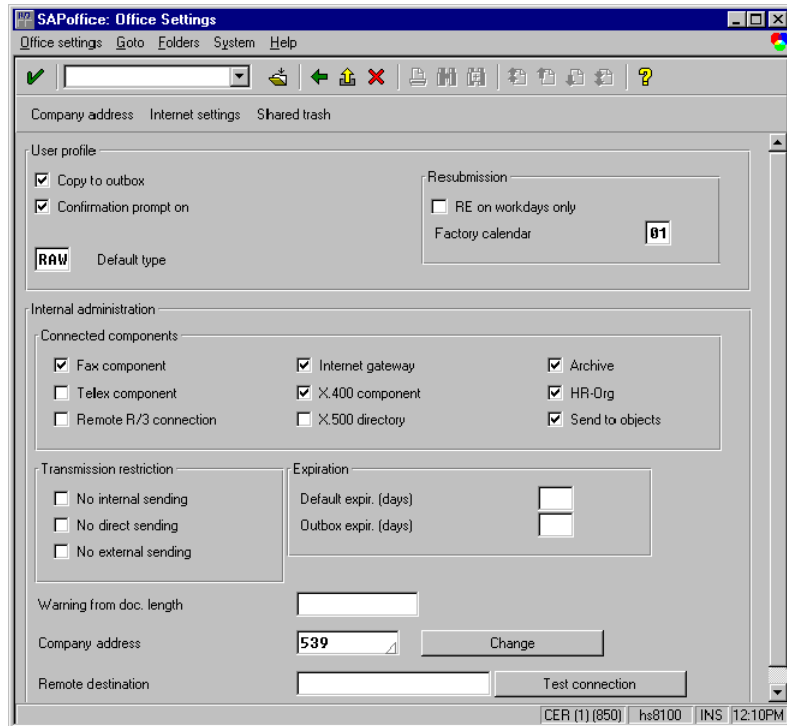


Note You can adjust this setting as necessary for batch faxing/fax scheduling purposes. For more information on batch faxing see ["Batch Faxing"](#) on page 55.

Activate the Fax Module in SAPoffice

To activate the fax module, execute SAP transaction SO16, and then select the **Fax component** check box under **Connected components**.

Figure 2.14 The Office Settings Dialog Box



Click **Save** and complete the **Change Request** dialog box if necessary.

Assign a Fax Number to Each SAP R/3 User

Each user who sends a message from SAP R/3 via fax or any other SAPconnect communication service must have an originator address of the appropriate address type. For RightFax, each user must have a fax number assigned in SAP. This setting is treated by RightFax only as a identifier for the user and does not need to be an actual fax number.

The user's SAP fax number is used when routing incoming faxes from RightFax into a user's SAPoffice Inbox (see "[Routing Received Faxes into SAPoffice](#)" on page 48). The recipient's **Routing Info** setting in RightFax is compared to each user's fax number in SAP. RightFax forwards the fax to the SAP user with the matching fax number. When routing faxes from RightFax to SAPoffice, each SAP user *must* have a unique fax number.

The SAP user's fax number is also used to assign a RightFax user ID to outbound faxes created in SAP. The user's fax number is included in the data stream when outbound faxes are forwarded to RightFax. This fax number is compared to the RightFax **Routing Info** field for each user ID. If a match is found, the matching user ID is assigned ownership of the fax, and the fax is sent from that user's mailbox. If multiple users have the same SAP fax number assigned, then they will all have their faxes sent via the same RightFax mailbox.



Note Fax status notifications back to SAP users do not use the SAP Fax Number setting to identify the user. These notifications will be sent to the correct user regardless of whether the user has a unique Fax Number setting in SAP.

To change or add a fax number to an SAP user record, execute SAP transaction SU01, select the user to edit, and click **Address**. Enter the user's fax number in the **Telefax number** box.

Figure 2.15 Entering the SAP User's Fax Number

The screenshot shows the 'Maintain User: Address' dialog box in SAP. The user 'SCHLATT' is selected. The 'Telefax number' field is filled with '06227-75-1624'. Other fields include 'Form of address' (Mr.), 'First name' (Thomas), 'Name' (Schlatterer-Kaiser), 'Location' (Walldorf), and 'Country key' (DE). The status bar at the bottom shows 'CER (1) (850) | hs8100 | INS | 12:29PM'.

Click **Save** and complete the **Change Request** dialog box if necessary.

Testing the Connection in SAP

After you have installed the RightFax connector software and properly configured the RightFax and SAP servers, you should test the connection to ensure that faxes can be sent and received via SAP R/3.

To test the fax connection

1. Make sure that the RightFax SAP Gateway Module service is started on the RightFax server.
2. Execute SAP transaction SM59.
3. Expand the **TCP/IP Connections** option and double-click **SAPCONNECT_FAXSERVER** (the RFC destination you set up earlier in this chapter).

Figure 2.16 Testing the Connection

Be sure that the Trace option is *not* checked before clicking Test Connection

The screenshot shows the 'RFC Destination SAPCONNECT_FAXSERVER' dialog box in SAP. The 'Trace' checkbox is unchecked. The 'Connection type' is 'TCP/IP connection' and the 'Program ID' is 'RFServer.sapgate'. The status bar at the bottom shows 'CER (0) | isv | OVR | 04:09PM'.

4. Make sure that the **Trace** option is *not* checked.



Warning *Testing the connection with the **Trace** option enabled will cause an error in the SAP connector on the RightFax server and launch the Dr. Watson application. For more information on the cause of this error, refer to SAP tech note 308827.*

5. Click **Test Connection**. SAP R/3 will attempt to communicate with the fax server and report on the outcome. If an error is displayed, make sure that the SAPGATE service is running on the RightFax server and then rerun this test.

■ ■ ■

Chapter 3

Configuring a SAP R/3 Version 4.0 System

After the RightFax SAP connector has been installed on the RightFax server, you must configure SAP R/3 to properly communicate with the connector. The instructions in this chapter help you configure an SAP version 4.0 system. If your SAP system is version 3.x, see [Chapter 2, “Configuring a SAP R/3 Version 3.x System”](#). If your SAP system is version 4.6, see [Chapter 4, “Configuring a SAP R/3 Version 4.6 System”](#).

Several steps are required to configure SAP R/3 version 4.0 for faxing through RightFax:

1. Create a new CPIC user.
2. Create an RFC destination.
3. Configure SAPconnect.
4. Schedule a SAPconnect background send process.
5. Activate the fax module in SAPoffice.
6. Assign a fax number to each SAP R/3 user.

Each of these steps is described in this chapter.

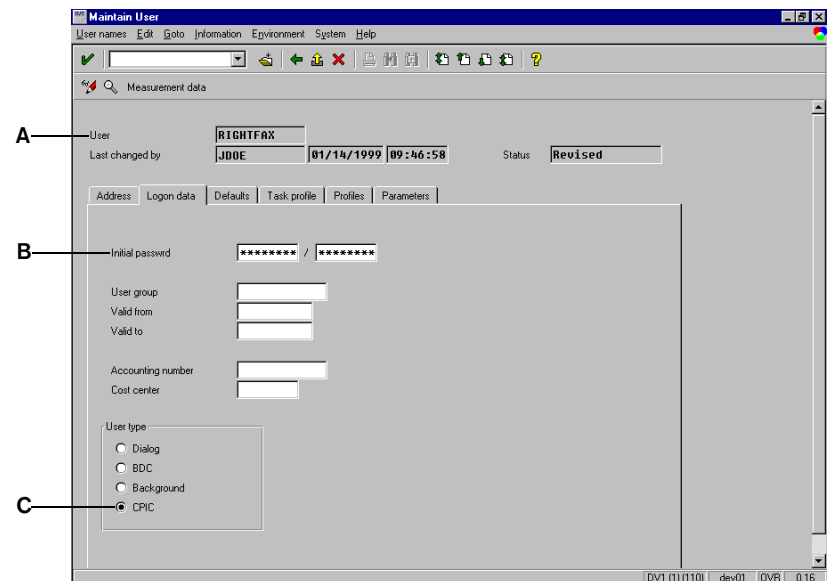
Create a New CPIC User

This step creates a new user account with the level of control needed by the fax server when communicating with the SAP R/3 system.

To create a new CPIC user

1. Execute SAP transaction SU01 and click **Create**. This opens the **Maintain User** dialog box. Click the **Logon Data** tab.

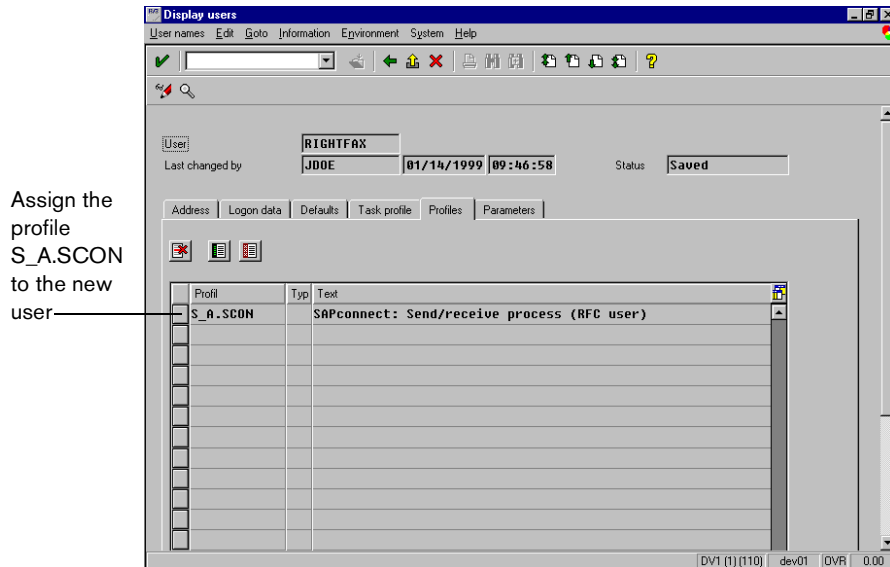
Figure 3.1 Completing the Logon Information



- A. Enter the user name defined in the RightFax SAP Gateway configuration program.
- B. Enter and confirm the password.
- C. Click CPIC.

- In the **User** and **Initial Password** boxes, enter the user ID and password you configured for the connector to use when logging on to the SAP R/3 system (page 7).
- Under **User Type**, click **CPIC**.
- Click the **Profiles** tab.

Figure 3.2 Assigning the User a Profile



- Select the profile S_A.SCON from the list.
- To save the new user, click **Save** [✓] and complete the **Change Request** dialog box if necessary.

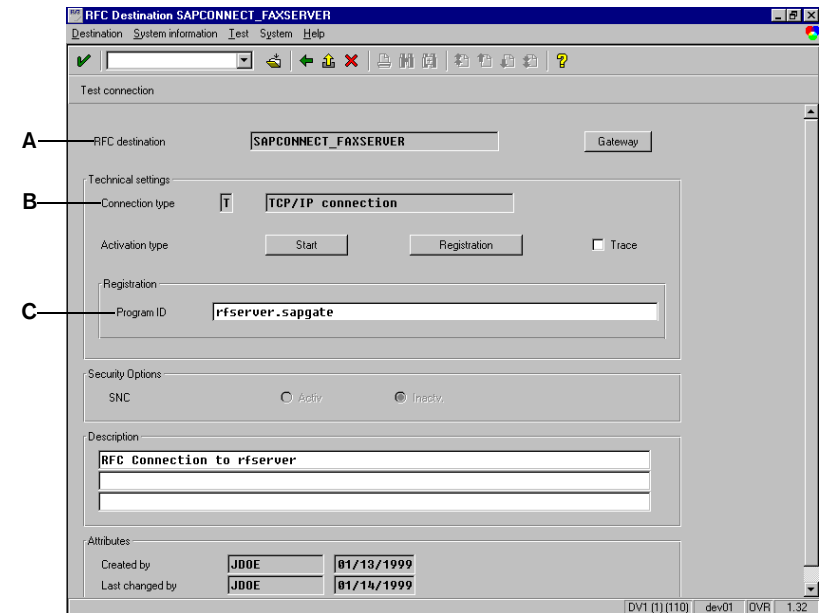
Create an RFC Destination

This step configures the SAP remote function call (RFC) destination for outbound fax calls.

To create an RFC destination

- Execute SAP transaction SM59. Click **Create** to open the **RFC Destination** dialog box.

Figure 3.3 Completing the RFC Destination Dialog Box



- Enter the RFC destination "SAPCONNECT_FAXSERVER" here
 - Select "T" for TCP/IP
 - Enter the value defined with the "PROGID" parameter in the SAPrfc.ini file on the fax server
- In the **RFC Destination** box, type **SAPCONNECT_FAXSERVER**, set the **Connection Type** box to "T" for TCP/IP, and enter a description for the RFC destination in the **Description** box, and then click **Save** [✓].

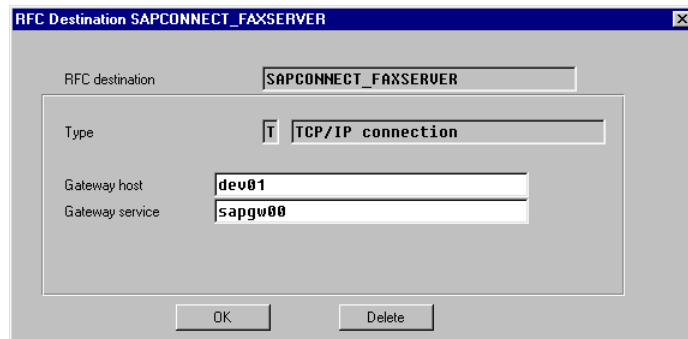
3. Click **Registration**. In the **Program ID** box, enter the value defined with the "PROGID" parameter in the SAPRFC.INI file on the fax server. In most cases, this will be the Windows NT name of your RightFax server followed by a period and then "sapgate." For example, "rfserver.sapgate."



Note This box must match the exact spelling and case found in the SAPrfc.ini file on the RightFax server or the connector will not properly communicate with the SAP system. For a description and example of the SAPRFC.INI file see [Appendix A, "Files Installed by the Connector"](#).

4. To save the new RFC destination, click **Save** [✓] and complete the **Change Request** dialog box if necessary.
5. Select **Gateway Options** from the **Destination** menu.

Figure 3.4 Completing the Gateway Host and Gateway Service Names



6. Enter the gateway host and gateway service name of the SAP gateway that the connector will be talking to.
7. Click **OK**.

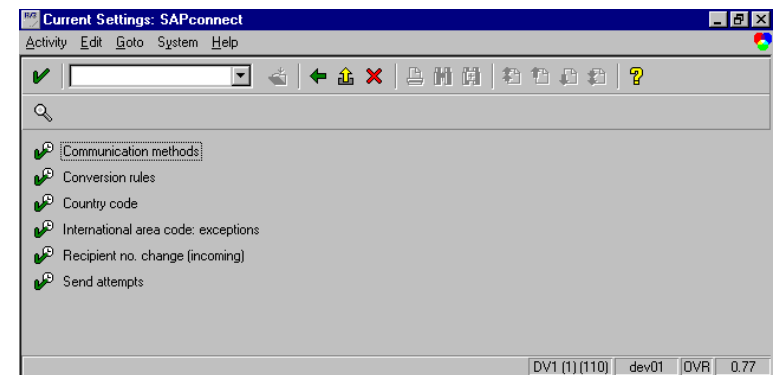
SAPconnect Configuration

This step lets you configure the communication method, conversion rules, and other protocols in SAPconnect to ensure proper communication between the SAP R/3 and RightFax servers.

To configure SAPconnect

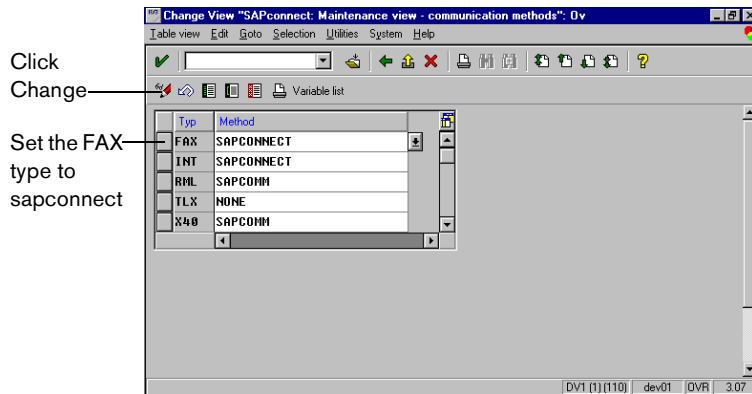
1. Execute SAP transaction SCOT, and then select **Customizing** from the **Goto** menu. This opens the **Current Settings: SAPconnect** dialog box.

Figure 3.5 The Current Settings: SAPconnect Dialog Box



2. Click **Communications Methods**.

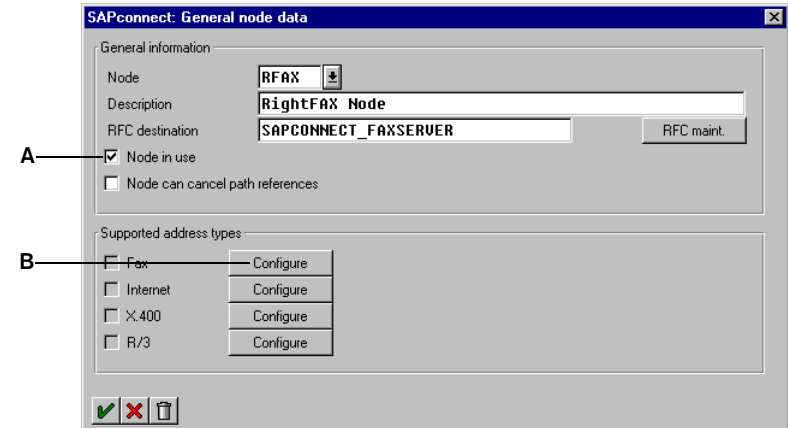
Figure 3.6 Setting the Fax Type to “SAPCONNECT”



3. Click **Change** (the button with the pencil icon), and then set the FAX type method to “SAPCONNECT.”
4. Click **Save** [✓] and complete the **Change Request** dialog box if necessary.

5. Execute SAP transaction SCOT, and then select **Create Node** from the **Edit** menu. This opens the **SAPconnect: General node data** dialog box.

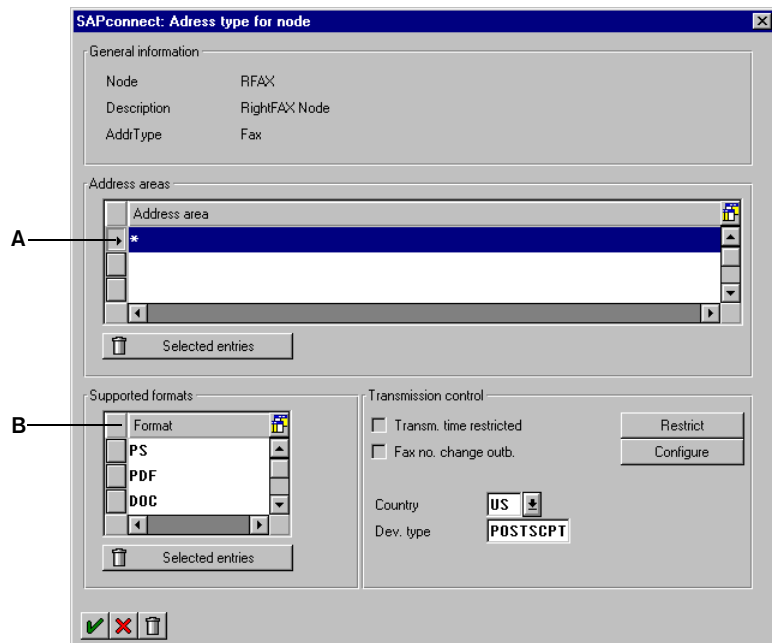
Figure 3.7 The SAPconnect: General Node Data Dialog Box



- A. After you enter a name and description for the new node, and the RFC destination name created earlier, select the **Node in use** check box.
 - B. Click **Configure**.
6. In the **Node** box, enter a name for the new SAPconnect node, and then type a description in the **Description** box. In the **RFC destination** box, enter the name of the new RFC destination created earlier. Select the **Node in use** check box.

- Click **Configure** next to **Fax** in the **Supported Address Types** group box. This opens the **SAPconnect: Address Type for Node** dialog box.

Figure 3.8 The SAPconnect: Address Type for Node Dialog Box



- An asterisk (*) here indicates that all phone numbers are supported by this node
 - For each supported document type, add the document type's file extension here
- Under **Address Area**, define the fax numbers to be serviced by this node. Specify the two-letter country code followed by phone number digits. An asterisk (*) may be used in this box as a wildcard. An asterisk by itself means that all fax numbers will be serviced.

- For each document type to be passed to the fax server, create an entry under **Supported Formats** with the document type's three-letter file extension. For plain ASCII documents, use the extension "RAW." For PostScript documents, use the extension "PS." Do not enter more than one of each type of printer language format, e.g., "PS" (PostScript) or "PCL" (HP-PCL), per **Format Group** type.

Only the document types specified here will be passed to RightFax. If a user faxes a document type not included on this list, SAP will attempt to convert the document to a type that is on the list. If SAP is unable to convert the document, it will return an error message to the user indicating that the fax could not be sent.

- In the **Country** box, enter the country code of the node's location.
- In the **Dev. Type** column, select either "POSTSCPT" or a PCL printer driver such as "HPLJ3" from the list. This is the printer output type that will be used for faxes sent to the RightFax server for conversion. To use PostScript, you must have installed the RightFax PDF optional module on the RightFax server.
- Click **Save** [✓] to close the **SAPconnect: General Node Data** dialog box, and then click **Save** [✓] again to complete the SAPconnect configuration.

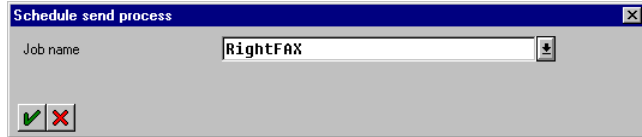
Schedule a SAPconnect Background Send Process

When an outgoing fax is generated by SAP R/3, it is placed in the SAPconnect queue. A background job must be scheduled to move the faxes from this queue to the RightFax server.

To schedule the background send process

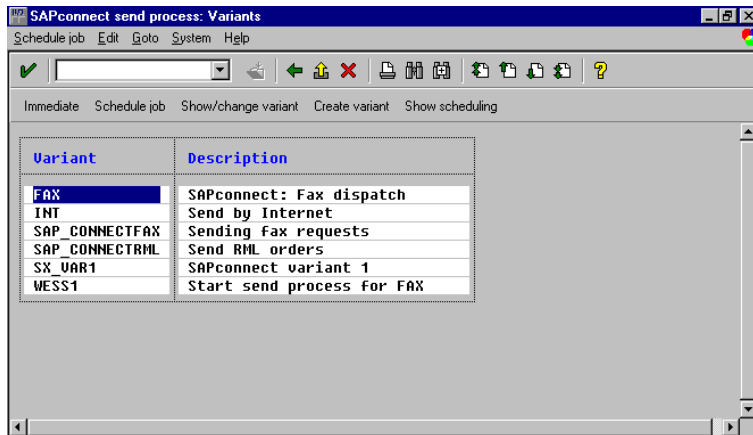
1. Execute SAP transaction SCOT and select **View** from the **Jobs** menu.
2. Click **Schedule Background Job**. This opens the **Schedule send process** dialog box.

Figure 3.9 Naming the New Send Process



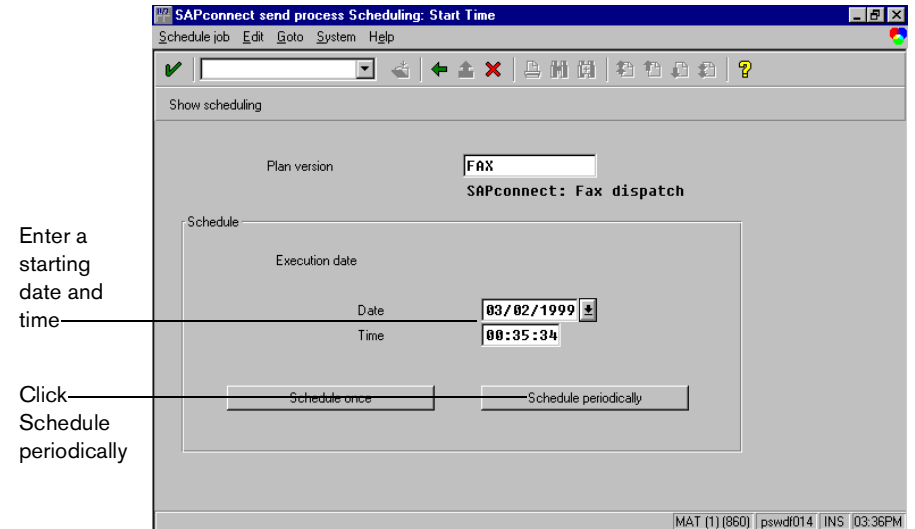
3. Type a name for the new send process and click **Save** [✓]. This opens the **SAPconnect Send Process: Variants** dialog box.

Figure 3.10 The SAPconnect Send Process: Variants Dialog Box



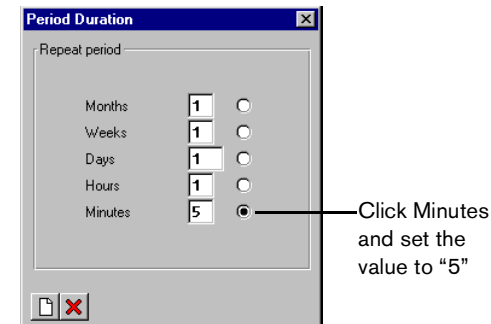
4. In the **Variant** list, click **FAX**, and then click **Schedule Job**.

Figure 3.11 The SAPconnect send process Scheduling: Start Time Dialog Box



5. Under **Execution date**, enter a date and time for the first background send event, and then click **Schedule Periodically**. This opens the **Period Duration** dialog box.

Figure 3.12 The Period Duration Dialog Box



- Click **Minutes** and enter **5** in the box, and then click **Create**. The period duration will be saved automatically.

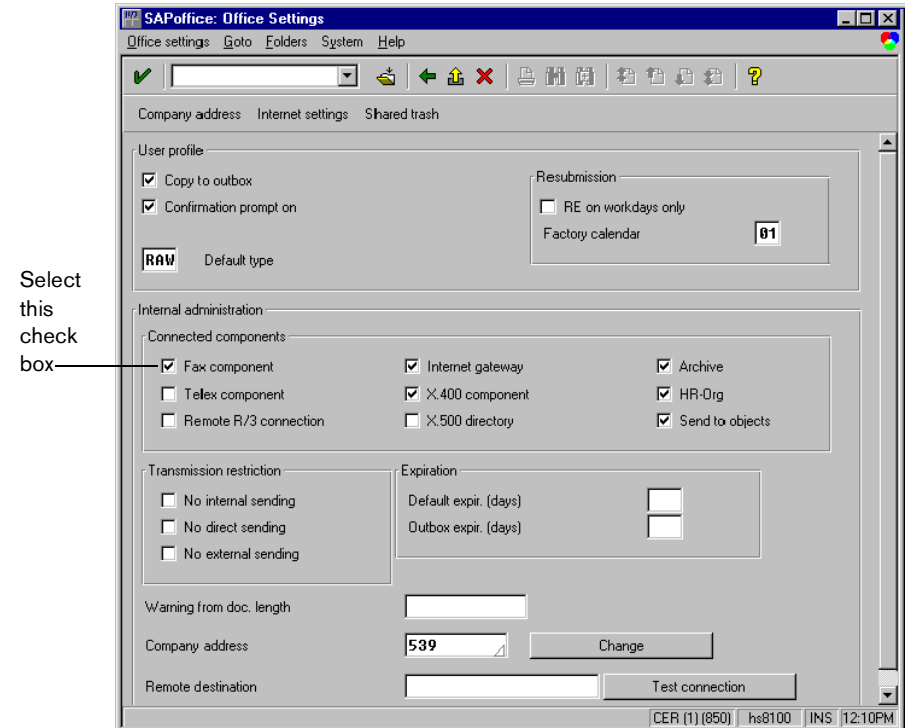


Note Although RightFax recommends setting the period duration to five minutes, you can adjust this setting as necessary for batch faxing/fax scheduling purposes. For more information on batch faxing see “Batch Faxing” on page 55.

Activate the Fax Module in SAPoffice

To activate the fax module, execute SAP transaction SO16, and then select the **Fax component** check box under **Connected components**.

Figure 3.13 The Office Settings Dialog Box



Click **Save** [✓] and complete the **Change Request** dialog box if necessary.

Assign a Fax Number to Each SAP R/3 User

Each user who sends a message from SAP R/3 via fax or any other SAPconnect communication service must have an originator address of the appropriate address type. For RightFax, each user must have a fax number assigned in SAP. This setting is treated by RightFax only as a identifier for the user and does not need to be an actual fax number.

The user's SAP fax number is used when routing incoming faxes from RightFax into a user's SAPoffice Inbox. The recipient's **Routing Info** setting in RightFax is compared to each user's fax number in SAP. RightFax forwards the fax to the SAP user with the matching fax number. When routing faxes from RightFax to SAPoffice, each SAP user must have a unique fax number.

The SAP user's fax number is also used to assign a RightFax user ID to outbound faxes created in SAP. The user's fax number is included in the data stream when outbound faxes are forwarded to RightFax. This fax number is compared to the RightFax **Routing Info** box for each user ID. If a match is found, the matching user ID is assigned ownership of the fax and the fax is sent from that user's mailbox. If multiple users have the same SAP fax number assigned, they will all have their faxes sent via the same RightFax mailbox.



Note Fax status notifications back to SAP users do not use the SAP Fax Number setting to identify the user. These notifications will be sent to the correct user regardless of whether the user has a unique Fax Number setting in SAP.

To change or add a fax number to a user record, execute SAP transaction SU01, select the user to edit, and click the **Address** tab. Enter the user's fax number in the **Fax** box.

Figure 3.14 Adding a Fax Number to a User Record

The screenshot shows the SAP 'Maintain User' (SU01) transaction. The 'Address' tab is selected. The 'Person' section is active, and the 'Fax' field in the 'Communication' section is highlighted with a red box and an arrow pointing to it. The 'Fax' field contains the value '3473'. The 'User' field at the top contains 'JDOE' and the 'Status' is 'Saved'.

Enter the user's fax number here

Click **Save** [✓] and complete the **Change Request** dialog box if necessary.

Testing the Connection in SAP

After you have installed the RightFax connector software and properly configured the RightFax and SAP servers, you should test the connection to ensure that faxes can be sent and received via SAP R/3.

To test the fax connection

1. Start the RightFax SAP Gateway service on the RightFax server.
2. Execute SAP transaction SM59.
3. Select "SAPCONNECT_FAXSERVER" (the RFC destination you set up earlier in this chapter).

Figure 3.15 The RFC Destination Dialog Box

Be sure that the Trace option is *not* checked before clicking Test Connection

Be sure that the Trace option is *not* checked before clicking Test Connection

4. Make sure that the **Trace** option is *not* checked.



Warning Testing the connection with the **Trace** option enabled will cause an error in the SAP connector on the RightFax server and launch the Dr. Watson application. For more information on the cause of this error, refer to SAP tech note 308827.

5. Click **Test connection**. SAP R/3 will attempt to communicate with the fax server and report on the outcome. If an error is displayed, make sure that the SAPGATE service is running on the RightFax server and then rerun this test.

■ ■ ■

Chapter 4

Configuring a SAP R/3 Version 4.6 System

After the RightFax SAP connector has been installed on the RightFax server, you must configure SAP R/3 to properly communicate with the connector. The instructions in this chapter help you configure an SAP version 4.6 system. If your SAP system is version 3.x, see [Chapter 2, “Configuring a SAP R/3 Version 3.x System”](#). If your SAP system is version 4.0, see [Chapter 3, “Configuring a SAP R/3 Version 4.0 System”](#).

The following procedures are required to configure SAP R/3 version 4.6 for use with RightFax:

1. Create a new system user.
2. Create a remote function call (RFC) destination.
3. Configure SAPconnect.
4. Create a new SAPconnect node.
5. Schedule a SAPconnect background send process.
6. Ensure that the fax component is activated.
7. Assign a fax number to each SAP R/3 user.

Each of these procedures is described in this chapter.

Create a New System User

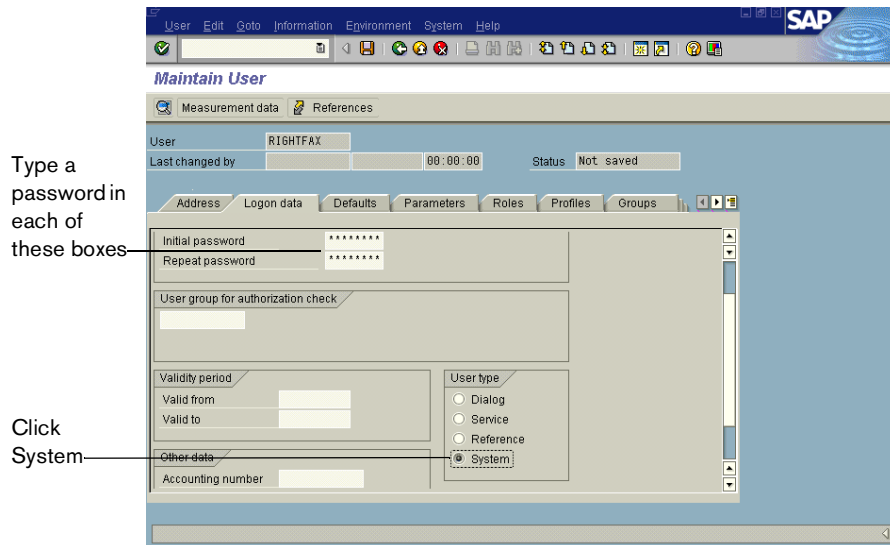
This step creates a new user account with the level of control needed by the fax server when communicating with the SAP R/3 system.

To create a new system user

1. From the main menu execute SAP transaction SU01 to open the **User Maintenance** dialog box.
2. In the **User Name** box, enter the user name you configured for the connector to use when logging on to the SAP R/3 system ([page 7](#)). Leave the **Alias** box blank.
3. Click **Create**. This opens the **Maintain User** dialog box and displays the **Address** tab.
4. Type **RightFax** in the **Last Name** box. This is an entry required by SAP.

5. Click the **Logon Data** tab.

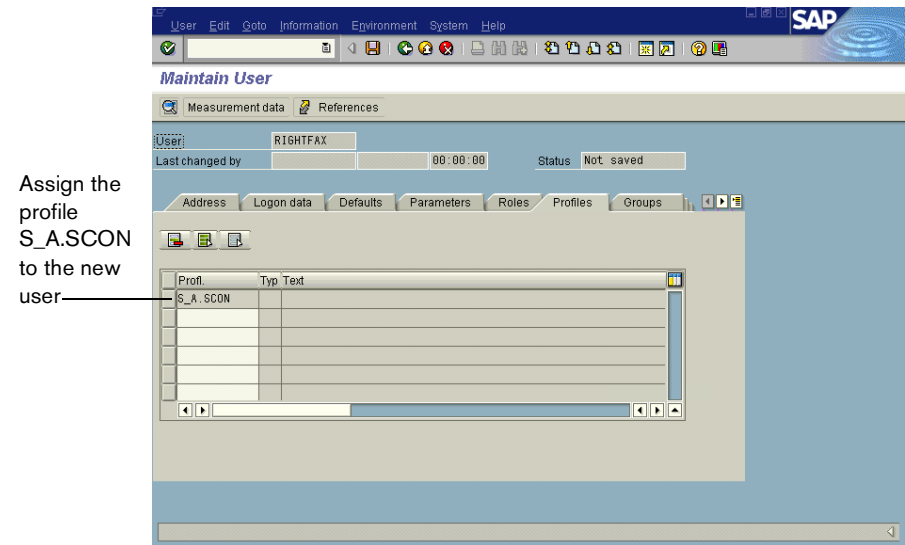
Figure 4.1 Completing the Logon Data Tab



6. Enter a password in the **Initial password** and **Repeat password** boxes, and then click **System** under **User type**.

7. Click the **Profiles** tab.

Figure 4.2 Assigning the S_A.SCON User Profile



8. Click the first line in the profiles list and select the profile **S_A.SCON** from the list.
9. To save the new user, select **Save** from the **User** menu. Complete the **Change Request** dialog box if it appears.

Create an RFC Destination

This step configures the SAP RFC destination for outbound fax calls.

To create an RFC destination

1. From the main menu execute SAP transaction SM59, and then click **Create** to open the **RFC Destination** dialog box.

Figure 4.3 Completing the RFC Destination Dialog Box

Enter the RFC destination sapconnect_faxserver here

Select T for TCP/IP

Type a description here

2. In the **RFC Destination** box, type **SAPCONNECT_FAXSERVER**. Set the **Connection Type** box to **T** for TCP/IP, and then enter a description for the RFC destination in the **Description** box.

3. Click **Enter** (✓). This opens the **RFC Destination** dialog box for **SAPCONNECT_FAXSERVER**.

Figure 4.4 Completing the RFC Destination Dialog Box

Enter the value defined for the PROGID parameter in the SAPRFC.INI file on the fax server

4. In the **Program ID** box, enter the value defined for the **PROGID** parameter in the **SAPRFC.INI** file on the fax server. In most cases, this will be the Windows NT name of your RightFax server followed by a period and then "sapgate." For example, "rfserver.sapgate."



Note This box must match the exact spelling and case found in the **SAPRFC.INI** file on the RightFax server. If not, the connector will not be able to communicate with SAP. For a description and example of the **SAPRFC.INI** file, see [Appendix A, "Files Installed by the Connector"](#).

5. To save the new RFC destination, click **Test connection**. Click **Yes** when prompted to save the changes. Complete the **Change Request** dialog box if it appears.

6. Select **Gateway Options** from the **Destination** menu. This opens a dialog box listing options for the new gateway.

Figure 4.5 Entering the Gateway Host and Gateway Service Names



7. Enter the gateway host and gateway service names of the SAP gateway that the connector will be talking to.
8. Click **OK**.

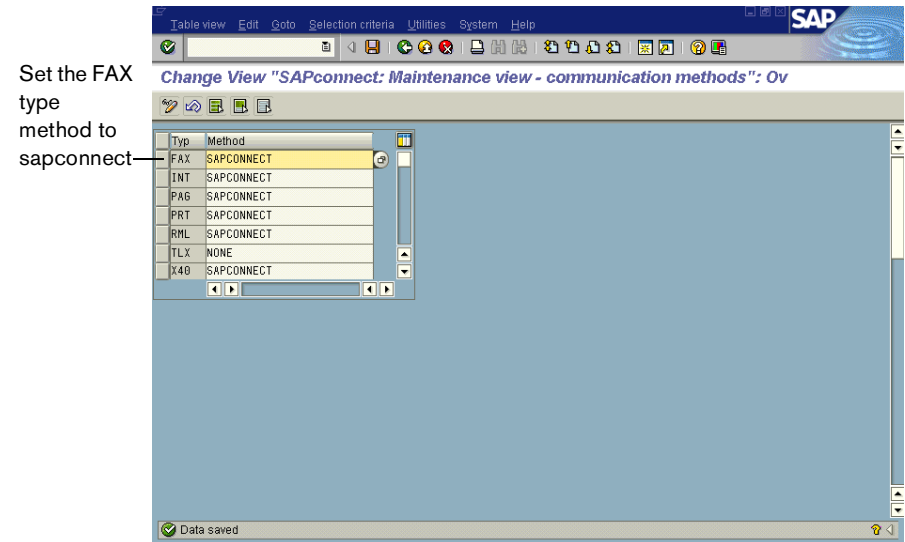
SAPconnect Configuration

This step lets you configure the communication method, conversion rules, and other protocols in SAPconnect to ensure proper communication between the SAP R/3 and RightFax servers.

To configure SAPconnect

1. From the main menu execute SAP transaction SCOT and select **Communications Methods** from the **Settings** menu. This opens the **Communication methods** dialog box.

Figure 4.6 Setting the Fax Type Method



2. In the **Type** column, highlight **FAX** and select **SAPCONNECT** from the list.
3. Click **Save** (✓). Complete the **Change Request** dialog box if it appears.

Create a New SAPconnect Node

This step creates and configures the SAPconnect node that will serve as the link between the SAP and RightFax servers.

To create the new SAPconnect node

1. From the main menu execute SAP transaction SCOT and select **Create** from the **Nodes** menu. This opens the **Create nodes** dialog box.



Note The options displayed in the **Create nodes** dialog box will change each time you click **Continue**.

Figure 4.7 The Create Nodes Dialog Box

Specify a name (max. 6 characters) and a description for the node.
[Click here for further information...](#)

Node: RFAX
Description: Rightfax Node

Back Continue Cancel

2. Type a name for the new SAPconnect node in the **Node** box, and then type a description in the **Description** box.

3. Click **Continue**. This displays RFC destination options.

Figure 4.8 Selecting an RFC Destination

The node is accessed via an RFC destination in the R/3 System. Assign an RFC destination to the node. If you have not already done so, you can create an RFC destination here.
[Click here for further information...](#)

Node: RFAX
RFC destination: SAPCONNECT_FAXSERVER

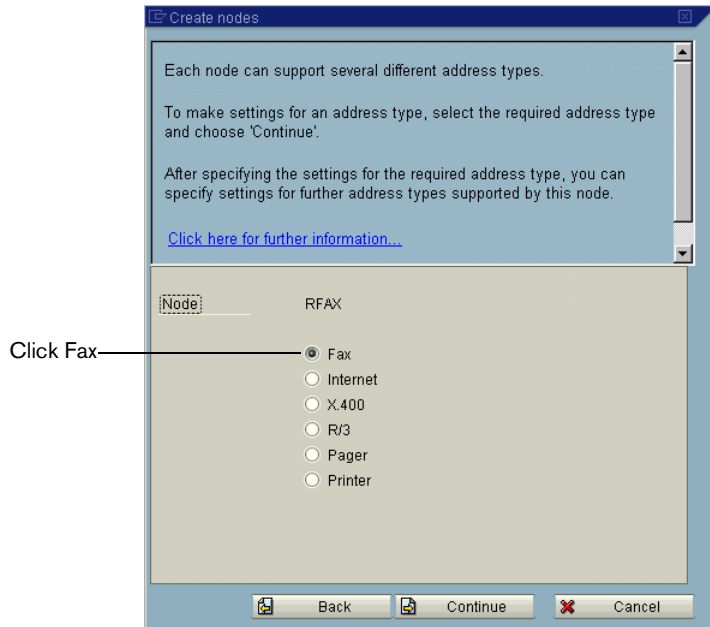
RFC destination

Back Continue Cancel

4. Type **SAPCONNECT_FAXSERVER** in the **RFC destination** box.

5. Click **Continue**. This displays address type options.

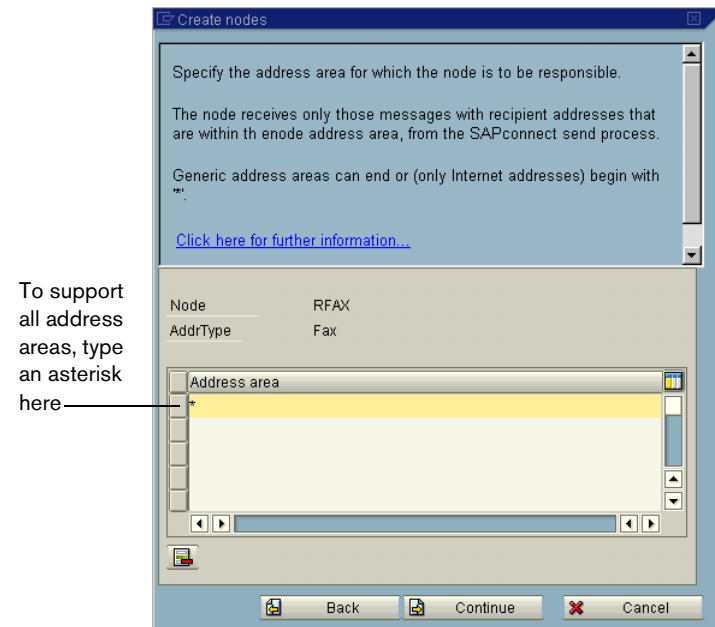
Figure 4.9 Assigning the “Fax” Address Type



6. Click **Fax**.

7. Click **Continue**. This displays a supported address area list.

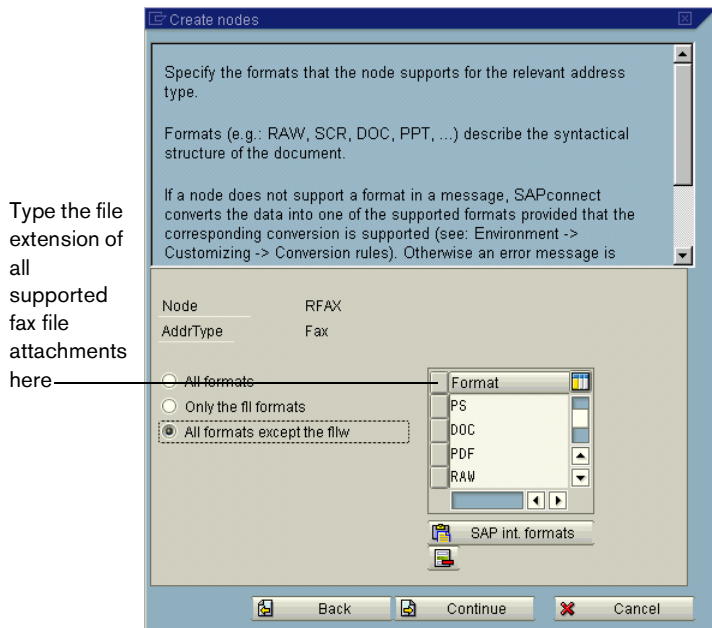
Figure 4.10 Assigning the Node's Address Area



8. Under **Address area**, enter the fax numbers to be serviced by this node. Specify the two-letter country code followed by phone number digits. An asterisk (*) can be used in this box as a wildcard character. An asterisk by itself means that all fax numbers will be serviced.

9. When you have entered all the address areas to service, click **Continue**. This displays a supported file format list.

Figure 4.11 Assigning Supported Document Types

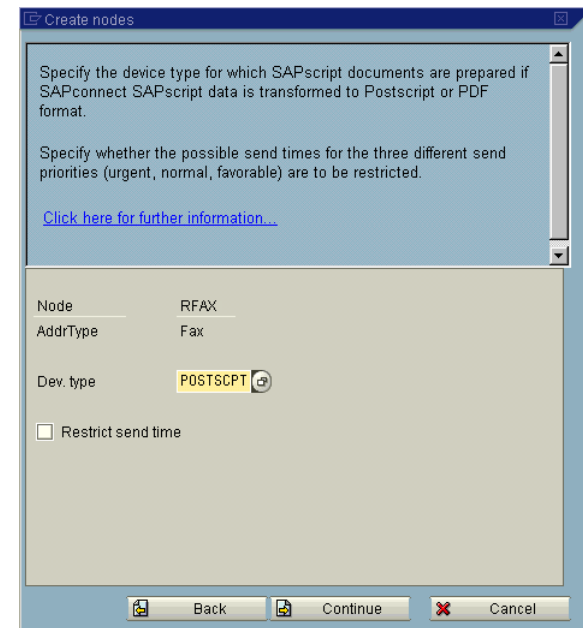


10. In the **Format** column, add the file name extension of each type of document file that users can attach to outbound faxes. Only the document types specified here will be passed to the RightFax server. If a user attaches a document type not included on this list, SAP will attempt to convert the document to one of SAP's internal document formats. If SAP is unable to convert the document file, it will return an error message to the user indicating that the fax could not be sent.

For plain ASCII documents, use the extension RAW. For PostScript documents, use the extension PS. Do not enter more than one of each type of printer language format, e.g., PS (PostScript) or PCL (HP-PCL), per format group type.

11. When you have entered all the supported file types, click **Continue**. This displays the device type setting.

Figure 4.12 Setting the Dev. Type Box



12. In the **Dev. type** box, select either **POSTSCRIPT** or a PCL printer driver such as HPLJ3 from the list. This is the printer output type that will be used for faxes sent to the RightFax server for conversion. To use PostScript, you must have installed the RightFax PDF™ module on the RightFax server.

13. Click **Continue**. This displays the node's country code.

Figure 4.13 Setting the Node's Country Code

The screenshot shows the 'Create nodes' dialog box. The title bar reads 'Create nodes'. The main area contains the following text: 'Specify the country code for the node location. (The country is used to determine the code for the fax number.)', 'Node-specific fax number changes for outgoing faxes:', and 'Specify whether you wish to specify node-specific exception substitutes in addition to the cross-System exception substitutes for fax numbers for this node for faxes sent from R/3.' Below this is a link: 'Click here for further information...'. A table is displayed with columns 'Node' and 'RFAX'. The 'Node' column contains 'Country' and the 'RFAX' column contains 'US' with a dropdown arrow. Below the table is a checkbox labeled 'Node-specific fax number changes for outgoing faxes'. At the bottom are buttons for 'Back', 'Continue', and 'Cancel'. An arrow points from the text 'Enter your country code here' to the 'Country' field.

14. In the **Country** box, enter the country code of the node's location. Click **Continue**.

15. When you are prompted to set further address types, select the **N** option and click **Continue**. This displays the failed send attempt options.

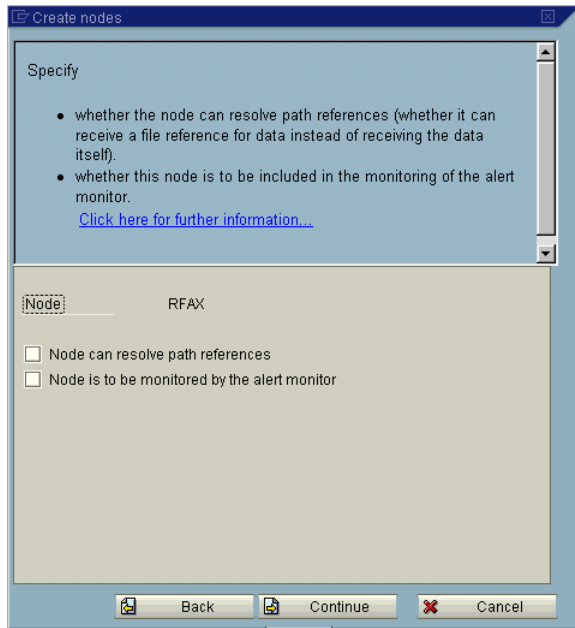
Figure 4.14 Setting the Maximum Time for Re-send Attempts

The screenshot shows the 'Create nodes' dialog box. The title bar reads 'Create nodes'. The main area contains the following text: 'Failed send attempt:', 'If a node cannot be reached currently because of an RFC error, the System tries to send the message again for a period of time that is specified individually for each node.', 'Please specify the maximum time period for this repeat send attempt procedure (in hours and minutes).', and 'These values are initially set to zero.' Below this is a table with columns 'Node' and 'RFAX'. The 'Node' column contains 'Maximum waiting time for repeat send attempt procedure:' and the 'RFAX' column contains '5' in the 'Minutes' field. At the bottom are buttons for 'Back', 'Continue', and 'Cancel'. An arrow points from the text 'Enter an appropriate length of time to reattempt failed send attempts' to the '5' in the 'Minutes' field.

16. In the **Hours** and **Minutes** boxes, type an appropriate length of time to re-attempt sending outbound faxes through this node if send attempts fail.

17. Click **Continue**. This displays two additional node options.

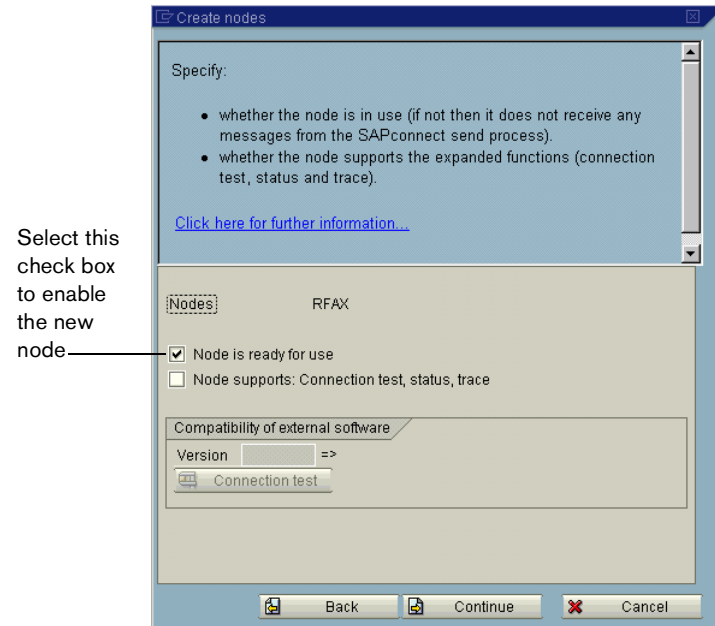
Figure 4.15 Additional Node Options



18. Set these options according to your SAP system configuration.

19. Click **Continue**. This displays the final set of options on this dialog box.

Figure 4.16 Completing the Node Configuration



20. Select the **Node is ready for use** check box, and click **Continue**. This completes configuration of the new RightFax node.

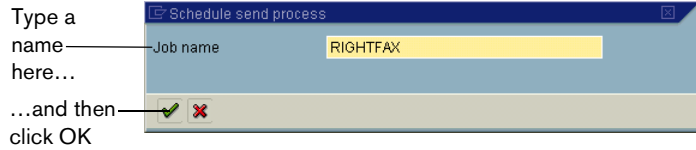
Schedule a SAPconnect Background Send Process

When an outgoing fax is generated in SAP, it is placed in the SAPconnect queue. To move the faxes from this queue to the RightFax server, a background job must be scheduled.

To schedule the background send process

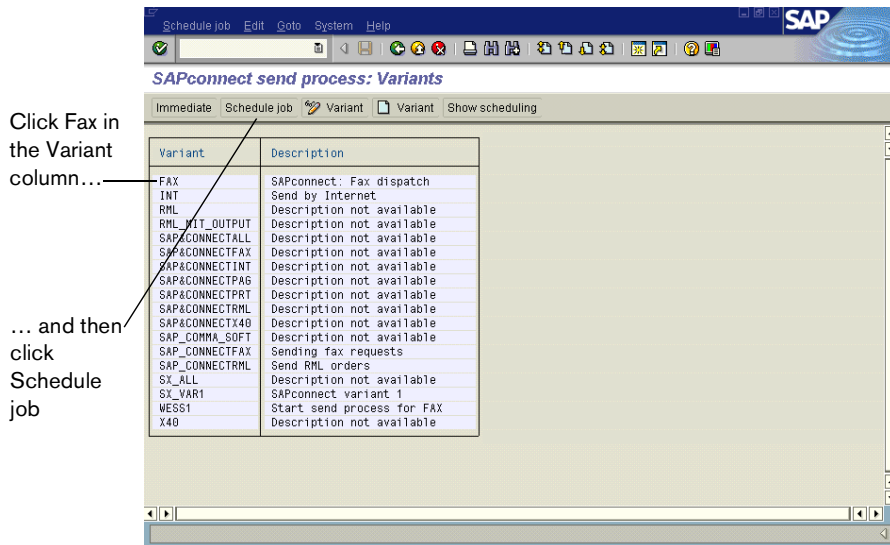
1. From the main menu execute SAP transaction SCOT and select **Jobs** from the **View** menu.
2. Select **Dispatch** from the **Jobs** menu. This opens the **Schedule send process** dialog box.

Figure 4.17 Naming the New Send Process



3. Type a name for the new background send process in the **Job name** box and click **OK**. This opens the **Variants** dialog box.

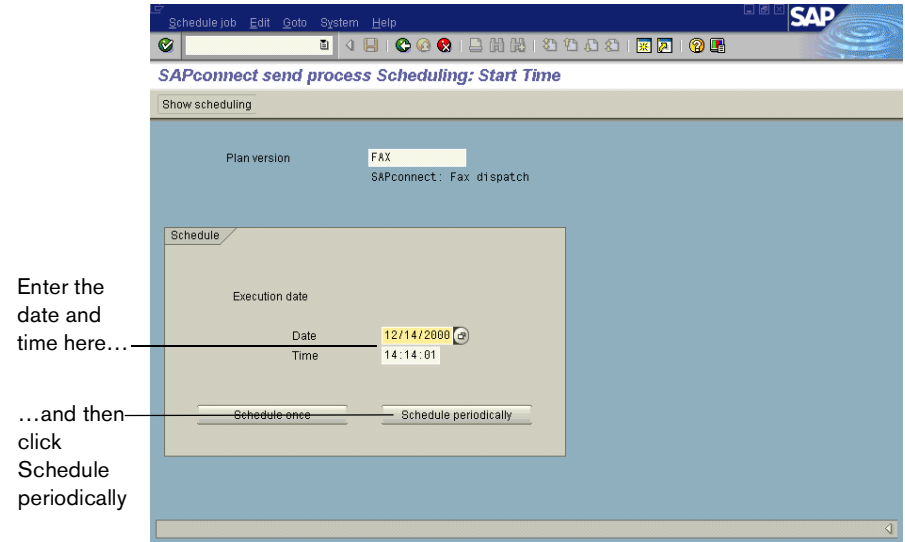
Figure 4.18 Selecting the FAX Variant



4. Click **FAX** in the **Variant** column.

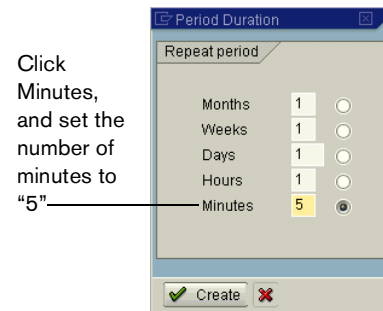
5. Click **Schedule job**. This opens the **Start Time** dialog box.

Figure 4.19 Specifying the Date and Time for the First Send Process



6. In the **Date** and **Time** boxes, enter a date and time for the first background send job.
7. Click **Schedule periodically**. This opens the **Period duration** dialog box

Figure 4.20 Setting the Period Duration



8. Click **Minutes**, and set the number of minutes to 5.
9. Click **Create**. The duration will be saved automatically.



Note Although RightFax recommends setting the period duration to five minutes, you can adjust this setting as necessary for batch faxing or fax scheduling. For more information on batch faxing, see “[Batch Faxing](#)” on [page 55](#).

Ensure That the Fax Component is Activated

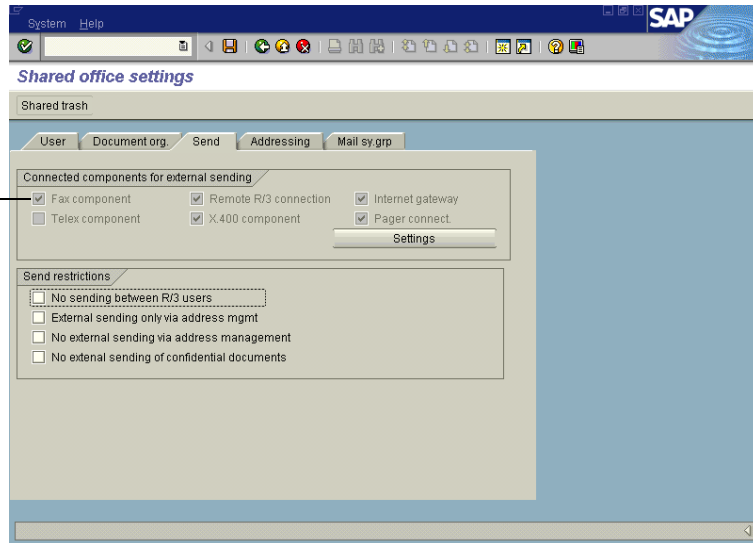
When SAPoffice is configured to support faxing via RightFax, the SAPoffice Fax component should be automatically enabled. This step lets you confirm that this component is activated.

To ensure that the Fax component is activated

1. From the main menu execute SAP transaction SO16 to open the **Shared office settings** dialog box.

Figure 4.21 The Shared Office Settings Dialog Box

Make sure that the Fax component check box is selected—



2. On the **Send** tab, make sure that the **Fax component** check box is selected.
3. Click **Enter** (✓). Complete the **Change Request** dialog box if it appears.

Assign a Fax Number to Each SAP R/3 User

To route faxes from the RightFax server to SAPoffice users, each user must have a fax number assigned in SAP. RightFax treats this number as an identifier only; it does not need to be an actual fax number.

For inbound faxes, the SAP fax number is used to route faxes from the RightFax server to the user in SAPoffice. For outbound faxes, RightFax uses the SAP fax number to assign ownership of the fax to the user. If multiple users share the same fax number, their faxes will be assigned to the RightFax mailbox associated with the SAP fax number.

To associate the SAP fax number with the user in RightFax, edit the user information in Enterprise Fax Manager. For instructions, see “[Routing Received Faxes into SAPoffice](#)” on [page 48](#).

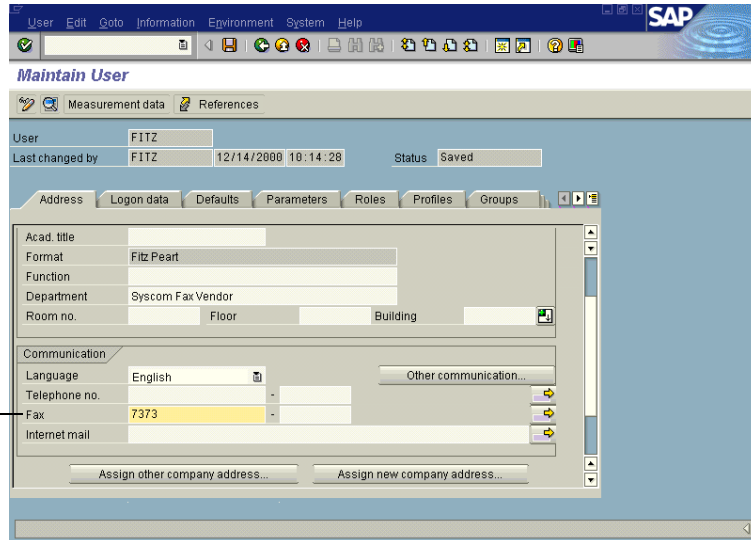


Note Fax status notifications back to SAP users do not use the SAP fax number to identify the user. These notifications will be sent to the correct user regardless of whether the user has a unique fax number in SAP.

To change or add a fax number to an SAP user record

1. From the main menu execute SAP transaction SU01. This opens the **Maintain User** dialog box.
2. Select a user to edit, and then select **Change** from the **User** menu.

Figure 4.22 Adding a Fax Number to a User Record



Enter the user's fax number here

3. Enter the user's fax number in the **Fax Number** box on the **Address** tab.
4. Select **Save** from the **User** menu. Complete the **Change Request** dialog box if it appears.

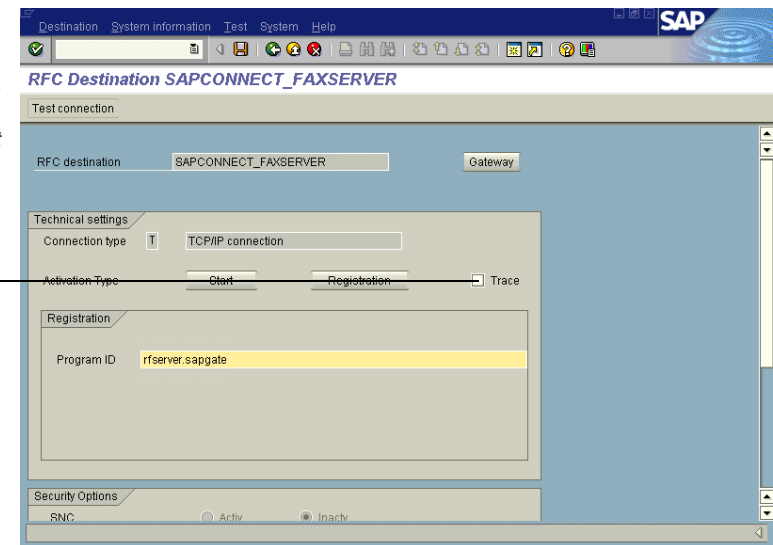
Testing the Connection in SAP

After you have installed the RightFax connector software and properly configured the RightFax and SAP R/3 servers, you should test the connection to ensure that faxes can be sent and received via SAP R/3.

To test the fax connection

1. Start the RightFax SAP Gateway service on the RightFax server.
2. From the SAP R/3 main menu, execute transaction SM59.
3. Select **SAPCONNECT_FAXSERVER** under **TCP/IP Connections** in the **RFC Destinations** tree. This opens the **RFC Destination** dialog box.

Figure 4.23 Testing the Connection



Be sure that the Trace option is *not* checked before clicking Test Connection

4. Make sure that the **Trace** option is *not* checked.



Warning *Testing the connection with the **Trace** option enabled will cause an error in the SAP connector on the RightFax server and launch the Dr. Watson application. For more information on the cause of this error, refer to SAP tech note 308827.*

5. Click **Test connection**. SAP R/3 will attempt to communicate with the fax server and report on the outcome.
6. If a connection error is displayed, make sure that the SAPGATE service is running on the RightFax server and then run this test again.

■ ■ ■

Chapter 5

Sending and Receiving Faxes in SAPoffice

SAPoffice is the SAP user's individual message box. SAPoffice can be used both to send and receive faxes via the SAP connector and to receive notification and status messages about sent faxes.

Sending Faxes from SAPoffice Versions 3.x and 4.0

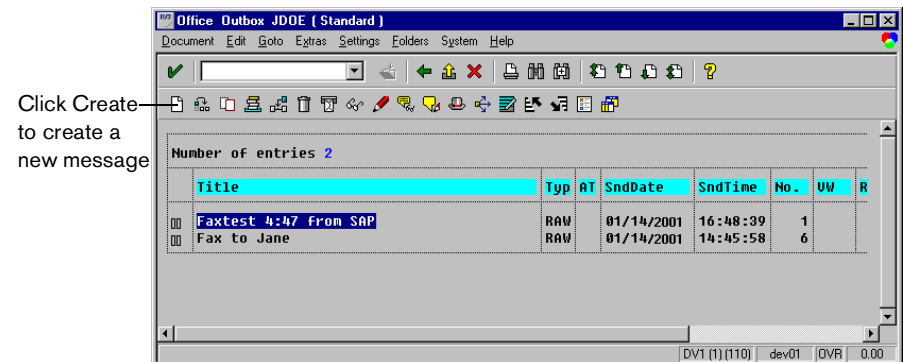
The instructions in this section use sample screen images from SAP version 3.1g. If your SAP server is version 4.0, some of the screens may look slightly different; however, unless specifically noted, the instructions are the same.

With the RightFax SAP connector, messages, including file attachments, can be sent directly from your SAPoffice Outbox as faxes via the RightFax server.

To send a fax from SAPoffice

1. Execute SAP transaction SO02 (or from the **Startup** screen, select **Outbox** from the **Office** menu). This opens the SAP R/3 Outbox.

Figure 5.1 The SAP R/3 Outbox



6. Click **Fax Entry** to open the **Fax Recipient Entry** dialog box.

Figure 5.5 The Fax Recipient Entry Dialog Box

The screenshot shows the 'Fax Recipient Entry' dialog box. The 'Document' section contains 'RAW MESSAGE' and 'Fax to Bill'. The 'Recipient number' section has 'Country' set to 'us' and 'No.' set to '520-555-8822'. The 'Transmission options' section has 'Cover sheet + text on one page' checked, 'Send immediately' selected, and 'Send at night' unselected. The 'Recipient' section has 'Name' filled with 'Bill Street'. The 'Sender' section has 'Company' filled with 'Company address', 'Fax' filled with '(0000) 0000/0000-000', 'Name' filled with 'Jane Doe', 'Department' filled with 'AdComm', and 'Fax number' filled with '3473'. The bottom of the dialog has 'Copy', 'Delete', and 'Cancel' buttons.

7. Information about the sender is automatically filled in based on information in the user's SAP profile. Enter the required country code and fax number of the intended recipient in the **Recipient Number** group box. Under **Recipient**, complete the optional recipient information.



Note The settings under **Transmission options** apply to the SAP server only. If the **Cover sheet** check box is selected, SAP will attach a cover sheet to the fax before sending the fax image to RightFax. If RightFax is configured to add cover sheets, it will add an additional cover sheet.

8. Click **Copy** to close the **Fax Recipient Entry** dialog box and return to the **Send Document** dialog box. Repeat steps 5–7 for each intended recipient.

9. After you have entered all the recipients, click **Send**. A screen appears showing confirmation that the fax was sent. The fax message is placed in the SAP message queue and will be picked up and faxed by RightFax at the next cycle of the SAPconnect background job.

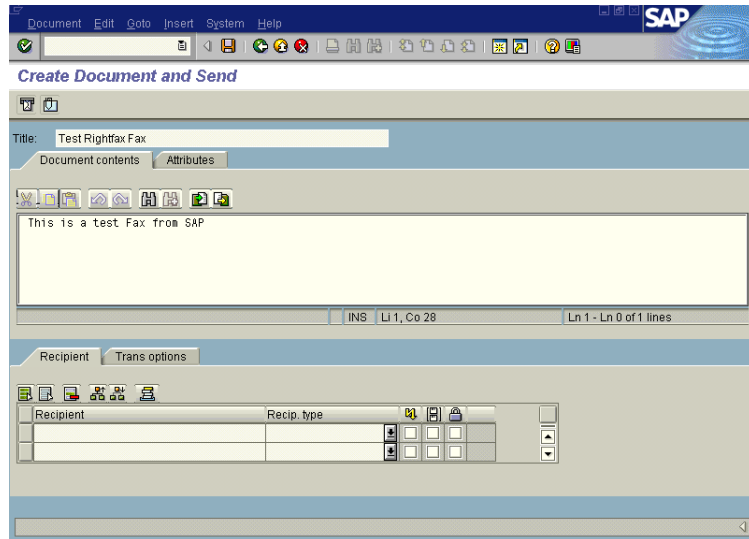
Sending Faxes from SAPoffice Version 4.6

With the RightFax SAP connector, messages, including file attachments, can be sent directly from your SAPoffice Outbox as faxes via the RightFax server.

To send a fax from SAPoffice

1. From the main menu execute SAP transaction SO02 (or from the Startup screen, select **Outbox** from the **Office** menu). This opens your SAP R/3 Outbox.
2. Click **New Message**. This opens the **Create Document and Send** dialog box.

Figure 5.6 The Create Document and Send Dialog Box



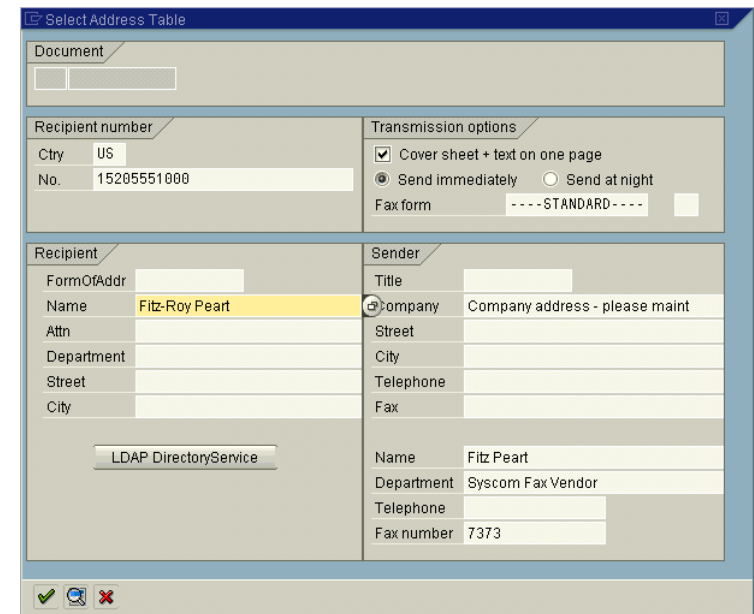
3. Type a title for the fax in the **Title** box. This will appear on the fax cover page.

4. Type the message text and specify any file attachments on the **Document contents** tab. The message text and any attached document files will appear as the body of the fax.

The types of files that can be attached to fax-bound SAPoffice messages are specified when you create the SAPconnect node for faxing via RightFax. Attached files are automatically converted to fax format using the RightFax conversion engine or server-side application conversion, depending on your RightFax configuration. For a list of all native file formats that can be converted by RightFax, please refer to the *RightFax Administrator's Guide*.

5. Select **Fax Entry** from the **Goto** menu. This opens the **Select Address Table** dialog box.

Figure 5.7 Addressing a Fax



Information about the sender is automatically entered in this dialog box based on the user's SAP profile.



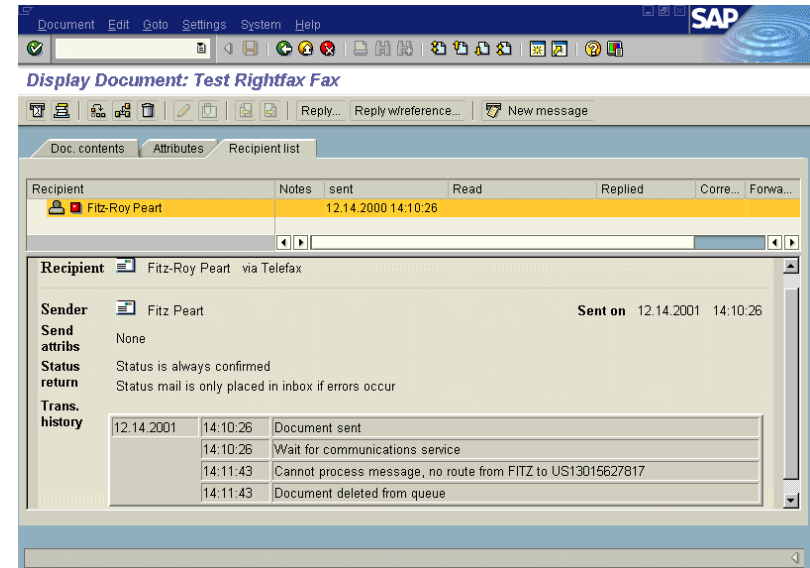
Note The settings under **Transmission options** apply to the SAP server only. If the **Cover sheet** check box is selected, SAP will attach a cover sheet to the fax before sending the fax image to RightFax. If RightFax is configured to add cover sheets, it will add an additional cover sheet.

6. Enter the required country code and fax number of the intended recipient in the **Recipient number** group box. You can also select a recipient from the address book.
7. Click **OK** to return to the **Create** dialog box. Repeat steps 5–7 for each intended recipient.
8. After you have entered all the recipients, click **Send**. A dialog box appears showing confirmation that the fax was sent. The fax message is placed in the SAP message queue and will be picked up and faxed by RightFax at the next cycle of the SAPconnect background job.

Fax Status Information and Notification

When you double-click a fax message in your SAPoffice Outbox, the **Display Document** dialog box appears.

Figure 5.8 The Display Document Dialog Box



Notification of unsent faxes

If RightFax is unable to send the fax due to transmission errors, a notification message will be placed in the sender's SAPoffice Inbox. SAPoffice notifications are not sent for successful fax transmissions.

Because SAP R/3 does not associate faxes with an SAP user ID, RightFax uses the sender's assigned SAP fax number to send back failed fax notifications. To ensure that notifications reach the correct recipients, each SAP user must have a unique fax number assigned. For more information, see ["Assign a Fax Number to Each SAP R/3 User"](#) on page 39.

Routing Received Faxes into SAPoffice

After you have configured a fax routing method for your organization within RightFax (routing incoming faxes to their intended recipients' RightFax user IDs), the SAP connector lets you automatically forward each RightFax user's new faxes directly to his SAPoffice Inbox.

To route inbound faxes directly to each user's SAPoffice Inbox, edit each user in Enterprise Fax Manager and click the **Inbound Routing** tab.

Figure 5.9 The User Edit Inbound Routing Dialog Box in RightFax

Set the **Routing Type** box to “SAP Client #1.”

In the **Routing Info** box, enter the fax number assigned to the user in SAP. For faxes to accurately route to the correct recipients, each SAP user must have a unique fax number assigned, but this does not need to be an actual fax number.

The **Routing Type** and **Routing Info** boxes must be configured individually for each RightFax user ID (or group ID).

■ ■ ■

Chapter 6

Sending Faxes From Modules

Because the RightFax Connector for SAP R/3 configures SAPconnect to automatically pass fax-bound documents to RightFax, each SAP module that supports fax output via SAPconnect automatically uses the SAP connector and its features.

You can configure the business rules of a module to automatically fax a document during the course of its life cycle as well as send existing documents as faxes when necessary. In addition, the RightFax SAP connector supports several new RightFax-specific SAPscript codes for customizing the fax output of your forms.

When a document is faxed from within a module, it uses the page layout of the output form as defined by the module administrator using SAPscript.

Configuring Business Rules to Automatically Fax a Document

SAP administrators can configure a document to be automatically sent as a fax at any point during the course of the document's life-cycle. For example, a copy of a purchase order can be configured to automatically fax back to the customer at the same time that it is forwarded to the Shipping department.

Because the business rules for each module can vary, it is the responsibility of the SAP module expert or administrator to apply the fax event to the document's life-cycle. As a general rule, the instruction to fax a document is the same as the instruction to print a document except that the output is Type 2, instead of Type 1.

Faxing a Pre-Existing Document

Occasionally, a document may need to be sent manually as a fax even if that is not a normal event in its life-cycle. For example, you may agree to fax a copy of a purchase order back to the customer before it is forwarded to your Shipping department, even though that is not your organization's normal practice.

Because the command to fax a document can vary from module to module, the operator faxing the document should refer to the module's user documentation or administrator for faxing instructions. As a general rule, the command to fax a document is the same as the command to print a document except that the output is Type 2, instead of Type 1.

Adding Fax Commands to Output Forms Via SAPscript

The RightFax Connector for SAP R/3 recognizes several special SAPscript codes that let you add fax control commands to your output forms. You can use these SAPscript codes to include RightFax cover sheet information, attach RightFax library documents, and more.

Following is a complete list of RightFax-compatible SAPscript codes, descriptions, and their correct syntax.

RFSAP_ATDATE (RFSAP_ AT_DATE)

Format <RFSAP_ATDATE:date>

Schedules the fax to send on a specific date. Dates can be expressed as relative or absolute. Relative dates give the number of days from today's date. For example, "+7" represents one week from today. Absolute dates specify the exact date to send the fax. Absolute dates must be written in one of these formats: MM/DD/YY, MM-DD-YY, or MM-DD-YYYY.

If no send time is specified with the RFSAP_ATTIME code (described in the following section), the send time defaults to "now" (the current time of processing). For example, if a fax is sent to the queue at 3:30 PM and it contains only an <RFSAP_ATDATE:+1> code, it will automatically be scheduled to send at 3:30 PM tomorrow.

Example <RFSAP_ATDATE:9-15-99>
<RFSAP_AT_DATE:+2>

RFSAP_ATTIME (RFSAP_ AT_TIME)

Format <RFSAP_ATTIME:time>

Schedules the fax to send at a specific time. Times can be expressed as relative or absolute. Relative times give the number of hours from the current time. For example, "+6" represents six hours from now.

Absolute times are entered in either 12-hour or 24-hour format. A colon separating hours and minutes is optional, and an "a" or "p" can be used to indicate AM or PM. The fax server does not necessarily send the fax at exactly the minute specified. Rather, the fax becomes eligible for scheduling within 15 minutes of the specified time.

Specifying a time between the current time and midnight will schedule the fax to send today. Specifying a time earlier than the current time will schedule the fax tomorrow.

Example <RFSAP_ATTIME:10:00p>
<RFSAP_AT_TIME:+2>

RFSAP_CHANNEL

Format <RFSAP_CHANNEL:channel#>

Sends the fax only on the specified channel of the fax board. Specify a number corresponding to the channel to use. Set the channel number to 0 (zero) to use *any* available channel.

This code is useful if your organization uses one channel for priority faxing, and you want the fax to go out right away. You can also use this code to limit fax broadcasts to one channel only, leaving the other channels free for priority faxing.

Example <RFSAP_CHANNEL:3>

RFSAP_COVER

Format <RFSAP_COVER>

Automatically generates a RightFax cover sheet for the fax containing the code. If you use SAP-generated cover sheets, this code will add an additional RightFax cover sheet before the SAP cover sheet.

RFSAP_DELETE (RFSAP_AUTODELETE)

Format <RFSAP_DELETE>

Deletes the fax from the user's FaxUtil mailbox after it has been *successfully* sent. This code overrides the default RightFax auto-delete setting.

RFSAP_DELETEALL (RFSAP_AUTODELETEALL)

Format <RFSAP_DELETEALL>

Deletes the fax from the user's FaxUtil mailbox after it has been sent, whether or not the send was successful. This code overrides the default RightFax auto-delete setting.

RFSAP_FCSFILE

Format <RFSAP_FCSFILE:*file name*>

Uses the specified file as the RightFax-generated cover sheet. The cover sheet file must exist in the RightFax\FCS folder on the RightFax server and must end with the extension .pcl. Do not specify a directory path.

Example <RFSAP_FCSFILE:MYCOVER1.PCL>

RFSAP_FINE

Format <RFSAP_FINE>

Converts the body of the fax using "fine" resolution (200 × 200 DPI). Fine resolution is recommended for faxes with detailed graphics and faxes that will be converted by OCR. This code overrides the default fax resolution set in the user's FaxUtil mailbox.

RFSAP_FORMTYPE

Format <RFSAP_FORMTYPE:*formID*>

Automatically overlays the fax onto the specified RightFax form.

Example <RFSAP_FORMTYPE:LETTERHEAD>

RFSAP_FROMFAXNUM (RFSAP_FROM_FAXNUM)

Format <RFSAP_FROMFAXNUM:*faxnumber*>

Specifies the sender's fax number on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Example <RFSAP_FROMFAXNUM:(520)555-1234>

RFSAP_FROMGENFAXNUM (RFSAP_FROM_GENFAXNUM)

Format <RFSAP_FROMGENFAXNUM:*faxnumber*>

Specifies the company's general fax number to be placed on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Example <RFSAP_FROMGENFAXNUM:(520)555-2345>

RFSAP_FROMGENPHONE (RFSAP_FROM_GENPHONE)

Format <RFSAP_FROMGENPHONE:*phonenumber*>

Specifies the company's general phone number to be placed on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Example <RFSAP_FROMGENPHONE:(520)555-3456>

RFSAP_FROMNAME (RFSAP_FROM_NAME)

Format <RFSAP_FROMNAME:*name*>

Specifies the sender's name to be placed on the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Example <RFSAP_FROMNAME:Jane Doe>

RFSAP_FROMPHONE (RFSAP_FROM_PHONE)**Format** <RFSAP_FROMPHONE:phonenumber>

Specifies the sender's phone number for the RightFax-generated fax cover sheet. If no cover sheet is generated by RightFax, this code will be ignored.

Example <RFSAP_FROMFAXNUM:(520)555-4567>**RFSAP_IGNORE****Format** <RFSAP_IGNORE>

Causes all subsequent RFSAP codes to be ignored.

RFSAP_LIBDOC**Format** <RFSAP_LIBDOC:documentID>

Sends the specified RightFax library document *instead* of sending the document containing the code. Multiple library documents may be specified, each as a separate RFSAP_LIBDOC code.

Example <RFSAP_LIBDOC:INFOPACK1>**RFSAP_LIBDOC2****Format** <RFSAP_LIBDOC2:documentID>

Sends the specified RightFax library document *in addition to* sending the document containing the code. Multiple library documents may be specified, each as a separate RFSAP_LIBDOC2 code.

Example <RFSAP_LIBDOC2:INFOPACK1>**RFSAP_NOCOVER****Format** <RFSAP_NOCOVER>

Turns off RightFax cover sheet generation for the document containing this code. If a cover sheet is generated by SAP, it will still be included.

RFSAP_NORMAL**Format** <RFSAP_NORMAL>

Converts the body of the fax using "normal" resolution (100 × 100 DPI). Normal resolution faxes can be transmitted much faster than fine resolution faxes, saving time and phone charges. This code overrides the default fax resolution set in the user's FaxUtil mailbox.

RFSAP_PREVIEW**Format** <RFSAP_PREVIEW>

Holds the fax for preview in your FaxUtil mailbox. You must view the fax in FaxUtil and select **Release** from the **File** menu before it will send.

RFSAP_PRIORITY**Format** <RFSAP_PRIORITY:priority>

Sets the priority of the outgoing fax. Allowed settings are: Low (L), Normal (N), and High (H). If a user specifies high priority and does not have "Can use high priority" permission, the fax will automatically be sent with "normal" priority.

Example <RFSAP_PRIORITY:HIGH>
<RFSAP_PRIORITY:N>
<RFSAP_PRIORITY:LOW>**RFSAP_SAVE****Format** <RFSAP_SAVE>

Instructs RightFax *not* to delete the fax image from the user's FaxUtil mailbox after being sent. This overrides any default auto-delete setting.

RFSAP_SIGNATURE

Format <RFSAP_SIGNATURE:signatureID>

Specifies a signature image to place in the document. The signature will be inserted into the document at the exact location of the <RFSAP_SIGNATURE> embedded code. You can include an unlimited number of <RFSAP_SIGNATURE> codes in each document. If you are not listed as an authorized user of the signature file, the fax server will fail to send the fax. To use this embedded code to work, you *must* have selected a PCL printer driver in the **Dev Type**. field when configuring SAPconnect. If you selected PostScript, this feature will not work.

For information on creating and using signature files see the *RightFax Administrator's Guide*.

RFSAP_UNIQUEID

Format <RFSAP_UNIQUEID:faxID>

Specifies a unique ID for the fax instead of having one automatically generated by RightFax. Custom unique IDs may be used for external document tracking systems.

Example <RFSAP_UNIQUEID:XYZ120396>

■ ■ ■

Chapter 7

Advanced Fax Control Features

SAP R/3 has several fax control features (such as automatically generated fax cover sheets) that also exist in RightFax. When developing a fax solution for your organization, you may choose to use the features of either or both systems, depending on your needs.

Fax Cover Sheets

Fax cover sheets can be automatically generated by both SAP and RightFax. When a fax is passed to RightFax, SAP includes the destination fax number, the recipient's name, and the sender's fax number only. Because it is the only information available to RightFax, these are the only fields that can be included on a RightFax-generated cover sheet. SAP, however, can include all completed information about the fax sender and recipient on its automatically generated cover sheets. For this reason, it is recommended that you enable the automatic fax cover sheet function in SAP and disable cover sheets in RightFax.



Note *If fax cover sheets are enabled on both SAP and RightFax, the fax will include both cover sheets. This is because SAP generates its cover sheet before sending the fax data to RightFax. After the fax data is received, RightFax adds its own cover sheet.*

For information on configuring SAP to add a cover sheet to outbound faxes, please refer to your SAP documentation or system administrator. For information on creating and using cover sheets in RightFax, please refer to your *RightFax Administrator's Guide*.

Batch Faxing

Batch faxing occurs when several faxes generated over a period of time are held to be sent all at once at a later time. This may be useful for holding low priority faxes until after hours when more fax channels are free, or for sending faxes at off-peak hours to save telephone long distance charges.

The interval that batch fax jobs are collected and sent can be set at the SAP application, in SAPconnect, and in RightFax.

Because different SAP modules have different requirements for delaying faxes sent to SAPconnect, please refer to your SAP module's user documentation or SAP administrator for information on delaying faxes at the application level. The interval that SAPconnect periodically picks up queued faxes and forwards them to RightFax is set when you configure the background send process for faxes (described in Chapter 3 or 4, depending on your version of SAP).

RightFax includes two features that let you schedule when faxes are released. The “Delay all Faxes” feature lets you specify a time when all faxes from RightFax users who do not have administrative access will be sent. The “Forced Scheduling” feature lets you specify fax size restrictions as well as fax delay times for users on a group basis. For information on these RightFax batch faxing features, please refer to your *RightFax Administrator’s Guide*.

Dialing Rules

Both SAP and RightFax let you configure special dialing rules that let you modify outgoing fax numbers. In SAP, these are called “exception rules” and are configured for each node. Exception rules let you replace the beginning of a fax number with a new set of numbers. This lets you strip a local area code or add a “9” to dial out.

RightFax, however, includes a much more comprehensive “pattern matching” dialing rule scheme that not only lets you modify numbers but also assign certain fax numbers to specific servers, route certain faxes to other RightFax servers on your WAN before dialing, and more.

If you configure exception rules in SAP, the numbers will be modified in SAP before being passed to RightFax. RightFax will then modify the number again according to its own rules if necessary. For information on configuring dialing rules in RightFax, please refer to the *RightFax Administrator’s Guide*.

■ ■ ■

Appendix A

Files Installed by the Connector

All components of the RightFax Connector for SAP R/3 are installed on the RightFax server. Although some SAP configuration is required to allow the two systems to communicate, no software installation to the SAP R/3 system is necessary.

The following files are added to the RightFax server by the SAP connector Setup program:

- RightFax\SAP\Librfc32.dll
- RightFax\SAP\SAPgate.exe
- RightFax\SAP\SAPrfc.ini
- RightFax\Shared Files\SAPwiz.cpl

SAPgate.exe

SAPgate.exe acts as the gateway between RightFax and SAP R/3. By default, SAPGATE runs as a service on the RightFax server and is started automatically.

SAPrfc.ini

SAPrfc.ini contains the information entered during the connector installation necessary for the SAP and RightFax servers to communicate. The following is an example of an SAPrfc.ini file:

```
;Outbound information
DEST=SAP_Srv
TYPE=R
PROGID=RFAXSRV.sapgate
GWHOST=Dev01
GWSERV=sapgw00
RFC_TRACE=0

;Inbound information using load balancing
DEST=SAP_CInt
TYPE=B
MSHOST=Dev01_MSGSRV
R3NAME=SAP01
GROUP=PUBLIC
RFC_TRACE=0
```

Because several of the settings in this file have corresponding Windows registry settings, you should never make changes directly to this file.

Sapwiz.cpl

Sapwiz.cpl is the file name for the RightFax SAP Gateway configuration program that creates and installs the SAPGATE service. It also creates and modifies the Saprfc.ini file.

The first time the RightFax SAP Gateway program runs (during the SAP connector installation), it acts as a wizard, prompting you for the necessary configuration information. You can view and edit these settings by running the RightFax SAP Gateway program from Control Panel.

■ ■ ■

Appendix B

Registry Entries Added by the Connector

All Windows registry entries added by the RightFax Connector for SAP R/3 are installed on the RightFax server. The following tables list all Windows registry entries added to the RightFax server by the SAP connector Setup program.

HKEY_LOCAL_MACHINE\Software\RightFax\SAP\SAP#

Table B1 SAP Registry Settings in HKEY_LOCAL_MACHINE\Software\RightFax\SAP\SAP#

Key	Type	Definition
ASHostIP	String	Application server name or IP address the gateway will talk to.
Change	DWORD	Change flag.
Client	DWORD	SAP client number.
ClientDesc	String	Text description to identify which gateway this is. Used <i>only</i> for display in the RightFax SAP configuration program.
Debug	DWORD	Generate RFC_DEV debug file.
DefaultUserID	String	ID of RightFax mailbox to use if no fax number match is found. Without this parameter RightFax uses the Default User ID. The account you specify must exist in RightFax.

Table B1 SAP Registry Settings in HKEY_LOCAL_MACHINE\Software\RightFax\SAP\SAP# (Continued)

Key	Type	Definition
Delay	DWORD	Delay between logon retries.
Fax Server	String	RightFax server the gateway is talking to.
Group	String	Used for SAP load balancing.
GWHostIP	String	Name or IP address of application server running the SAP Gateway.
GWServer	String	Name of SAP Gateway (SAPGW##).
Language	String	Language to use when connecting to the client.
Logon Retries	DWORD	Times to retry logon to SAP system.
Message Server	String	IP address used for SAP load balancing.
Password	String	Password of CPIC user account.
Protocol	String	Protocol to use to talk to the RightFax Server. <i>Not</i> the protocol used to talk to SAP which is always IP.
SysNumber	DWORD	SAP system number.
System Name	String	Name or IP address of SAP system.

Table B1 SAP Registry Settings in
HKEY_LOCAL_MACHINE\Software\RightFax\SAP\SAP# (Continued)

Key	Type	Definition
System Type	DWORD	Set to 0 normally. Set to 1 for load balancing on SAP side.
Username	String	Name of CPIC user created for the Gateway to use.

HKEY_LOCAL_MACHINE\Software\RightFax\SAP

Table B2 SAP Registry Settings in
HKEY_LOCAL_MACHINE\Software\RightFax\SAP

Key	Type	Definition
NumSAPs	DWORD	How many SAP Gateways are set up (0 indexed).
SAP_Num	DWORD	Stores currently edited gateway.

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