

SAPConnect

This technical note describes how to configure and fax with HP SAPconnect Server, which integrates the SAP BC-CON interface with HP Output Server.

NOTE: The images in this section are from SAP R/3 GUI version 5.0.

Before configuring the HP SAPconnect Server, complete the following:

- Install HP Output Server (see *Installing and Configuring* for HP Output Server).
- Install HP Output Manager for SAP.

To configure HP SAPconnect Server, complete the following:

- Configure R/3 to work with HP SAPconnect Server.
- Configure SAPoffice.

Configuring HP SAPconnect Server

The first part of the configuration process—configuring R/3 to work with HP SAPconnect Server—involves the following tasks:

1. Modifying the `saprfc.ini` file
The `saprfc.ini` file specifies the connection type and all RFC-specific parameters required to connect to R/3.
2. Creating an RFC destination
The RFC destination enables the R/3 interface to communicate with the HP Output Server interface.
3. Modifying the communication method for faxing
The communication method enables the fax destination to communicate with HP Output Server.
4. Creating a SAPconnect node
The SAPconnect node is the means by which R/3 and HP SAPconnect Server communicate.

HP Output Management for SAP provides the following attributes that enable you to configure, start, stop, and retrieve the status of HP SAPconnect Server from the HP Output Server command line interface:

Attributes	Description
<code>-sapcon-server-sid</code>	Required: This attribute specifies the SAPCON RFC destination.
<code>-sapcon-logical-fax-dest</code>	Required: This attribute names the HP Output Server logical fax destination.

Attributes	Description
-sapcon-client-logon-retry-factor	Optional: This attribute sets the SAPCON RFC client logon retry factor (in seconds).
-sapcon-client-logon-retry-max	Optional: This attribute sets the SAPCON RFC client maximum logon retry interval (in seconds).

You can use these attributes with the HP Output Server `config_server` command to configure an HP SAPconnect server:

```
config_server -x "-sapcon-server-sid
RFC_Destination -sapcon-logical-fax-dest
fax1" -t sapcon
```

For information about the `config_server` command and a complete listing of HP Output Server attributes, refer to the *System Administrator's Reference* for HP Output Server.

The second part of the configuration process involves the following:

1. Testing the connection
The SAPconnect node connection should be tested to ensure that all steps were successfully executed and the connection is operable.
2. Creating a test fax request
Fax documents can be created and delivered through SAPconnect.

Modifying the `saprfc.ini` file

You must create an `saprfc.ini` file and either place it in the HP Output Management for SAP working directory (`$DAZEL_HOME/var/sap`) or set the `RFC_INI` environment variable to point to the file, as shown in the examples below.

On UNIX (Korn shell):

```
export RFC_INI=/home/myhome/secret/saprfc.ini
```

On Windows NT from the command prompt:

```
set RFC_INI=c:\home\myhome\secret\saprfc.ini
```

NOTE: The steps above are not necessary if the `saprfc.ini` file is copied to the `$DAZEL_HOME/var/sap` directory.

The template `dazellInstall/lib/saprfc.ini` is provided as part of HP Output Management for SAP. The file includes a protected R/3 user name and password—HP recommends setting the file mode to read-only for the server's process owner.

NOTE: Dazel HSI and HP SAPconnect Server can share the same `saprfc.ini` file.

The following is a sample `saprfc.ini` file.

```
DEST=DZL_RFC_DESTINATION
TYPE=R
PROGID=host.dzl_sapcond
GWHOST=SAPhost
GWSERV=sapgw01
RFC_TRACE=0

DEST=SID
TYPE=A
ASHOST=SAPhost
SYSNR=01
RFC_TRACE=0
ABAP_DEBUG=0
USE_SAPGUI=0

DZL_DEST=C00
DZL_CLIENT=001
DZL_USERNAME=DZLFAX
DZL_PASSWORD=password
DZL_LANGUAGE=E
DZL_RFC_TRACE=0
```

NOTE: In most instances, the numeric values for the SAP gateway (GWSERV) and the SYSNR should be the same.

To deliver the same sample `saprfc.ini` file from the command line, enter the following:

```
config_server -x"-sapcon-server-sid DZL_RFC_DESTINATION
-sapcon-logical-fax-dest fax1 -server-uses-syslog false
-server-log-level all" -t sapcon
```

HP Output Server defines the options that begin with the prefix `DZL`, in addition to the original definition `R/3` provides for these options in the `saprfc.ini` file.

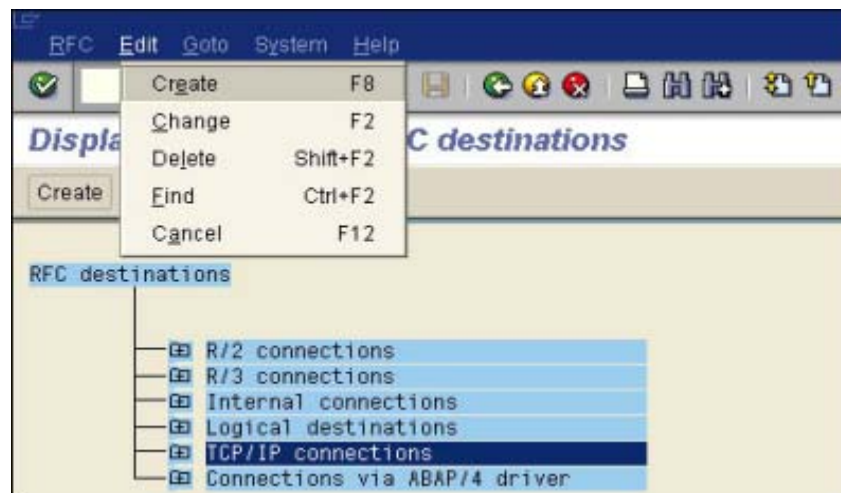
The first `DEST` option is the name of the RFC server within the SAP R/3 server. The second `DEST` option must be the same as the value for `DZL_DEST`. This is the R/3 system ID that the HP Output Server uses. `PROGID` is the host with the HP SAPconnect server. `GWHOST` should be the same as SAP host if SAP gateway is not used. `DZL_CLIENT` represents the client on which the CPI-C user exists and `DZL_USERNAME` identifies the CPI-C user.

The `saprfc.ini` file assumes that the SAP gateway is running on the same server. If your HP SAPconnect Server and R/3 system are running on different machines, refer to your R/3 documentation for information about using SAProuter to communicate between servers.

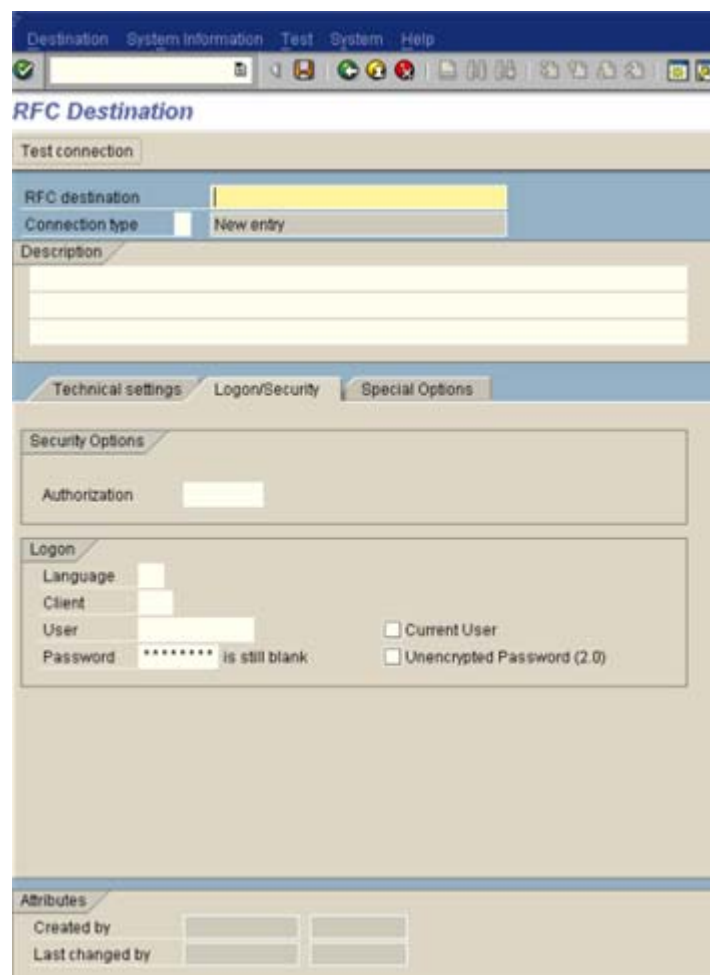
Creating an RFC destination

This section identifies the steps that are necessary to create an RFC destination. To create an RFC destination, complete the following steps:

1. Start the SAP GUI.
2. In the R/3 command field, enter `/nsm59`.
3. From the menu under **RFC destinations**, select **TCP/IP connections**.



4. Click **Create**.
The **RFc destination** screen appears:



5. Enter a name in the **RFC destination** field (for example, DZL_RFC_DESTINATION).
6. Enter **T** in the **Connection type** field. You will also be required to enter a text description of your RFC destination in the **Description** field.
7. Click **Save** (CTRL+S).
Additional options appear.
8. Click **Registration**.
9. Enter the **Program ID** of the fax system, for example, *host.dz1_sapcond*, where *host* is the host name. The value appears in the PROGID field of the *saprfc.ini* file.

NOTE: Enter the hostname of the remote HP Output Server installation. This name must be identical to the hostname in the *saprfc.ini* file.

10. Click **Start**.
11. If HP Output Server uses a gateway server that runs on another host, choose **Explicit host**.
12. Click **Save**.

Modifying the communication method

You must modify the communication method in order for the fax destination to communicate through the HP SAPconnect Server.

1. In the R/3 command field, enter `/nscon`.
The **SAPconnect: Administrator** screen appears:

The screenshot shows the SAPconnect: Administrator interface. A tree view on the left displays the following nodes:

- FIR(100)
 - FAX Telefax
 - D_FX
 - UFAX
 - INT
 - W/o nodes
 - D_ML
 - ML1_ML
 - ML2_ML
 - ML3_ML
 - ML4_ML
 - ML5_ML
 - SMTP
 - UNODE
 - X40 X.400
 - RML Remote Ma
 - PAG
 - PRT

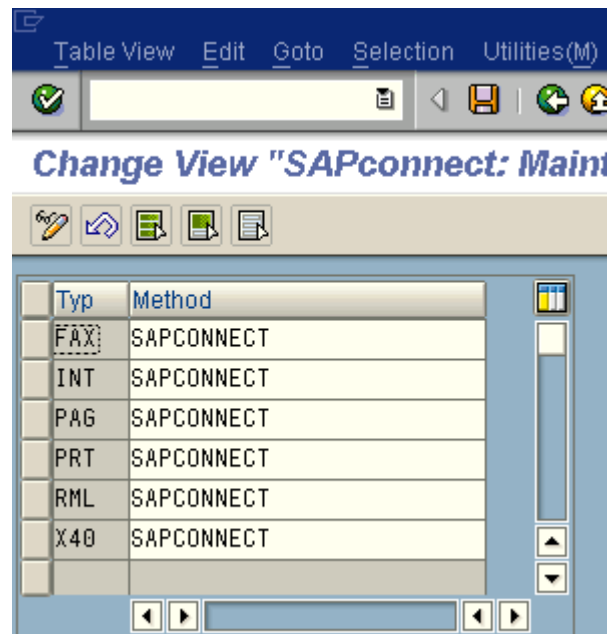
A data table is visible on the right side of the screen, showing statistics for various communication methods. The table has columns for 'Duration In transit' and 'Duration Waiting'. A context menu is open over the 'Send Jobs' option, listing various settings such as 'Communication Methods', 'Device Types for Format Conversion', 'Confirmation of receipt', 'Default Domain', 'Pager Service', 'Country code', 'Country code exceptions', 'Recipient no. change (Incoming)', 'Inbound Processing', and 'Inbound distribution'.

	0	0	0	0	0:00	0:00
Inbound Processing	0	0:00	0:00			
Inbound distribution	0	0:00	0:00			
	698	167	2	0	0:01	0:09
W/o nodes	484	1	0		0:00	0:12
D_ML	0	0	0		0:00	0:00
ML1_ML	52	40	2		0:01	0:16
ML2_ML	62	30	0		0:05	0:06
ML3_ML	63	70	0		0:00	0:02
ML4_ML	80	17	0		0:02	0:04
ML5_ML	37	9	0		0:00	0:03
SMTP	0	0	0		0:00	0:00
UNODE	0	0	0		0:00	0:00
X40 X.400	0	0	0	0	0:00	0:00
RML Remote Ma	0	0	0	0	0:00	0:00
PAG	0	0	0	0	0:00	0:00
PRT	0	0	0	0	0:00	0:00

2. Select **Settings>Communication methods**. The **Display View "SAPconnect: Maintenance view - communication methods": Overview** screen appears. This screen contains a table with the following headings:

Typ

Method



Typ	Method
FAX	SAPCONNECT
INT	SAPCONNECT
PAG	SAPCONNECT
PRT	SAPCONNECT
RML	SAPCONNECT
X40	SAPCONNECT

3. For type **Fax**, select method **SAPCONNECT**.
4. Click **Save**.

Creating a SAPconnect node

Once you have defined the communication method and format groups, you then create a SAPconnect node. The SAPconnect node is the means by which R/3 and HP SAPconnect Server communicate.

1. In the R/3 command field, enter `/nscon`.
2. Select **Nodes>Create**.
The **Create nodes** screen appears:

Nodes Edit Goto View Settings Utilities(M) System Help

Create Ctrl+F5
Change
Display
Copy Ctrl+F3
Rename Ctrl+F4
Delete
Exit Shift+F3

System Status (system status)

24.05.2006 05:22

	Completed	Error	In transit	Waiting	Duration In transit	Duration Waiting
					hh:mm	hh:mm
FIR(100)	698	167	2	0		
FAX Telefax	0	0	0	0	0:00	0:00
D_FX	0	0	0	0	0:00	0:00
UFAX	0	0	0	0	0:00	0:00
INT	698	167	2	0	0:01	0:09
W/o nodes	484	1	0	0	0:00	0:12
D_ML	0	0	0	0	0:00	0:00
ML1_ML	52	40	2	0	0:01	0:16
ML2_ML	62	30	0	0	0:05	0:06
ML3_ML	63	70	0	0	0:00	0:02
ML4_ML	80	17	0	0	0:02	0:04
ML5_ML	37	9	0	0	0:00	0:03
SMTP	0	0	0	0	0:00	0:00
UNODE	0	0	0	0	0:00	0:00
X40 X.400	0	0	0	0	0:00	0:00
RML Remote Ma	0	0	0	0	0:00	0:00
PAG	0	0	0	0	0:00	0:00
PRT	0	0	0	0	0:00	0:00

- Enter a name in the **Node** field and a short description of the node in the **Description** field.

Create nodes

Specify a name (max. 6 characters) and a description for the node.

[Click here for further information...](#)

Node: DZLFAX

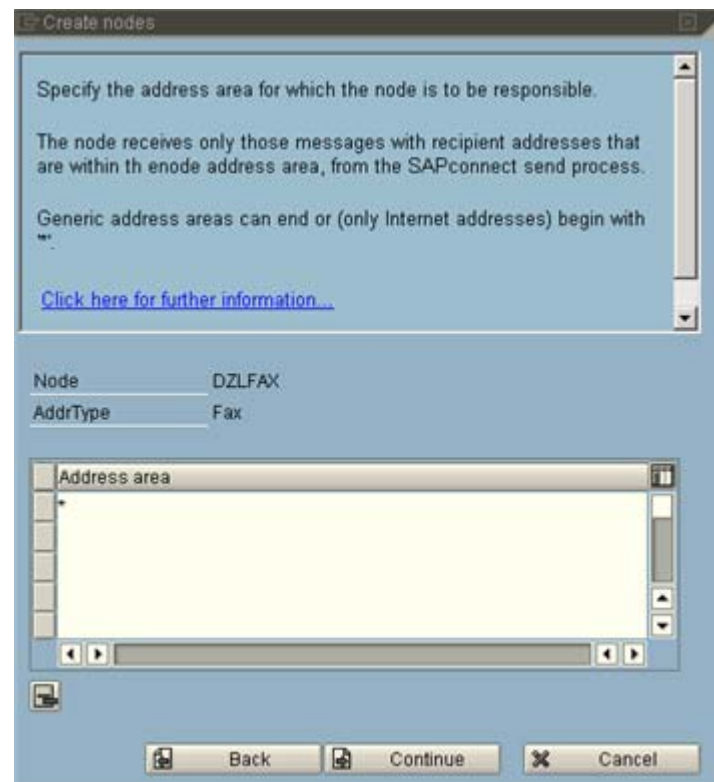
Description: Dazel Fax

Back Continue Cancel

4. Click **Continue**.
5. Enter the RFC destination in the **RFC destination** field (for example, DZL RFC_DESTINATION.)



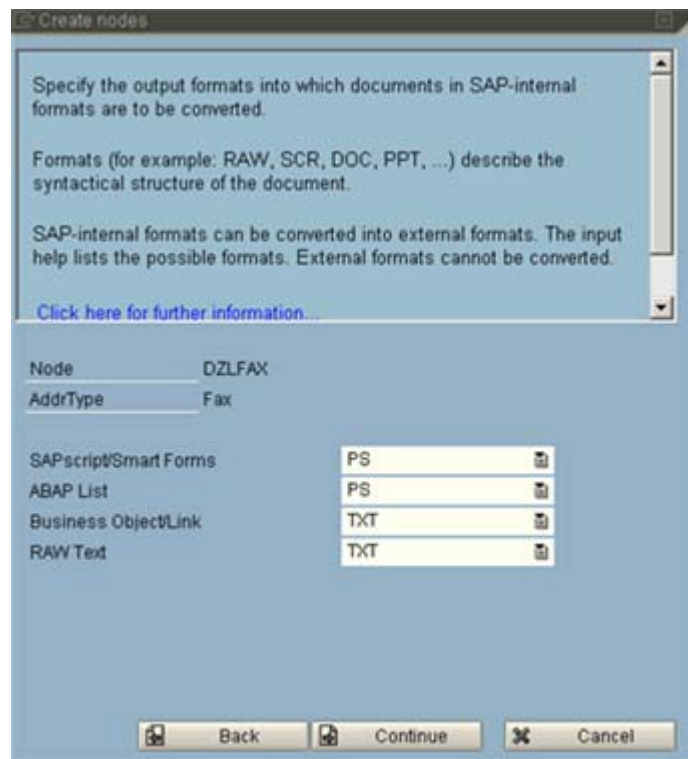
6. Click **Continue**.
7. The **Node** field appears in the **Create Nodes** screen. Select **Fax**.
8. Click **Continue**.
The **Address area** field appears within the **Create nodes** screen.



9. Enter an asterisk (*) in the **Address area** field to trap all generic addresses.

NOTE: Contact SAP for information on specific address configurations.

10. Click **Continue**.
The **Output formats** screen appears.



11. Click **Continue**.
The **Country code for node location** screen appears.
12. Enter the appropriate country in the **Country** field.

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:

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.

[Click here for further information...](#)

Node: DZLFAX
AddrType: Fax
Country: US

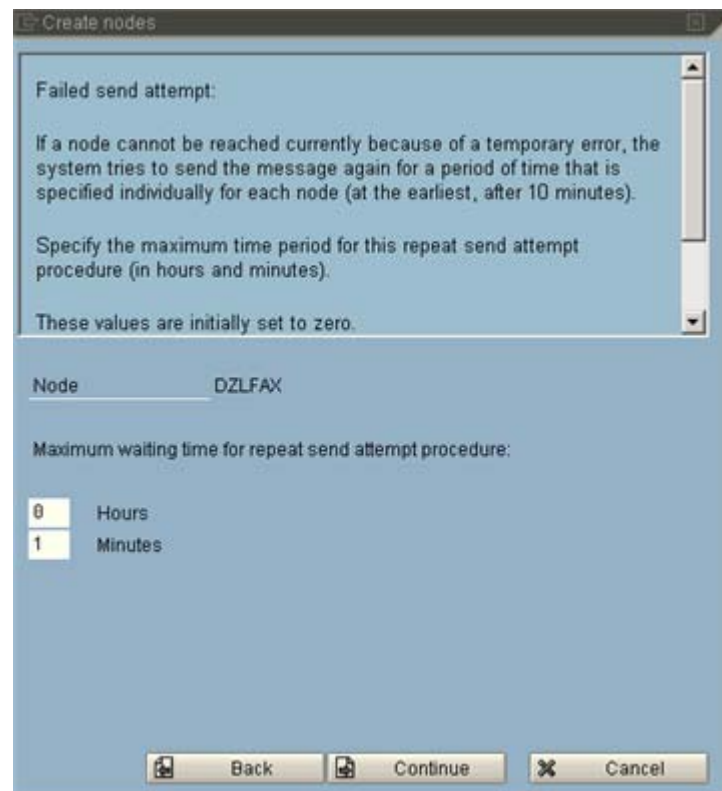
Node-specific fax number changes for outgoing faxes

Back Continue Cancel

13. Click **Continue**. This sets the address type for your SAPconnect node.
14. Under **Set further address types**, select **N (No)**.



15. Click **Continue**.
The **Failed send attempt** screen appears.
16. Enter values for **Hours** and **Minutes** in their corresponding fields.



17. Click **Continue**.
18. Select **Node is ready for use**.
19. Click **Continue**. The **SAPconnect: Administration (nodes)** screen appears. The node is saved and is located under **FAX Telefax**.

	Completed	Error	In transit	Waiting	Duration In transit hh:aa	Duration Waiting hh:aa
FIR(100)	698	167	2	0		
FAX Telefax	0	0	0	0	0:00	0:00
DZLFAX	0	0	0	0	0:00	0:00
D_FX	0	0	0	0	0:00	0:00
UFAX	0	0	0	0	0:00	0:00
INT	698	167	2	0	0:01	0:09
W/o nodes	404	1	0	0	0:00	0:12
D_ML	0	0	0	0	0:00	0:00
ML1_ML	52	40	2	0	0:01	0:16
ML2_ML	62	30	0	0	0:05	0:06
ML3_ML	63	70	0	0	0:00	0:02
ML4_ML	80	17	0	0	0:02	0:04
ML5_ML	37	9	0	0	0:00	0:03
SMTP	0	0	0	0	0:00	0:00
UNODE	0	0	0	0	0:00	0:00
X40 X.400	0	0	0	0	0:00	0:00
RML Remote Ma	0	0	0	0	0:00	0:00
PAG	0	0	0	0	0:00	0:00
PRT	0	0	0	0	0:00	0:00

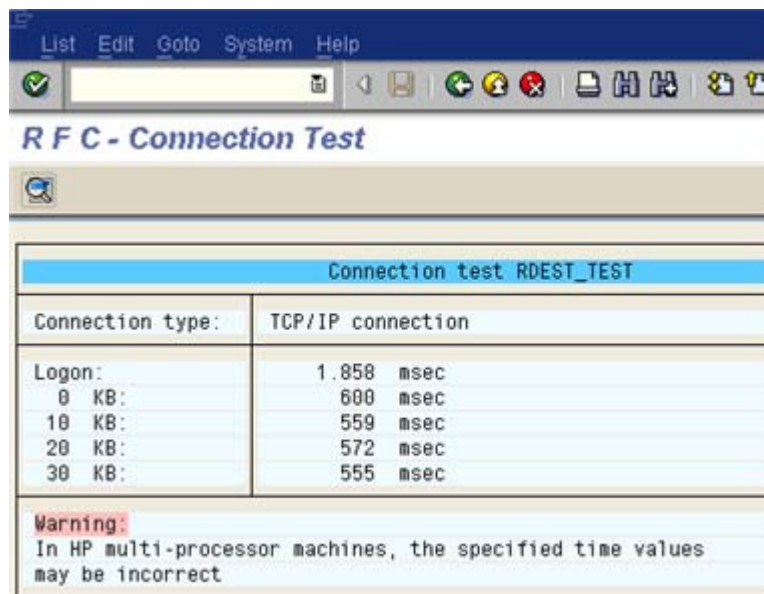
Testing the connection

The SAPconnect node connection should be tested to ensure that all steps were successfully executed and the connection is operable.

1. In the command field, enter `/nsm59`.
2. Select **TCP/IP connections** from the menu under **RFC destinations**.
3. Double-click on your RFC destination (DZL_RFC_DESTINATION).
4. Click **Test connection**.

Test connection

This prompts the **RFC - Connection Test** screen, which indicates if the SAP node connection has been configured properly.



5. Close the **RFC - Connection Test** screen.

Configuring personal address settings

1. In the command field, enter `/nsol2`.
The **Private office setting** screen appears.
2. Press **F9**. The **Address maintenance** screen appears. Configure your personal address settings in this screen.

The screenshot shows the "Address maintenance: 'SAP user'" screen. It is divided into three sections: Person, Communication, and Company.

Person

Title	Ms.
Last name	Kailasanathan
First name	Nagalakshmi
Academic Title	
Format	Nagalakshmi Kailasanathan
Function	
Department	
Room Number	Floor
	Buildings

Communication

Language	English	Other communication...
Telephone		Extension 0000
Mobile		
Fax		Extension
E-Mail	nagalakshmi.k@hp.com	
Comm. Meth	Remote Mail	

Company

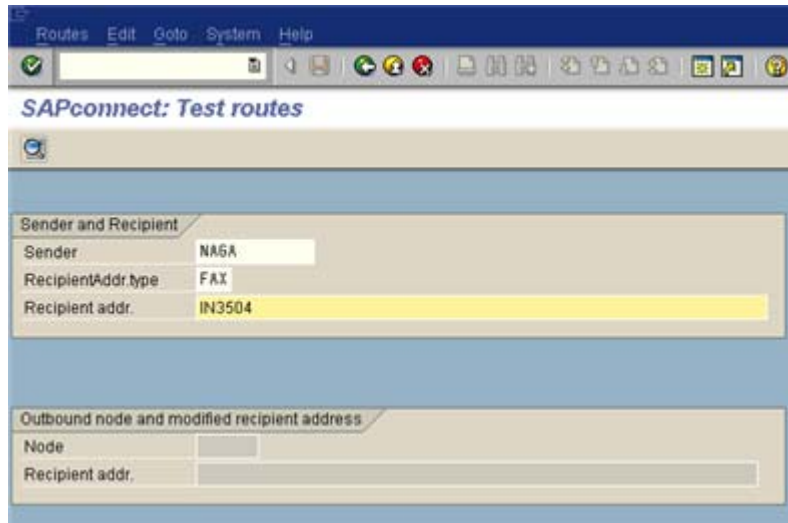
Hewlett-Packard Company / 14231 Tandem Blvd / Austin TX 78728

At the bottom, there are icons for a checkmark, a document, a lock, and a close button, along with the text "Preview".

3. Save your settings and exit both screens.

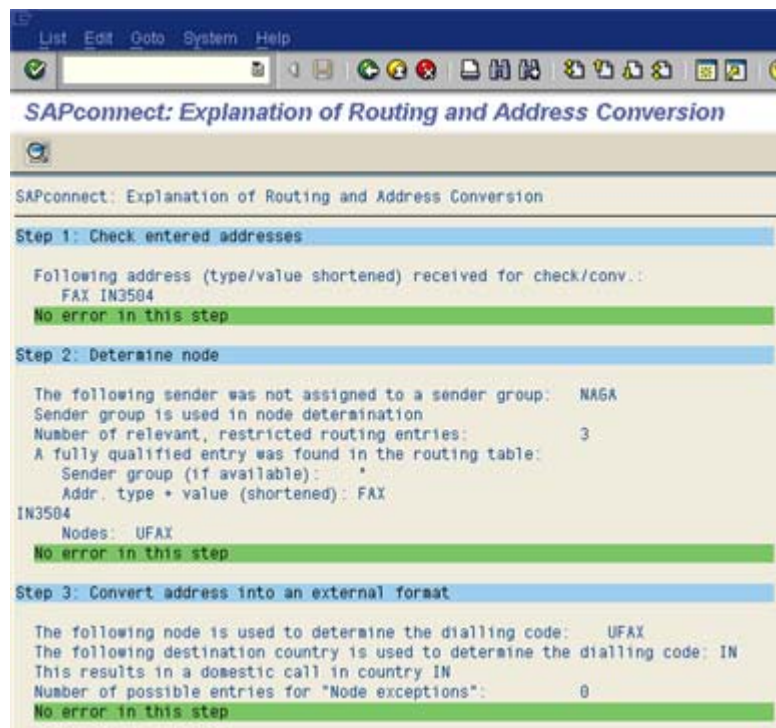
Starting the routing test

1. In the command field, enter /nscon.
2. Select **Utilities>Routing test** (CTRL+F10). The **SAPconnect: Test routes** screen appears:



3. Press **F2**. This prompts the **SAPconnect: Explanation of Routing and Address Conversion** screen, which provides a full description of each component of the SAPconnect node connection.

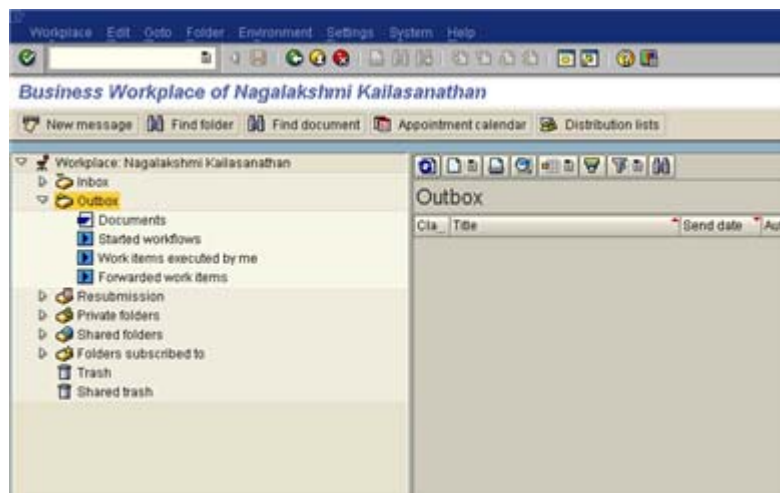
NOTE: After you run the routing test, return to the previous screen and press **Enter**. This should retrieve the **Node** and **Recipient addr.** values in the **Outbound node and modified recipient address** window.



Creating a test fax request

Fax documents can be created and delivered through SAPconnect. To deliver a fax document, complete the following:

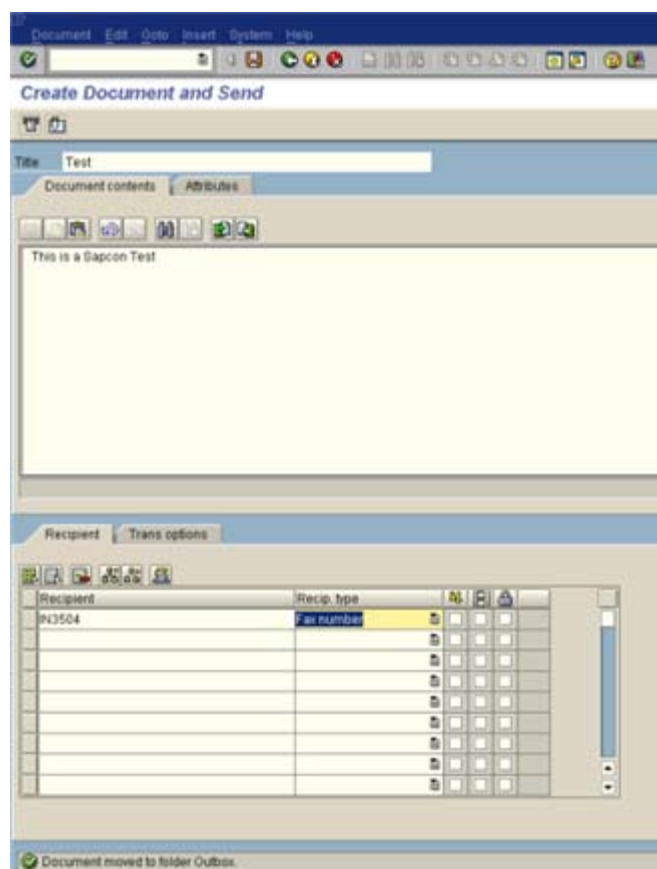
1. In the command field, enter /ns002.
The **Business Workplace** screen appears:



- Click the **New message** button:



The **Create document** screen appears:



- Enter a document title and a description of the document contents.
- Enter the country and fax number of your choice in the **Recipient** column and choose **Fax number** in the **Recip. type** column.
- Click the send button (**Shift+F8**):



- You can observe the status of your fax request in the **Business Workplace** screen or in Job Tracker.

Configuring fax and e-mail with HP SAPConnect server

HP SAPconnect server integrates the SAP BC-CON interface with HP Output Server. The HP SAPconnect server integrates with the SAP BC-CON interface to deliver SAPoffice messages through HP Output Server. The HP SAPconnect server supports fax and e-mail messages.




Configuring the HP SAPconnect server involves two main tasks:

- Configuring R/3 to work with the HP SAPconnect server

- Configuring SAPoffice

NOTE: The menu references and screen images in this section are from SAP GUI version 6.40, and SAP R/3 Enterprise 4.7.

The following table describes each of the buttons in the SAP GUI that you use to configure SAPconnect:

SAP GUI Button	Description
	The Create button in the SAP GUI allows you to create new objects.
	The Save button in the SAP GUI saves any changes you have made to the SAP instance.
	The Start send process button starts the SAPconnect sending process for a particular address type.

Configuring HP SAPconnect server

Configuring an HP SAPconnect server is a two-part process that involves the following:

1. Configuring SAP R/3 to work with the HP SAPconnect server

The following section describes the tasks that you must perform to configure SAP R/3 to work with the HP SAPconnect server.

2. Configuring SAPoffice

You configure SAPoffice by testing the SAPconnect node connection to ensure that all steps were successfully executed and the connection is operable.

Configuring SAP R/3

The first part of the configuration process—configuring SAP R/3 to work with the HP SAPconnect server—involves the following tasks:

1. Creating an RFC destination.
The RFC destination enables the R/3 interface to communicate with HP Output Management RFC interface.
2. Modifying the communication method for faxing and e-mail.
The communication method enables the fax and e-mail destinations to communicate through the HP SAPconnect server.
3. Creating a SAPconnect node.
The SAPconnect node is the means by which R/3 and the HP SAPconnect server communicate.
4. Creating the `saprfc.ini` file.
The `saprfc.ini` file specifies the connection type and all RFC-specific parameters required to connect to R/3.
5. Creating the HP SAPconnect server.
The HP SAPconnect server integrates the SAP BC-CON interface with HP Output Server. You use the `config_server` command to create the HP SAPconnect server.

Task 1: Creating an RFC destination

This section identifies the steps that are necessary to create an RFC destination. To create an RFC destination, perform the following steps:

1. Start the SAP GUI and log in to the SAP instance in which you want to configure the RFC destination for SAPconnect.
2. In the **R/3 command** field, type `/nsm59`.
3. Under **RFC destinations**, select and expand **TCP/IP connections**.
4. On the **Edit** menu, click **Create**.
The RFC Destination screen appears.
5. Enter a name in the **RFC destination field** (for example, `DZL_RFC_DESTINATION`).
6. Enter **T** in the **Connection type** field.
7. Enter a text description of your RFC destination in the **Description** field.
8. Click **Save**.
Additional options appear.
9. In **Activation Type**, select **Registered Server Program**.
10. Enter the **Program ID**. For example, `HPsapconnect-server.dzl_sapcond`, where `HPsapconnect-server` is the host name that runs the HP Output Server domain.
11. If the SAP R/3 instance uses a gateway server that runs on another host, type the name of the host in the **Gateway host** field.
12. Click **Save**.

Task 2: Modifying the communication method

You must modify the communication method within SAP R/3 in order for fax or e-mail to deliver through the HP SAPconnect server. To modify the communication method, perform the following steps:

1. In the **R/3 command** field, type `/nscon`.
The **SAPconnect: Administration (system status)** screen appears.
2. From the Settings menu, click **Communication Methods**.
The Change View “**SAPconnect: Maintenance view - communication methods**” screen appears. This screen contains a table with two columns **Type** and **Method**.
3. For type **FAX**, select method **SAPCONNECT**. If you are using an HP SAPconnect server to send e-mail messages to HP Output Server, select **SAPCONNECT** for type **INT**.
4. Click **Save**.

Task 3: Creating a SAPconnect node

After you have defined the communication method and format groups, you then create a SAPconnect node. The SAPconnect node is the means by which R/3 and the HP SAPconnect server communicate.

NOTE: If you intend to use HP SAPconnect servers for faxing and e-mail, you have to create a separate SAPconnect node for each: a node for faxing and a node for e-mail messages.

To create a SAPconnect node, perform the following steps:

1. In the **R/3 command** field, type `/nscon`.
The **SAPconnect: Administration (system status)** screen appears.

2. Click **Create**.
The **Create nodes** screen appears.
3. Enter a name in the **Node** field and a short description of the node in the **Description** field.
4. Click **Continue**.
The **Create nodes** screen prompts you to supply the node type that you want to create.
5. Select **RFC Node**.
6. Click **Continue**.
The **Create nodes** screen prompts you to assign an RFC destination to the node.
7. In the **RFC destination** field, type the RFC destination created in “Task 1: Creating an RFC destination” (for example, DZL_RFC_DESTINATION).
8. Click **Continue**.
The **Node** field appears in the **Create nodes** screen.
9. Do one of the following:
 - If you are configuring the node for faxing, select **Fax**.
 - If you are configuring the node for e-mail, select **Internet**.
10. Click **Continue**.
The **Address area** field appears within the **Create nodes** screen.
11. Enter an asterisk (*) in the **Address area** field to trap all generic addresses.

NOTE: Contact SAP for information on specific address configurations.

12. Click **Continue**.
The **Create nodes** screen prompts you to specify the output formats into which SAP-internal formats are to be converted.
13. A list of default output format options for fax and e-mail is displayed.
14. Click **Continue**.
The **Create nodes** screen prompts you about restricting send times.
15. If you want to restrict send times, select the **Restrict send time** check box.

NOTE: For information about restricting send time, contact your SAP BASIS Administrator.

16. Click **Continue**.
If you are configuring the node for faxing, the **Create nodes** screen prompts you for the country code for the node location. If you are configuring the node for e-mail, skip to step 18.
17. Enter the appropriate country in the **Country** field.
18. Click **Continue**.
This sets the address type for your SAPconnect node.
The **Create node** screen displays information about setting another address type for the node.
19. Select **N (No)** under **Set further address types**.
20. Click **Continue**.
The Failed send attempt screen appears.
21. Enter values for **Hours** and **Minutes** in their corresponding fields.
22. Click **Continue**.

The **Create nodes** screen prompts you for more information about the node.

23. Do not configure anything on this screen. Click **Continue**.

The **Create nodes** screen prompts you for information about node readiness for use and whether the node supports expanded functions.

24. Select the **Node is ready for use** check box.

25. Click **Continue**.

The **SAPconnect: Administration (nodes)** screen appears. The node is saved and if configured for faxing, is located under **FAX Telefax** and if configured for e-mail, is located under **INT**.

Task 4: Creating the `saprfc.ini` file

To assist you in creating the `saprfc.ini` file, HP Output Manager for SAP provides a template `saprfc.ini` file in the `installDir/lib` directory. You can copy the file and modify it to correspond to the configuration of your SAP R/3 installation. The template file includes a protected R/3 user name and password. HP recommends setting the file mode to read-only for the server's process owner.

Before you modify the `saprfc.ini` file, do one of the following:

- Create an HP SAPconnect server working directory with the following path name and copy the `saprfc.ini` template file to it from `installDir/lib`:

```
installDir/var/sap/serverName
```

where *installDir* refers to the pathname of the location where HP Output Server is installed and *serverName* is the name you choose for the HP SAPconnect server.

-or-

- Set the `RFC_INI` environment variable to point to the location of the `saprfc.ini` file, as shown in the following examples:

On UNIX (Korn shell):

```
export RFC_INI=/home/myhome/secret/saprfc.ini
```

On Windows from the command prompt:

```
set RFC_INI=c:\home\myhome\secret\saprfc.ini
```

NOTE: If you plan to configure multiple HP SAPconnect servers, you must create a working directory for each server and place a separate `saprfc.ini` file in each working directory. For more information about creating multiple HP SAPconnect servers, see “Configuring SAPoffice to work with HP SAPconnect server” in this section.

The following is a sample `saprfc.ini` file.

```
DEST=RFC destination
TYPE=R
PROGID=HPSapconnect-server.dzl_sapcond
GWHOST=SAPhost
GWSERV=sapgwSYSNR
RFC_TRACE=0
DEST=SAP system ID
TYPE=A
ASHOST=SAPhost
```

```

SYSNR=SYSNR
RFC_TRACE=0
ABAP_DEBUG=0
USE_SAPGUI=0
DZL_DEST=SAP system ID
DZL_CLIENT=SAP client of CPIC user
DZL_USERNAME=CPIC user name
DZL_PASSWORD=CPIC password
DZL_LANGUAGE=E
DZL_RFC_TRACE=0

```

The first section of the sample file, beginning with `DEST=RFC` destination and ending with `RFC_TRACE=0`, specifies the RFC destination and SAP gateway host. Following is additional information about selected fields in this section of the sample file:

Option	Description
DEST	In the first section of the sample file, this option is the name of the RFC destination within the SAP R/3 server.
TYPE	This option specifies the connection type. The value R for the TYPE option is for RFC server programs or for a client program working with another external program as an RFC server program that is registered at an SAP gateway. For more information about values for this option, see your SAP documentation.
PROGID	This option specifies <i>HPsapconnect-server.dzl_sapcond</i> , where <i>HPsapconnect-server</i> is the host name where the <i>HP SAPconnect server</i> runs in an HP Output Server domain. This must match the Program ID field in the RFC Destination. Note that if you are creating multiple HP SAPconnect servers to work with more than one SAP system, you must specify a unique PROGID for each server.
GWHOST	This option specifies the gateway host and is the same as the SAP host if the SAP gateway is not installed on a separate host.
GWSERV	This option specifies the gateway service, for example <i>sapgw01</i> . Note that in most instances, the numeric values for the SAP gateway (GWSERV) and the SYSNR are the same.

The second section of the sample file, beginning with `DEST=SAP system ID` and ending with `USE_SAPGUI=0` specifies options for the SAP application server. Following is additional information about selected fields in this section of the sample file:

Option	Description
DEST	In the second section of the sample file, this option is the SAP system ID. The value of DEST in this second section of the file and DZL_DEST in the last section of the file must match. This is the R/3 system ID that the HP SAPconnect server uses.
TYPE	This option specifies the connection type. The value A for the TYPE option in this section of the file is only to be used to connect to an application server. For more information about values for this option, see your SAP documentation.
ABAP_DEBUG	This option is set automatically when you activate the ABAP debugger by entering d in the trace field or by setting RFC_DEBUG in the system environment.
USE_SAPGUI	This option displays SAP dynpros and graphics. The value 0 for this option deactivates this functionality.

In the last section of the file beginning with `DZL_DEST`, the HP SAPconnect server defines the options that begin with the prefix `DZL`, in addition to the original definition SAP R/3 provides for these options in the `saprfc.ini` file. `DZL_CLIENT` represents the client on which the CPI-C user exists and `DZL_USERNAME` identifies the CPI-C user.

NOTE: Ensure the CPI-C user has the following profile set so it will function properly with SAPconnect: `S_A.SCON`.

Task 5: Creating the HP SAPconnect server

After you create the `saprfc.ini` file, create the HP SAPconnect server using the HP Output Server `config_server` command. You can configure the HP SAPconnect server to submit documents to a fax logical destination or to an e-mail logical destination.

NOTE: Transformations performed by HP Output Server may affect the format and extension of an attachment to an e-mail message.

HP Output Manager for SAP provides the following attributes that enable you to configure, start, stop, and retrieve the status of the HP SAPconnect server from the HP Output Server command line interface. :

Table 1. HP Output Manager for SAP attributes

Attributes	Description
-sapcon-server-sid	Required: This attribute specifies the RFC destination created in "Task 1: Creating an RFC destination" on page 45, or an existing RFC destination which the HP SAPconnect server will use to communicate with SAP R/3.
-sapcon-logical-fax-dest	Required: This attribute names the HP Output Server logical fax destination.
-sapcon-client-logon-retry-factor	Optional: This attribute sets the SAPCON RFC client logon retry factor (in seconds).
-sapcon-client-logon-retry-max	Optional: This attribute sets the SAPCON RFC client maximum logon retry interval (in seconds).
-sapcon-logical-email-dest	Optional, unless configuring the HP SAPconnect server to submit e-mail messages to an e-mail logical destination. This attribute names the HP Output Server logical e-mail destination.

Use these attributes with the HP Output Server `config_server` command and the syntax in the following examples to create an HP SAPconnect server:

NOTE: On a UNIX installation of HP Output Manager for SAP, you can also specify a value for the `-server-login-name` attribute when you configure the HP SAPconnect server. If you do not specify a value for this attribute, the default value is `root`. This prevents non-root users from starting and stopping the HP SAPconnect server and from patching an HP Output Manager for SAP installation. To avoid this restriction, set `-server-login-name` to the owner of the HP Output Server installed files (specified when you installed HP Output Server).

Example 1: Creating an HP SAPconnect server to submit faxes

To create an HP SAPconnect server that can submit faxes to a fax logical destination, use the following syntax:

```
config_server -t sapcon -x "--sapcon-server-sid RFC Destination
-sapcon-logical-fax-dest logicalfaxName" serverName
```

where *RFC Destination* is the RFC destination, *logicalfaxName* is the name of the logical fax destination in HP Output Server, and *serverName* is the name you choose for the HP SAPconnect server.

Example 2: Creating an HP SAPconnect server to submit e-mail messages

To create an HP SAPconnect server that can submit e-mail messages to an e-mail logical destination, use the following syntax:

```
config_server -t sapcon -x "--sapcon-server-sid RFC Destination
-sapcon-logical-email-dest logicalemailName -sapcon-logical-fax-dest
logicalfaxName" serverName
```

where *logicalemailName* is the name of the logical e-mail destination in HP Output Server and *serverName* is the name you choose for the HP SAPConnect server.

NOTE: The `-sapcon-logical-fax-dest` attribute is required in this command, even though you are configuring the HP SAPConnect server to submit e-mail messages to an e-mail logical destination. Without the `-sapcon-logical-fax-dest` attribute, the HP SAPConnect server cannot start.

Configuring an existing HP SAPConnect server for e-mail

To modify the configuration of an HP SAPConnect server so that the server can submit documents to an e-mail logical destination, use the following syntax with the `config_server` command:

```
config_server -u -t sapcon -x"-sapcon-server-sid RFC Destination
-sapcon-logical-email-dest logicalemailName" serverName
```

where *RFC Destination* is the RFC destination and *logicalemailName* is the name of the e-mail logical destination in HP Output Server and *serverName* is the name of the HP SAPConnect server.

Creating multiple HP SAPConnect servers

You can create multiple HP SAPConnect servers to work with more than one SAP instance.

To create multiple HP SAPConnect servers, do the following:

1. Create a separate `saprfc.ini` file for each HP SAPConnect server. For more information about creating an `saprfc.ini` file, see “Task 4: Creating the `saprfc.ini` file” in this section.
2. For each HP SAPConnect server, create a separate working directory with the following path name and place the appropriate `saprfc.ini` file in it:

```
installDir/var/sap/serverName
```

where *installDir* refers to the path name of the location where HP Output Server is installed and *serverName* is the name you choose for the HP SAPConnect server. Each server must have a unique name.

3. Create and configure the HP SAPConnect servers using the HP Output Server `server config_server` command with the following syntax:

```
config_server -t sapcon -x "-sapcon-server-sid RFC Destination
-sapcon-logical-fax-dest fax1" serverName1 serverName2 serverName3...
```

NOTE: Include the `-sapcon-logical-email-dest` attribute in this command if you are creating multiple HP SAPConnect servers that can submit e-mail messages to a logical e-mail destination.

For more information about creating an HP SAPConnect server using the `config_server` command, see “Configuring SAPoffice to work with HP SAPConnect server” in this section.

HP SAPConnect server and multiple SAP R/3 instances in the same SAP R/3 system

If you have multiple SAP R/3 instances configured in an SAP R/3 system, a single HP SAPConnect server cannot connect to multiple SAP R/3 instances. You must create one HP SAPConnect server for each instance.

For example, your SAP R/3 system contains the following SAP R/3 instances:

- zeus - central instance
- athena - database instance

- mercury - application server
- apollo - application server

If you would like to have an HP SAPconnect server configured to deliver for zeus, mercury, and apollo, you must configure one HP SAPconnect server for each of these instances. For more information, see “Creating multiple HP SAPconnect servers” in this section.

saprfc.ini and SAP logon groups

The GWHOST attribute in the `saprfc.ini` cannot be set to utilize SAP logon groups for load balancing. This is a limitation with SAP and the `saprfc.ini` file. You must enter the host name of the gateway server for each `saprfc.ini` file associated with an HP SAPconnect server.

Configuring SAPoffice to work with HP SAPconnect server

You configure SAPoffice to work with the HP SAPconnect server by testing the SAPconnect node connection to ensure that previous tasks were successfully executed.

To test the SAPconnect node connection to ensure that all steps were successfully executed and the connection is operable, perform the steps in the following sections.

Task 1: Testing the connection

1. In the **Command** field, type `/nsm59`.
2. Under **RFC destinations**, select and expand **TCP/IP connections**.
3. Double-click your RFC destination.
4. Click **Test connection**.
This prompts the **RFC - Connection Test** screen, which indicates if the SAP node connection has been configured properly.
5. Close the **RFC - Connection Test** screen.

Task 2: Configuring personal address settings

1. In the **Command** field, type `/ns012`.
The Private office setting screen appears.
2. Press **F9**. The **Address maintenance** screen appears. Configure your personal address settings in this screen.
3. Save your settings and exit both screens.

Task 3: Starting the routing test

1. In the **Command** field, type `/nscon`.
2. On the **Utilities** menu, click **Routing test (CTRL+F10)**. The **SAPconnect: Test routes** screen appears.
3. Type the sender's name in the **Sender** field.
4. Type **FAX** in the **Recipient Addr. type** field and type a fax number in **Recipient addr. field**.
For e-mail, type **INT** in **Recipient Addr. type** field and the e-mail address in **Recipient addr. field**.
5. Press **F2**.

This prompts the **SAPconnect: Explanation of Routing and Address Conversion** screen, which provides a full description of each component of the SAPconnect node connection.

NOTE: After you run the routing test, return to the previous screen and press **Enter**. This should retrieve the **Node** and **Recipient addr. values** in the **Outbound node and modified recipient address** window.

Task 4: Creating a test fax or e-mail request

Fax documents and e-mail messages can be created and delivered through SAPconnect.

To deliver a fax document or e-mail message, perform the following steps:

Create the document to send

1. In the **Command** field, type `/nsbwp`.
The **Business Workplace** screen appears.
2. Click **New message**.
The **Create Document and Send** screen appears.
3. Enter a document title and a description of the document contents.
4. Enter the country and fax number of your choice in the **Recipient** column and choose **Fax number** in the **Recip. type** column.
For e-mail, type the e-mail address in the **Recipient** column and select **Internet address** in the **Recip. type** column.
5. Click **Send** (Shift+F8).

Initiate the send process in SAPconnect

In order to send the document through SAPconnect for testing, you need to initiate the send from the **SAPconnect: Administration screen**. To do this, perform the following steps:

1. In the **Command** field, type `/nscon`.
The **SAPconnect: Administration (system status)** screen appears.
2. Click **Start send process**.
The **SAPconnect Send Process: Change Parameters** screen appears.
3. In the **Addr Type** field, select **FAX Fax number**.
4. Click **Start**.

You can observe the status of your fax request in the **Business Workplace** screen or in Job Tracker.

For copyright information about this documentation, please refer to the *HP Output Management for SAP Release Notes*.