

HP Capture and Route (HP CR) Installation Guide

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Part I: Server

1 Introduction

The *HP Capture and Route Installation Guide* contains instructions on installing and configuring HP Capture and Route (HP CR), an enterprise application. The *Guide* is written for system administrators who have detailed knowledge of the Windows operating system and LANs.

This section describes:

[HP Capture and Route overview](#) (3)

[Built-in HP CR server features](#) (4)

[Clients and specialized integrations](#) (4)

[Server deployment summary](#) (5)

[On-line help and related documentation](#) (6)

1-1 HP Capture and Route overview

HP Capture and Route (HP CR) is a server-based software application for document capture, which operates on a Microsoft Windows server within a customer's network. Users can access HP CR's document capture and routing capabilities from any scan-enabled MFP or network-connected scanner. HP CR converts captured documents into a variety of image- and text-based document formats and delivers them to a wide range of destinations.

Documents are transferred from a web-based End User Interface, MFP, or network scanner to the HP CR server, which processes and delivers them to specified destinations. If the device used to scan a document is an HP device enabled with the HP OXPd embedded platform, and the capture function or document process requires it, the user may be prompted at the time of scanning to enter indexing meta-data or recipient addressing information. Certain document processes may also specify that a user receive notification upon final job delivery through the system. Notification messages can be sent to the scanning user's email address or as a confirmation page printed back to the source scan device if that device is an MFP and capable of printing these confirmations.

1-1-1 Scalability and automated failover

HP CR is a highly scalable enterprise application that can be deployed in organizations of all sizes. Its robust server-client architecture supports distributed workloads, versatile throughput, and unmatched document distribution capabilities using numerous delivery systems and methods.

With smaller workloads, the HP CR server can suitably perform all the functions required for document distribution. As an organization grows, the server workload can be distributed or completely off-loaded using one or all of the following components:

- **Remote Administrator** - A remote system hosting HP CR Server Administrator, which is the HP CR server management application. (See [Section 5: Installing a Remote Administrator](#), 77.)
- **Remote Compose (Composer)** - A remote system hosting a Composer, which performs document conversion tasks. (See [Section 6: Installing a remote Composer](#), 81.)
- **Remote Modem Server** - A remote system hosting a modem server. (See [Section 7: Installing a remote modem server](#), 87.)
- **Remote Intelligent Device Client** - A remote system hosting an HP CR Intelligent Device Client. (See [Section 8: Installing the remote HP CR Intelligent Device Client](#), 95.)

- **Secondary Server** - A secondary system in a failover configuration. (See [Section 14: Setting up an HP CR server cluster](#), 139.)

In addition to scalability, the HP CR supports automated failover. In case of a system failure on the HP CR server, automated failover promises seamless recovery using a standby server.

1-2 Built-in HP CR server features

The HP CR server includes these built-in features:

- **Centralized administration** - You can manage an HP CR server using the HP CR Server Administrator, a snap-in for Microsoft Management Console. After connecting the HP CR Server Administrator to your HP CR server in the LAN, you can:
 - Modify the configuration of server components
 - Manage the server connectors
 - Manage user permissions and feature access
 - Monitor message processing
 - Manipulate rules for handling inbound and outbound messages
 - Troubleshoot errors
- **Automated self-maintenance** - You can manage the HP CR server databases using the Maintenance component. You can configure the Maintenance component Cleanup feature to remove messages and archive entries from the database after a specified length of time. You can also configure the Archive feature to copy messages to an archive database and remove the messages from the archive after a specified length of time.
- **Customized document workflow** - You can create rules to determine how the HP CR server will process inbound and outbound messages. The rules are highly configurable and can be manipulated to achieve specific results.
- **Configurable user permissions and feature access** - You can create Groups and configure user permissions in the HP CR Server Administrator. The collection of group records determines the access privilege of each user to the HP CR End User Interface and Preview. (Preview is a configurable feature that makes a user's messages available for preview before they are sent.) The user default configuration applies globally to users who do not require special permissions or feature access.

1-3 Clients and specialized integrations

HP CR features are accessible where the users need them most—on the web, office machines, multifunction devices, and business systems that are an integral part of the communication workflow.

HP CR is an intranet-based application for:

- **Multifunction devices and business systems** - Supports software solutions complementing the hardware solutions offered by Hewlett Packard as well as integrating with other vendor devices such as Ricoh Corporation, Sharp Electronics Corporation, and Xerox Corporation.

NOTE: HP CR server does not support HP Chai Device Client. If you are using Chai and are upgrading to HP CR, install the Embedded Device Client for HP OXPd v1.4 available on the server clients directory. For download, installation, and configuration instructions, refer to the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#).

NOTE: When scanning from Ricoh devices, users must choose **Multi-paged PDF** in the scan options of the device.

- **Document and records management systems** - HP CR integrates with document and records management solutions including Microsoft® SharePoint®, Autonomy iManage WorkSite, and FileShare.

Refer to [Section 16: Software Integrations](#) (157) and the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#) for more information.

1-4 Localized clients and device buttons

HP CR, device clients, and standard device buttons have been localized for Simplified Chinese, French, German, Italian, Brazilian Portuguese, and Spanish. Localization includes:

- HP CR End User Interface and the [HP Capture and Route \(HP CR\) User Guide](#).
- HP CR for HP OXPd v1.6 Device Client and the associated [Quick Start Guide](#).
- HP CR for HP OXPd v1.4 Device Client and the associated [Quick Start Guide](#).
- HP CR for Microsoft SharePoint and the associated [Quick Start Guide](#).
- HP CR for Autonomy WorkSite and the associated [Quick Start Guide](#).

Standard device buttons have been localized. Note, however, that the Administrator can modify the text as it appears on a device button. These buttons will not appear as localized unless the Administrator enters the text in the applicable language.

1-5 Server deployment summary

To deploy the HP CR server:

1. Complete the installation requirements using the guidelines provided in [Section 2: Requirements](#) (7).
2. Install the HP CR server using the instructions in [Section 3: Installing the HP CR server](#) (27).
3. Perform required configurations using the instructions in [Section 4: HP CR post installation review and configurations](#) (33).
4. Set up SMTP integration. Refer to the SMTP connector information in the [HP CR administrator on-line help](#) for instructions.
5. Set up other server-side related features such as:
 - Remote Administrator ([Section 5: Installing a Remote Administrator](#), 77)
 - Remote Composer ([Section 6: Installing a remote Composer](#), 81)
 - Remote Modem Server ([Section 7: Installing a remote modem server](#), 87)
 - Remote HP CR Intelligent Device Client ([Section 8: Installing the remote HP CR Intelligent Device Client](#), 95)
6. Set up the HP CR End User Interface where users can create Distribution Rules. Refer to [Section 10: HP CR End User Interface](#) (103). In addition, consult the [HP CR User Guide](#), which has links to the HP CR End User Interface and all other related documentation for the HP CR server.

1-6 On-line help and related documentation

Click the **Help** button at any time to access [HP CR on-line documentation](#).

Refer also to the [HP Capture and Route v1.2.0 Release Notes](#).

2 Requirements

Before you can install the HP CR server on a system, you must configure the system. This section discusses hardware and software requirements for the HP CR server as well as required server configurations.

This section describes:

- [Hardware and software requirements](#) (7)
- [Creating the HP CR service account](#) (10)
- [Creating the HP CR Admins group](#) (11)
- [Configuring Distributed COM \(DCOM\) permissions](#) (11)
- [Setting up Microsoft SMTP service](#) (12)
- [Configuring Internet Information Services \(IIS\)](#) (13)
- [Enabling and configuring integrated Windows authentication](#) (14)
- [Installing a Microsoft SQL application on the HP CR server](#) (15)
- [Disabling the Internet Explorer enhanced security configuration component](#) (24)
- [Enabling 8.3 name creation on NTFS partitions](#) (25)

2-1 Hardware and software requirements

The HP CR server installation requires a dedicated system that meets the following minimum requirements:

- Dual core processor, 2 GHz, 4GB of RAM, RAID 5W with 100 GB of disk space, and Microsoft mouse or compatible pointing device
- Windows 2008 R2 64-bit, 2003 Standard Edition SP2 64-bit

For Windows 2003 Standard Edition SP2 64-bit: Configure Internet Information Services (IIS) to run 32-bit applications (see [Configuring IIS to run 32-bit applications](#) (14) for instructions)

For Windows 2008 64-bit: Internet Information Services (IIS) v7 (see [Configuring IIS when installing the HP CR server on Windows 2008 systems](#) (13) for configuration instructions)

NOTE: For IIS v7 or later, configure to allow Active Server Pages. This configuration is located in the Web Service Extensions node in the IIS console tree.

- Windows Active Directory - HP CR can only be installed in a Windows Active Directory environment. All server security and authentications are dependent on the Active Directory authentication.
- Disabled Internet Explorer Enhanced Security Configuration (Windows component).

If this component is enabled, you cannot install HP CR server. After you disable the component, reboot your system before proceeding with the server installation. For instructions on how to verify that the component is disabled, see [Disabling the Internet Explorer enhanced security configuration component](#) (24).

- Microsoft .Net Framework 4.0, which is required to install the Embedded Device Client for HP OXPd, the Intelligent Device Client, and the End User Interface. The installation will install MS.net 4.0 if it is not found to be installed.

NOTE: Do not run any other enterprise application on the HP CR server.

- Microsoft Internet Explorer 7 or later
- Acrobat Reader 7.0 or later
- Internet connection

2-1-1 Supported devices

HP CR supports the Embedded Device Client for HP OXPd on all devices listed below. Consult HP to determine compatible firmware versions for supported devices.

Table 1 List of devices supported with the Embedded Device Client for HP OXPd

Device	Group	Supported Firmware	Minimum Installed RAM	XPd Version
Color LaserJet 4730 MFP	10	46.350.1	256 MB	1.4.9.0
Digital Sender 9200c	10	09.270.2	256 MB	1.4.9.0
LaserJet 4345 MFP	10	09.270.1	256 MB	1.4.9.0
LaserJet 9040 MFP	10	08.250.9	256 MB	1.4.9.0
LaserJet 9050 MFP	10	08.250.9	256 MB	1.4.9.0
LaserJet 9500 MFP	10	08.250.9	512 MB	1.4.9.0
Color LaserJet CM 4730 MFP	20	50.221.3	N/A	1.6.3.2
Digital Sender 9250c	20	48.171.2	N/A	1.6.3.2
LaserJet M3035 MFP	20	48.250.8	N/A	1.6.3.2
LaserJet M4345 MFP	20	48.250.8	N/A	1.6.3.2
LaserJet M4349 MFP	20	48.241.2	N/A	1.6.3.2
LaserJet M5035 MFP	20	48.241.2	N/A	1.6.3.2
LaserJet M5039 MFP	20	48.241.2	N/A	1.6.3.2
LaserJet M9040 MFP	20	51.191.3	N/A	1.6.3.2
LaserJet M9050 MFP	20	51.191.3	N/A	1.6.3.2
LaserJet M9059 MFP	20	51.191.3	N/A	1.6.3.2
Color LaserJet CM 6030 MFP	40	52.191.2	N/A	1.6.3.2
Color LaserJet CM 6040 MFP	40	52.200.4	N/A	1.6.3.2
Color LaserJet CM 6049 MFP	40	52.180.5	N/A	1.6.3.2
Color LaserJet CM 3530 MFP	50	53.180.3	N/A	1.6.3.2
Color LaserJet CM 4540 MFP	XX	2200887_229562	N/A	1.6.3.2
ScanJet 7000n	XX	2131311_192131	N/A	1.6.3.2

Device	Group	Supported Firmware	Minimum Installed RAM	XPd Version
ScanJet 8500	XX	2200643_228340	N/A	1.6.3.2
LaserJet Flow M525 MXP	XX	2200893_229650	N/A	1.6.3.2a
LaserJet Flow M575 MXP	XX	2200893_229649	N/A	1.6.3.2
LaserJet M775 MFP	XX	2200890_229591		1.6.3.2
LaserJet M4555 MFP	XX	2200887_229566		1.6.3.2

2-1-2 Additional installation requirements

An HP CR server installation also requires the following:

- HP CR service account. For instructions on how to create the HP CR service account, see [Creating the HP CR service account](#) (10).
- Windows user account that belongs to the local Administrators group. For instructions on how to create this group, see [Creating the HP CR Admins group](#) (11).
- Configured IIS for a Windows 2008 system. For instructions, see [Configuring IIS when installing the HP CR server on Windows 2008 systems](#) (13).
- Installed MS SQL application. For instructions, see [Installing a Microsoft SQL application on the HP CR server](#) (15).
- (Optional) Installed, configured, and tested fax module for an HP CR server that supports faxing. Fax options are installed (or planned out) if faxing is going to be used in the HP CR environment. Faxing is available through the Telco, T37 SMTP, or HP Lanfax connector, depending on your environment. For information on modem installation, consult the fax connector options in the [HP CR administrator on-line help](#).
- Verified that the **NtfsDisable8dot3NameCreation** registry value is set to 0.
You must enable 8.3 Name Creation on NTFS Partitions to allow Ghostscript to work with long file names or with spaces and nonstandard characters in the file name during conversion. If your system does not have the registry key set to 0, you must manually enable the key and set the value to 0. For instructions, see [Enabling 8.3 name creation on NTFS partitions](#) (25).
- Windows firewall settings: Turning off the firewall will allow exceptions for the mmc.exe and the DCOM port (135). If you do not want to turn off the Windows firewall, keep the firewall on and allow the DCOM port (135) and mmc.exe.

NOTE: If the firewall is on and you do not allow the DCOM port (135) and mmc.exe, you will get the following message when you try to open the HP CR Server Administrator after installing the server:
0x800706ba) The RPC server is unavailable.

2-1-3 Additional software considerations for a composer

The HP CR server setup automatically installs a local Composer on the server. This is needed to compose documents into the specified final formats.

A remote Composer is available (see [Section 6: Installing a remote Composer](#) (81) for details). The local and remote Composer must have the following applications and, optionally, Microsoft Word. For example, if you are planning to use Crystal Reports for composing, then Crystal Reports must be installed on the compose server.

- Microsoft Visio 2007 for *.VSD and *.VDX message attachments (required)
- Crystal Reports v10.0 or earlier for *.RPT message attachments (required)
- Microsoft Office 2007 for *.DOC, *.DOCX, *.PPT, *.PPTX, *.XLS, and *.XLSX message attachments (recommended, but not required)
- Microsoft Word 2007 for *.DOC Routing Sheet templates



IMPORTANT: After you install Microsoft Word, you must open a Word document and register the software. You must also verify that pop-ups do not appear to ensure successful composition of messages in the HP CR server.

NOTE: Routing Sheet templates are provided in *.DOC and *.OMTPL format. These templates can be edited in Word and WordPad, respectively.

If multiple versions of an application are deployed in the LAN, the most recent version must be installed on the Composer. For example, if Office 2007 and 2003 are deployed, then Office 2007 must be installed on the Composer.

An item is required only if the Composer must be able to convert the documents associated with the application. For example, if Microsoft Office is not deployed in the LAN, Microsoft Office does not need to be installed.

2-2 Creating the HP CR service account

The HP CR service account is a dedicated Windows user account designed to run services on the HP CR server.



IMPORTANT: It is strongly recommended that you do not change this account or the password associated with it.

The HP CR service account user:

- Must belong to the Domain Users group in the domain where the HP CR server is being installed.
- Must belong to the local Administrators group on the system where the HP CR server is being installed.
- Must have a password that never expires.

You can create or select a Windows user account as the HP CR service account. For instructions on creating Windows user accounts, consult Windows help.

2-3 Creating the HP CR Admins group

The Admins group consists of all HP CR users who run the HP CR Server Administrator (either on the HP CR Server or Remote Administrator). These users must have Distributed COM access, launch, and configuration permissions on the HP CR server.

To create an HP CR Admins group:

1. Go to the Active Directory or LDAP. Locate the domain where the HP CR server is being installed.
2. Create a group for HP CR Server Administrator users. Name this group HP CR Admins.
3. Add all users who will run the HP CR Server Administrator to the HP CR Admins group.
4. Log in to the system where the HP CR server is being installed using an account that belongs to the local Administrators group.
5. Add the HP CR Admins group to the local Administrators group.

When you need to add additional users to run the HP CR Server Administrator, you can add them to the HP CR Admins group.

2-4 Configuring Distributed COM (DCOM) permissions

The following users and groups require DCOM access, launch, and configuration permissions on the HP CR server:

- HP CR service account user
- HP CR Admins group
- SYSTEM group on the HP CR server
- INTERACTIVE group on the HP CR server



TIP: SYSTEM and INTERACTIVE are built-in accounts that are not visible in the list of local users and groups. SYSTEM is a group for Windows services that are configured to run in the local Windows security context. INTERACTIVE is a group to which the current local Windows user is automatically added.

2-4-1 Configuring DCOM permissions on Windows 2008 and Windows 2003

1. Log in to the system where you will install the HP CR server. Use the local Administrators group login credentials.
2. Run `dcomcnfg`. The **Component Services** console opens.
3. Go to the console root, expand **Component Services**.
4. Expand **Computers**. Go to the details pane, right-click **My Computer**, select **Properties**. The **Properties** page opens.
5. Go to **COM Security**.

6. Configure access permissions:
 - a Go to the **Access Permissions** section.
 - b Click **Edit Default**. The **Access Permission** page opens.
 - c Verify that the HP CR service account user has **Local Access** and **Remote Access** permissions enabled. If necessary, add this group to the list.
 - d Verify that the HP CR Admins group has **Local Access** and **Remote Access** permissions enabled. If necessary, add this group to the list.
 - e Verify that INTERACTIVE and SYSTEM have **Local Access** and **Remote Access** permissions enabled. If necessary, add these groups to the list.
 - f Click **OK**.
7. Configure launch permissions:
 - a Go to **Launch and Activation Permissions** section.
 - b Click **Edit Default**. The **Launch Permission** page opens.
 - c Verify that the HP CR service account user has **Local Launch**, **Remote Launch**, **Local Activation**, and **Remote Activation** permissions enabled. If necessary, add this group to the list.
 - d Verify that the HP CR Admins group has **Local Launch**, **Remote Launch**, **Local Activation**, and **Remote Activation** permissions enabled. If necessary, add this group to the list.
 - e Verify that INTERACTIVE and SYSTEM have has **Local Launch**, **Remote Launch**, **Local Activation**, and **Remote Activation** permissions enabled. If necessary, add these groups to the list.
 - f Click **OK**.
8. Click **Apply**, **OK**, and right-click **My Computer** in **Component Services**.
9. Select **Stop MS DTC**, then select **Start MSDTC**.
10. Close **Component Services**.

2-5 Setting up Microsoft SMTP service

2-5-1 Setting up SMTP server for IIS 7.0

1. Click the **Start** button.
2. Click **Administrator Tools > Server Manager**.
3. Click the **Features** node in the **Server Manager** pane. Click **Add Features** in the **Features Summary** pane.
4. Click on the box next to **SMTP Server**, and the **Add Features Wizard** page opens clarifying which role services and features need to be installed.
5. Click the **Add Required Role Services** button. Click **Next**.
6. Click **Next** on the page that discusses the Web Server (IIS) role, which is already installed.
7. Review the installation selection on the next page and note that SMTP Server will be installed. Click **Install**.
8. Ensure that the installation is fully successfully, and then click **Close**.

2-5-2 Setting up SMTP server for IIS 6.0

1. From the **Start** menu, click **Control Panel**.
2. Double-click **Add or Remove Programs**.
3. From the left pane, click **Add/Remove Windows Components**.
4. From the **Components** list, click **Application Server** and then click **Details**.
5. From the **Subcomponents of Application Server** list, click **Internet Information Services (IIS)** and then click **Details**.
6. From the **Subcomponents of Internet Information Services (IIS)** list, select the **SMTP Service** check box.
7. Click **OK**.
8. Click **Next**. You might be prompted for the Windows Server 2003 family CD or the network install path.
9. Click **Finish**.

2-6 Configuring Internet Information Services (IIS)

2-6-1 Configuring IIS when installing the HP CR server on Windows 2008 systems

To use HP CR Intelligent Device Client on a Windows 2008 system, you must add role services:

1. Log on to the system where HP CR server is being installed using an account that belongs to the local Administrators group.
2. Click **Start > All Programs > Administrative Tools > Server Manager** to open the **Server Manager** console.
3. Click **Roles**.
4. Under the **Web Server (IIS)** section, click **Add Role Services** in the details pane. The **Add Role Services** page opens.
5. At the top level, check off the following:
 - **Common HTTP Features (Installed)** - Check all options under this option.
 - **Application Development** - Check all options under this option.
 - **Security (Installed)** - Check all options under this option.
 - **Management Tools (Installed)** - Check all options under this option.
6. Click **Next** and then **Install**. Close the page when the installation is complete.
7. Click **Features** and then **Add Features** in the details pane. The **Add Features** page opens.
8. Check the **SMTP Server** option.
9. Click **Next** and then **Install**.
10. Close the page when the installation is complete.

For information on related command-to-switch modes, refer to [Microsoft support](#).

2-6-2 Configuring IIS to run 32-bit applications

For servers running Windows 2003 64-bit, IIS must be configured to run 32-bit applications:

1. Open a command prompt and enter:

```
cscript.exe C:\InetPub\adminscripts\adsutil.vbs set  
W3SVC/AppPools/Enable32bitAppOnWin64 1
```

2. Press **Enter**.

For information on related command to switch modes, refer to [Microsoft support](#).

2-7 Enabling and configuring integrated Windows authentication

2-7-1 Enabling integrated Windows authentication

NOTE: This registration is only required for installing the HP CR End User Interface.

The End User Interface authenticates users based on their Windows logon credentials. The logon credentials are either passed transparently from the client to the web server or entered manually by the user at the beginning of each session. The login method depends on how authentication is configured. Both methods are described in the following configuration instructions.

NOTE: Windows authentication is required with NTLM authentication. Skip this section for database authentication.


Configure Windows authentication on the web server and then configure Internet Explorer on clients.

2-7-2 Configuring integrated Windows authentication on the web server

1. Click **Start > All Programs > Administrative Tools > Internet Information Services (IIS) Manager**.
2. Expand the server running the End User Interface. Expand **Sites** and then expand **Default Web Site**.
3. Click the virtual directory for the End User Interface. (The default name is `WebClient`.) The IIS features are displayed in the details pane.
4. In the **IIS** section, click **Authentication**.
5. Verify the **Anonymous Authentication** option is disabled. If not, disable the option.
6. Verify the **Windows Authentication** option is enabled. If not, enable the option.
7. Perform an `iisreset`. To do so, open a command prompt. Then, enter `iisreset`.
8. Press **Enter**.

2-8 Installing a Microsoft SQL application on the HP CR server

The HP CR server utilizes the MS SQL database to store and archive messages. It requires access to one of the following SQL database applications: SQL Server 2008 SP2 or SQL Express 2008.


 **IMPORTANT:** Microsoft SQL 2000 is no longer supported. If you are using SQL 2000, HP CR requires that you upgrade to SQL 2008 SP2 or SQL Express 2008 prior to upgrading your HP CR server.

- **SQL Server 2008 SP2** - This comprehensive database application can be installed on:
 - The HP CR server
 - A system on the same switch as the HP CR server

When installed on the HP CR server, the SQL server must only service databases for HP CR. Consider that installing a SQL server instance on the HP CR server might require the purchase of an additional SQL server license.

- **SQL Express 2008** - This limited Microsoft SQL database application provides the basic database services the HP CR server needs to maintain its SQL databases. It is licensed as part of the HP CR installation.

If SQL Express 2008 is being used, it must be installed local to the HP CR server.

 **IMPORTANT:** SQL Express installation requires Microsoft .NET Framework 4.0.

2-8-1 Installing SQL Server 2008 SP2

Consult the SQL Server documentation for information on SQL Server licensing and installation information.

2-8-2 Installing SQL Express 2008

If SQL Express 2008 is being used, it must be installed local to the HP CR server.

You must have administrative rights on the system where you will install SQL Express 2008. We recommend that you read the [Microsoft SQL Server 2008 Release Notes](#) and [Readme](#) in their entirety before installing SQL Server 2008 Express.

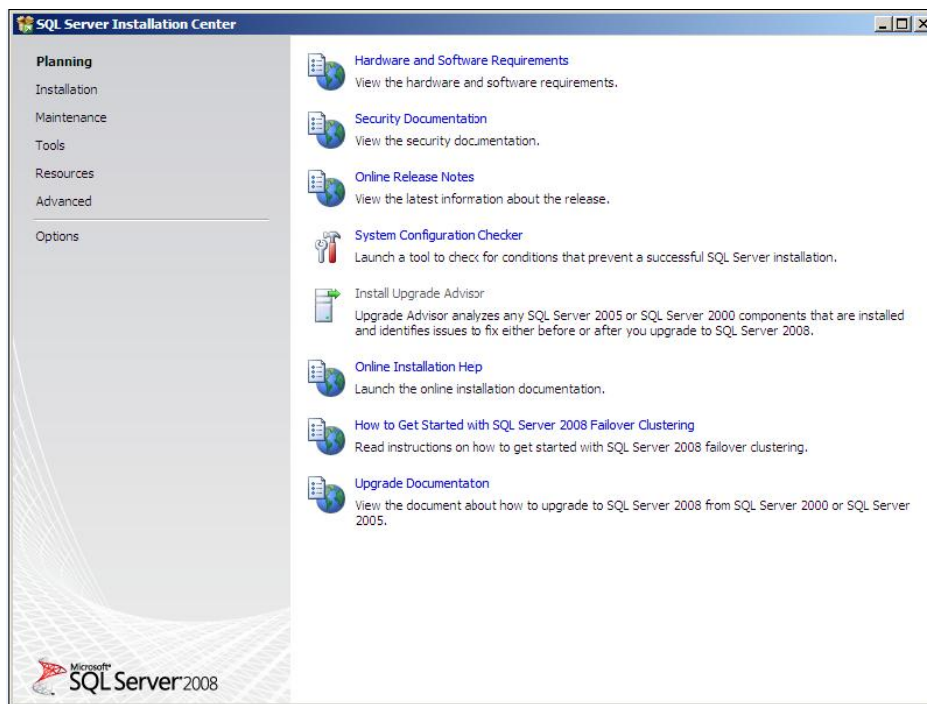
Prior to installing SQL Express 2008, you may be required to apply the following on your system:

- Microsoft .Net Framework 4.0
- Windows Installer 4.5

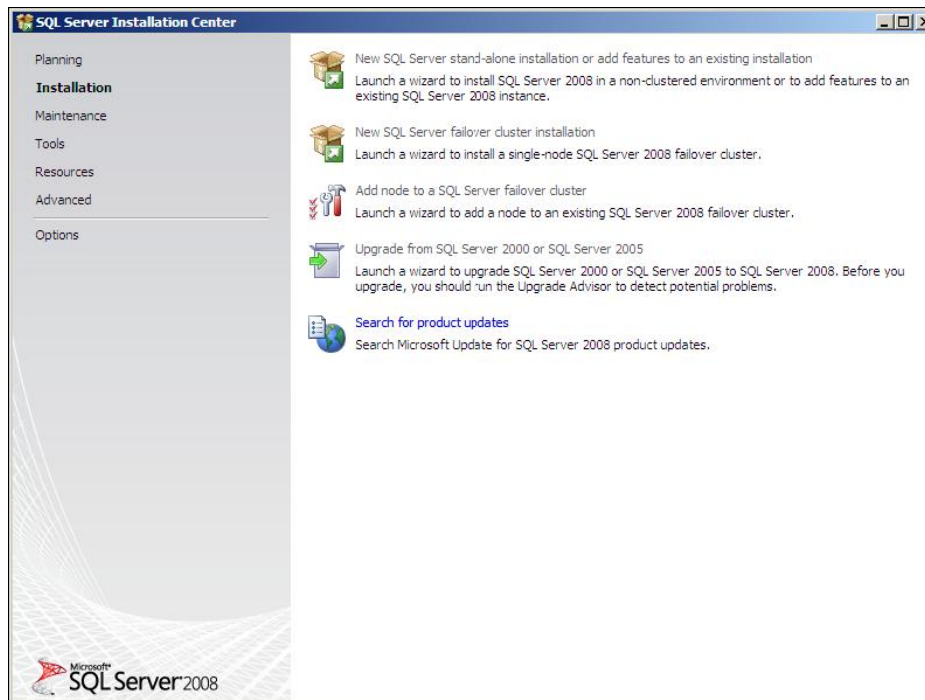
To install SQL Express 2008:

1. Log in to the server where the HP CR server is being installed using an account that belongs to the local Administrators group.
2. Go to a network copy of the HP CR server setup.

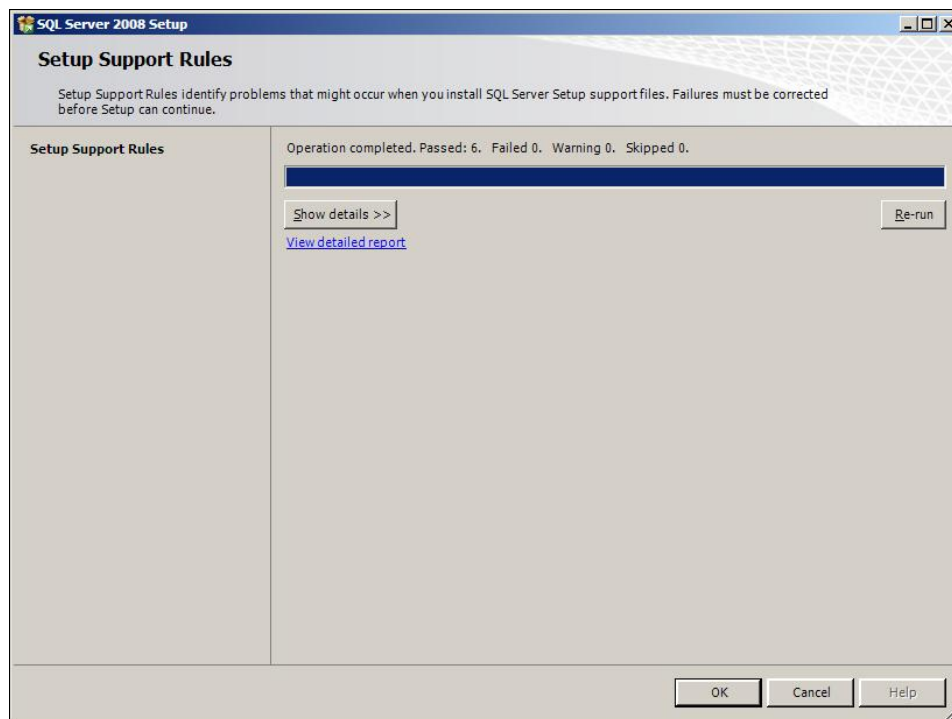
- Go to `\Tools\SQLExpress2008` and run `SQLEXPR_x64_ENU.exe`. The setup extracts the files and then shows the **SQL Server Installation Center** page.



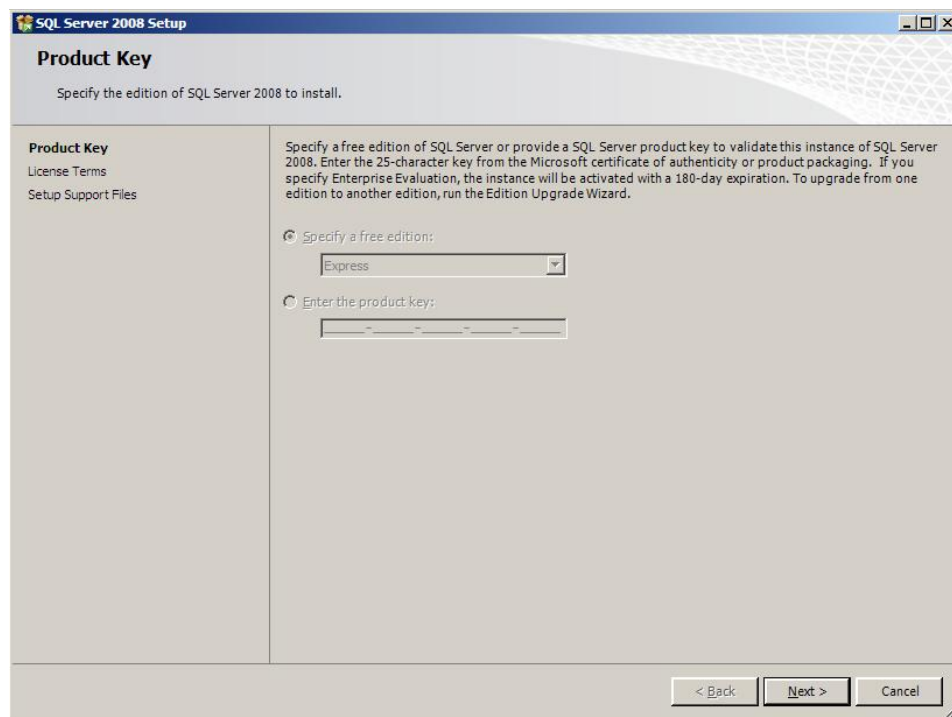
- Carefully read this entire page. Then click **Installation** on the left pane. The following page opens.



5. Click the **New SQL Server standalone installation or add features to an existing installation** option. The setup automatically does a configuration check and shows the result.

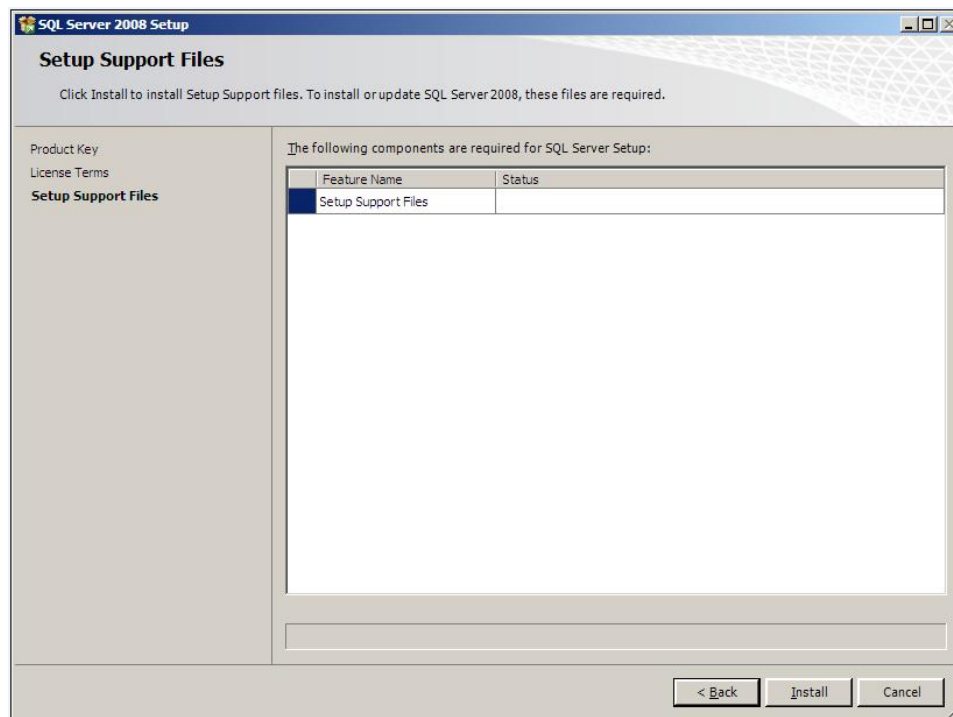


6. Click **OK**. The **Product Key** page opens.

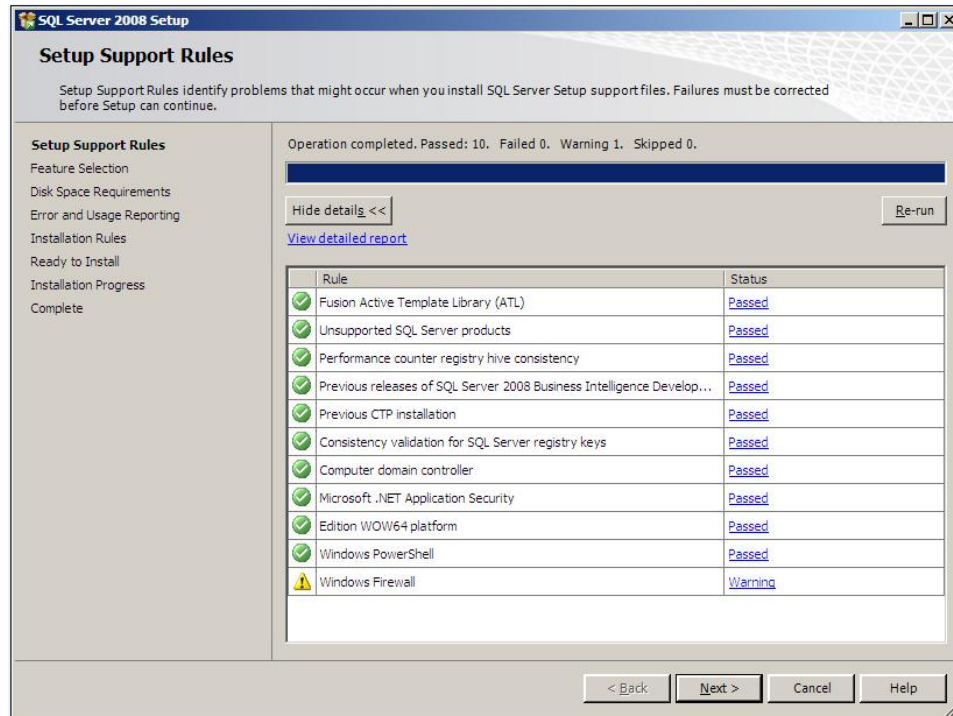


7. Click **Next**.8. Check the box beside **I accept the license terms** option and click **Next**.

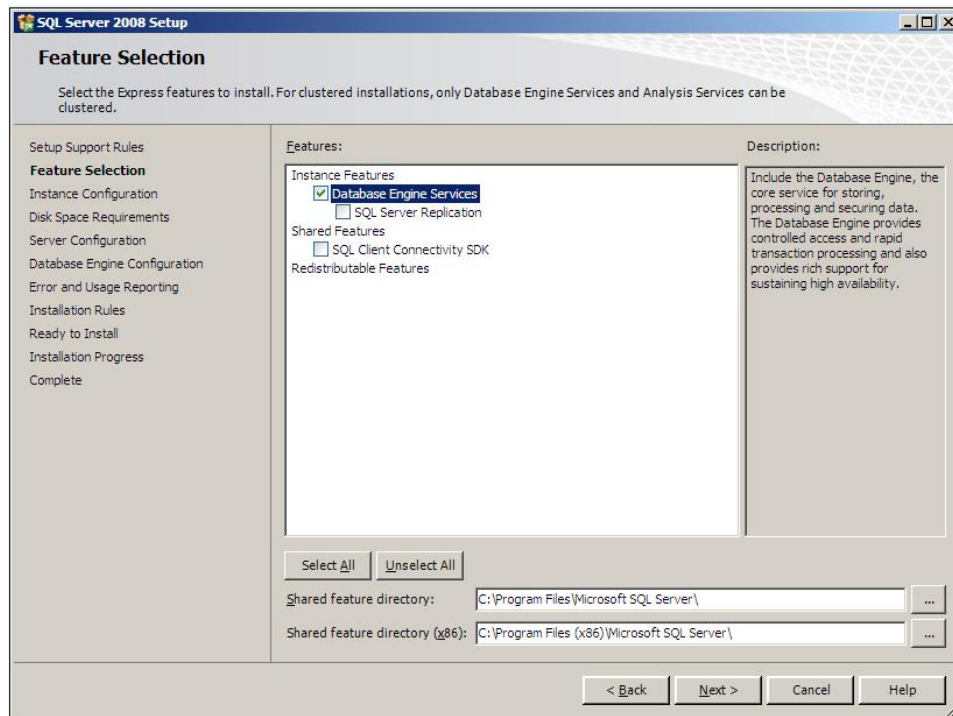
9. The setup checks and prompts to install the required support files.



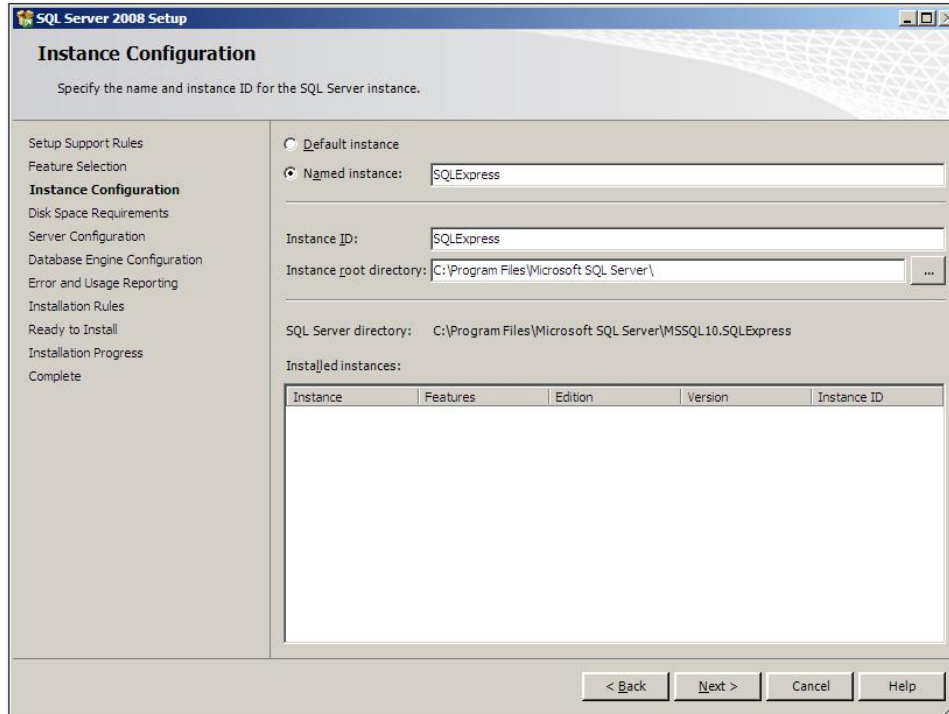
10. Click **Install** to install the required files.



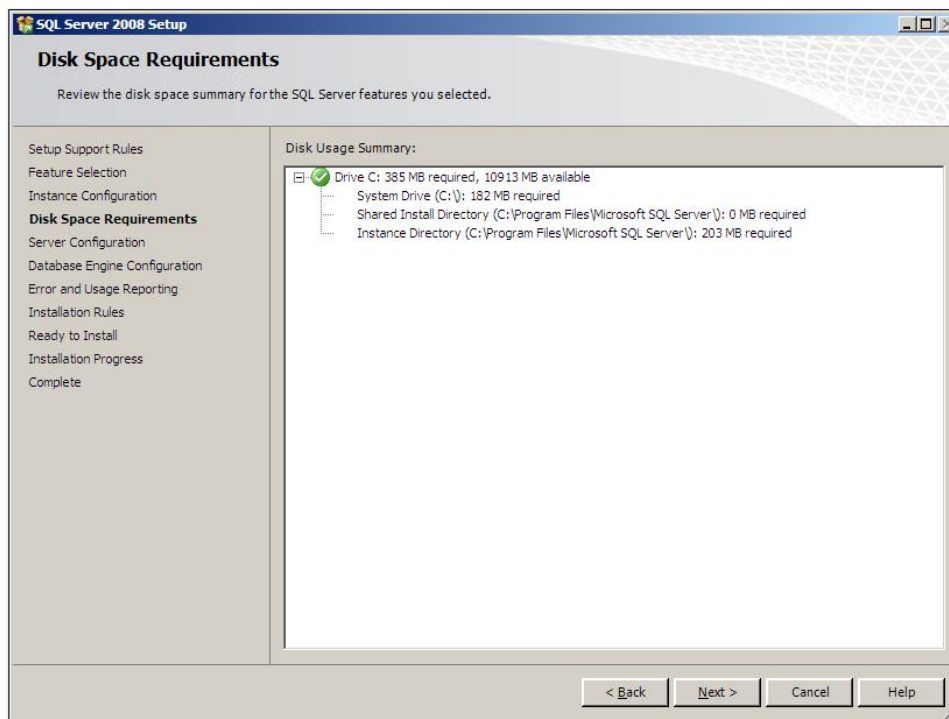
11. Click **Next**. The setup checks the **Database Engine Services**.



- Click **Next**. The **Instance Configuration** page opens.

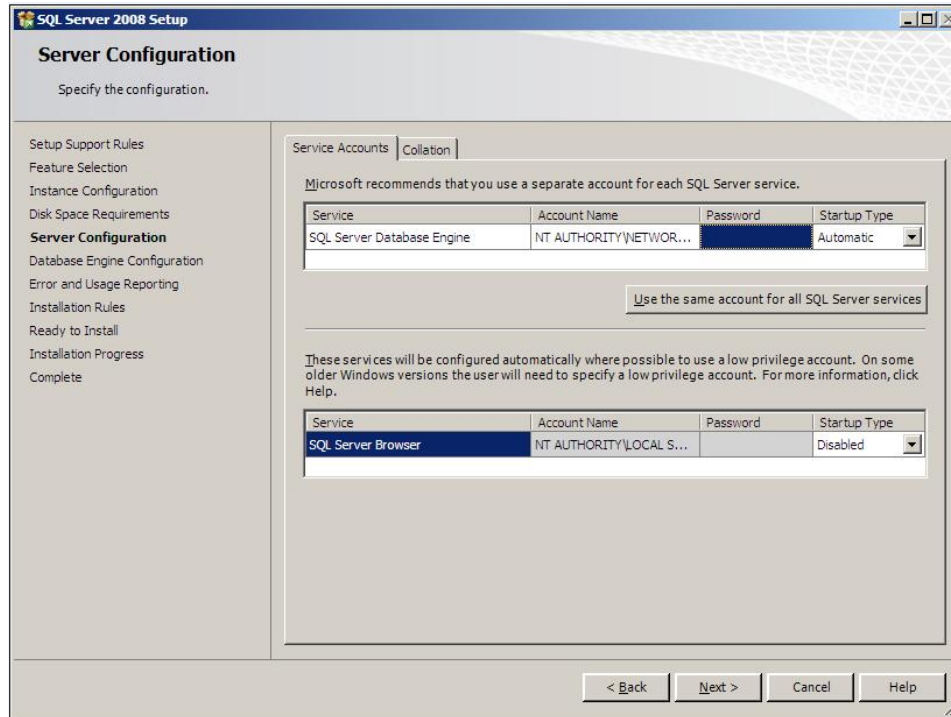


- Keep the defaults and click **Next**. The **Disk Space Requirements** page opens.

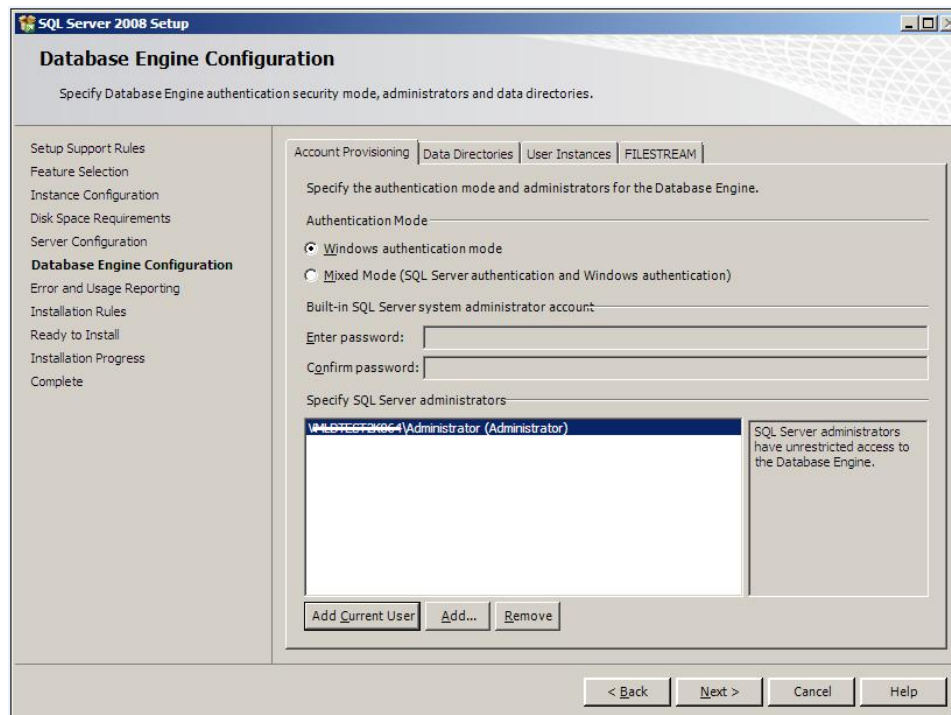


- Verify that you meet the space requirements.

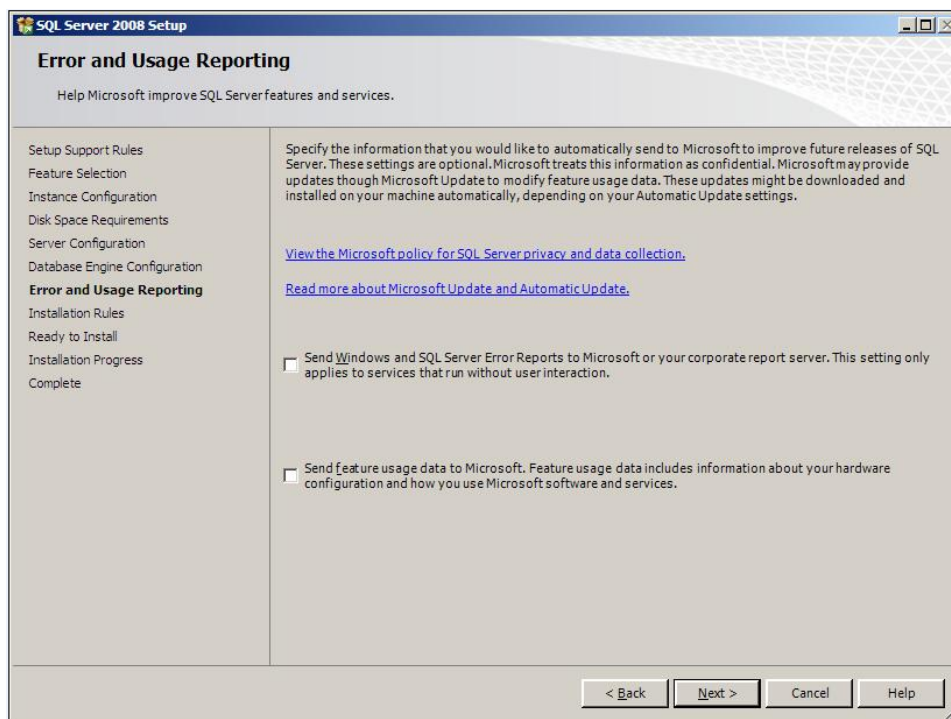
15. Click **Next**. The **Server Configuration** page opens.



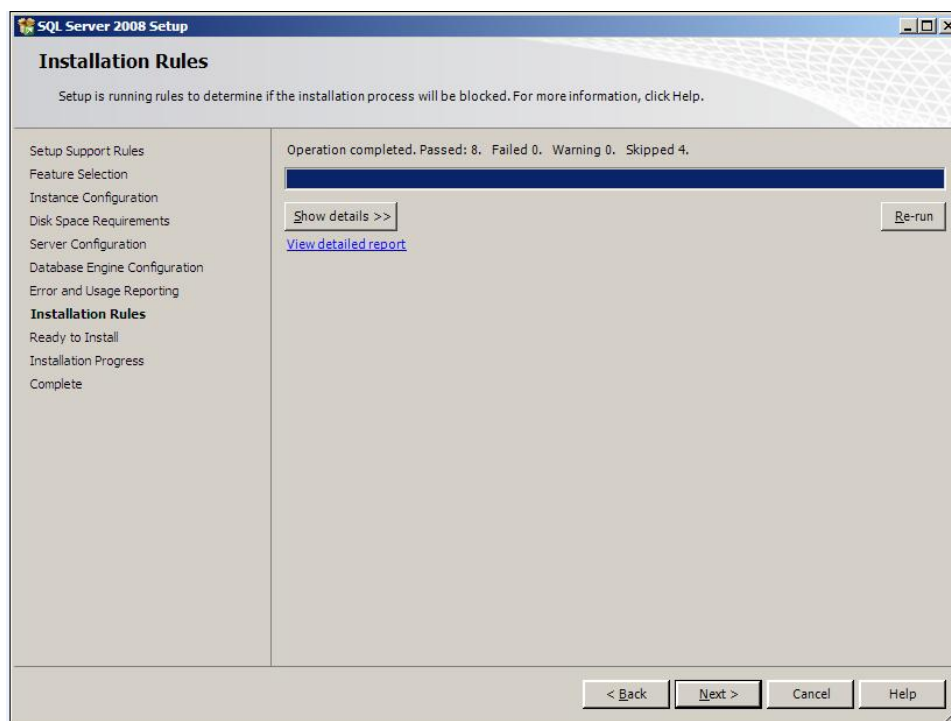
16. Select an account for the SQL service (for example, the built-in Network Service account). Click **Next**. The **Database Engine Configuration** page opens.
17. Click **Add Current User** and specify an administrator.



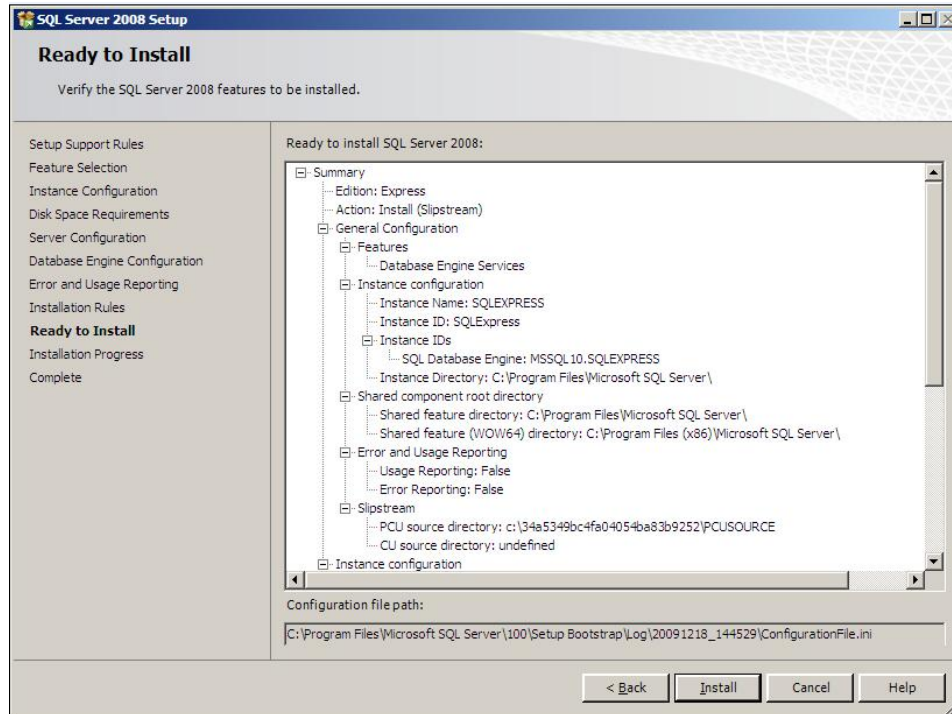
18. Click **Next**. The **Error and Usage Reporting** page opens.



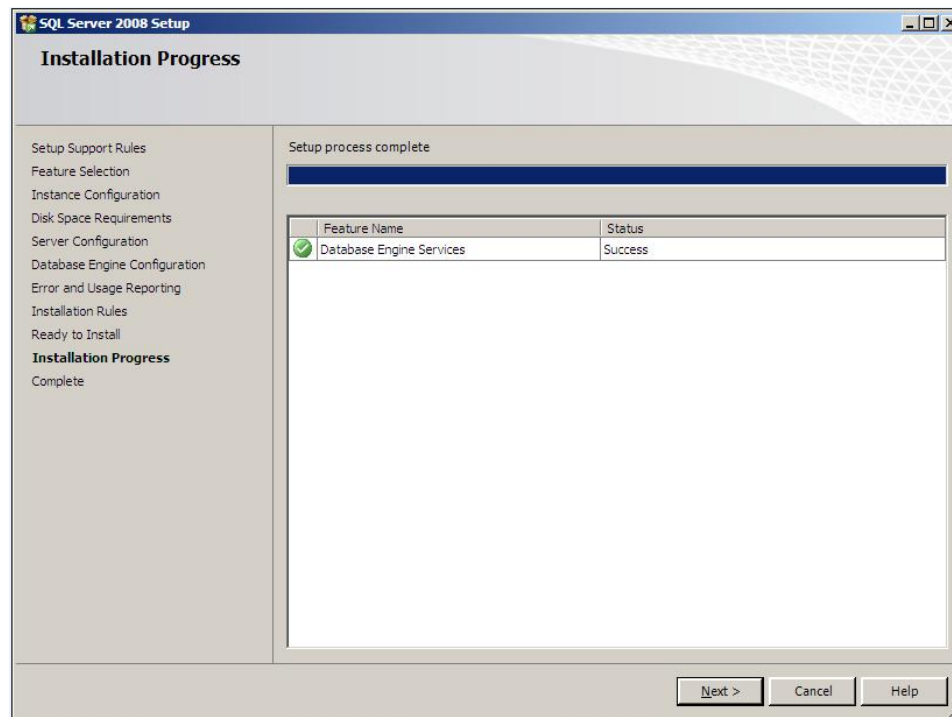
19. Click **Next**. The **Installation Rules** page opens.



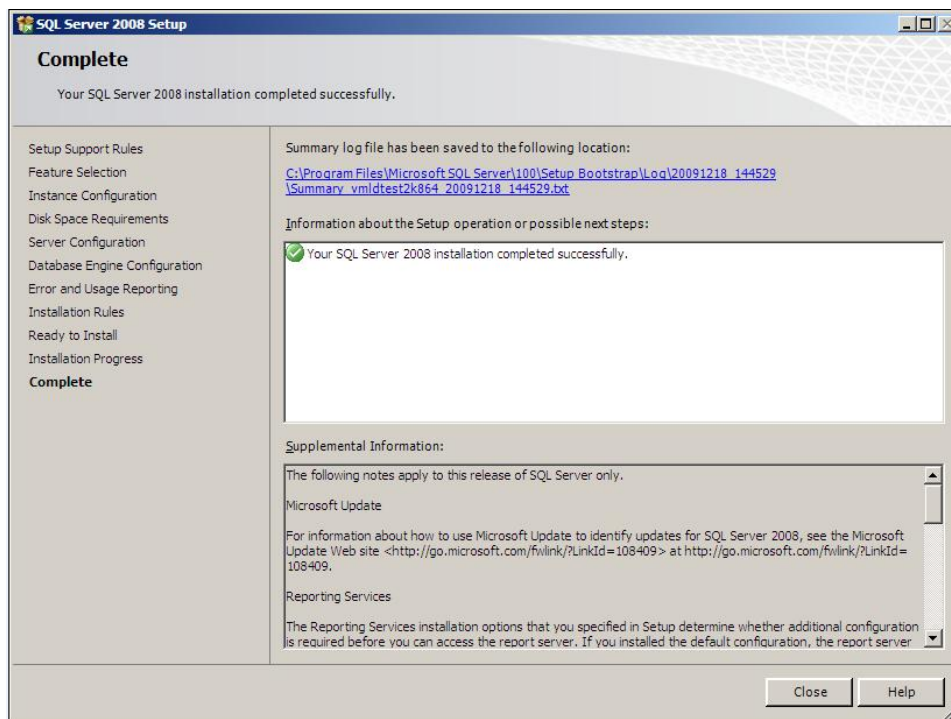
20. Click **Next**. The **Ready to Install** page opens.



21. Click **Install** to start the installation. The setup shows the installation progress.



22. When installation is complete, the **Complete** page opens.



23. Click **Close** to close the installation wizard.

2-9 Disabling the Internet Explorer enhanced security configuration component

If this Windows component is enabled, you cannot install the HP CR server. After you disable the component, you must reboot your system before proceeding with the server installation.

For Windows 2008 R2, follow the instructions below to disable Internet Explorer Enhanced Security Configuration for all users.

1. Close all instances of Internet Explorer.
2. Click **Start > Administrative Tools > Server Manager**.
3. If a **User Account Control** dialog box appears, click **Continue**.
4. In the left pane, select **Server Manager**.
5. In the right pane under **Server Summary**, click **Configure IE ESC**.
6. Under **Administrators**, click **Off**.
7. Under **Users**, click **Off**.
8. Click **OK**.
9. Reboot your system before proceeding with the installation.

For Windows 2003 Standard Edition SP2, follow the instructions below to verify that Internet Explorer Enhanced Security Configuration is disabled:

1. Click **Start > Control Panel > Add or Remove Programs**.
2. In the **Add or Remove programs** page, click **Add/Remove Windows Components**. The **Windows Component wizard** opens.
3. Scroll down the components list to find **Internet Explorer Enhanced Security Configuration**.
4. Verify that the component is disabled. If not, disable it.
5. Click **Next**, then click **Finish**.
6. Reboot your system before proceeding with the installation.

2-10 Enabling 8.3 name creation on NTFS partitions

You must enable 8.3 Name Creation on NTFS Partitions to allow the Ghostscript conversion engine to work with long file names or with spaces and nonstandard characters in the file name during conversion. To do so:

1. Click **Start > Run**.
2. Enter `regedit` and click **OK**.
3. In the **Registry Editor**, go to:
`HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\FileSystem`
4. Right-click the **NtfsDisable8dot3NameCreation** entry and select **Modify** from the drop-down menu. The **Edit DWORD Value** page opens.
5. In the **Value data** text box, enter `0`.
6. Click **OK** to close the page.

3 Installing the HP CR server

The HP CR server is installed with:

- Specialized Windows services that carry out the document distribution responsibilities of the server
- Components that complete message processing tasks
- Connectors that connect the HP CR server with external systems that submit messages to the server and distribute them to their final destinations
- HP CR Server Administrator, which is the management application for the HP CR server

The remainder of this section describes:

[Installing the HP CR server](#) (27)

[Completing the server configuration wizard](#) (31)

3-1 Installing the HP CR server

The HP CR server setup program has a verification utility that checks the server for compliance with installation requirements. All installation requirements must be met before HP CR can be installed.



TIP: Before you start installing the HP CR server, review and verify that you have met all [Requirements](#) (7).

NOTE: If you are setting up an HP CR server cluster, review the HP Cluster Service setup instructions (see [Section 14: Setting up an HP CR server cluster](#), 139) before beginning the HP CR server installation. If you are setting up HP CR with a Telco Connector, see [Section 15: Installing and configuring a Dialogic modem driver](#) (149) before beginning the HP CR server install.

To install HP CR server:

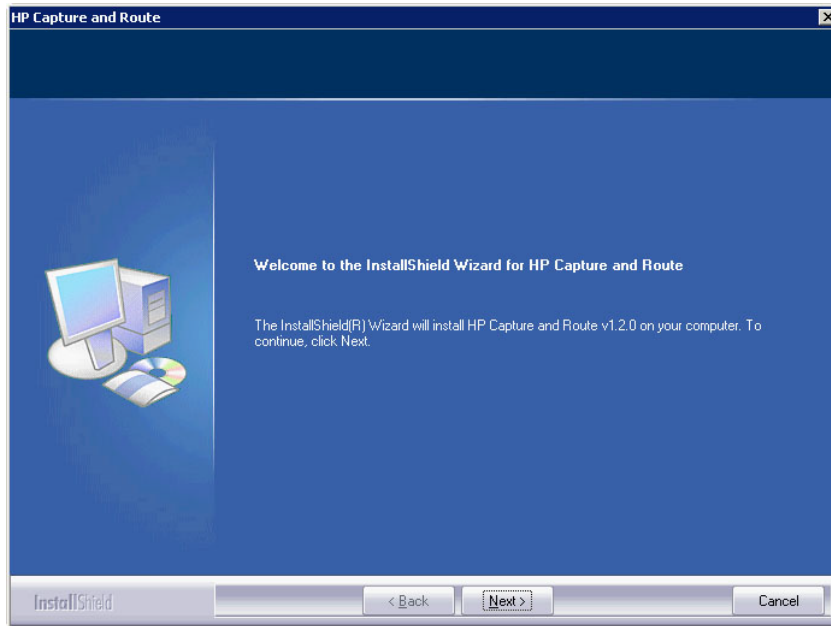
1. Log in to the system where the HP CR server is being installed using the HP CR service account.
2. Go to a network copy of the HP CR server and right-click on:

`\MessageServer\setup.exe`

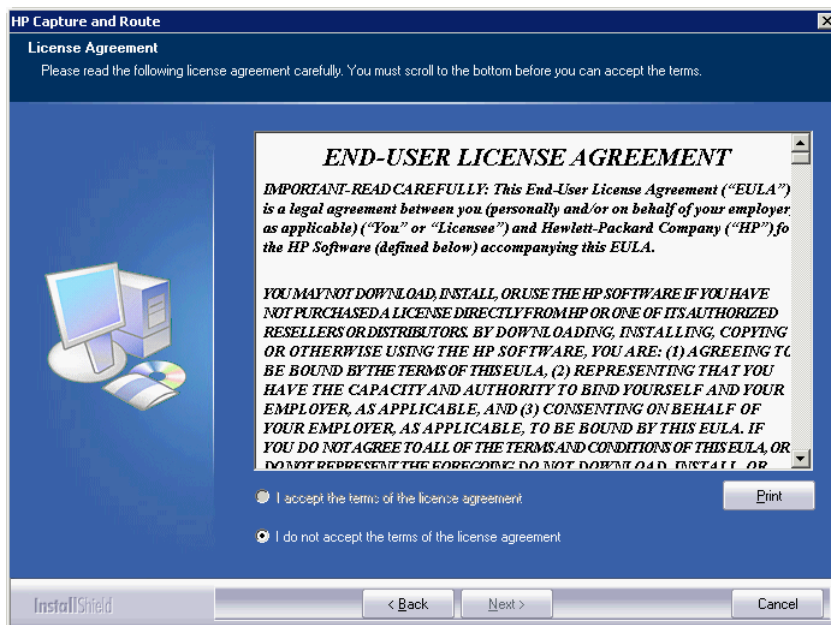
Select the **Run as administrator option**.

The InstallShield wizard opens and configures your system for installation. When configuration is complete, you see the welcome message.

NOTE: During installation, if .NET 4.0 is not found by the installation check, it is automatically installed. The HP CR server installation screens will show only after .NET 4.0 installation is complete.

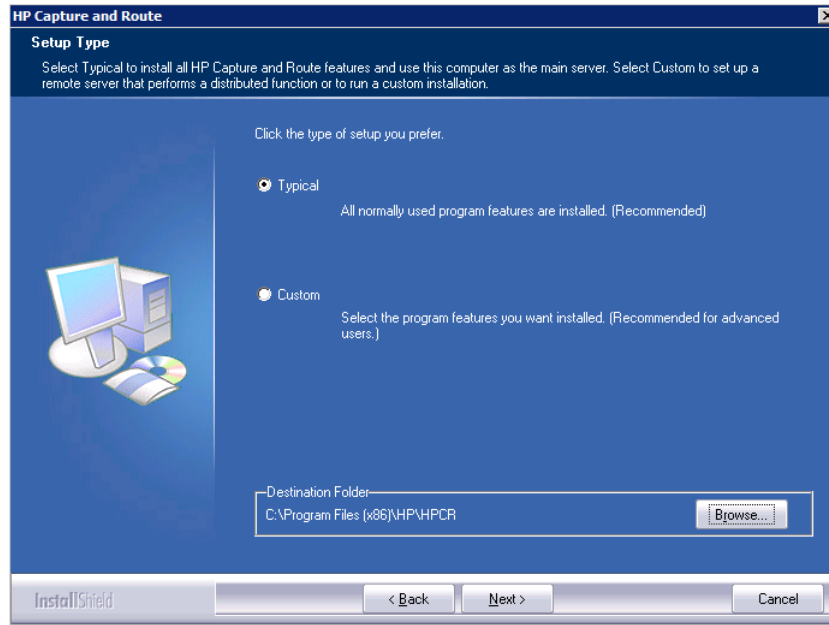


3. Click **Next**. The setup shows the **License Agreement** page.



4. Scroll down through the End-User License Agreement. Then, select **I accept the terms of the license agreement**.

5. Click **Next**. The setup shows the installation options.



NOTE: The default destination folder is: [C:\Program Files \(x86\)\HP\HPCR](#)
 You can change the destination if necessary by clicking **Browse** and then selecting the desired location.

6. Select one of the following:

- **Typical** for an installation that does not support faxing from a Telco connector.
- **Custom** to select options, such as the modem server.

If you selected **Custom**, select options for the HP CR server installation. The following features must **always** be selected:

- Message Server
- Connector Package
- Component Package
- Server Administrator



IMPORTANT: Select the Modem Server option to support faxing with a local modem server.

7. Review the results and perform one of the following listed actions.



IMPORTANT: If Microsoft Office is partially detected by the setup, exit the setup and verify that Office is configured for first-time use. Start an Office application and, if prompted, enter a user name and initials. Wait for a new document to open and then exit the Office application. If Microsoft Office is still only partially detected, verify that Word, Excel, and PowerPoint are installed and continue with the HP CR server installation.

- To exit the setup or to install components that are required for the installation, click **Cancel** and then click **Yes** to exit the setup.
- To continue with the installation, click **Next**. The setup requests logon credentials for the HP CR service account. By default, the **User Name** field is populated with the name of the user logged into Windows.

8. Provide the HP CR service account logon credentials:
 - a In the **NT Domain** field, enter the Windows domain name.
 - b In the **User Name** field, enter the user name.
 - c In the **Password** and **Confirm Password** fields, enter the user password.
 - d Click **Next**. The setup validates the user account and then displays options for the message database.

9. Complete the database configuration:
 - a If the setup detects **Microsoft SQL Server Express 2008**, verify that the **Server** field is populated with the name of the server running the Microsoft SQL server database application and that `\SQLExpress` is appended to the server name.

If the setup detects **SQL Server 2008 SP2**, verify that the **Server** field is populated with the name of the server running the Microsoft SQL server database application.

NOTE: The default value is the local server where the setup is running.

NOTE: Special instructions apply to an HP CR server cluster. For the first server being set up, enter the database server name. For the second server being set up, allow the setup to create a local database. (The second server is configured to use the database server, so the local database is not used.) For more information, refer to [Section 14: Setting up an HP CR server cluster](#) (139).

b In the **Database** field, review the message database name and modify it if necessary.

NOTE: During installation, the database is created on the HP CR server in:

... \HP\MessageServer\Database

c Select the authentication method that the HP CR services use to access the database. Choose one of the following:

- **Use Windows Integrated Authentication** to use the HP CR service account. This is the default.
- **Use SQL Authentication** to use SQL server authentication. If you select this option, enter the logon credentials in the **User Name** and **Password** fields.

10. Click **Next**. The setup validates the connection to the database and displays installation settings.

11. Review the installation settings.

12. Click **Next** to proceed with the installation.

A message is displayed when installation is complete.

13. Click **Finish**. The setup launches the server configuration wizard (described in the next section).

NOTE: HP CR server can be found in the registry (see [Note about the registry keys location for HP CR server](#), 32) after installation is complete.

3-2 Completing the server configuration wizard

After the HP CR server is installed, the server configuration wizard launches automatically. The server configuration wizard must be completed before starting the HP CR Server Administrator.

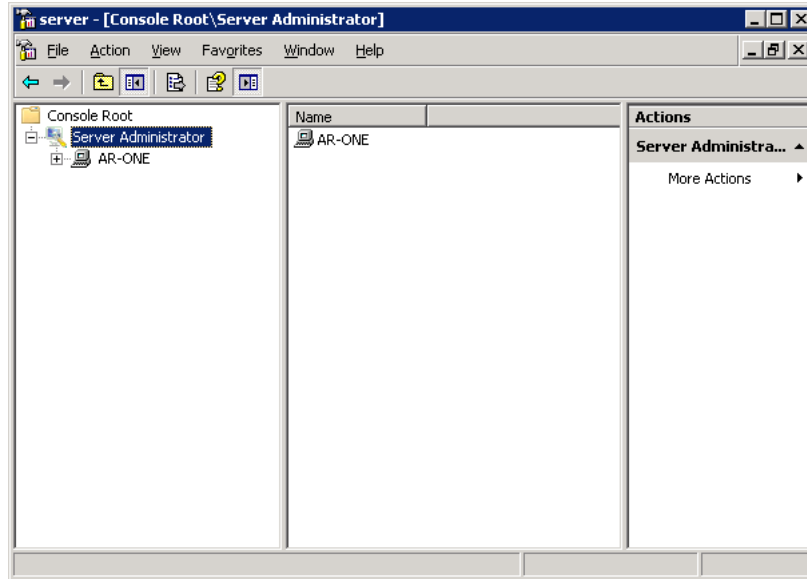
1. Verify that the server configuration wizard has opened and is showing a welcome message.



IMPORTANT: When setting up the passive server in an HP CR server cluster, exit the server configuration wizard and click **No** when prompted to run the wizard again when HP CR Server Administrator starts. See [Section 14: Setting up an HP CR server cluster](#) (139) for additional information.

2. Click **Next**. A message indicates the server configuration is completed.
3. Click **Finish** to close the wizard.

The server configuration wizard saves the configuration and starts the HP CR Server Administrator.



When the HP CR Server Administrator is closed, Microsoft Management Console displays a message about saving changes to the MSC file. This file records the current position of items in the console tree. To preserve the console state, save the changes.

If prompted to update the MSC file, click **Yes**.

3-2-1 Note about the registry keys location for HP CR server

The 64-bit operating system stores registry keys for 32-bit applications under Wow643Node. Therefore, when installing HP CR server, the HP CR registry keys are located in:

[HKLM\SOFTWARE\Wow6432Node\Omtool](#)

4 HP CR post installation review and configurations

The HP CR Server Administrator can be used for:

[Modifying the HP CR Server Administrator](#) (33)

[Modifying components](#) (56)

[Modifying connectors](#) (64)

[Implementing and configuring the HP CR Intelligent Device Client](#) (71)

4-1 Modifying the HP CR Server Administrator

The HP CR Server Administrator is used for many functions with the HP CR server, such as to configure and manage connectors, configure and manage components, add group permissions, and dispatch rules. To launch the HP CR Server Administrator:

Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator**.

As described in this section, HP CR Server Administrator modifications include the following:

[Activating the server license](#) (33)

[Specifying the originator of notification messages](#) (35)

[How the routing rules work after installation](#) (36)

[Configuring group permissions](#) (37)

[Managing the Web Client views](#) (55)

[Managing devices](#) (55)

The HP CR Server Administrator also can be used to monitor message traffic and MFP device configuration. For details related to these tasks, refer to the [HP CR administrator on-line help](#).

4-1-1 Activating the server license

After installation, the server uses a 60-day demonstration license. At some point during this time, the server license should be activated. This can be done automatically or through a manual method, depending on whether the HP CR server has access to the internet.

4-1-1-1 Automatic license activation

Have available a copy of the **Activation Code** received with the software package.

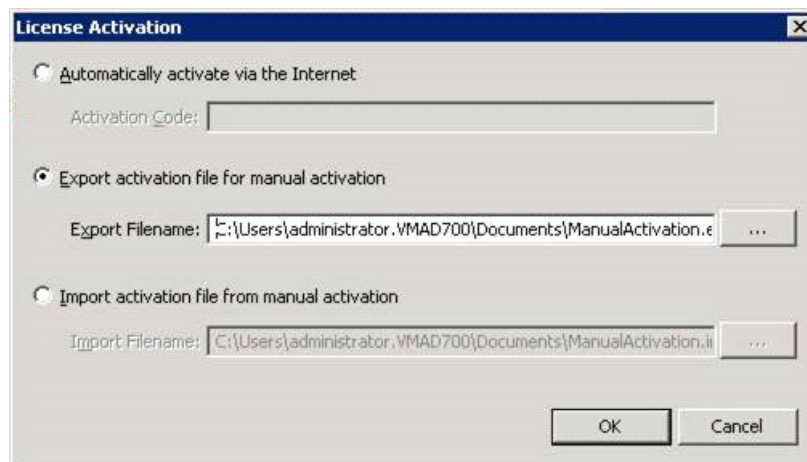
1. Launch HP CR Server Administrator and expand the tree view.
2. Select the server name. Right-click and select **Licensing...**
3. Click the **Activate License...** button.
4. Select the **Automatically activate via the Internet** option.
5. Paste the **Activation Code** in the **Activation Code** page.

6. Click **OK**. The server is updated with the new license.
7. Click **Close** to complete the procedure.

4-1-1-2 Manual license activation

Have available a copy of the **Activation Code** received with the software package.

1. Launch HP CR Server Administrator and expand the tree view.
2. Select the server name. Right-click and select **Licensing...**
3. Click the **Activate License...** button.
4. Select the **Export activation file for manual activation** option.
5. Browse to a location to save the file.



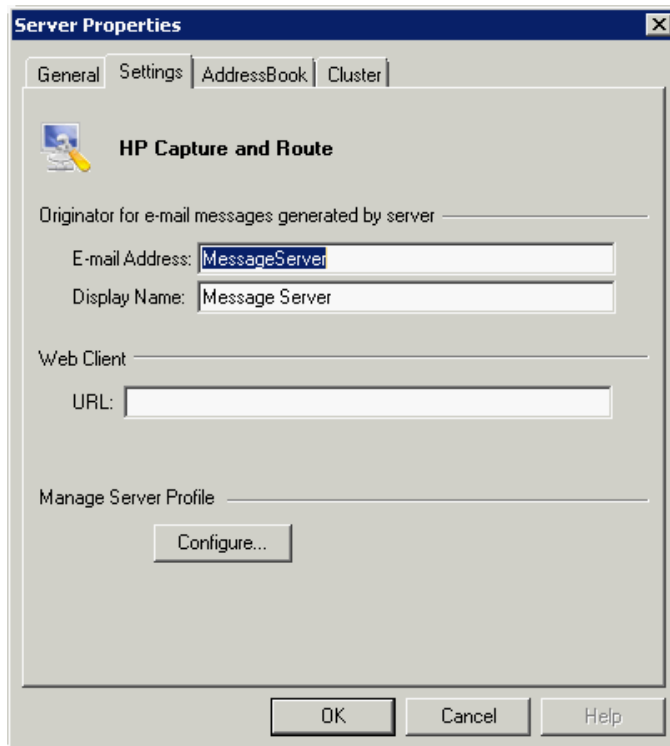
6. From a system with internet access, launch the web browser and go to: <https://license.omtool.com/manual>
The **Manual License Portal** page opens.
7. Paste the **Activation Code** in the **Activation Code** page.
8. Browse to the [ManualActivation.exp](#) file created in Step 5. Click **Upload**, then click **NEXT**.
9. Click **Download** and save the [ManualActivation.imp](#) file to a location available on the HP CR server.
10. From the HP CR Server Administrator, select the server name. Then, right-click and select **Licensing...**
11. Select the **Activate License...** button.
12. Select the **Import activation file from manual activation** option.
13. Browse to the saved [ManualActivation.imp](#) file.
14. Click **OK**. The license has been updated.
15. Click **Close** to complete the procedure.

4-1-2 Specifying the originator of notification messages

The HP CR server generates notification messages for various events and sends them to users through the HP CR connectors for SMTP. The display name and email address associated with these notification messages can be set in the HP CR server properties. It is recommended that these attributes are set using a valid email address so users can reply to notification messages if they require assistance. (The default display name is Message Server and the default email address is MessageServer.)

To specify the originator of notification messages generated by the HP CR server:

1. Launch HP CR Server Administrator and expand the tree view.
2. Right-click the HP CR server in the console tree and select **Properties**. The **Server Properties** page opens.
3. Click **Settings**.
4. In the **Email Address** text box, enter the email address that should be associated with notification messages generated by the HP CR server.
5. In the **Display Name** text box, enter the name that should be associated with notification messages generated by the HP CR server.



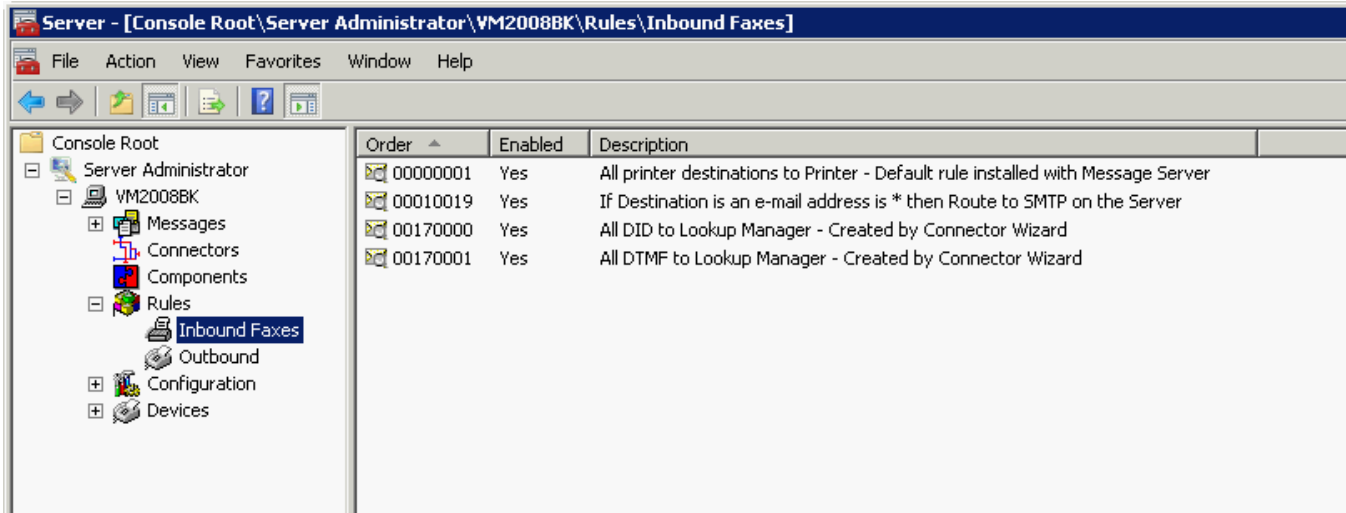
6. Click **OK** to save changes to the server properties.

4-1-3 How the routing rules work after installation

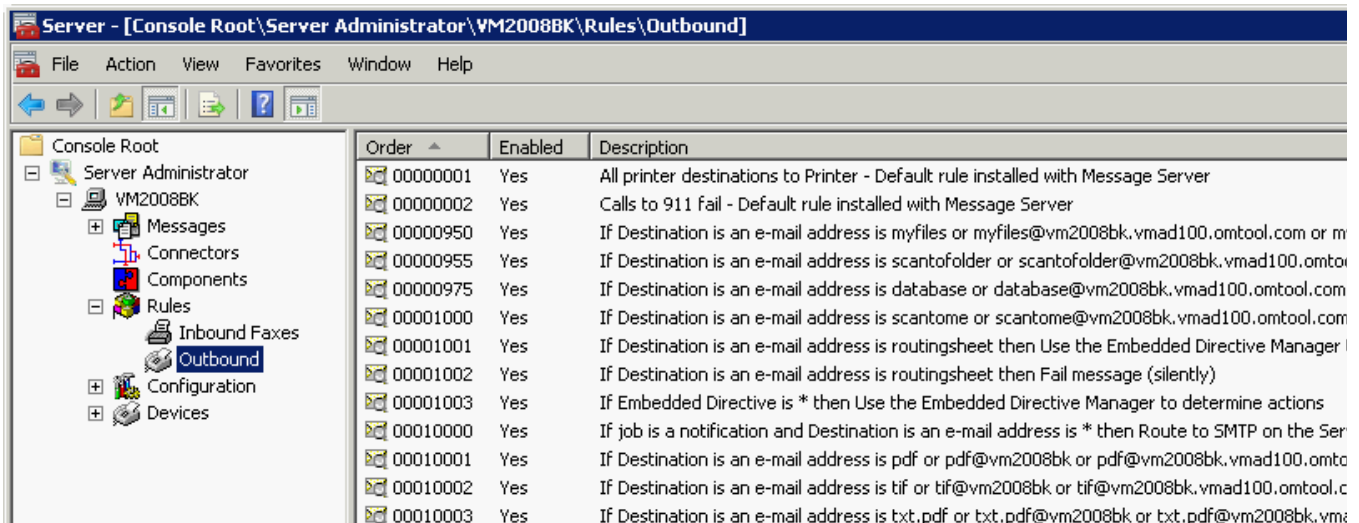
When a message arrives on the HP CR server via a connector, the server tries to match the message to the most appropriate routing rules to determine how it should be processed. When the message matches a routing rule, the HP CR server begins processing the message according to the instructions associated with that rule. Some routing rules are created automatically when you install the HP CR server.

Routing rules can be inbound or outbound.

- **Inbound Faxing** - The Inbound folder in the console tree defines all of the inbound fax routing rules. The HP CR server uses the inbound rules when processing inbound fax messages. The rules are listed in the same order they are used in processing messages.



- **Outbound** - The Outbound folder in the console tree lists all outbound rules defined for the HP CR server and uses the outbound rules to process outbound messages. The rules are listed in the same order they are used in processing messages.



You can associate up to five criteria with a rule. If you want to set more than five criteria for a rule, create the rule with the first five criteria, make a copy of the rule, add the next five criteria, and so on.

Routing rules are preconfigured after installation. Only custom rules need to be created.

4-1-4 Configuring group permissions

The configuration node allows the HP CR Server Administrator to configure group permissions as well as custom options, validators, properties, and Web Client views. Details can be found below, as well as in the [HP CR administrator on-line help](#) (“Configuring group user permissions” topic).

The server functions that use group access permissions are:

- **Clients** - determines whether the members of the group have permissions to use the end user interface client
- **Prompts** - determines what pre-configured prompts the members of the group can use
- **Scan Settings** - determines whether the members of the group can use and configure scan settings for a particular device or device group
- **Custom Options** - determines what configured custom options the members of the group can use
- **Printers** - indicates configured printers that are available as a destination by members of the group
- **Folders** - indicates configured folders that are available as a destination by members of the group

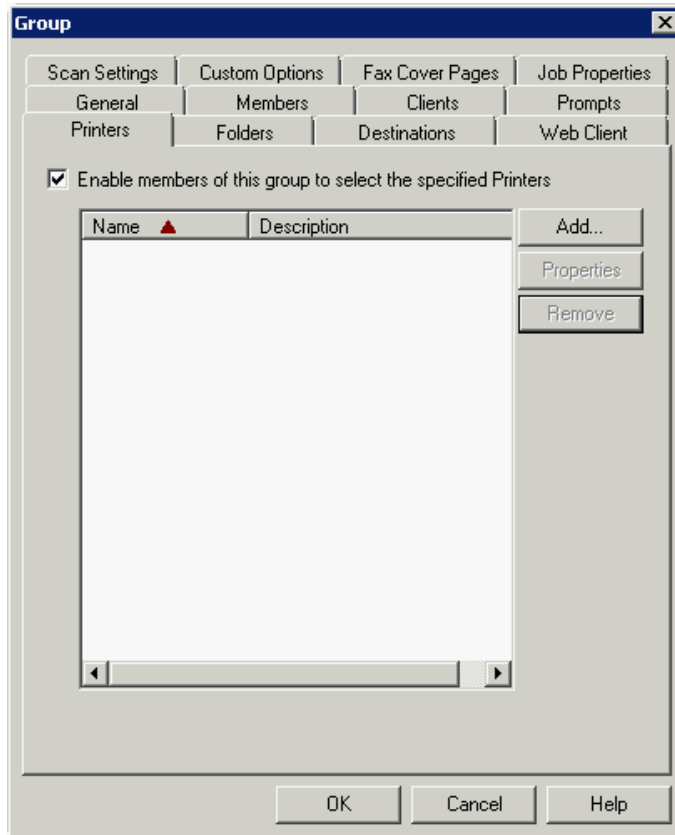
4-1-5 Adding and configuring network printers for groups

4-1-5-1 Adding network printers

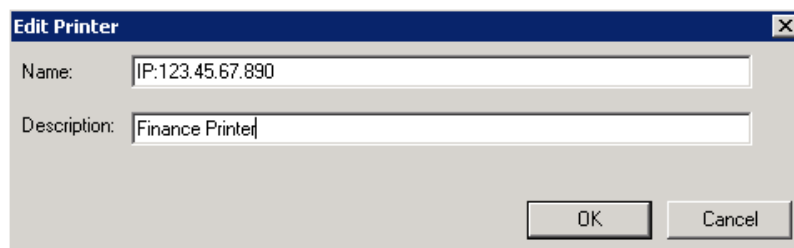
The HP CR End User Interface will read the list of configured network printers on the HP CR server. Before the network printers are listed in the HP CR End User Interface, the network printers must be added to the **Printers** tab in the **Groups** section of the HP CR Server Administrator, as described below.

1. Install the printer driver on the HP CR server using the standard Windows installation procedure.
2. Launch HP CR Server Administrator, expand the tree view, and click **Configuration > Groups**.
3. In the right pane, double-click on the **Default** group (or applicable group). The **Group** page is displayed.
4. Click on the **Printers** tab.

5. Select **Enable members of this group to select the specified Printers**.



6. Click the **Add** button. The **Add Printer** page is displayed.
7. Enter the printer information. For example:



8. Click **OK**. Click **OK** again to save the changes. Refer also to [Selecting a network printer](#) (109).

4-1-5-2 Modifying network printer properties

1. Launch HP CR Server Administrator, expand the tree view, and click **Configuration > Groups**.
2. In the right pane, double-click on the **Default** group (or applicable group).
3. Click on the **Printers** tab.
4. Highlight the printer that needs to be modified and click **Properties**.
5. On the **Edit Printer** page make all needed changes and, when finished, click **OK**.
6. Click **OK** again to close the **Group** page.

4-1-5-3 Removing a network printer

1. Launch HP CR Server Administrator, expand the tree view, and click **Configuration > Groups**.
2. In the right pane, double-click on the **Default** group (or applicable group).
3. Click on the **Printers** tab.
4. Highlight the printer that needs to be modified and click **Remove**.
5. Click **OK** to close the **Group** page.

4-1-6 Adding and configuring network folders for groups

In certain capture scenarios it is desirable for the HP CR server to impersonate the user who has submitted the document for processing when uploading that document to network storage. When a user logs into a device and provides both a network user name and password, the HP CR captures those credentials in a secure manner and passes them to the HP CR server. The server can then use the credentials to log in as that user when uploading the delivered document to a network folder.

NOTE: Capture and use of login credentials requires configuration for the device buttons as well as the correct permissions for the account used in delivering to the network storage.

4-1-6-1 Requirements for using a folder (UNC or FTP)

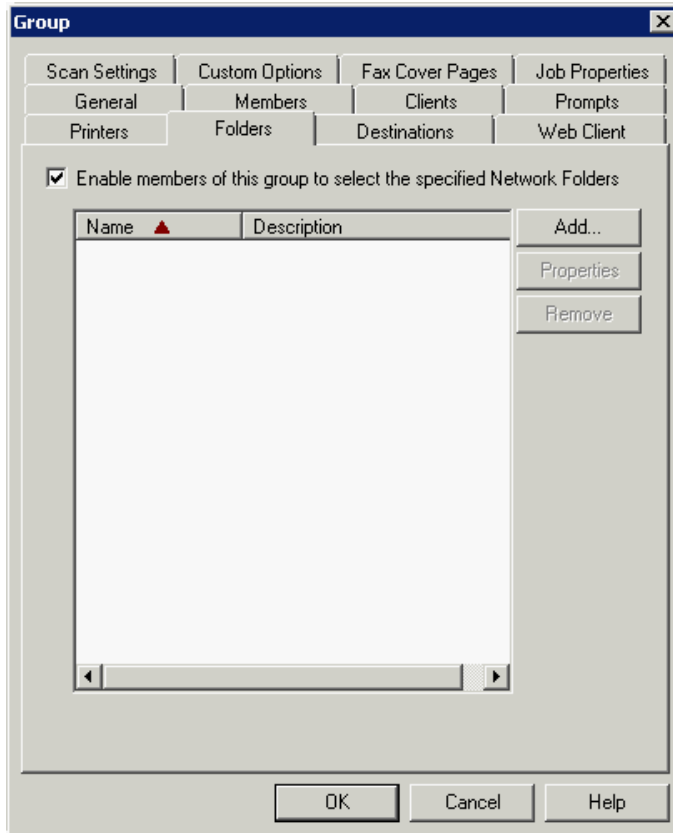
When using a network folder, be sure the following requirements are met:

- The folder is remote from the HP CR server
- The folder has appropriate permissions for user access

4-1-6-2 Adding a network folder

1. Launch HP CR Server Administrator, expand the tree view, and click **Configuration > Groups**.
2. In the right pane, double-click on the **Default** group (or applicable group).
3. Click on the **Folders** tab on the **Group** page.

4. Select **Enable members of this group to select the specified Network Folders**.



5. Click the **Add** button.

6. In the **Folder Type** drop-down, select **UNC** or **FTP**.

NOTE: Information for adding a network folder for FTP support is included in this procedure. For details about FTP and FTPS support and configuration, refer also to [FTP and FTPS support requirements](#) (45).

7. Identify a path for the network folder. Note that all network folders must be on a remote share (not on the HP CR server).

For a UNC network folder:

In the **Address** field, enter the UNC path of the shared network folder. For example:

`\\<server_ip_address>\HP\HPCR\shared`

NOTE: The server IP address or the computer name can be used in the UNC path.

For an FTP network folder:

In the **Address** field, add an FTP address.

- The FTP address can be either the machine name or the IP address of the machine.
- When entering the address, you can point it either to the root of the FTP or to a subfolder if one exists. Examples are:

`ftp://123.45.67.89`

`ftp://123.45.67.89/Sales`

8. If desired, enter a description in the **Description** field. This will display in the Web Client under the **Select Destinations** drop-down.

9. You can select one of two methods to connect to the folder:

- **Service Account** - The service account that starts the HP CR services will need permissions to the folder. When a document is stored in this folder, the service account is the user responsible for storing it.
- **Specific Account** - Enter a user name and password. Regardless of who was authenticated at the device, this specific user will store the document in the folder and requires permissions at the operating system level.

For FTP support, add a **Specific Account** user to connect to the FTP. Ensure that this user has privileges to write to the FTP site.

In addition, you can select:

- **Use user supplied credentials if available** - When a user authenticates to the device, this authentication is passed through to be used to store the document to a folder. If the authentication is not available, such as when a feature that does not require authentication is selected, either **Service Account** or **Specific Account** will be used (whichever is selected).
- **FTP Settings** - Use these options to further define the FTP destination.

NOTE: For FTPS, select the **Explicit TLS (Connects on port 21)** option.

Example for a UNC folder:

The screenshot shows the 'Add Folder' dialog box with the following configuration:

- Folder Type:** UNC
- Address:** \\<server_ip_address>\HP\HPCR\shared
- Description:** Shared Folder
- Connect Using:**
 - Service Account
 - Specific Account
 - User:** [Empty text box]
 - Password:** [Empty text box]
- Use user supplied credentials if available
- FTP Settings:**
 - Unsecured connection
 - Explicit TLS (Connects on port 21)
 - Explicit SSL (Connects on port 21)
 - Implicit TLS or SSL (Connects on port 990)
 - Passive Transfer
 - Allow connection to servers with improper certificates

Buttons: OK, Cancel

Example for an FTP folder:

Add Folder

Folder Type:

Address:

Description:

Connect Using:

Service Account

Specific Account

User:

Password:

Use user supplied credentials if available

FTP Settings:

Unsecured connection

Explicit TLS (Connects on port 21)

Explicit SSL (Connects on port 21)

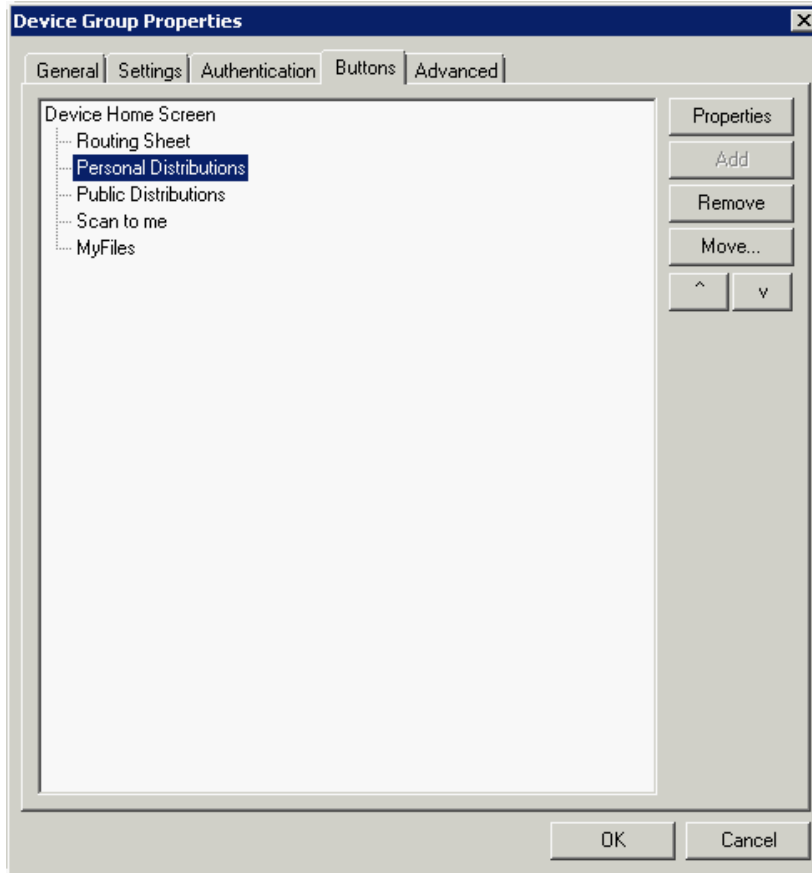
Implicit TLS or SSL (Connects on port 990)

Passive Transfer

Allow connection to servers with improper certificates

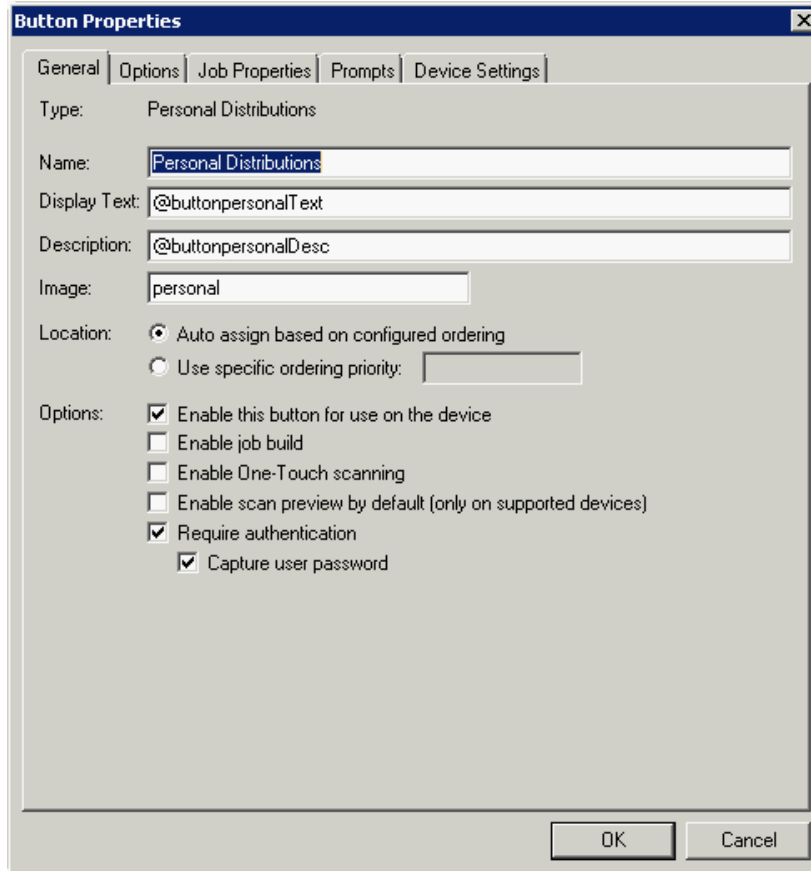
10. Click **OK** to return to the **Group** page.
11. Click **OK** again to save and close the **Group** page.
12. To capture the user's credentials at the device, the device feature will also need to enable the **Capture user password** feature. To configure **Capture user password** at the device:
 - a Expand the **Devices** node.
 - b Right-click the Group that the device belongs to and select **Properties**.
 - c Click the **Buttons** tab.

- d Select a feature that will capture the user password (such as Personal Distributions).



- e Click **Properties**.

- f Select the **Require authentication** and **Capture user password** options at the bottom of the screen.



- g Click **OK** to close the **Button Properties** page.

Repeat Steps d through g for any features that capture the user's credentials at the device.

NOTE: If the **Connect Using** folder settings are changed, any previously created distributions will need to be updated to reflect the changes.

13. Click **OK** to close the **Device Group Properties** page.

NOTE: Permission (at the share level) for capture and use of user credentials requires that the user account specified or the group the user belongs to has read/write privileges.

4-1-6-3 Modifying network folder properties

1. Launch HP CR Server Administrator, expand the tree view, and click **Configuration > Groups**.
2. In the right pane, double-click on the **Default** group (or applicable group).
3. Click on the **Folders** tab.
4. Highlight the folder name that needs to be modified and click **Properties**.
5. On the **Edit Folder** page make all needed changes and, when finished, click **OK**.
6. Click **OK** again to close the **Group** page.

4-1-6-4 Removing a network folder

1. Launch HP CR Server Administrator, expand the tree view, and click **Configuration > Groups**.
2. In the right pane, double-click on the **Default** group (or applicable group).
3. Click on the **Folders** tab.
4. Highlight the printer that needs to be modified and click **Remove**.
5. Click **OK** to close the **Group** page.

4-1-7 FTP and FTPS support requirements

If you will write documents to a network folder using FTP or FTPS, the following are required:

- FTP server
- HP CR End User Interface client
- HP MFP device configured with the Embedded Device Client for HP OXPd (any model)

The remainder of this section describes:

[FTP support configuration](#) (below)

[FTPS support configuration](#) (47)

[Sending to an FTP\(S\) destination in the Web Client](#) (49)

[Sending to an FTP\(S\) destination on an HP MFP](#) (52)

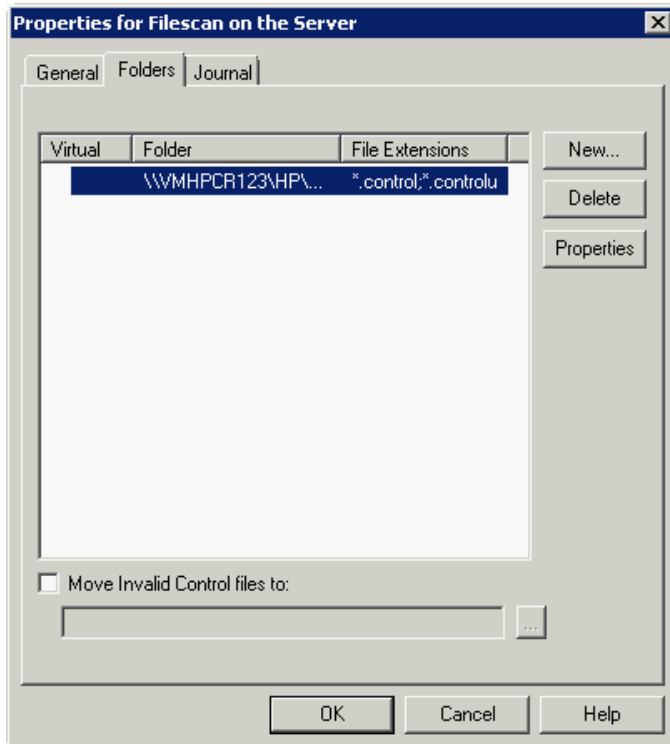
4-1-7-1 FTP support configuration

Installing and configuring a Filescan connector for FTP support

- The Filescan connector is installed by default.
- Do not set the Filescan connector to virtual mode.
- Leave the folder path as the default folder path defined during installation.

NOTE: When the Filescan connector is created, a default Filescan rule is created. The FTP destination will match this rule and be delivered for the final destination using the default.

There is no special Filescan rule that needs to be created in order for FTP support to function.



Setting up and configuring the FTP server

1. Install an FTP on the HP CR server (or remotely).
2. Configure the server and assign users.

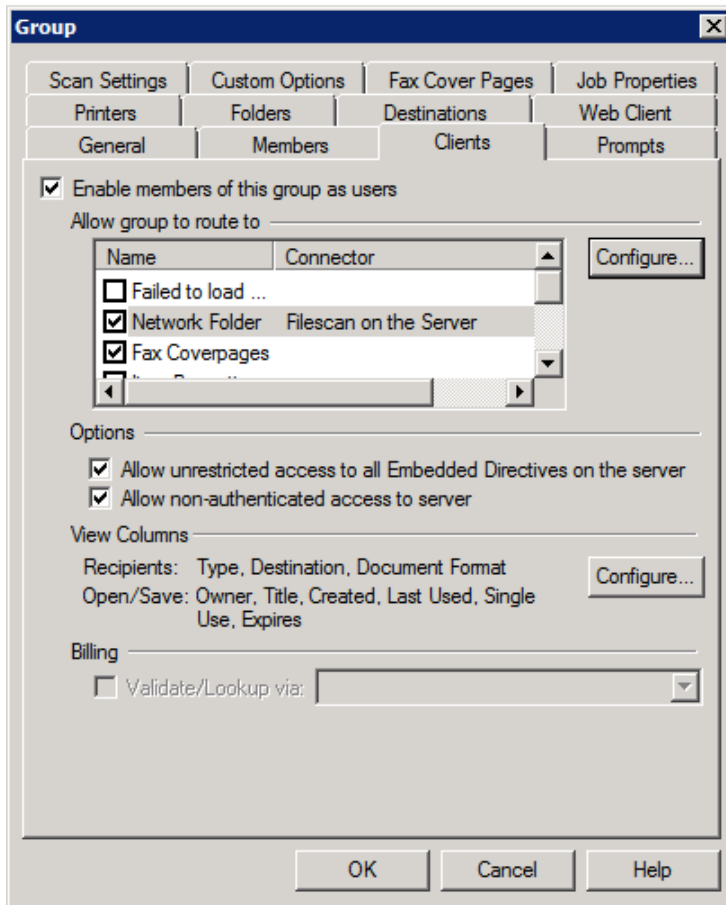
Configuring FTP support

FTP support is installed, by default, for HP CR. To verify that FTP support is installed properly, complete the procedure in [Adding a network folder](#) (39), if you have not already done so.

Enabling an FTP destination for use with the Web Client

1. In the tree view, click **Configuration > Groups** and select the **Default** group.
2. Double-click a group to display the **Group** properties dialog.

- Click on the **Clients** tab and select the **Enable members of this group as users** option.



- In the **Allow group to route to** list, locate **Network Folder** and enable it.
- Click **OK** to finish.

4-1-7-2 FTPS support configuration

Setting up and configuring FTP server for FTPS support

- Launch server manager.
- Navigate to **Roles > Web server(IIS)**.
- Click on **Add Role Services**.
- Select the **FTP server** and click on **Install**.

FTP server is installed on the HP CR server.

Creating an FTPS site

- Launch Internet Information Services (IIS) Manager.
- Double-click on the **Server Certificates** and create the "Self-assigned" certificate.
- Expand the tree view and, in the **Connections** pane, expand the tree for the server name. Select **Sites**.
- From the **Actions** pane, select **Add FTP Site**.

5. Complete the **Add FTP Site** wizard:
 - a In the **FTP site name** field, enter a name for this FTP site.
 - b In the **Physical path** field, enter the location of your site or where you want the FTP site files to go.
 - c Click **Next**.
 - d Set the IP address that you want to use for FTP.
 - e Select **Allow SSL**.
 - f Select the created “Self-assigned” certificate from the **SSL Certificate** drop-down list.
 - g Click **Next**.
 - h Select **Basic** authentication.
 - i Select **All users** on the **Allow access to** drop-down.
 - j Select **Read** and **Write** from **Permissions**.
 - k Click **Finish**.

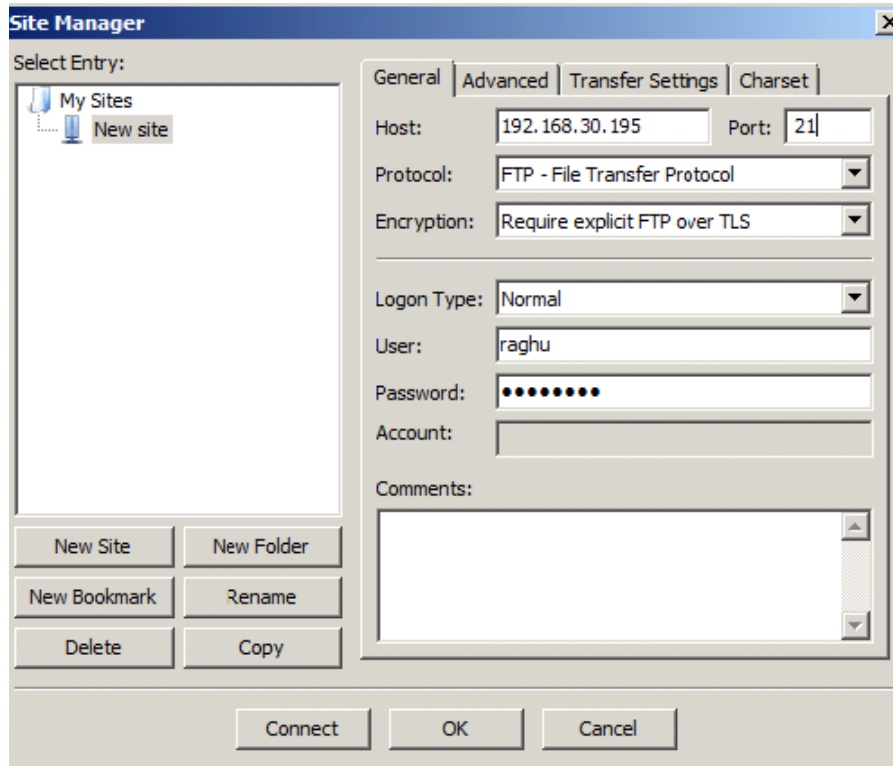
You should see the name of your FTP site under the main **Sites** pane.

6. Double-click on the FTP site that you set up from the main pane, or expand **Sites** from the tree view and select the FTP site that you set up.
7. Check folder permissions on the folder to which you pointed the FTP site:
 - a Click **Edit Permissions** under the **Actions** pane.
 - b Click the **Security** tab. Add **Everyone** and give all permissions to it.
 - c Make sure the user that you created above has modify rights to the folder.
8. With the FTP site that you created above selected in the IIS Manager, launch the FTP User Isolation module by clicking on the **FTP User Isolation** icon.
9. Change the isolation method from **FTP root directory** to **User name directory (disable global virtual directories)**.
10. Click **Apply** under the **Actions** pane.
11. Go back to the root of your FTP Site.
12. Create a virtual directory named **Local User** (for example: [User A](#)):
 - a Right-click on **Test FTP Site** from the tree view and select **Add Virtual Directory**.
 - b Enter the **Alias** as **LocalUser** (for example: [User A](#)). Note that this name is case-sensitive.
 - c Enter the **Physical path** as the path given for FTP site. For example:
[C:\inetpub\ftproot](#)
 - d Click **OK**.
13. Authorize the domain users in FTP:
 - a In IIS Manager, select your FTP Site and then the **FTP Authorization Rules** module.
 - b You can authorize users to access the FTP site using one of these options:
 - Add the individual users or groups.
 - Allow all authenticated users. By default, individual users or a user group are added when setting up isolated users.

Testing the FTPS connection

To test the FTPS connection, install FileZilla Client.

1. Install FileZilla(3.5.3).
2. Launch FileZilla.
3. Navigate to **File > Site manager > New Site**.



4. Provide the details for the respective fields and click **Connect**.

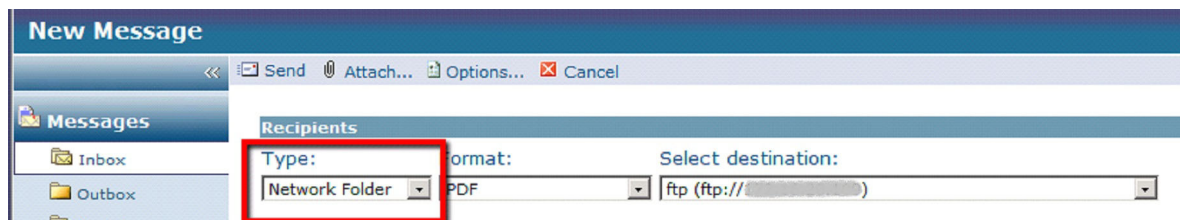
FTPS site will be connected to the specified path.

FTPS support configuration on the HP CR server

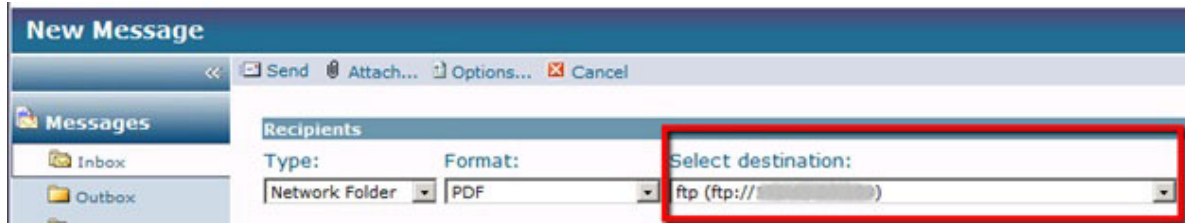
FTP support is installed, by default, for HP CR. To verify that FTP support is installed properly, complete the procedure in [Adding a network folder](#) (39), if you have not already done so.

4-1-7-3 Sending to an FTP(S) destination in the Web Client

1. Install and configure the HP CR Web Client.
2. Open the Web Client.
3. Select **Messages > New**.
4. In the **New Message** dialog, select **Network Folder** as the **Type**.

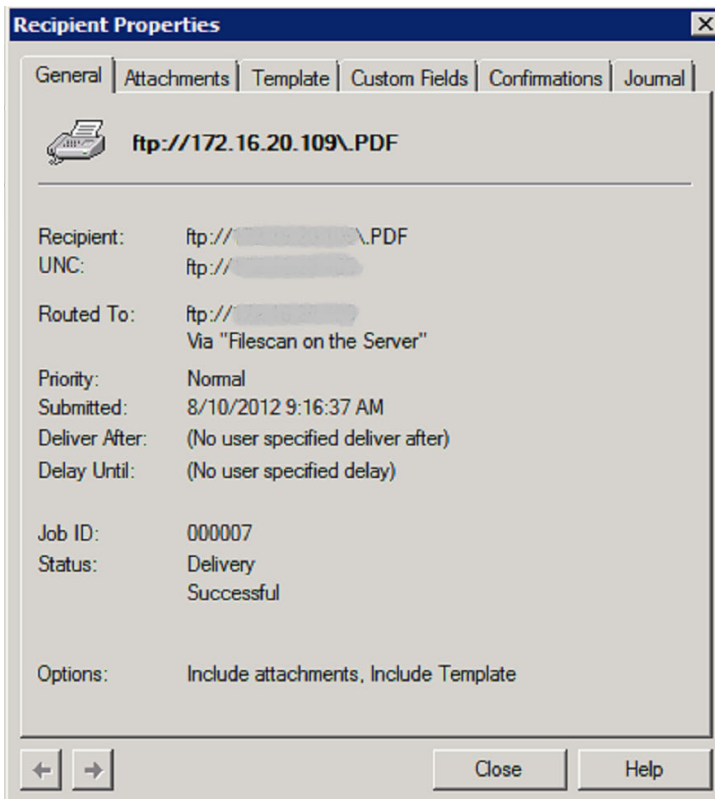


- In the **Select destination** drop-down, select the FTP folder.

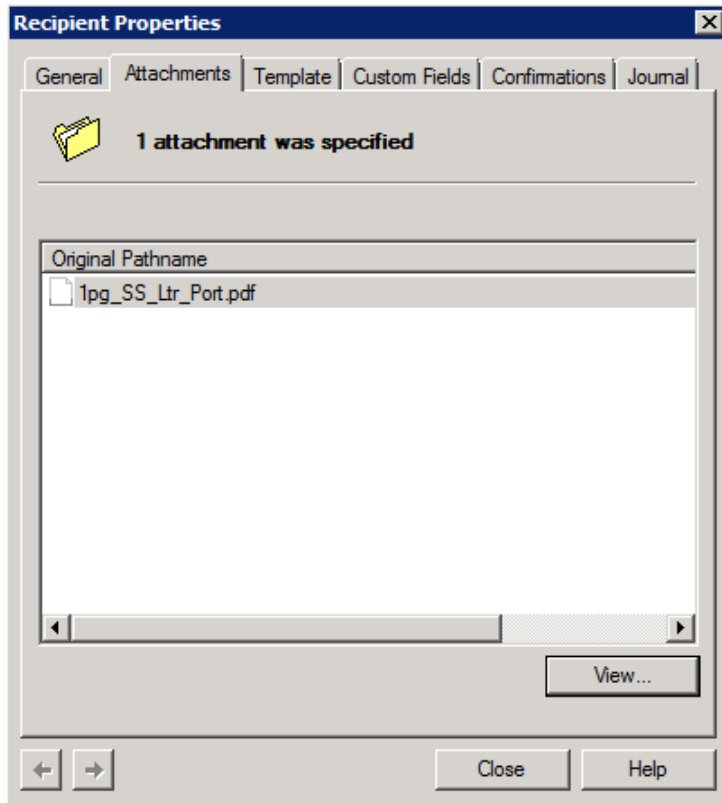


- Complete all needed fields to send a message, then send the message to the HP CR server. The job will be delivered to the destination via FTP with the following Recipient properties:

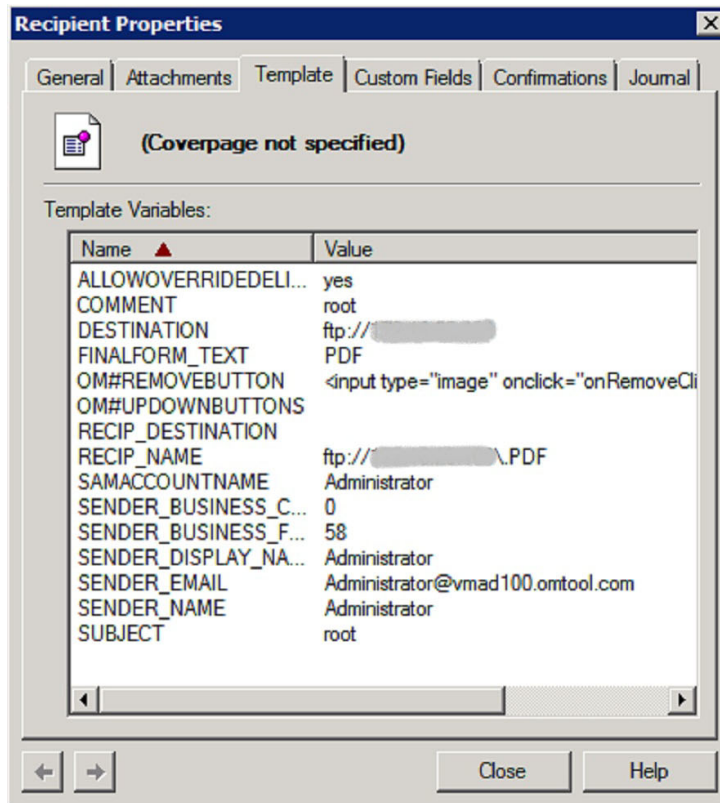
General



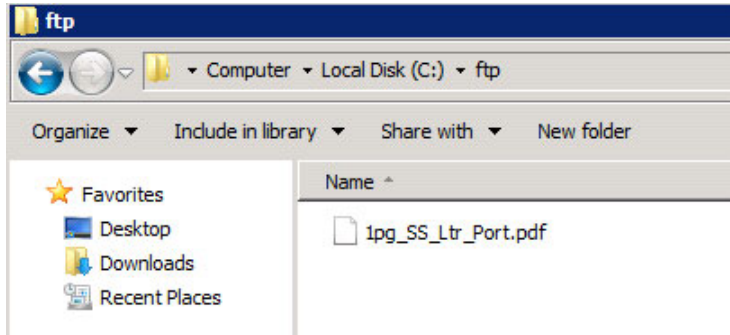
Attachments



Template



The attachment will be delivered to the FTP destination that was specified when creating the network folder in the HP CR server.



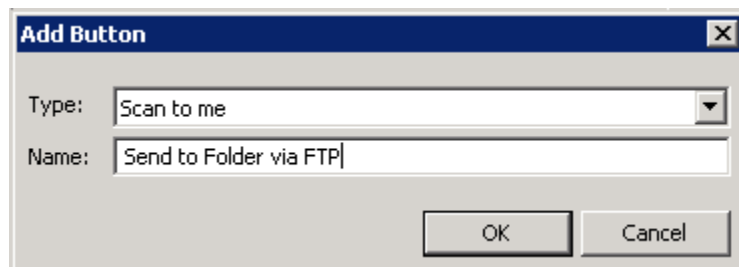
4-1-7-4 Sending to an FTP(S) destination on an HP MFP

Method One: Creating an Embedded Directive for use with FTP(S)

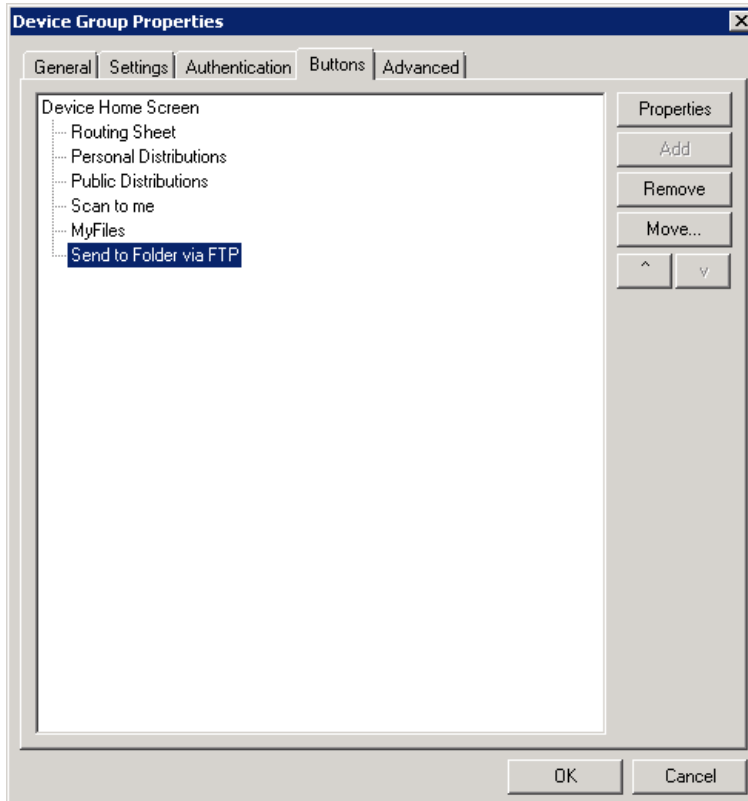
1. Open the Web Client and select **Distributions > New**.
2. In the **New Message** dialog, select **Network Folder** as the **Type**.
3. In the **Select destination** drop-down select the FTP folder.
4. Complete all needed fields to send a message, and then send the message to the HP CR server.
5. Walk up to the HP MFP.
6. Select **Public Distributions** (or **Personal Distributions**).
7. Select the newly created Embedded Directive that will be using FTP.
8. Scan a document.

Method Two: Creating a new button on the device using FTP(S) to a network folder

1. From the Web Client, create an Embedded Directive that:
 - Is public (published). In this way when it is used, the job will be from the scanning user rather than the Embedded Directive owner.
 - Routes to the Network folder using FTP.
2. Right-click on the device group and select **Properties**.
3. Click on the **Buttons** tab and select **Add**.
4. In the **Add Button** dialog, select **Scan to Distribution** in the **Type** drop-down.
5. Enter a **Name** for the button and click **OK**.



6. In the **Device Home Screen** tree view, select the new button that was just created and click the **Properties** button.

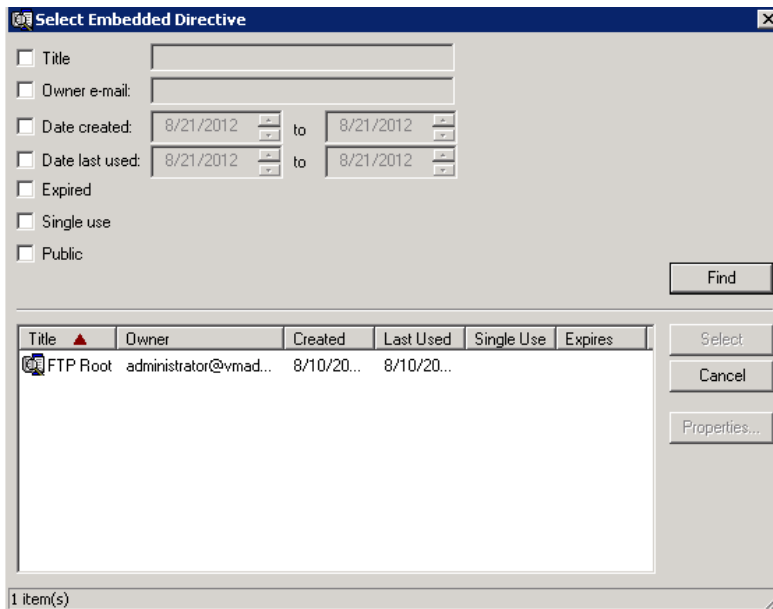


7. When the **Button Properties** dialog opens, click the **Options** tab.

- To choose a **Scan Distribution**, click the **Select** button.



- Search for and locate the Embedded Directive that will send via FTP to a network folder.



Highlight the Embedded Directive and click **Select**.

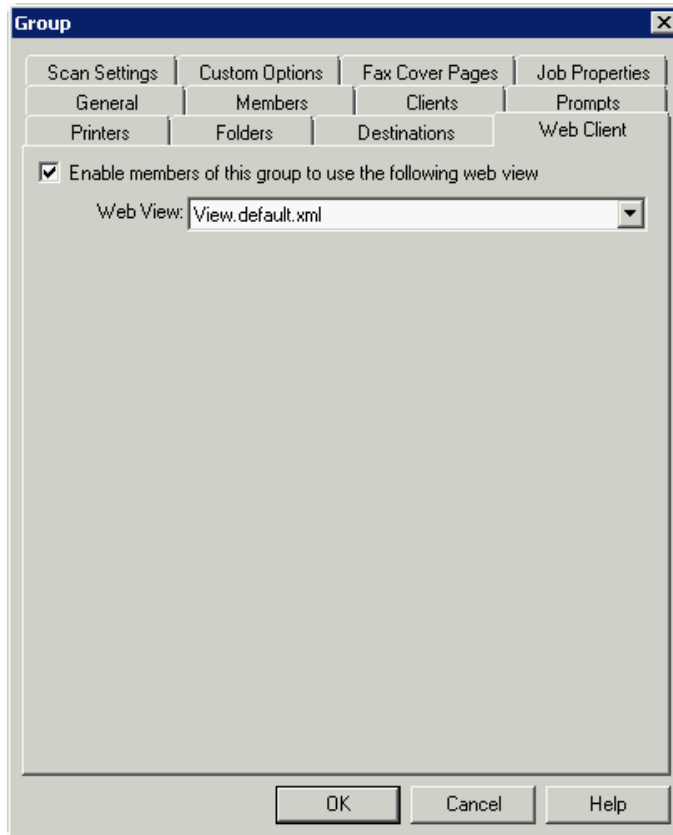
- Click **OK** to complete the setup.

A new button will be available on the device that will use FTP to scan to a network folder.

4-1-8 Managing the Web Client views

You can specify the Web Client view that will be used by members of a group. This enables members of the group to set up options to customize the HP CR End User Interface. See [Optional configuration - Customizing the HP CR End User Interface](#) (112).

1. Launch HP CR Server Administrator, expand the tree view, and click **Configuration > Groups**.
2. In the right pane, double-click on the **Default** group (or applicable group). The **Group** page opens.
3. Click on the **Web Client** tab.
4. Select **Enable members of this group to use the following web view**.



5. Select the appropriate XML for the Web Client view.
6. Click **OK** to close the **Group** page.

4-1-9 Managing devices

The Devices node enables you to manage devices and create groups of devices with customized buttons. Refer to the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#).

4-2 Modifying components

Within the HP CR server, the components perform functions such as composing the message into the format appropriate for the method of delivery, modifying the fax number if necessary, and determining whether a message requires status or fax preview processing. All components are managed by a Windows service called the Component Manager that manages the flow of messages through the components and processing steps of a message.

The following are automatically installed with the HP CR server:

- [Billing component](#) (56)
- [Compose component](#) (57)
- [Data Extractor component](#) (60)
- [Dispatch component](#) (60)
- [Embedded Directive Manager component](#) (60)
- [Lookup Manager component](#) (61)
- [Maintenance component](#) (62)
- [Notification component](#) (63)
- [Preview Manager component](#) (63)

4-2-1 Billing component

The Billing component extracts data from messages and populates a table in the Archive database with this information. The Billing component should be used for the Job Based Accounting function of HP Access Control. To configure the Billing component:

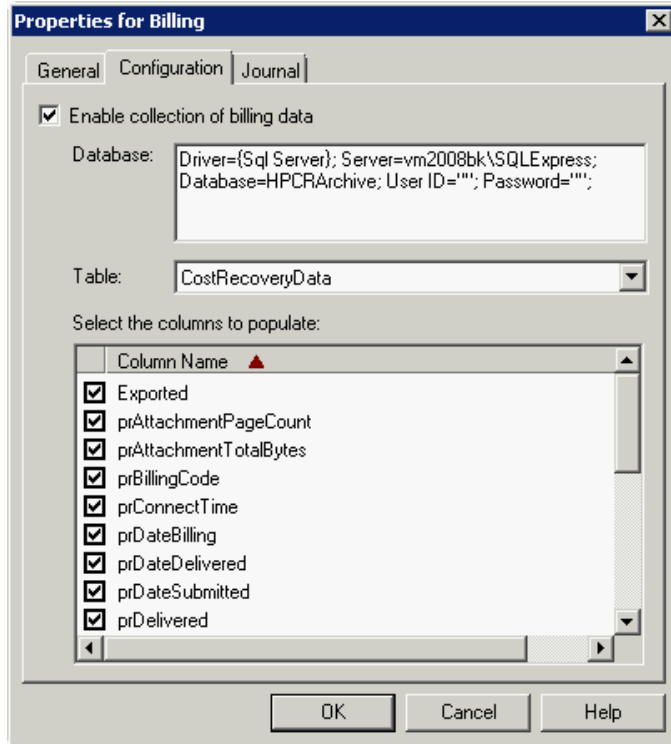
1. Launch HP CR Server Administrator, expand the tree view, and click **Components**. The Components are listed in the details pane.
2. Double-click **Billing** to open the **Properties for Billing** page.
3. Click **Configuration**.
4. Select the **Enable collection of billing data** option to enable billing.
5. Configure information in the **Database** section. Modify the Data Source Name (DSN) to point to an external ADO compatible database. By default, the DSN points to the HP Archive Database which includes a table to collect all Job Accounting data.
6. Verify that the **CostRecoveryData** table is selected in the **Table** drop-down menu. For information on this table, click [../About_the_CostRecoveryData_table.htm](#). If needed, select another table. The choices are **ArchiveTable** and **<No table selected>**.
7. In the **Select the columns to populate** section, uncheck the columns that should not be populated in the table. By default, all columns are selected.

Any column you do not select will not have data entered for it and must be either null or have defaults configured in the table itself. When writing a billing record, if you do not have a value for that column or you are not configured to place a value into a column, the null or default specified value is inserted in the column.

You must always have the following columns selected:

- **prDateBilling** - The value for this string is the billing date.
- **prGUID** - The value for this column should be nvarchar and is limited to 36 characters.

If you do not select these columns, you will see an error message indicating that the minimum requirements have not been met.



NOTE: Information in a Date field applies to the prDateSubmitted table in the database.

8. Click **OK** to save your changes.

4-2-2 Compose component

The Compose component (Composer) can deliver the original format or convert input (source) files from one file type into another file type (final file format). For example, when a PDF file is sent as a fax message, the file is converted into a final format of TIFF. The HP CR server supports the following final formats:

- DOC/DOCX (OCR text)
- PDF (text)
- PDF (image)
- PDF (image + hidden text)
- PDF/A (image + text)
- PDF/A (OCR text)
- RTF (OCR text)
- TIFF (image, single-page)
- JPEG (image, single-page)
- TXT (OCR text)
- XLS/XLSX (OCR text)
- XPS (OCR text)

In addition to composing into various formats, the Composer can be used to:

- Apply document compression.
- Meet the archiving standards set for composing to PDF/A formatting.

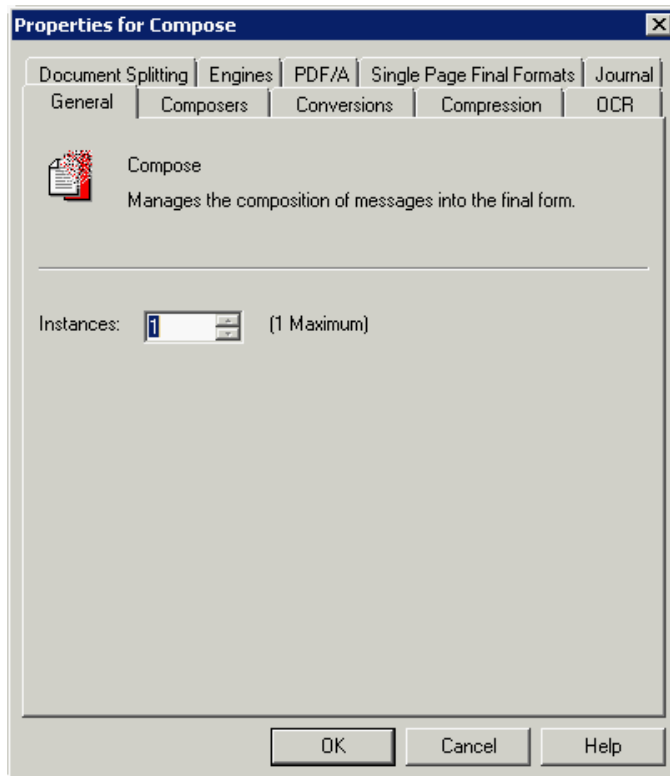
4-2-2-1 Configuring the Compose component for Microsoft Office automation

The Compose component can be configured to convert documents using the “Automation” conversion method, which utilizes a document’s native application to open the document so that it can be converted to the required delivery format. Automation is the recommended conversion method for Microsoft Office documents, because this method produces the highest quality conversion results and eliminates conversion errors that can occur with other methods.

NOTE: The following procedure is optional. However, for best results this procedure is highly recommended if you have Microsoft Office installed on the server. If Office is not being used in the LAN, or if automation is not the preferred method for converting Office documents, skip the following procedure.

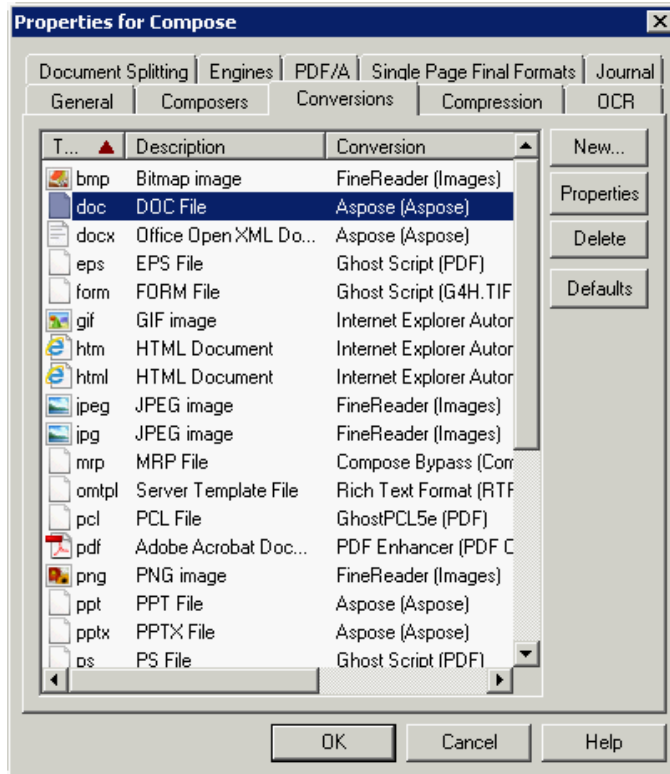
The Compose component manages conversion methods for all Composers for the HP CR server, so it is necessary to complete this procedure only once. To configure the Compose component to use the automation conversion method:

1. Verify that a supported version of Microsoft Office is installed on the HP CR server. For supported Office versions, see [Additional installation requirements](#) (9).
2. Launch HP CR Server Administrator, expand the tree view, and click **Components**.
3. Double-click **Compose**. The **Properties for Compose** page is displayed.

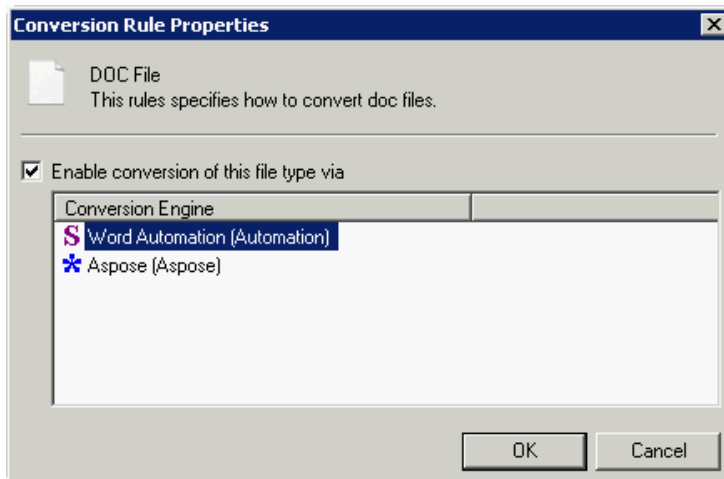


4. Click the **Conversions** tab.

5. Enable automation for **DOC** files. To do so, select **doc**.



6. Click **Properties**, select **Word Automation** (the Conversion Engine), and click **OK**.



7. Repeat the previous step for **DOCX**, **PPT**, **PPTX**, **XLS**, and **XLSX** file types (selecting the appropriate Conversion Engine for each).

NOTE: DOCX, PPTX, and XLSX are file types associated only with Office 2007. DOC, PPT, and XLS files are file types associated with Office 2003 and earlier, and are also compatible with Office 2007.

8. Click **OK** to save changes to the Compose component.

NOTE: The third-party conversion engine (Aspose) that HP CR uses by default for MS Office documents supports documents from Office 97 and later. Also note that when converting a DOC file to PDF using the Aspose engine, if the file includes comments with text strike-through, the PDF file does not show the strike-through marked on the contents in the document.

4-2-2-2 Configuring additional Compose component features

Refer to the Compose component topics in the [HP CR administrator on-line help](#).

4-2-3 Data Extractor component

The Data Extractor component allows for the extraction and mapping of barcode data from documents that pass through the HP CR.

This component can be set with a Regular Expression designed to detect a preset value in the third party vendor barcodes. The advantage of using Regular Expressions is that it allows HP CR to support third party vendor barcodes without the need for software updates.

How the Data Extractor component works after installation

The data extractor is enabled by default. To configure it for use with Regular Expressions, refer to the [HP CR administrator on-line help](#) (“Configuring the Data Extractor with regular expressions” topic).

4-2-4 Dispatch component

The Dispatch component determines the final system destination for each message. The final system destination is the part of the HP CR server that routes a message to its intended recipient (also known as the recipient destination). The recipient destination is an email address, fax number, folder name, or printer name. The Dispatch component also normalizes the phone number for outbound faxes.

How the Dispatch component works after installation

Dispatch is set up completely for all installations. There is no need to configure this component beyond the default setup.

The Dispatch component converts a destination number into a fully qualified number that would be meaningful to someone located anywhere in the world. To review normalization properties and rules, refer to the [HP CR administrator on-line help](#).

4-2-5 Embedded Directive Manager component

The Embedded Directive Manager component manages embedded directives for the server, and performs tasks such as:

- Creating embedded directives for Routing Sheets and managing them for the server. (You must use the HP CR Client to generate a Routing Sheet.)
- Detecting and decoding embedded directives in Routing Sheets. (If a document with a Routing Sheet enters the server via a network scanning device, the Routing Sheet must be the first or last page in the scanned document.)
- Applying embedded directives to messages. (You can create an embedded directive using the HP CR Client, and then apply the embedded directive to documents via inbound or outbound rules.)

You can have only one instance of this component. You cannot modify this setting.

How the Embedded Directive Manager component works after installation

The Embedded Directive Manager can scan outbound messages for embedded directives and decodes them after you create one or more outbound routing rules. These rules specify the criteria for messages the HP CR server will route to the Embedded Directive Manager.

For more information, refer to Embedded Directive Manager topics in the [HP CR administrator on-line help](#).

4-2-6 Lookup Manager component

The Lookup Manager component matches DID extensions to the appropriate HP CR user. This component uses LDAP to find matches to user objects stored in Microsoft Active Directory. The Lookup Manager component can route messages to multiple users that all share the same extension number. For example, if one DID extension is assigned to five users, the Lookup Manager component routes all messages destined for that DID extension to all five users.

How the Lookup Manager component works after installation

DID lookup must be manually configured in the SMTP connector after installation if inbound faxes are being routed to users via the Lookup Manager.

To configure the Lookup Manager component:

1. Launch HP CR Server Administrator, expand the tree view, and click **Connectors**. The details pane lists the connectors that are licensed with your server.
2. Double-click the **SMTP** connector to open the **Properties** page.
3. Select the box beside **Enable DID Lookup via this connector** option if it is not checked.
4. Click **DID Lookup**.
5. Click **Add**. The **LDAP Properties** page opens.
6. In the **General** section, enter the following information.
 - In the **Server Address** text box, enter the name of the lookup server.
 - In the **Port** text box, enter the port number. The port number can be 389 (LDAP), 636 (secure LDAP), or 3268 (Active Directory).
 - In the **Description** text box, enter a brief description.
7. In the **Logon** section, enter the following information:
 - Select **User** if you want to log onto the lookup server as a specific user (the default is Anonymous).
 - In the **Username** text box, enter the user name.
 - In the **Password** text box, enter the user password.

If you select **User**, you must look at the **Username** field. Lookups in this search base should be successful with no additional configuration if this field contains a user ID formatted using the Active Directory logon format (for example: `username@server.forest.domain.com`). If this field contains a user ID in any other format (for example: `domain\user`), select **Bind using Windows generic security services**.

8. Click **Search**.
9. In the **General** section of the **Search** page, enter the following information:
 - In the **Search Timeout** text box, enter the number of minutes the server should search before timing out. The timeout period you define on the lookup server should not be longer than the Search Timeout setting for the connector. You must also consider the scope of your search base when configuring the timeout setting. If the search base is broad, configure a longer timeout period since the lookup might take a relatively longer amount of time.
 - In the **Search Base** text box, enter the search base string. Use LDAP format. For example: `ou=mystore,o=com`
 - In the **Search Filter** section, define the search filter.

If you want to use a simple filter, do the following:

- Select **Use simple filter**.
- Select **Wildcard match ending on received DID** if you want the search filter to match all received DID numbers. Or, select **Match last [] digits of received DID** and type a number in the spin box if you want the search filter to match only the specified number of digits at the end of the DID string.
- Select **Return people only** if you want the query to return only users associated with this connector. (This option will exclude printers, computers, and other resources from the search results.)
- Select an option in **Attribute holding fax number**. The option you select is the field in the database that the connector queries.

If you want to use a custom filter, do the following:

- Select **Use custom filter**.
 - Click **Properties**.
 - Type the custom search filter in the **Filter** text box. (Use the guidelines provided in the Custom LDAP Filter screen.)
 - Click **OK**.
10. In the **Filter** section, click **Test**. The **Lookup Test** page opens.
 11. Enter a DID number in the **Enter the incoming DID** text box. Click **Search**. Query results appear.
 12. Click **Close** to return to the **LDAP Properties** page.
 13. Click **OK**. Click **OK** to close the **SMTP Properties** page.



TIP: It is recommended that you index the database field containing DID numbers. This optimizes the speed of lookups.

For information about simple and custom LDAP filters, refer to the [HP CR administrator on-line help](#).

4-2-7 Maintenance component

The Maintenance component:

- Removes old messages from the history folder. The retention period is set by the administrator.
- Archives processed messages based on desired archives (including successfully sent messages, failed messages, and all received messages).

Archiving allows for longer retention periods by storing all messages and their corresponding documents and data in a network file and/or SQL database as an archived ZIP file.

How the Maintenance component works after installation

The administrator will need to create and schedule the cleanup and archive tasks after installation. To configure cleanup for the HP CR server:



IMPORTANT: You cannot run cleanup from a Remote Administrator. You must run cleanup through the HP CR Server Administrator.

1. Launch HP CR Server Administrator, expand the tree view, and click **Components**. The components are listed in the details pane.
2. Double-click the **Maintenance** component to open the **Properties** page.
3. Click the **Cleanup** option.

4. In the **Queues** section, select the number of days the Maintenance component should leave messages in the HP CR server database before deleting them in the **Remove messages older than [...] days** option.
5. Select the check box beside the **Remove messages that failed to archive** option if you want the Maintenance component to remove messages that failed to archive.
6. In the **Billing** section, check the box beside the **Remove entries older than [...] days** option to run cleanup on billing records in the HP CR server database. Enter the appropriate number of days in the spin box (the default is 180 days).
7. In the **Connector and Component Journals** section, select the check box beside the **Remove billing records after [...] days** option to run cleanup on messages in the connectors, components, and the journals in the HP CR server database. Enter the appropriate number of days (default is 60).
8. Click **OK** to save your changes to the Maintenance component.

When cleanup runs, items are marked for deletion and deleted at 5am the following day.

For information about setting up and configuring archive, refer to the [HP CR administrator on-line help](#).

4-2-8 Notification component

The Notification component delivers a notice about the status of a message to the person who sent the message. Notification is sent for outbound messages only, or messages that originate within the HP CR server.

How the Notification component works after installation

Notification is set up by default. No additional settings are required.

For information about working with notification messages, refer to the [HP CR administrator on-line help](#).

4-2-9 Preview Manager component

The Preview Manager component determines whether or not outbound messages require preview.

- **Outbound faxes requiring preview** - If an outbound message requires preview, the HP CR server generates and sends a notification message to the sender. The notification message indicates that the outbound message is waiting to be previewed and provides a link to the message in the HP CR Client. Then the Preview Manager component holds the outbound message until it has been accepted or declined, or until it expires.
- **Outbound faxes not requiring preview** - If an outbound message does not require preview, the HP CR server continues processing it for delivery.

NOTE: Only HP CR servers with the Web Client support the functionality associated with this component.

How the Preview Manager component works after installation

The Preview Manager is set up by default. You can have only one instance of this component. You cannot modify its settings.

For information about enabling preview in the Preview Manager, refer to the [HP CR administrator on-line help](#).

4-3 Modifying connectors

Connectors are the means by which messages enter and leave the HP CR server. With a connector, HP CR can communicate with external messaging systems. Depending on the system, it can either accept, deliver, or accept and deliver a message. All connectors are managed by a Windows server service called the Connector Manager, which engages connectors as needed, and transfers messages between the other systems and the HP CR server. HP CR will deliver documents to the following recipient types through its connector subsystem:

- Microsoft SharePoint document library
- Network folder
- Self (delivered as an email attachment to the Windows home folder or personal Web folder accessed through the HP CR End User Interface)
- Email
- Fax
- Remote print

HP CR can also capture and store a document and any meta-data related to a document that has been captured from the users or extracted from the document as part of its processing. Documents and meta-data can be stored in SQL databases, or saved in XML format and stored on network folders. Database or XML output from HP CR is one method to support integration with most archive, content management, workflow, or other information system. This allows HP CR to serve as the platform for all distributed document capture and routing requirements.

The Connector Manager for HP CR is also the means by which new information systems and extensions are made available as upgrade options.

The following are automatically available with the HP CR server:

- [Database connector](#) (65)
- [Document Management System \(DMS\) connectors](#) (65)
 - [WorkSite \(DMS\) connector](#) (66)
 - [FileShare \(DMS\) connector](#) (66)
 - [SharePoint \(DMS\) connector](#) (66)
 - [XMLStore connector](#) (66)
- [Fax connector options](#) (67)
 - [HP LAN Fax connector](#) (67)
 - [Telco connector](#) (67)
 - [T.37 Fax connector](#) (68)
- [Filescan connector](#) (68)
- [HP CR Server connector](#) (69)
- [Printer connector](#) (69)
- [SMTP connector](#) (70)
- [XMLScan connector](#) (71)

To view or modify a connector:

1. Select the connector.
2. Right-click and select **Properties** on the drop-down menu.

4-3-1 Database connector

The Database connector allows you to route inbound messages (documents and faxes) from the HP CR server to a SQL database.

NOTE: A Database connector can route inbound messages to only **one** table in a database. If you want to route messages to more than one table in your database, you must add an additional Database connector (one for each additional table) to your environment.

How the Database connector works

Requirements for the Database connector are that you must have the following installed and configured before you can install and use a Database connector:

- **Database** - By default, the installation sets up and configures a database during the server install.

If you choose to use another SQL database, the database must have all the required field names and any optional field names that correspond to the data you want to store. For instructions on setting up a database, see the [HP CR administrator on-line help](#) (Creating a Database for the Database Connector" topic).
- **Connection String** - By default, the installation sets up and configures the connection string to the database created during the server install.

The connection string and table name, must be provided along with where you want to store the actual messages (in a folder or in the database). For instructions on how to create the connection string, see the [HP CR administrator on-line help](#) ("Guidelines for Creating a Database Connection String (Database Connector)" topic).

If you choose to store messages in a folder, the Database connector saves information about the messages (including the network path to the actual message) in the database while saving the actual messages in the folder you select.

If you choose to store the messages in the database, the Database connector saves information about messages and the actual messages in the database as binary data.
- **Inbound Routing Rule** - You must create an inbound routing rule. This rule will identify messages matching a specified criteria and routes them to the database via the Database connector. For instructions on creating an inbound routing rule, see the [HP CR administrator on-line help](#) ("Creating an Inbound Routing Rule for the Database Connector" topic).

4-3-2 Document Management System (DMS) connectors

The Document Management System (DMS) connector routes documents from the server to your company DMS. The following document management systems (DMSs) are supported:

- Autonomy iManage WorkSite
- Windows FileShare
- Microsoft SharePoint Server 2007, Microsoft SharePoint Server 2010
- XMLStore

4-3-2-1 WorkSite (DMS) connector

HP CR supports integration with HP Autonomy iManage WorkSite, an information management module used to retain and track all content while enabling accessibility to authorized individuals from any device or access point. HP CR with the WorkSite connector allows users to send both soft copy and hard copy documents to Autonomy iManage WorkSite quickly and easily. And, there is no learning curve for users—HP CR works with the Autonomy iManage WorkSite's native windows that are familiar to users.

The WorkSite (DMS) connector is automatically installed with the HP CR server. See [HP CR for Autonomy WorkSite](#) (125) for more details.

4-3-2-2 FileShare (DMS) connector

The FileShare connector stores documents in a shared network folder. The documents are routed to the folder after matching on an outbound routing rule. The folder must be set up with the correct sharing permissions for all the users who should have access to the FileShare folder.

Additional configuration

By default, the installation creates a FileShare directory and is configured on the local system. You must:

1. Specify the location of the FileShare directory using the IP address, not a UNC path.
2. Set permissions for the `...\Program Files\Common Files\HP\HPCR` directory. The Domain Users group (or other appropriate user group) requires read/write permissions to this directory.

4-3-2-3 SharePoint (DMS) connector

HP CR provides tight integration with Microsoft SharePoint through SharePoint's native interfaces. Users can upload scanned documents directly into SharePoint document libraries from an HP MFP or other scanning device.

How the SharePoint connector works after installation

The end-user specifies a target SharePoint server and library and values for any meta-data field by using HP CR Extensions for Microsoft SharePoint, a required component for integration with SharePoint. These extensions are installed onto a SharePoint server and provide users with an "Upload Scan" option from within the end user, browser-based interface to SharePoint document libraries. The user can enter a document file name, choose a document file format, and enter values for any index fields appropriate for documents uploaded to that library. The user can then choose to publish that information as a Personal Scan Reservation (making it accessible as a one-touch scanning option at an MFP device) or print a barcode scan Routing Sheet to use with the scanned hardcopy document. In either case, the HP CR server will upload the scanned document directly into the SharePoint document library at that location with the specified document name and meta-data field values.

4-3-2-4 XMLStore connector

The XMLStore connector enables HP CR to support integration with external software systems. HP CR integrates with these systems so that documents captured through HP CR can be transferred to the third party system for processing.

HP CR and third party system integration uses HP CR's XMLStore connector to output scanned documents and meta-data to a target network folder which is monitored by the third party system as a source for incoming documents to process. The XMLStore connector stores a scanned document as well as an XML file which may include meta-data regarding the scanned document. The XMLStore is configured to use an XSLT, which formats the output meta-data from the HP CR server in a documented format that can be parsed and imported to the third party system.

For details, refer to XMLStore connector topics in the [HP CR administrator on-line help](#).

4-3-3 Fax connector options

HP CR provides fax capability to devices and users within an organization without the need for devices to have internal fax modems connected to analog phone lines. HP CR supports:

- Legacy network fax servers using the proprietary HP LAN fax protocol, used by the HP DSS product to interface to network fax servers
- Voice over IP (VOIP) gateways using the T.38 internet faxing standard
- Internet-based fax services using the T.37 internet faxing standard

4-3-3-1 HP LAN Fax connector

When considering how the HP LAN Fax connector works after installation, the following is the basic workflow the HP LAN Fax connector uses to send a fax out to the HP CR server:

1. A user prepares and sends a fax using a configured HP MFP device.
2. The fax document is delivered from the device to the `\HP\Shared\LanFax\In\` folder (a shared folder that is accessed by the device and the HP CR server).
3. The HP CR server detects the fax, picks it up, and processes it for delivery via the Telco connector.
4. After the message is processed, delivery status is sent back to the HP device.

The following is the basic workflow the HP LAN Fax connector uses to send a fax to a third party fax server:

1. A user prepares and sends a fax using the User Interface or a configured HP MFP device.
2. The fax document is delivered to the HP CR server.
3. The HP CR server detects the fax and matches the routing rule to send faxes to the HP LAN Fax connector directory that is monitored by the third party fax server services for delivery.
4. After the message is processed, delivery status is sent back to the sender.

For additional information, refer to HP LAN Fax connector topics in the [HP CR administrator on-line help](#).

4-3-3-2 Telco connector

The Telco connector allows faxes to be sent directly from end user desktops. By implementing Fax over IP (software based solution), HP CR can be implemented as a full enterprise fax server.

After installation, the Telco connector requires the additional installation of modem drivers licensed to run the SR-140 modem software support.

The following procedure provides you with all the steps you need to add a local modem server or a remote modem server to the HP CR server.

NOTE: If the modem server is local, the new connector wizard can detect the modem channels automatically. If the modem server is remote, you must detect the modem channels on the remote system.

1. Launch HP CR Server Administrator, expand the tree view, and right-click **Connectors**.
2. Select **New > Telco Connector**. The **Server Address** page opens. The **Run on the Omtool Message Server** option is selected by default.
3. If the modem server is local, click **Next**. Alternately, if the modem server is remote, click **Remote Server** and enter the server name.
4. Click **Next**. The system verifies that the product is installed on the system and opens the **Display Name** page.

5. In the **Name** text box, enter a descriptive name for the connector.
6. Click **Next**. The **Telco Device Detection** page opens.
7. Click **Next**. The **Telco Default Settings** page opens.
8. In the **CSI** text box, enter the identity of your company.

The CSI value you provide will be applied to all modem channels as the identity of your company for inbound and outbound faxes. Your company's identity is called the CSI (Called Subscriber Identification) for inbound faxes and the TSI (Transmitting Station Identifier) for outbound faxes. You can customize these values for individual modem channels after you complete the new connector wizard by modifying the properties of each modem channel.

NOTE: The modem strips any spaces or additional characters from the value you enter in the CSI text box. If you are using an inbound routing rule based on CSI or TSI, the criteria you enter for CSI or TSI must also be stripped of all spaces or additional characters, otherwise the rule will not work.

9. In the **Dial Prefix** text box, enter the dial prefix if your company uses one.
10. Click **Next**. The **Area Code** page opens.
11. In the **Area Code** text box, enter the area code.
12. Click **Next**.
13. The **Congratulations** page opens.
14. Click **Finish**.

The Telco connector is listed on the details pane.

For additional information, refer to the Telco connector topics in the [HP CR administrator on-line help](#).

4-3-3-3 T.37 Fax connector

The T37 Fax connector is configured to deliver email to a fax server or fax service that accepts T.37 SMTP mail. For details, refer to the T.37 Fax connector topics in the [HP CR administrator on-line help](#).

4-3-4 Filescan connector

The Filescan connector processes files through instructions that are added to a control file that users create and place in one or more shared directories. After a file is in a directory, Filescan processes it based on predefined keywords found within the file. The keywords hold information about the sender, recipient(s), and message content. "Drop folders" can be created with the Filescan connector to allow for drag-and-drop functionality to common distributions.

The Filescan connector also can be used to write documents to a network folder using FTP (file transfer protocol) and FTPS (FTP that supports the Transport Layer Security (TLS) and Secure Sockets Layer (SSL) protocols). The system administrator can specify a generic, default user name and password to use when logging into an FTP location.

How the Filescan connector works after installation

Filescan is set up by default to monitor a directory on the server: [\HP\Shared\Filescan](#)

When a control file and specified attachment are copied into this directory, the resulting document is picked up and processed by the HP CR server.

A control file example is:

```
;Sender Information
#SENDER_EMAIL jsmith@company.com
#SENDER_NAME Joe Smith
;Single Recipient's Information
#RECIPIENT
#RECIPIENT_NAME Mary Fuller
#DESTINATION 1-772-456-4421
#COVERPAGE mycoverpage
;Attached File
#ATTACHMENT report.txt
```

4-3-4-1 Configuring the Filescan connector

The Filescan connector is installed by default. To create a new Filescan folder:

1. Launch HP CR Server Administrator, expand the tree view, and right-click **Connectors** and select the **Filescan** connector in the details pane.
2. Click **Folders > New**. The **New Folder** page opens.
3. In the **Folder to scan** text box, enter the location of the folder to use as a Filescan folder. Click **OK**.
4. Select **Enable Virtual Mode** if you want to use a virtual control file for this Filescan folder. If you select this option, indicate the file types the Filescan connector can collect from the Filescan folder.
5. Click **OK** to create the Filescan folder.
6. Click **OK** again to save your changes to the connector.

For all the control file variables as well as additional information for configuring virtual Filescan, refer to the [HP CR administrator on-line help](#).

4-3-5 HP CR Server connector

The HP CR Server connector allows the HP CR server to manage communication between the server and its other connectors. This is a required connector for the HP CR server. You cannot remove it.

4-3-6 Printer connector

The Printer connector allows HP CR to route messages to a printer. This is strictly a routing destination for messages. You must have the following installed and configured before you can use a Printer connector.

- At least one network printer and printer driver that is shared and is accessible to the HP CR server.

Supported formats for sending are:

- UNC printers: `\\PrintServer\Printer`
- IP printers: `IP: 123.45.67.89`

For more information about the Printer connector, refer to the [HP CR administrator on-line help](#).

4-3-7 SMTP connector

The SMTP connector enables communication between the HP CR server and an SMTP mail server. With this connector installed, HP CR users can send and receive messages using the End User Interface or any SMTP email client program. The SMTP connector is used for a standardized approach in mail communication, which alleviates the need for preparatory interfaces.

The SMTP connector also can be configured for DID lookups. This setting will identify additional information about the intended recipient for inbound faxes, as well as retrieve and apply sender information on a cover page for an outbound message.

4-3-7-1 Configuring the SMTP connector to send outbound messages (Smart Host)

Use the following procedure to configure virtual SMTP server properties.

1. Click **Start > Administrative Tools > Internet Services Manager**. The **IIS Manager** console opens.
2. Expand the console tree.
3. Right-click **Default SMTP Virtual Server**. Select **Properties**.
4. Click **Delivery**, then click **Advanced**.
5. In the **Smart host** text box, enter the address of the mail delivery server. For example:
Exchange1.companyname.com
6. Click **OK**. Click **OK** again to save your changes.

Additional configuration for inbound DID lookups can be found in the [HP CR administrator on-line help](#).

4-3-8 XMLScan connector

The XMLScan connector enables HP CR to support integration with external software systems. HP CR also can receive documents and meta-data sent from the third party system and deliver the content to one or more intended destinations.

HP CR and third party system integration uses HP CR's XMLScan connector to receive documents and meta-data which have been exported from the third party system. An XSLT translation parses the XML sent back from the third party system and maps this information to appropriate properties of the job created on the HP CR server. HP CR then processes the returned job based on these properties and routes it to its intended destination(s).

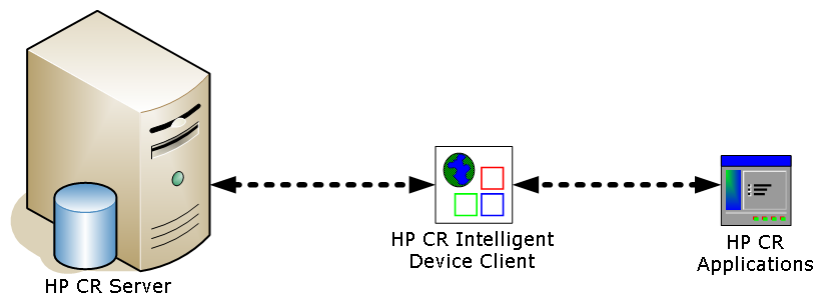
For details, refer to the XMLScan connector topics in the [HP CR administrator on-line help](#).

4-4 Implementing and configuring the HP CR Intelligent Device Client

The HP CR Intelligent Device Client is a request handler for client applications. It comprises a group of IIS web server extensions providing a layer for communication between clients and the HP CR server. For example, it allows a client (such as Embedded Device Client for HP OXPd v1.6) to submit messages to the HP CR server. It also allows the clients to pull up information about embedded directives from the server.

Figure 4-1 The HP CR Intelligent Device Client environment

Intelligent Device Client facilitates communication between the HP CR server and other HP CR applications.



IMPORTANT: HP CR installs the HP CR Intelligent Device client by default. No separate installation is necessary. You must configure the client and test it, as described below.

If necessary, you can install the client on a remote system. For instructions, see [Section 8: Installing the remote HP CR Intelligent Device Client](#) (95).

Refer also to [HP CR Intelligent Device Client components](#) and [Optional configuration: Modifying the directory security configuration of virtual directories](#). For information about IIS implementation (Windows 2003 64-bit only), refer to the [HP CR administrator on-line help](#).

4-4-1 HP CR Intelligent Device Client components

The Intelligent Device Client is the bridge that delivers information from the HP OXPd device to the HP CR server. The HP CR Intelligent Device Client manages the Embedded Device Client for HP OXPd v1.4 and v1.6 separately. Each category utilizes a unique web server extension, application pool, virtual directory, and location.

The main components of the Intelligent Device Client environment are detailed in the following table.

Table 1 Description of Intelligent Device Client components with location and function

Component	Location	Function
WebAPI	C:\Program Files (x86)\HP\HPCR\WebAPI\WebAPI	This folder is utilized for Embedded HP CR intelligent devices. Applications like Embedded Device Client for HP OXPd submit messages to: ... \HP\HPCR\WebAPI\WebAP\FilePostings. The messages are processed by OmISAPIU.DLL, other supporting DLL files, and XML-based configuration files in: ... \HP\HPCR\WebAPI\WebAP\Scripts.

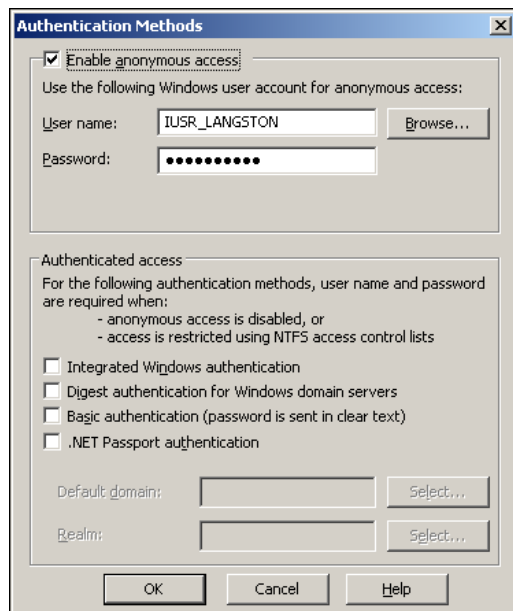
4-4-2 Optional configuration: Modifying the directory security configuration of virtual directories

The virtual directories created by the Intelligent Device Client setup grant authenticated access via integrated Windows authentication.

The default authentication and access control configuration can be modified if it does not comply with the security policy in the LAN. The Intelligent Device Client supports all IIS authentication methods except .NET Passport and Digest Authentication for Windows Domain server. It also supports IP address and domain name restrictions.

NOTE: After the Intelligent Device Client is installed, the virtual directory properties are set to allow read access, allow execute permissions on scripts and executable, and use its associated application pool (WebAPI). Do not modify these settings.

Figure 4-2 Default Authentication and Access Control Configuration for a Virtual Directory



After the Intelligent Device Client is installed, the authentication and access control configuration for the virtual directory enables anonymous access with the local IUSR account or the account specified during installation and enables integrated Windows authentication.

A modified configuration must meet the following conditions:

- If anonymous access is enabled, the account used for anonymous access must have full control to read and write to the folder. These permissions are configured in the Windows security settings on the folder.

- If integrated Windows authentication is enabled, all accounts used to post and download files and gain access to the OmISAPIU.DLL resource, must have full control to read and write to the folder. These permissions are configured in the Windows security settings on the folder. For information on accounts that are used to post and download files and gain access to the OmISAPIU.DLL resource, consult the HP CR documentation on the application being used in conjunction with the Intelligent Device Client. (Refer to [On-line help and related documentation](#), 6.)

4-4-3 Testing connectivity to the Intelligent Device Client

An Embedded Device Client for HP OXPd application must be able to access the Intelligent Device Client configuration file OmISAPIU.DLL. Test the connection to the web server and verify that the Intelligent Device Client is installed and configured correctly.

1. Log in to any system in the LAN that is running the HP CR server or client software.
2. Start the browser and go to:

```
http://[web server]/[virtual directory]/Scripts/OmISAPIU.dll?Action=GetConfiguration
```

where [web server] represents the web server host name or IP address and [virtual directory] represents the name of the virtual directory in IIS that is accessed by the Embedded Device Client for HP OXPd application.



TIP: A connection to the Intelligent Device Client from a device running an Embedded HP OXPd device client application is similar to:

```
http://localhost/WebAPI/Scripts/OmISAPIU.dll?Action=GetConfiguration
```

When constructing the URL, consider the following:

- The Action command in the URL is case-sensitive.
- If Secure HTTP connectivity is configured for the End User Interface, replace HTTP with HTTPS.

The browser displays the basic configuration for the Intelligent Device Client.

```
<?xml version="1.0" ?>
- <Omtool>
- <Product>
  <Name>Omtool ISAPI Services</Name>
  <Version>1.0</Version>
  <Build>1</Build>
  <Description>Provides a bridge between the Omtool Xlet and HP DCR</Description>
</Product>
- <Servers>
  - <Server Name="ServicesServer">
    <PostPath>WebAPI/FilePostings/</PostPath>
    <FileTransfer>http://172.16.20.131/WebAPI/FileTransfer/</FileTransfer>
  </Server>
  - <Server Name="OmtoolServer">
    <ServerName>VMOXPTESTING3</ServerName>
  </Server>
</Servers>
</Omtool>
```

If an error occurs, troubleshoot the web server and repeat the test until it is successful. See the [HP CR administrator on-line help](#) ("Connectivity issues with the HP CR Intelligent Device Client" topic).

Part II:

Remote Components

5 Installing a Remote Administrator

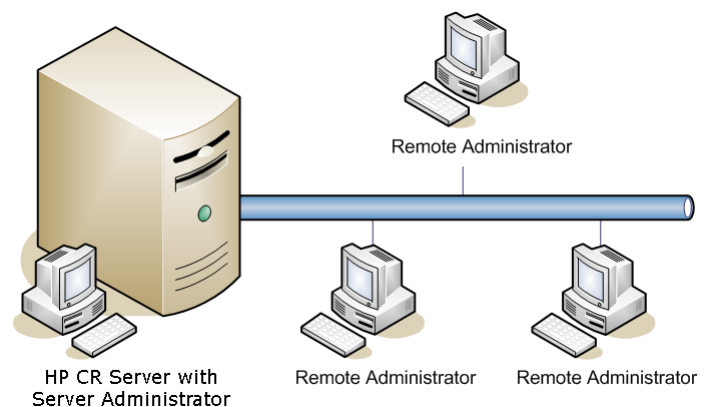
HP CR Server Administrator is the management application for the HP CR server. When installed on a remote system, this server management application is called a **Remote Administrator**.

The Remote Administrator provides convenient access to the HP CR server for administrators who support the implementation. It includes support for Windows 7, which allows administrators to manage the HP CR server from their personal workstations.

NOTE: There is no known limit on the number of Remote Administrators the HP CR server can support.

Figure 5-1 HP CR server with HP CR Server Administrator and Remote Administrators

The HP CR server shown here has HP CR Server Administrator and three Remote Administrators installed. This is an example of a supported configuration. (The HP CR server must be installed with HP CR Server Administrator, but the environment can have more or fewer Remote Administrators than shown in this illustration.)



The remainder of this section describes:

[Requirements for the Remote Administrator](#) (77)

[Installing the Remote Administrator](#) (78)

[Starting the HP CR Server Administrator and connecting to the HP CR Server](#) (80)

[Problems connecting to the HP CR server using Remote Administrator](#) (80)

For additional information (including optional configuration), refer to the [HP CR administrator on-line help](#).

5-1 Requirements for the Remote Administrator

A Remote Administrator requires a system that meets the minimum [Hardware and software requirements](#) (7) and [Additional installation requirements](#) (9) listed for the HP CR server. In addition, a Remote Administrator requires:

- Windows NT domain computer that belongs to the same domain as the HP CR server
- Dual core processor, 2 GHz, 4GB of RAM, RAID 5W with 100 GB of disk space, and Microsoft mouse or compatible pointing device
- Windows 2008 (64-bit), 2003 Standard Edition SP2 (64-bit), Windows 7
- Microsoft Internet Explorer 7 or later
- Acrobat Reader 7.0 or later

- Access to a network copy of the HP CR server setup
- Windows user account running Remote Administrator that belongs to the HP CR Administrators group
- HP CR service account that has Distributed COM access, launch, and configuration permissions on the Remote Administrator, and belongs to the local Administrators group on the Remote Administrator



TIP: For instructions on configuring these Distributed COM permissions, consult Windows help or go to [Configuring Distributed COM \(DCOM\) permissions](#) (11). Where the procedure indicates to log in to the HP CR server, log in to the Remote Administrator instead.

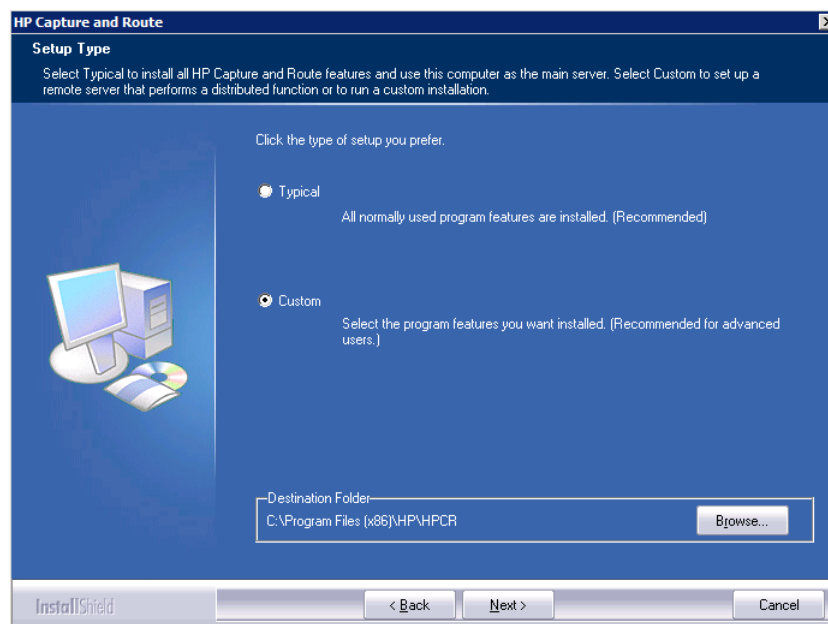
5-2 Installing the Remote Administrator

1. Log in to the system where you will install the Remote Administrator using an account that belongs to the HP CR Administrators group.
2. Navigate to the network share where the HP CR server setup files are located.
3. Run:

`\MessageServer\setup.exe`

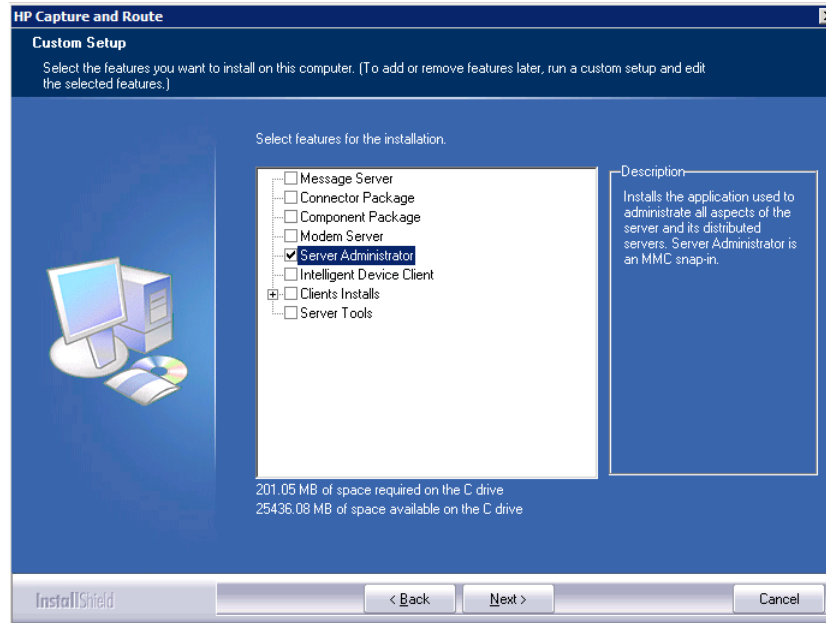
The **InstallShield** wizard opens, configures your system for installation, and displays a welcome message.

4. Click **Next**. The setup shows the **License Agreement** page.
5. Select **I accept the terms of the license agreement** and click **Next**. The setup shows the installation options.

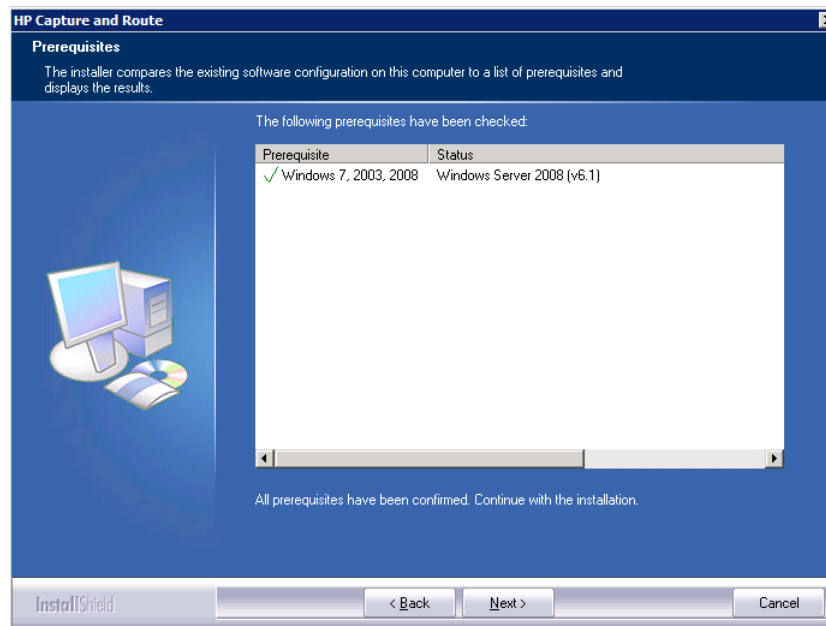


6. Select **Custom** and click **Next**. The setup shows a list of HP CR features.

7. Select **Server Administrator**. Clear all the other features you are not installing.



8. Click **Next**. The setup checks the system for installation requirements and displays the results.



NOTE: The setup cannot continue until all required components are installed. (Double-click an item in the list for more information.) If any required components were not detected, click **Cancel** and **Yes** to exit the setup and install the components that are required to complete the installation.

9. Click **Next**. The setup shows installation settings.

NOTE: If other installation features are included, the setup might request additional information before displaying installation settings.

10. Review the installation settings and click **Next** to start the installation. The setup installs the selected features and displays a message indicating that the installation is complete.

11. Click **Finish**.

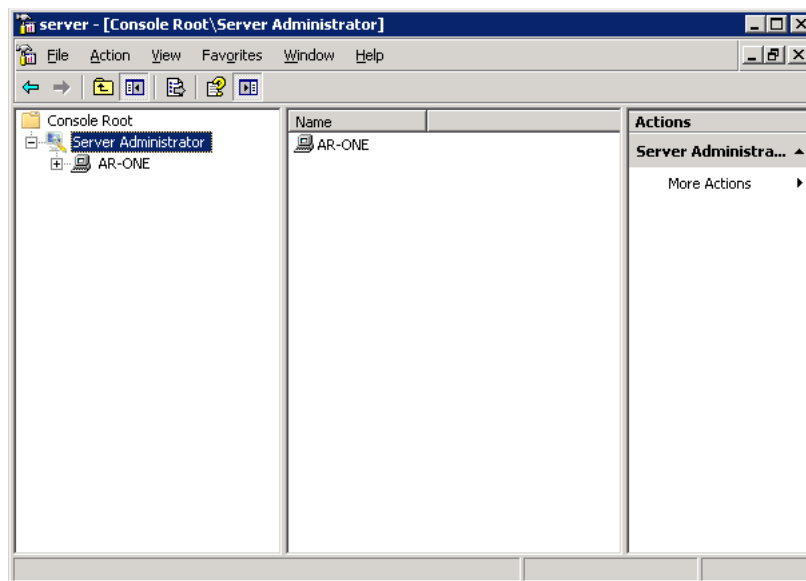
After Remote Administrator is installed on the remote system, start HP CR Server Administrator and connect to the HP CR server, as described below.

5-3 Starting the HP CR Server Administrator and connecting to the HP CR Server

1. Log in to the system where you installed the Remote Administrator using an account that belongs to the HP CR Server Administrators group.
2. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.

The **Specify Message Server** page opens and the **Network Address** field is populated with the local system name.

3. Enter the HP CR server computer name or IP address and click **Finish**. The Microsoft Management Console starts and opens the HP CR Server Administrator snap-in.



TIP: When HP CR Server Administrator is closed, Microsoft Management Console displays a message about saving changes to the MSC file. This file records the current position of items in the console tree. To preserve the console state, save the changes. If prompted to update the MSC file, click **Yes**.

5-4 Problems connecting to the HP CR server using Remote Administrator

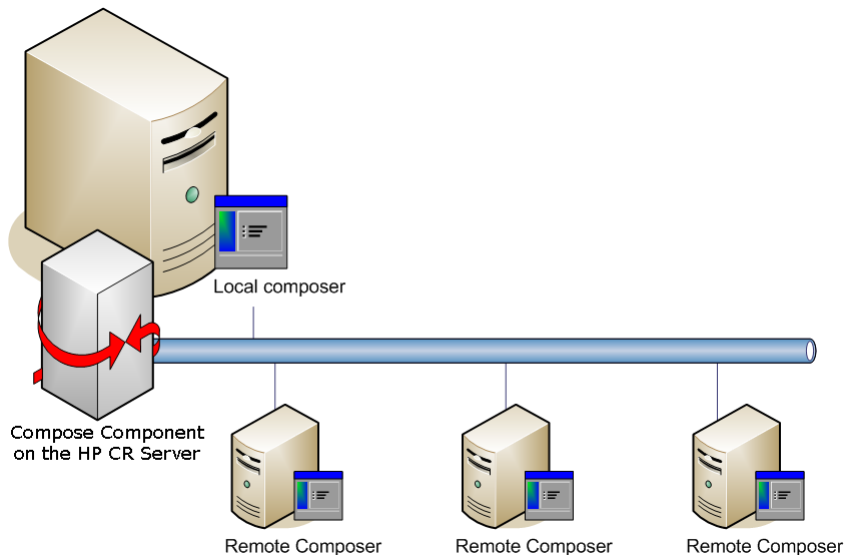
If you have trouble connecting to the HP CR server using the Remote Administrator, add the DCOM port [135](#) to the Exceptions list by keeping the Firewall **ON**. You then should be able to connect to and launch the HP CR server without any issues.

6 Installing a remote Composer

HP CR Compose component (Composer) is a system that performs message conversion tasks for the HP CR server. A server supports multiple Composers, all managed by the Compose component on the HP CR server. A remote system that hosts a Composer is called a **remote Composer**.

Figure 6-1 HP CR server with a local Composer and remote Composers

The HP CR server shown here has a local Composer and three remote Composers. This is an example of a supported configuration. (The HP CR server can run without a local Composer, and the environment can have more or fewer remote Composers than shown in this illustration.)



When you install an HP CR server, the Compose component is installed as part of the Component Package and a Composer is created locally. As Composers are added, the Compose component workload is distributed automatically. Workload distribution can be manipulated by modifying the capabilities of each Composer. By default, a general Composer composes all types of messages, all enabled file types and final formats, and all template types. But, each Composer can be modified to accept only certain types of jobs. This filtering enables a Composer to become specialized for certain types of conversions. It is also possible to enforce policies that would cause messages with certain file types or templates to fail.

When scaling an environment with additional connectors or components, you should contact your software representative who can assist you in correctly identifying potential bottlenecks in the system based on workload and other factors. Your software representative can provide helpful information on the overall impact of increasing the system speed and efficiency.

The remainder of this section describes:

[Requirements for a remote Composer](#) (82)

[Installing the remote Composer](#) (83)

[Adding the Composer to the HP CR server](#) (85)

For additional information (including optional configuration), refer to the [HP CR administrator on-line help](#).

6-1 Requirements for a remote Composer

6-1-1 Basic requirements

A remote Composer requires a system that meets the minimum [Hardware and software requirements](#) (7) and [Additional installation requirements](#) (9) listed for the HP CR server. In addition, a remote Composer requires:

- Windows NT domain computer that always runs in the same domain as the HP CR server
- Dual core processor, 2 GHz, 4GB of RAM, RAID 5W with 100 GB of disk space, and Microsoft mouse or compatible pointing device
- Windows 2008 (64-bit), 2003 Standard Edition SP2 (64-bit)
- Disabled **Internet Explorer Enhanced Security Configuration** (Windows component).

If this component is not disabled, you cannot proceed with the installation. After you disable the component, you must reboot your system before proceeding with the installation. For instructions on how to verify that the component is disabled, see [Disabling the Internet Explorer enhanced security configuration component](#) (24).

- Microsoft Internet Explorer 7 or later
- Access to a network copy of the HP CR server setup
- Windows user account that belongs to the HP CR Administrators group
- License key for each additional Composer

NOTE: A license key is not required if the local Composer is being moved to a remote system.

- Verification that the **NtfsDisable8dot3NameCreation** registry value is set to 0

In case your system does not have the registry key, you must manually enable the key and set the value to 0. For instructions, see [Enabling 8.3 name creation on NTFS partitions](#) (25).

6-1-2 Software requirements for message conversion

A specific application is required only if the Composer needs to convert documents into file types associated with the application. For example, if you are planning to use Crystal Reports for compose, it must be installed on the Composer.

NOTE: If Microsoft Office is not deployed in the LAN, the requirement does not apply.

- Microsoft Visio 2007/2003/XP/2000 for *.VSD and *.VDX message attachments
- Crystal Reports v10.0 or earlier for *.RPT message attachments
- Microsoft Word 2007/2003/XP/2000 for *.DOC Routing Sheet templates

NOTE: Routing Sheet templates are provided in *.DOC and *.OMTPL format, and these templates can be edited in Word and WordPad, respectively. If *.DOC templates are used, Word is required because the Composer converts all *.DOC Routing Sheet templates using Word. The Composer cannot be configured to use any other conversion method.

- Microsoft Office 2007/2003/XP/2000 for *.DOC, *.DOCX, *.XLS, *.XLSX, *.PPT, and *.PPTX message attachments (recommended)

If multiple versions of an application are deployed in the LAN, the most recent version must be installed on the Composer. For example, if Office 2007 and 2003 are deployed, then Office 2007 must be installed on the Composer.

6-2 Installing the remote Composer

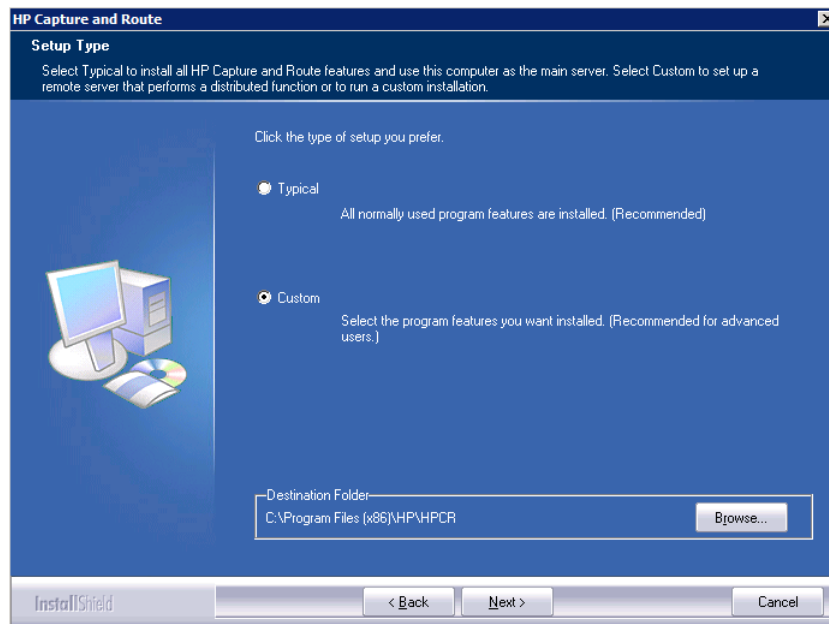
NOTE: Before installing a remote Composer on a Windows 2008 system, allow DCOM port 135 as an exception. Otherwise you will not be able to add the remote Composer.

1. Log in to the system where you will install the remote Composer using an account that belongs to the HP CR Administrators group.
2. Navigate to the network share where the HP CR server setup files are located.
3. Run:

`\MessageServer\setup.exe`

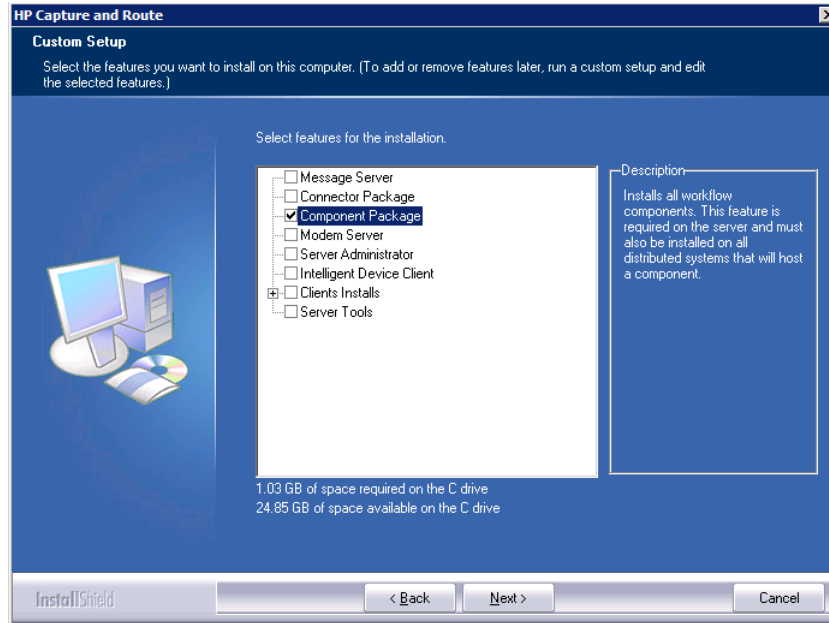
The **InstallShield** wizard opens, configures your system for installation, and displays a welcome message.

4. Click **Next**. The setup shows the **License Agreement** page.
5. Select **I accept the terms of the license agreement**, and click **Next**. The setup shows the installation options.

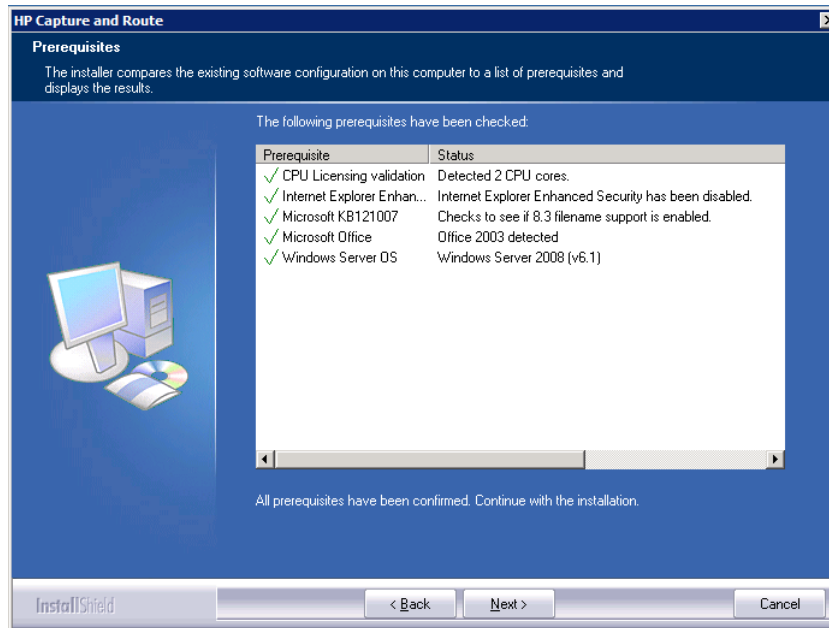


6. Select **Custom** and click **Next**. The setup shows a list of HP CR features.

7. Select **Component Package**. Clear all the other features that you are not installing at this time.



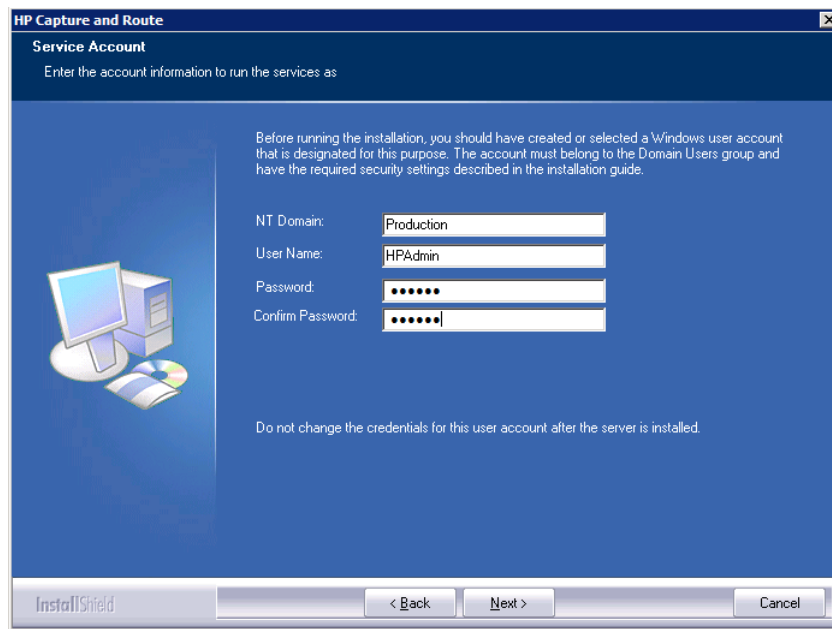
8. Click **Next**. The setup checks the system for installation requirements and displays the results.



NOTE: The setup cannot continue until all required components are installed. (Double-click an item in the list for more information.) If any required components were not detected, click **Cancel** and **Yes** to exit the setup and install the components that are required to complete the installation.

9. Click **Next** to continue the installation.

The setup requests logon credentials for the HP CR service account. The **NT Domain** and **User Name** fields are populated automatically based on the current Windows user.



10. Enter the HP CR service account logon credentials.
 - a In the **NT Domain** field, enter the Windows domain name.
 - b In the **User Name** field, enter the user name.
 - c In the **Password** and **Confirm Password** fields, enter the user password.
11. Click **Next**. The setup validates the user account and then shows installation settings.

NOTE: If other installation features are included, the setup might request additional information before displaying installation settings.

12. Review the installation settings and click **Next** to start the installation. The setup installs the selected component and displays a message indicating that the installation is complete.
13. Click **Finish**.

After the remote Composer is installed on the remote system, add the Composer to the Compose component on the HP CR server, as described below.

6-3 Adding the Composer to the HP CR server

Complete this procedure if you are adding a new Composer or replacing an existing Composer with a new one.

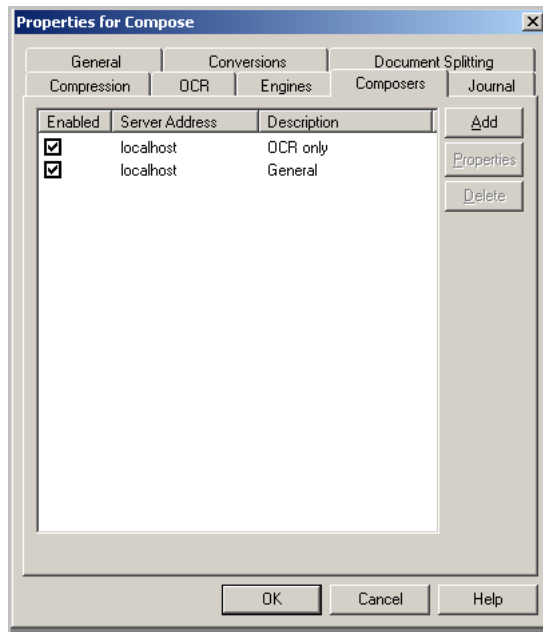


TIP: If you are replacing a local Composer with a new remote Composer, you must first remove the local Composer (as described in the procedure below) so the new Composer can be added without a license key. (If you keep the local Composer and add a remote Composer, you would need another license key.)

For each additional Composer you add to your environment, you must get a license key from your software representative.

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. In the console tree, click **Components**.

3. Double-click **Compose** in the details pane to open the **Properties for Composer** page.
4. Click the **Composers** option.

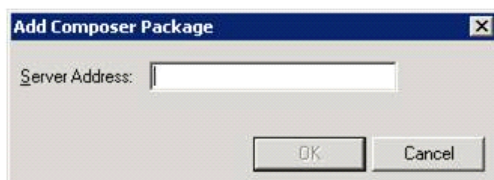


5. If you are not replacing a Composer, but are just adding a new one, continue with Step 6.
If you are replacing the local Composer with a new remote Composer, select **localhost**, click **Delete**, and then click **Yes** to remove the local Composer. You can continue with Step 6.



TIP: The local Composer must be removed first so that the new Composer can be added without a license key.

6. Click **Add**. The **Add Composer Package** page opens.



7. In the **Server Address** text box, enter the remote Composer machine name or IP address.
8. Click **OK**.
The Composer is added to the Compose component.
9. Click **OK** to close the Composer page.

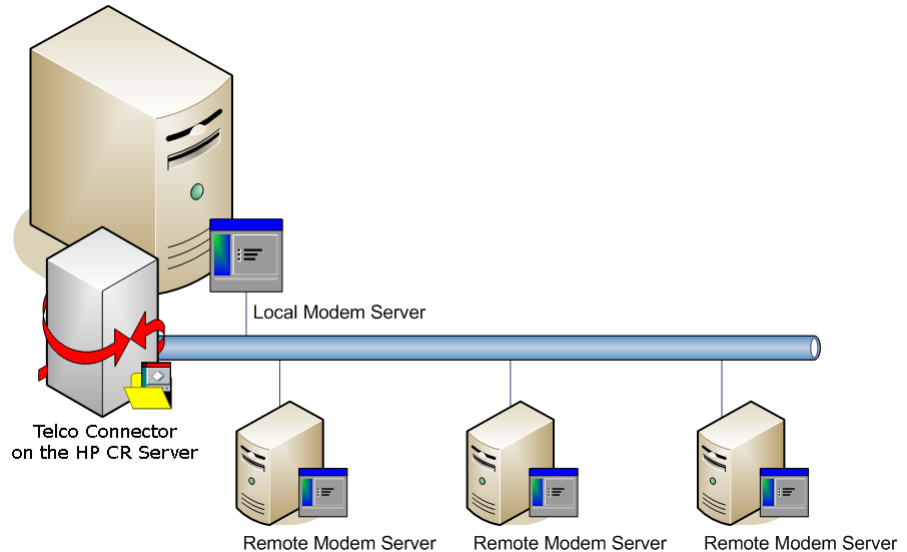
The remote Composer begins performing conversion tasks immediately.

7 Installing a remote modem server

A modem server is a server that sends and/or receives faxes for the HP CR server. It consists of Dialogic Brooktrout System Software, Brooktrout System Drivers, and HP CR modem server software. An HP CR server supports multiple modem servers, all managed by the HP CR connector for Telco on the HP CR server. A remote system that hosts a modem server is called a **remote modem server**.

Figure 7-1 Server with a local modem server and remote modem servers

The HP CR server shown here has a local modem server and three remote modem servers with an HP CR connector for Telco managing all of them. This is an example of a supported configuration.



The HP CR server can run without a local modem server, and the environment can have more Telco connectors or fewer remote modem servers than shown in this illustration. The HP CR connector for Telco can be configured to monitor one Telco share, an intermediary repository for inbound and outbound faxes.

Modem servers are supported in these configurations:

- HP CR connector for Telco with one modem server in the LAN
- HP CR connector for Telco with multiple modem servers in the LAN
- Multiple HP CR connectors for Telco, each with one or more modem servers in the LAN

Using multiple HP CR connectors for Telco delivers additional benefits to environments with special faxing requirements:

- **Reduced faxing costs** - With multiple HP CR connectors for Telco, the HP CR server can be configured to deliver faxes using the modem server closest to the destination. This can reduce long distance telephone charges.
- **Failover support** - Through rules, the HP CR server can be configured to route outbound faxes to one HP CR connector for Telco but if delivery fails, the HP CR server can route the outbound faxes to another HP CR connector for Telco.
- **Increased efficiency** - Multiple HP CR connectors for Telco provide built-in workload distribution based on the HP CR server configuration, HP CR connector for Telco configuration, and rules.

When scaling an environment with additional connectors or components, you should contact your software representative who can assist you in correctly identifying potential bottlenecks in the system based on workload and other factors. Your software representative can provide helpful information on the overall impact of increasing the system speed and efficiency.

The remainder of this section describes:

- [Requirements for a remote modem server](#) (88)
- [Installing and testing Brooktrout system software](#) (88)
- [Installing the remote modem server](#) (89)
- [Detecting channels on the modem server](#) (91)
- [Configuring a path to the Telco share directory](#) (92)

For additional information (including optional configuration and troubleshooting), refer to the [HP CR administrator on-line help](#).

7-1 Requirements for a remote modem server

A remote modem server requires a system that meets the minimum [Hardware and software requirements](#) (7) and [Additional installation requirements](#) (9) listed for the HP CR server. In addition, a remote modem server requires:

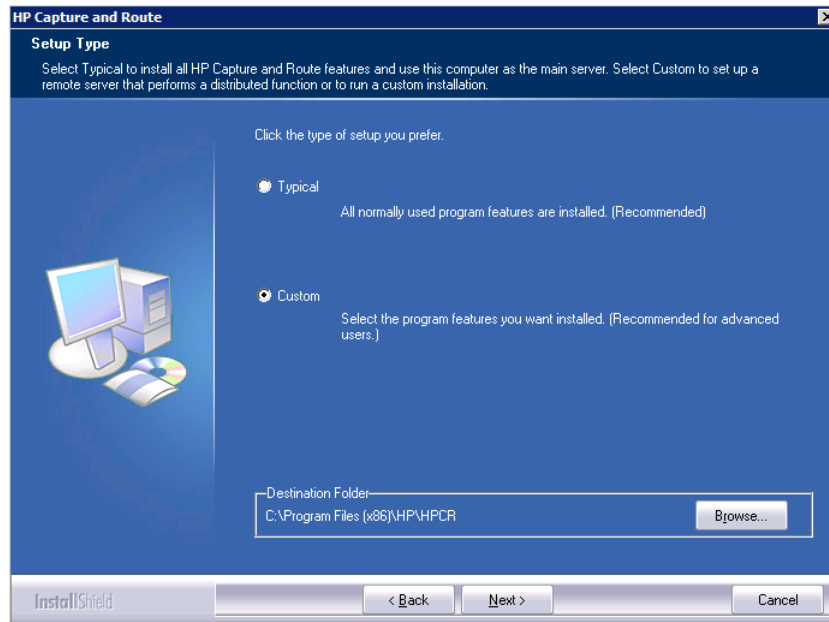
- Windows NT domain computer that always runs in the same domain as the HP CR server
- Dual core processor, 2 GHz, 2GB of RAM for one T1line (2-24 channels) or 4 GB RAM for two T1 lines (24-48 channels), RAID 5W with 100 GB of disk space, and Microsoft mouse or compatible pointing device
- Windows 2008 (64-bit), 2003 Standard Edition SP2 (64-bit)
- Microsoft Internet Explorer 7 or later
- Access to a network copy of the HP CR server setup
- Windows user account that belongs to the local Administrators group
- Installation of at least one supported Dialogic Brooktrout System Software. For additional requirements on installing the fax board and Brooktrout System Software, consult [Installing and configuring a Dialogic modem driver](#) (149).

7-2 Installing and testing Brooktrout system software

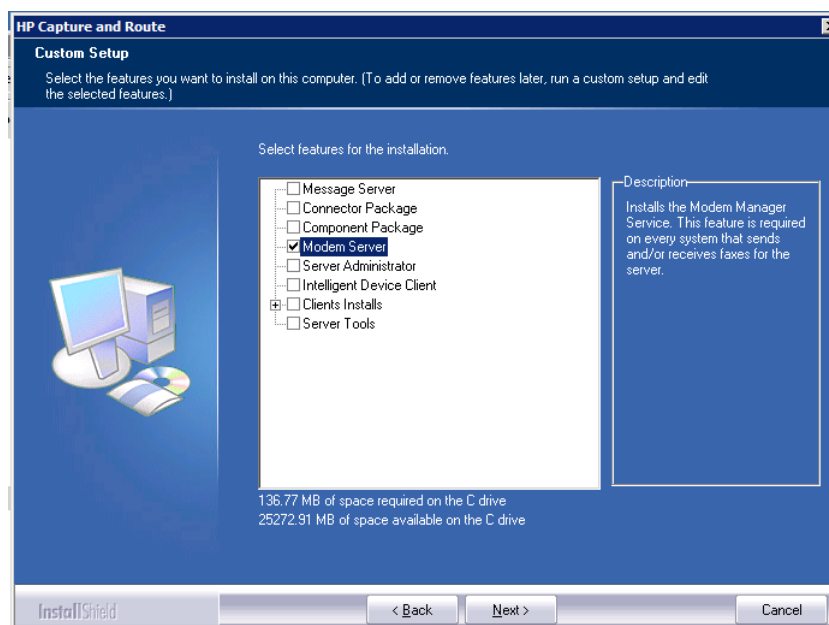
Before a remote modem server is installed with Dialogic Brooktrout SR140 fax channels, install the Brooktrout System Software. Refer to [Installing and configuring a Dialogic modem driver](#) (149).

7-3 Installing the remote modem server

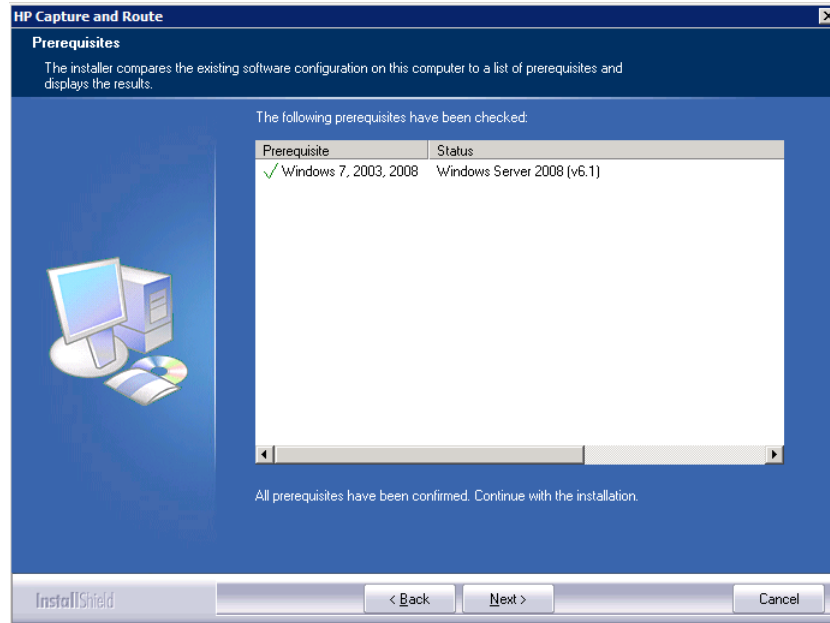
1. Log in to the system where you will install the remote modem server using an account that belongs to the HP CR Administrators group.
2. Navigate to the network where the HP CR server setup files are located.
3. Run: `\MessageServer\setup.exe`
The **InstallShield** wizard opens with a welcome message. Your system configures for installation.
4. Click **Next**. The setup shows the **License Agreement** page.
5. Select **I accept the terms of the license agreement** and click **Next**. The setup shows the installation options.



6. Select **Custom** and click **Next**. The setup shows a list of HP CR features.
7. Select **Modem Server**. Clear all the other features you are not installing at this time.



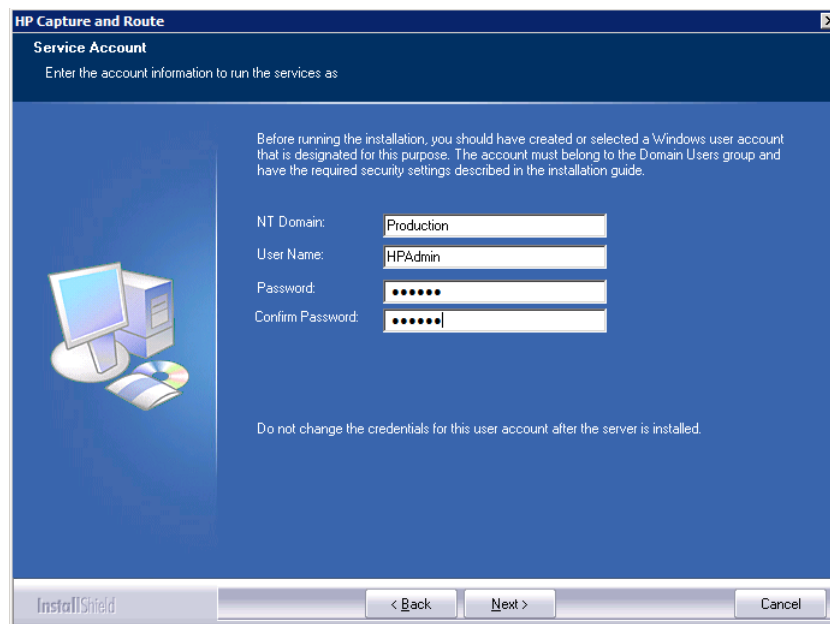
8. Click **Next**. The setup checks the system for installation requirements and displays the results.



NOTE: The setup cannot continue until all required components are installed. (Double-click an item in the list for more information.) If any required components were not detected, click **Cancel** and **Yes** to exit the setup and install the components that are required to complete the installation.

9. Click **Next** to continue the installation.

The setup requests logon credentials for the HP CR service account. The **NT Domain** and **User Name** fields are populated automatically based on the current Windows user.



10. Enter the HP CR service account logon credentials.
- In the **NT Domain** field, enter the Windows domain name.
 - In the **User Name** field, enter the user name.
 - In the **Password** and **Confirm Password** fields, enter the user password.

NOTE: If other installation features are included, the setup might request additional information before displaying installation settings.

11. Review the installation settings and click **Next** to start the installation. The setup installs the modem server and displays a message indicating that the installation is complete.
12. Click **Finish**.
13. Continue by detecting the channels on the modem server, as described below.

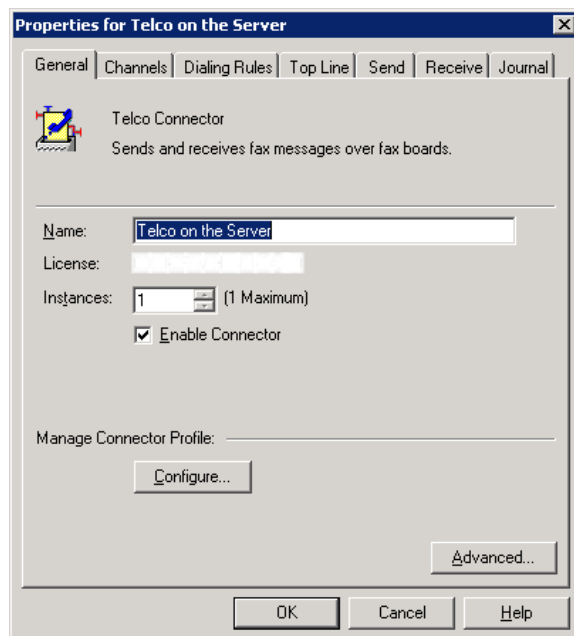
7-4 Detecting channels on the modem server

After you install the remote modem server, you must configure the HP CR connector for Telco to detect the channels on the remote modem server. When the channels have been detected, the properties of each channel, such as send and receive properties, can be configured in the HP CR connector for Telco properties.

To detect the channels on the modem server:

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. Click **Connectors** in the console tree, and double-click **Telco** in the details pane.

The **Properties** page opens.



3. Click **Channels** and then click **Detect Channels**. The **Detect Channels** page opens.
4. In the **Remote Server Address** text box, enter the remote modem server machine name or IP Address. Click **Detect Now**.
5. Configure the channels if necessary, and then click **OK**.

For more information on configuring the channels, consult the [HP CR administrator on-line help](#).

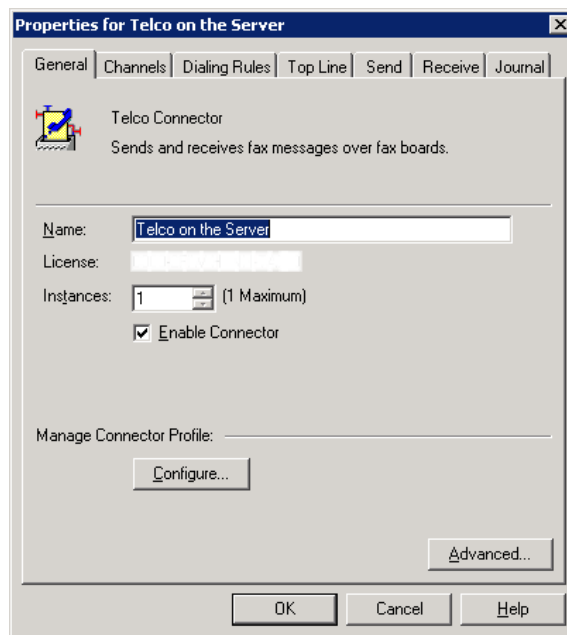
7-5 Configuring a path to the Telco share directory

After you detect the channels, you can configure the path to the Telco share directory to be a UNC path.

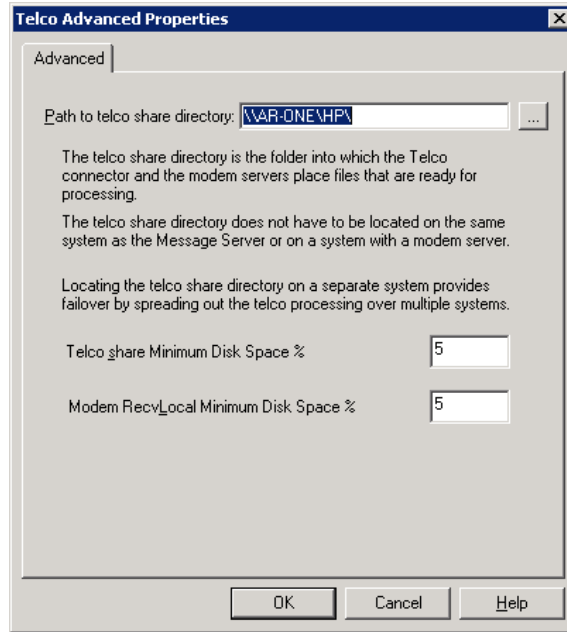
NOTE: The HP CR server UNC path is filled in by default.

If you specify a full path, when the configuration file is written to the remote modem server, the remote modem channels will look for “c:\” for the send and receive queues. But they should be looking at the HP CR server for the queues. So, you need to configure the path:

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. Click **Connectors** in the console tree, and double-click **Telco** in the details pane. The **Properties** page opens.



3. Click **Advanced** to open the **Telco Advanced Properties** page.



In the **Path to telco share directory** text box, the HP CR server UNC path is filled in by default.

4. Modify the path, if necessary. For example, you can specify the system name instead of providing the IP address. Add a trailing backslash at the end (for example: `\\123.4.5.678\telcoshare\`).
5. Click **OK** and then **OK** again to save your changes and close the **Properties** page.

8 Installing the remote HP CR Intelligent Device Client

The Intelligent Device Client is installed on the HP CR server with a complete installation. You can install the Intelligent Device Client on a remote system using the instructions in this section.

The remainder of this section describes:

[Requirements for the HP CR Intelligent Device Client](#) (95)

[Installing the remote HP CR Intelligent Device Client](#) (96)

[Configuring the remote Intelligent Device Client](#) (98)

For additional information (including optional configuration and troubleshooting), refer to the [HP CR administrator on-line help](#).

8-1 Requirements for the HP CR Intelligent Device Client

8-1-1 Basic requirements

The HP CR Intelligent Device Client requires a system that meets the minimum [Hardware and software requirements](#) (7) and [Additional installation requirements](#) (9) listed for the HP CR server. In addition, an HP CR Intelligent Device Client requires:

- A Windows NT domain system that runs in the same domain as the HP CR server and is not a domain controller. If the system is in a different domain, the domain must have bidirectional trust with the HP CR server domain.
- Pentium III-compatible processor, 1 GHz, 512 MB RAM, 500 MB available hard disk space, and Microsoft mouse or compatible pointing device
- Windows 2008 (64-bit), 2003 Standard Edition SP2 (64-bit).
- IIS with the following components: Common Files, World Wide Web Service, and Internet Information Services Manager
- Access to a network copy of the HP CR server setup
- Windows user account that belongs to the HP CR Administrators group

8-1-2 HTTP and HTTPS requirements

The Intelligent Device Client supports HTTP and HTTPS connectivity to the HP CR End User Interface. For HTTPS connectivity, you must perform the following tasks prior to installing the Intelligent Device Client on a remote system.

- Create and install a CA certificate on the default web site in IIS.
 - HTTPS for use with Embedded Device Client for HP OXPd v1.6
 - HTTPS for use with Embedded Device Client for HP OXPd v1.4



TIP: To set up a CA certificate using Microsoft Certificate Services, refer to the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#). For a CA certificate issued by a third party, use the certificate authority's instructions and apply the certificate to the default web site in IIS.

- Enable Secure Socket Layer (SSL) on the default web site in IIS. Refer to the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#).

8-1-3 Required COM permissions for the remote HP CR Intelligent Device Client

When performing a typical HP CR server installation, the HP CR Intelligent Device Client is installed by default. No separate client installation is necessary. For custom installations, you can uncheck the HP CR Intelligent Device Client option from the list of components to install.

If you need to install the HP CR Intelligent Device Client on a separate system, you must configure the following DCOM permissions for the Anonymous_User user.

1. Log in to the system where you will install the HP CR server using an account that belongs to the Administrators group.
2. Click **Start > Control Panel > Administrative Tools > Component Services**.
3. In the console, expand **Component Services > Computers**.
4. Right-click **My Computer** and select **Properties** from the drop-down menu.
5. Click **COM Security**.
6. In the **Access Permissions** section, click **Edit Limits**. The **Access Permission** page opens.
7. For user **Anonymous_logon**, select **Local Access** and **Remote Access** permissions.
8. Click **OK** to close the page.
9. In the **Launch and Activate Permissions** section, click **Edit Limits**. The **Launch Permissions** page opens.
10. For user **Anonymous_logon**, select **Local Launch**, **Remote Launch**, **Local Activation**, and **Remote Activation** permissions.
11. Click **OK** and then **OK** again to close the **Properties** page.

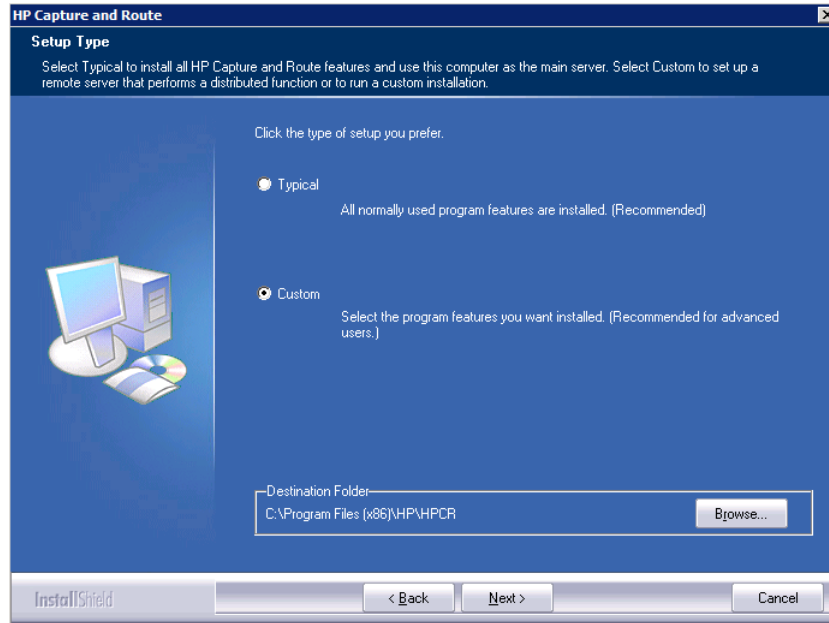
8-2 Installing the remote HP CR Intelligent Device Client

1. Log in to the system using an account that belongs to the HP CR Administrators group.
2. Navigate to the network where the HP CR server setup files are located.
3. Run:

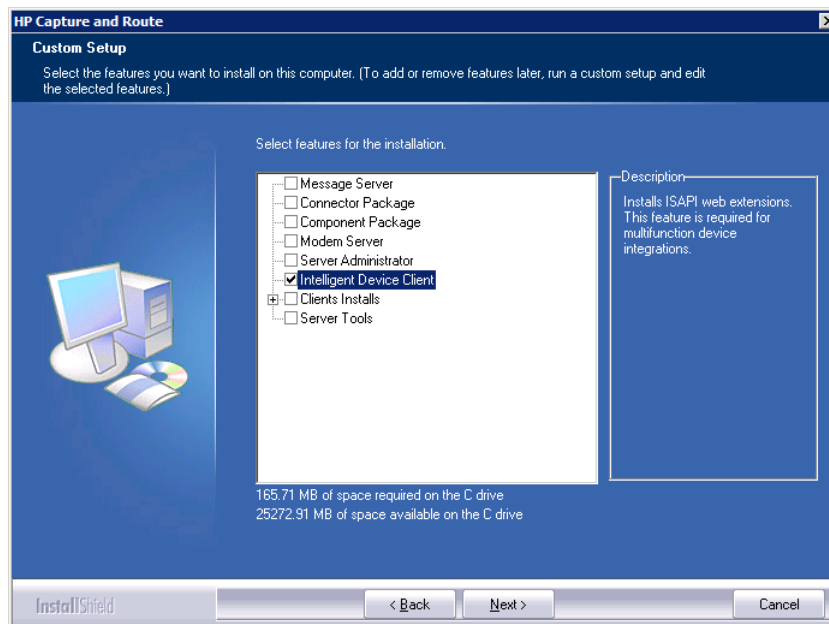
```
\MessageServer\setup.exe
```

The **InstallShield** wizard opens, configures your system, and displays the welcome message.
4. Click **Next**. The setup shows the **License Agreement** page.
5. Read the agreement and select **I accept the terms of the license agreement** option.

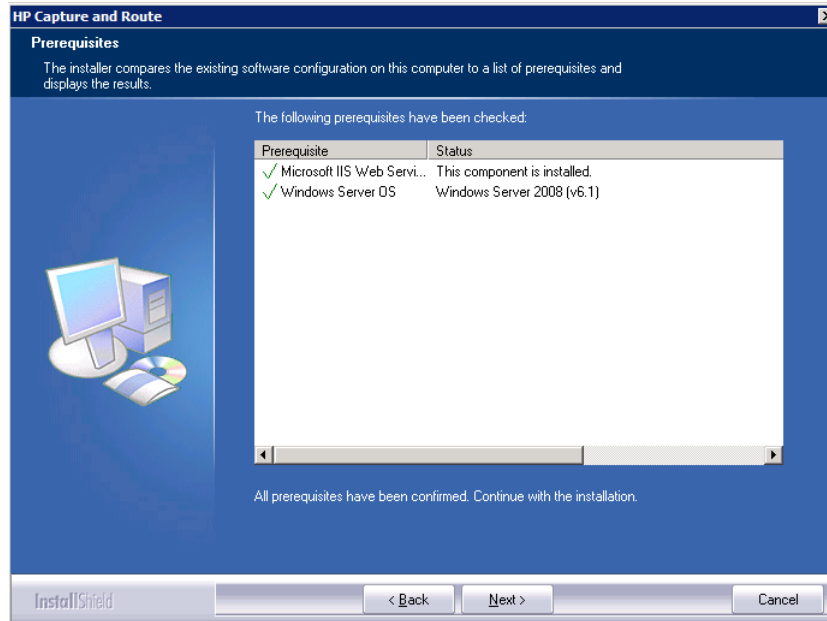
6. Click **Next**. The setup shows the installation options.



7. Select **Custom**. Click **Next**. The setup shows a list of HP CR features.
8. Select **Intelligent Device Client**. Clear any other feature you are not installing at this time.



9. Click **Next**. The setup checks the system for installation requirements and displays the results.



NOTE: The setup cannot continue until all prerequisite components are installed. (Double-click an item in the list for more information.) If any required components is missing, click **Cancel** and exit the installation setup. Install the components, then install HP CR Intelligent Device Client.

10. Click **Next**. The setup shows installation settings.
11. Review the installation settings. Click **Next** to start the installation. The setup installs the selected component and displays a message indicating that the installation is complete.
12. Click **Finish**.
13. Continue to configure the remote Intelligent Device Client, as described below.

8-3 Configuring the remote Intelligent Device Client

8-3-1 Specifying the HP CR Server

When you install the Intelligent Device Client on a remote machine, you must:

- Specify the HP CR server IP Address in OmISAPIU.xml
- Edit the registry string that stores the HP CR server location

To specify HP CR server name or IP address in OmISAPIU.xml:

1. Go to:
 - ... \HP\HPCR\WebAPI\WebAPI\Scripts
2. Open **OmISAPIU.xml** for editing.

NOTE: If the server is part of a cluster, the following setting should be made in the file:

```
<Server Name="MessageServer"><ServerName>
Primary_Server_name</ServerName>
```

```
<Server Name="MessageServer"><ServerName>Secondary_Server_name</ServerName>
</Server>
```

3. Locate the **ServerName** node.
4. Specify the HP CR server name or IP address. For example:

```
<ServerName>[IP Address]</ServerName>
```

5. Save and close the file.

6. Go to:

```
... \HP\HPCR\WebAPI\WebAPI\Scripts
```

7. Open **OmiSAPIU.xml** for editing.
8. Locate the **ServerName** node.
9. Specify the HP CR server name or IP address. For example:

```
<ServerName>12.123.4.5</ServerName>
```

10. Save and close the file.

8-3-2 Adding the application pool logon account to the HP CR Admins group

The application pool for the WebAPI is the WebAPI managing the worker process that handles requests from other Embedded Device Client for HP OXPd applications. By default, they run as Local System.

NOTE: If the security policy in the LAN does not permit the application pool to run as Local System, the application pool identity can be reconfigured using any account that belongs to the Domain Users group.

If you change your login to a network account, Integrated Windows Authentication will not work for the virtual directories that use the application pool. The work-around requires kerberos protocol changes in the active directory.

If necessary, modify the application pool identity. For instructions, consult the [Windows documentation on IIS](#).

If the Intelligent Device Client is installed on a remote system, add the application pool logon account to the HP CR Admins group which has the required Distributed COM permissions to communicate with the HP CR server. For instructions, see [Creating the HP CR Admins group](#) (11).

NOTE: When the Intelligent Device Client is installed on the HP CR server and both application pools run as Local System, you do not need to modify the application pool identity.

8-3-3 Other configurations

Other configurations include:

- Modifying the directory security configuration of virtual directories (optional)

For instructions, see [Optional configuration: Modifying the directory security configuration of virtual directories](#) (72).

9 HP CR Embedded Device Client for HP OXPd

As an intranet-based application for multifunction devices and business systems, HP CR supports software solutions to deploy Embedded Device Client for HP OXPd to multifunction devices running OXPd SDK v1.4.x and OXPd SDK v1.6.x.

Instructions for installing this device client are provided in the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#).

10 HP CR End User Interface

The End User Interface is an intranet-based web application providing network users a convenient method of creating document distributions, generating Routing Sheets, and sending messages.

Using HP CR End User Interface, users can send/distribute documents either electronically as an email or a fax message. They can also scan a hard copy document using a MFP device and distribute it using HP CR's routing capabilities.

- To distribute a document electronically, simply create the message and click **Send** (or select an existing message and click **Forward/Resend**) just as you would send an email message. The HP CR End User Interface immediately distributes the document as an electronic file attachment using the document distribution information.
- To distribute a hard copy document, generate a Routing Sheet from a document distribution. (A Routing Sheet is a cover sheet for your message containing the document distribution information (Distribution Rule data). Take the Routing Sheet and your hard copy documents to an office machine and scan the document with the Routing Sheet as the first or last page of the document. Your company's intelligent HP CR software detects the barcode on the Routing Sheet, routes the document to the HP CR sever where it is processed and sent to the intended recipient.

In the main menu, HP CR End User Interface presents the user with several options to create Messages and Distributions, and to set preferences as necessary.

The remainder of this section contains instructions on installing and configuring the HP CR End User Interface. These instructions are written for HP CR Server Administrators with detailed knowledge of the HP CR server and clients.

[HP CR End User Interface requirements](#) (104)

[Installing the HP CR End User Interface](#) (106)

[Required configuration](#) (108)

[Optional configuration - Customizing the HP CR End User Interface](#) (112)

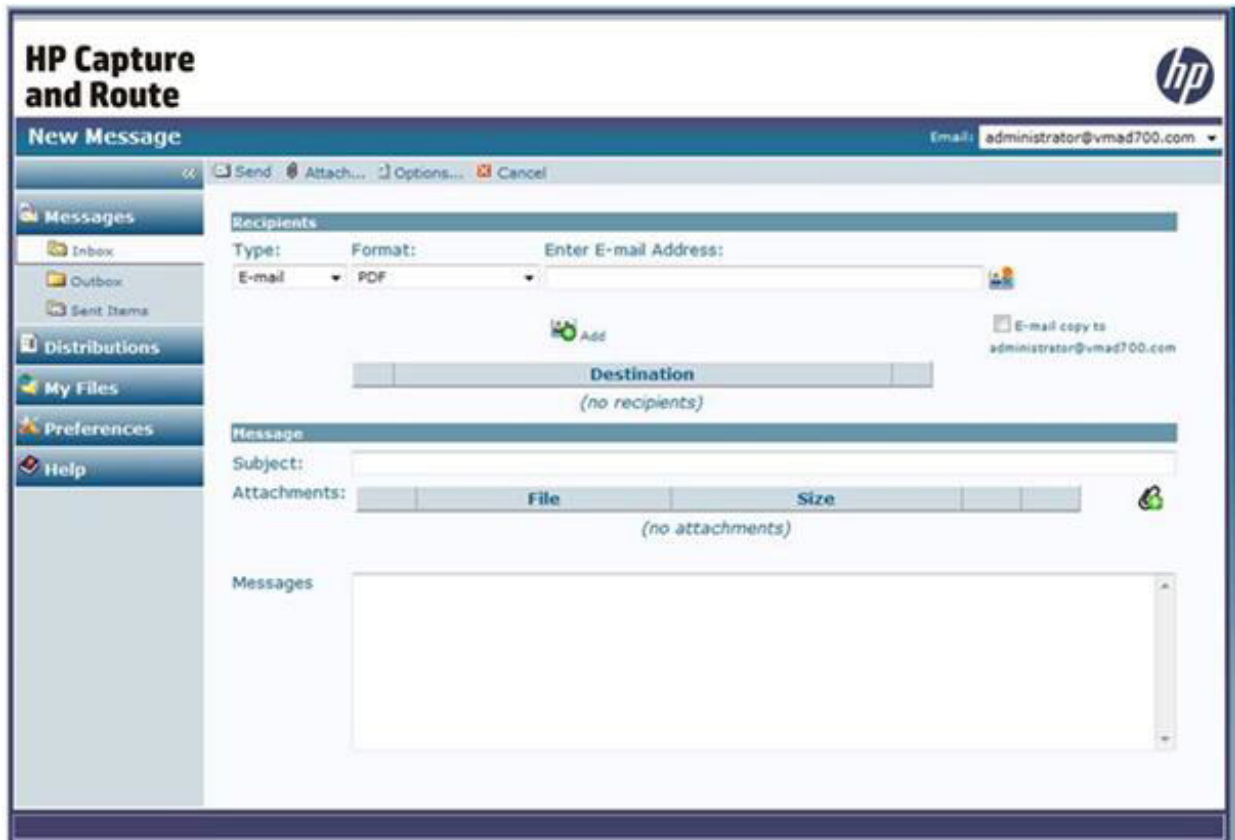
[Optional configuration - Configuring the HP CR Server Administrator](#) (119)

For additional information (including optional configuration and troubleshooting), refer to the [HP CR administrator on-line help](#).

For instructions on how to use the HP CR End User Interface, consult the [HP Capture and Route \(HP CR\) User Guide](#).

Figure 10-1 End User Interface

The default view of End User Interface presents the user with a series of options.



10-1 HP CR End User Interface requirements

10-1-1 Basic requirements



IMPORTANT: You can install HP CR End User Interface on the system running the HP CR server. If you install the HP CR End User Interface on a system that is not running the HP CR server, you must configure DCOM permissions so that the End User Interface server can access the HP CR server DCOM objects.

The requirements for the HP CR End User Interface are:

- Pentium-class processor, 20 MB hard disk space, 64 MB RAM (128 recommended)
- Windows 2008 R2 64-bit, 2003 Standard Edition SP2 64-bit
 - For Windows 2003 Standard Edition SP2 64-bit: Configure IIS to run 32-bit applications (see [Configuring IIS to run 32-bit applications](#) (14) for instructions)
 - For Windows 2008 64-bit: Internet Information Services (IIS) v7 (see [Configuring IIS when installing the HP CR server on Windows 2008 systems](#) (13) for configuration instructions)
- IIS (Windows component)

NOTE: For IIS v7 or later, configure to allow Active Server Pages. This configuration is located in the Web Service Extensions node in the IIS console tree.

- Microsoft .NET Framework v4.0 redistributable package ([Installing the End User Interface](#), 106)
- Microsoft Internet Explorer 7 or later
- Acrobat Reader 7.0 or later
- Internet connection

Supported Email Applications

- Microsoft® Outlook® 2007 or higher (Outlook Express is not supported)

The HP CR End User Interface has a **Browse Address book** option for new messages page. This feature is available for Microsoft Outlook clients only.

NOTE: The HP CR End User Interface user can choose an email address from the Microsoft Outlook Address Book only if the Outlook client is installed and configured on the client system. (Also see [Enabling the Address Book lookup functionality](#), 113.)

When HP CR End User Interface is configured to integrate with an Address Book for a supported email application, the email application must be selected as the Windows default email application. For more information, consult Windows help.

10-1-2 User requirements: email account

The HP CR End User Interface users must have an email account created for them using the mail server (Microsoft Exchange Server).



IMPORTANT: The mail server for any email account created must be installed on the same domain where the HP CR server is installed.

This is necessary because the HP CR End User Interface queries the Active Directory attributes like “mail” and “proxyAddresses”. The “proxyAddresses” attribute is added to the Active Directory properties only if an Microsoft Exchange Server is installed in the same domain as the Active Directory.

10-1-3 User requirements: full permissions



IMPORTANT: Full permissions to the Web Client installation folder for all domain users (including the application pool account user) is required when the End User Interface is installed to a non-default location with a custom virtual directory name.

10-2 Installing the HP CR End User Interface

The End User Interface setup does all of the following:

- Installs the End User Interface program files
- Creates a virtual directory in IIS and configures IIS authentication
- Configures End User Interface with the HP CR server location, and the mail system identity and location

10-2-1 Installing the End User Interface

If you have used HP CR End User Interface before, you must keep the deprecated client application and set up files in your system as deleting those files may interfere with the server usage.

1. Log on to the system where End User Interface is being installed using an account that belongs to the local Administrators group.
2. Navigate to a network folder containing the setup files and run **setup.exe**.

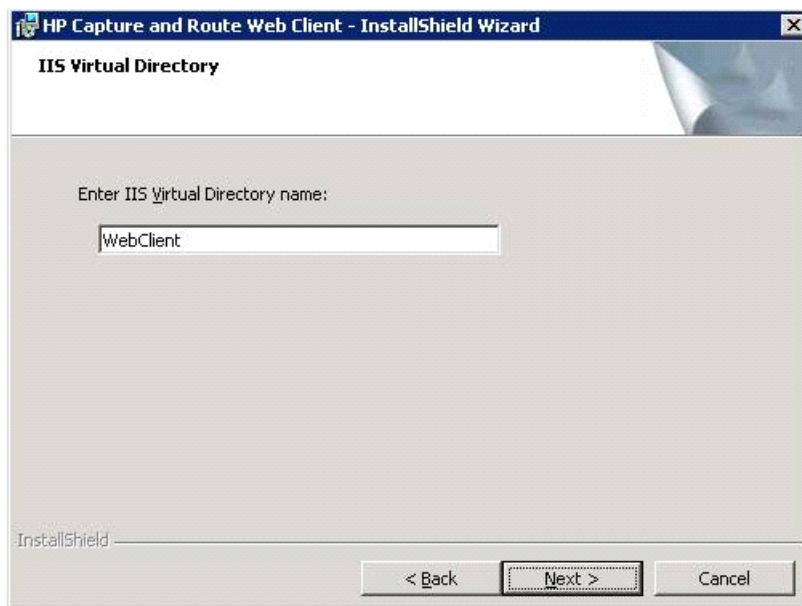


TIP: The End User Interface setup is installed with a complete HP CR server installation in `\Program Files\HP\HPCR\Clients\Web`. Immediately following the HP CR server installation, only the HP CR service account has permissions to access client setup programs on the HP CR server, but additional users can be granted permissions if necessary.

The **InstallShield** wizard configures your system and shows the **Welcome** message.

NOTE: If Microsoft .NET Framework v4.0 is not installed on your system, the HP CR End User Interface installation kit will direct you to the location from where you can download the package. After you have installed the package, you can proceed with the HP CR End User Interface installation.

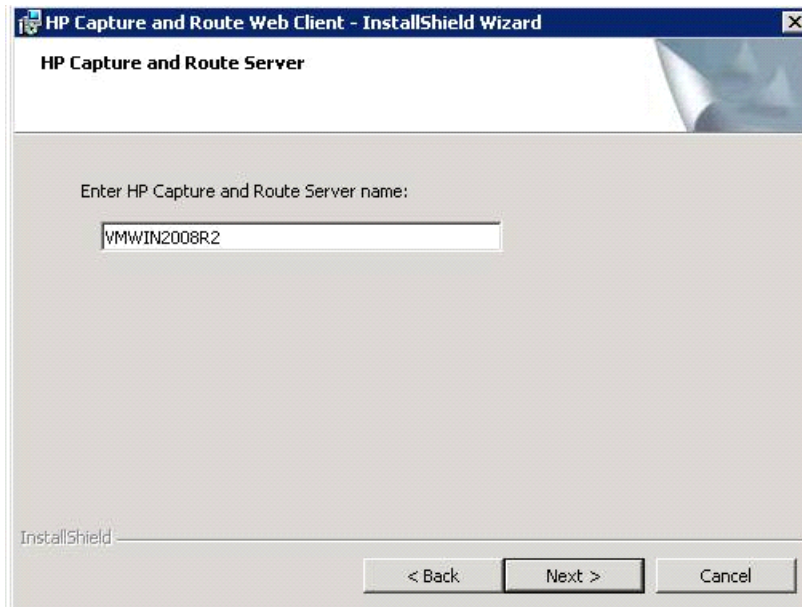
3. Click **Next**. The setup shows the destination folder.
4. Change the destination folder if necessary by clicking **Change** and then following the prompts. Click **Next**. The setup shows the IIS Virtual Directory name for the End User Interface.



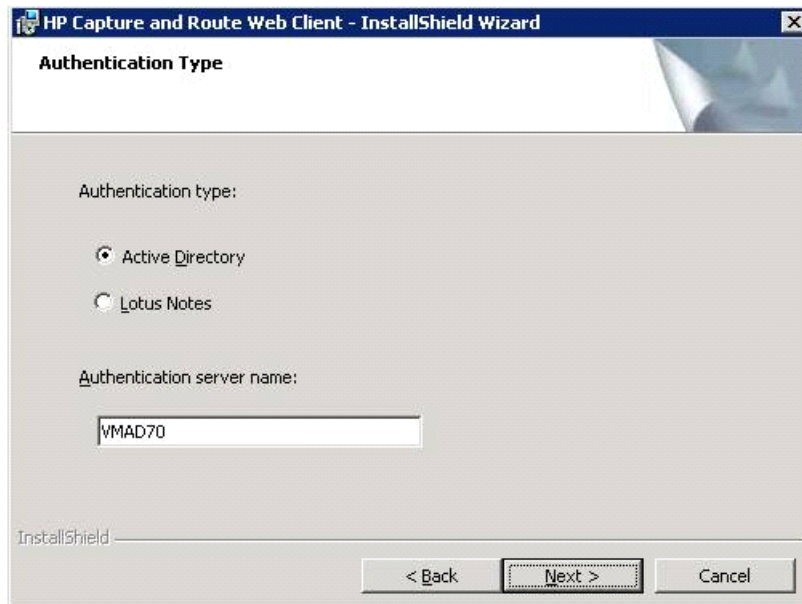
5. Change the virtual directory name if necessary. The default is [WebClient](#). Click **Next**.

NOTE: The virtual directory name is used to create a virtual directory in IIS under Default Web Site.

The setup prompts you to enter the HP CR server name. If you are installing the client in a system which has the HP CR server running, the name is filled in by default.



6. Click **Next**. The setup prompts you to choose the authentication type and enter the authentication server name.



7. Enter the authentication server name, which is the Active Directory server name.
8. Click **Next**. The setup shows the **Ready to Install the Program** page.
9. Click **Install**. The client is installed. The setup indicates when the installation is complete.
10. To launch the End User Interface, check the box beside the **Launch the program** option.
11. Click **Finish** to close the **InstallShield** wizard.

When installation is complete, a web browser opens and HP CR End User Interface is launched with a URL of <http://webservername/WebClient>.

NOTE: If you are configured to use a Secure Socket Layer (SSL) connection, manually configure the End User Interface URL to be <https://webservername/WebClient>.

10-2-2 Required DCOM permissions when installing on a remote system

When you install HP CR End User Interface on a remote system, you must configure the following DCOM permissions on the HP CR server. Without this configuration, the HP CR server cannot communicate with the remote clients. For DCOM configuration instructions, see [Configuring required COM permissions for launching the remote End User Interface](#) (110).

10-3 Required configuration

10-3-1 Enabling integrated Windows authentication

The End User Interface authenticates users based on their Windows logon credentials. The logon credentials are either passed transparently from the client to the web server or entered manually by the user at the beginning of each session. The login method depends on how authentication is configured; both methods are described in the configuration instructions.

NOTE: Windows authentication is required with NTLM authentication. Skip this section for database authentication.

Configure Windows authentication on the web server and then configure Internet Explorer on clients.

10-3-1-1 Configuring integrated Windows authentication on the web server

1. Log on to the web server using an account that belongs to the local Administrators group and start IIS.
2. Expand the server running the End User Interface and expand **Default Web Site**.
3. Click the virtual directory for the End User Interface. (The default name is [WebClient](#).) The End User Interface program files appear in the details pane.
4. Right-click **WebClient** in the details pane and select **Properties**.

NOTE: When right-clicking **WebClient** in IIS for Windows 2008 server, you do not get a **Properties** option. Instead, for 2008 server, double-click authentication and enable anonymous access there.

5. Go to the **Directory Security** tab.
6. Go to **Authentication and access control** (Windows 2003/2008) and click **Edit**. The **Authentication Methods** page opens.
7. Clear **Enable anonymous access** (Windows 2003).
8. Go to **Authenticated access** section and select **Integrated Windows Authentication** option.
9. Click **OK** to save the changes and close the **Authentication Methods** page.
10. Click **OK** to close the **Properties** page.

10-3-1-2 Configuring integrated Windows authentication on clients running Internet Explorer 7.0/6.0

You must configure Integrated Windows Authentication on all clients running Internet Explorer 7.0/6.0.

1. Log on to the client using an account that belongs to the local Administrators group and start Internet Explorer.
2. Open Internet Explorer and click **Tools > Internet Options**.
3. Click the **Security** option.
4. Select **Internet** or **Local Intranet** depending on your default zone and click **Custom level**.
The **Security Settings** page opens.
5. Scroll down to the **User Authentication** section and make the following changes:
 - To authenticate the Windows user transparently, select **Automatic logon with current user name and password**.
 - To prompt the Windows user to enter logon credentials at the beginning of each session, select **Prompt for Username and Password**.
6. Click **OK** to close the **Internet Options** page.
7. Close the Internet Explorer page.
8. Close all other open instances of Internet Explorer for the change to take effects.

10-3-2 Adding the End User Interface URL to the list of trusted sites on a client system

You must add the HP CR End User Interface URL to the list of trusted sites on all client systems which will browse to the HP CR End User Interface.

1. Log on to the client system using an account that belongs to the local Administrators group and start Internet Options. (It is accessible from Control Panel or Internet Explorer.)
2. Go to the **Security** tab.
3. Select **Trusted sites** and click **Sites**.
4. Enter the End User Interface URL and click **Add**.
5. Clear **Require server verification (https:) for all sites in this zone** if this option is selected.
6. Click **Close** to close the **Trusted Sites** dialog.
7. Click **Apply** to save the changes and click **OK** to close the dialog box.

The End User Interface URL is now added to the list of trusted sites. To verify that the system recognizes the End User Interface URL as a trusted site, start Internet Explorer and go to the End User Interface URL. Verify that End User Interface loads. (Depending on your Windows Integrated Authentication configuration, you may need to login.)

10-3-3 Selecting a network printer

1. Be sure the printer driver is installed on the HP CR server and that the printer was added to the Groups section of the HP CR Server Administrator, as described in [Adding network printers](#) (37).

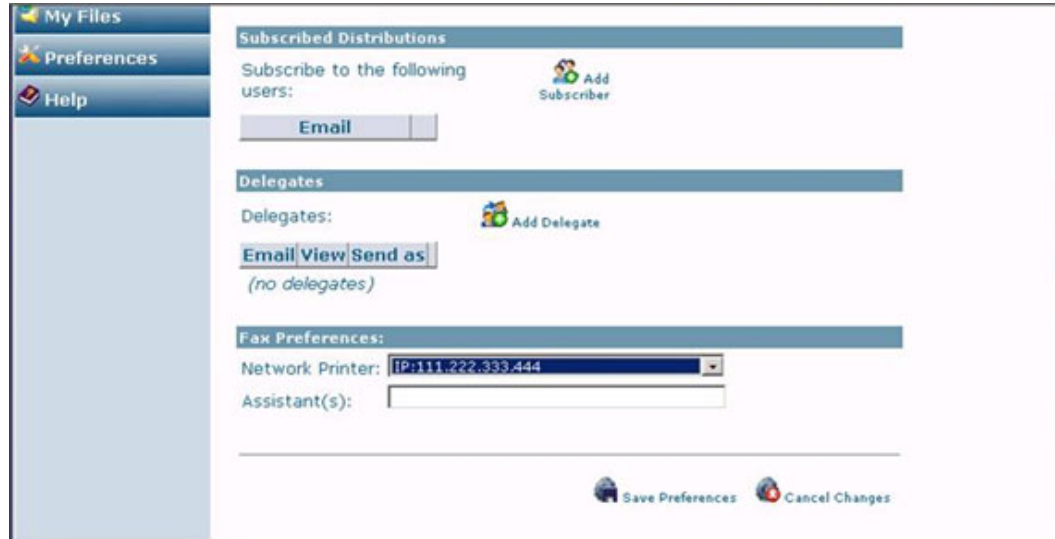
NOTE: Before the network printers are listed in the HP CR End User Interface, the network printers must be added to the **Printer** tab in the **Group** section of the HP CR Server Administrator.

The HP CR End User Interface will read the list of configured network printers on the HP CR server.

2. Log in to the HP CR End User Interface application.
3. Click **Preferences**.

The **User Preferences** page opens listing the user information and options.

4. Choose the network printer from the **Network Printer** drop-down menu.



5. Click **Save Preferences**.

NOTE: If you do not save your preferences, your configuration is valid for the current session only. The HP CR End User Interface will not remember your choices if you log out or open a new session.

10-3-4 Configuring required COM permissions for launching the remote End User Interface

Before you can launch a remote End User Interface, you must configure COM permissions for Anonymous_logon on the HP CR server. To do so:

1. Login to the system running the HP CR server using an account that belongs to the Administrator.
2. Click **Start > Control Panel > Administrative Tools > Component Services**.
3. In the console, expand **Component Services > Computers**.
4. Right-click **My Computer** and select **Properties** from the drop-down menu.
5. Click **COM Security**.
6. In the **Access Permissions** section, click **Edit Limits**. The **Access Permission** page opens.
7. For user **Anonymous_logon**, select **Local Access** and **Remote Access** permissions.
8. Click **OK** to close the page.
9. In the **Launch and Activate Permissions** section, click **Edit Limits**. The **Launch Permissions** page opens.
10. For user **Anonymous_logon**, select **Local Launch**, **Remote Launch**, **Local Activation**, and **Remote Activation** permissions.
11. Click **OK** and then **OK** to close the **Properties** page.

10-3-5 Configuring required firewall settings for launching a remote End User Interface

Before you can launch a remote End User Interface, you must configure firewall settings on the HP CR server. To do so:

1. Login to the system running the HP CR server using an account that belongs to the Administrator.
2. Click **Start > Control Panel > Windows Firewall**.
3. Click **Exceptions**, then **Add Programs**. The **Add a program** page opens.
4. Browse to `C:\Programfiles\HP\HPCR\bin\omwebgflookupU.exe`.
5. Click **OK**.

This process excludes the executable from the firewall block.

6. Browse to `C:\Programfiles\HP\HPCR\bin\omGFServerU.exe`.
7. Click **OK**.

This process excludes the executable from the firewall block.

8. Click **Add Port**. The **Add a Port** page opens.
9. In the **Name** text box, enter `browser`.
10. In the **Port number** text box, enter `80`.
11. Check if there is an entry called **End Port Mapper(DCOM)**.
If not click **Add Port**. In the **Name** text box, enter `End Port Mapper (DCOM)`. In the **Port Number** text box, enter `135`. Select the **TCP** option.
12. Click **OK** to save your changes.

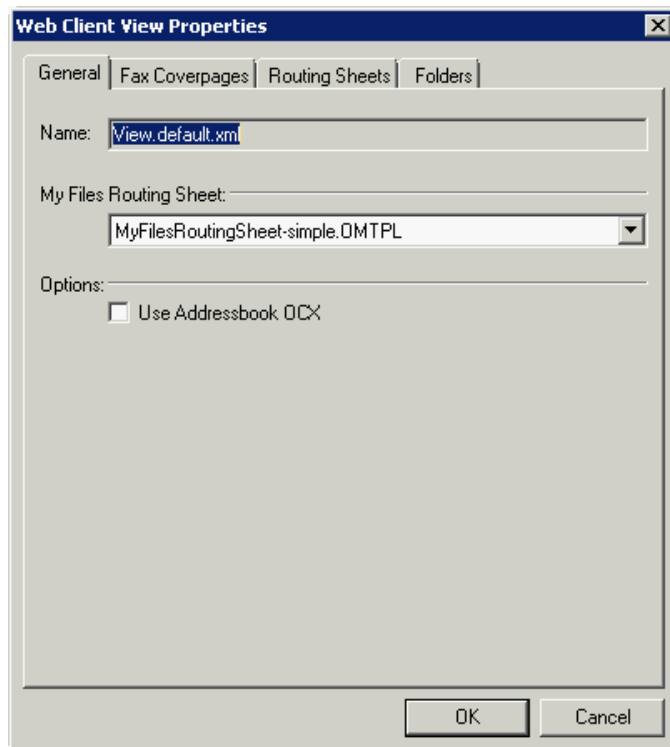
10-4 Optional configuration - Customizing the HP CR End User Interface

Use the Administrator Web Client Views Management tool to set up primary customized options. In addition, you can modify the View.default.xml file for secondary customized options. Procedures for both primary and secondary options are provided in the following sections.

10-4-1 Using the Administrator Web Client Views Management tool to set up primary customized options

You can set up primary customized options to define the ways in which features are displayed with the End User Interface.

1. Launch the HP CR Server Administrator.
2. Click **Configuration > Web Client Views**.
3. Right-click on View.Default.xml in the results pane. Select **Properties**. The **Web Client View Properties** page is displayed.



Use the Administrator Web Client Views Management tool for:

- [Setting a default Routing Sheet template for use with the Scan to My Files feature](#) (113)
- [Enabling the Address Book lookup functionality](#) (113)
- [Making fax cover page templates available and setting a default template](#) (114)
- [Making Routing Sheet templates available and setting a default template](#) (116)
- [Setting tabs/folders that are enabled and specifying a default display](#) (117)

10-4-1-1 Setting a default Routing Sheet template for use with the Scan to My Files feature

On the **Web Client View Properties** page (**General** tab), select a template file from the **My Files Routing Sheet** drop-down.

NOTE: Typically, the default Routing Sheet template for Personal and Public Distributions is different from the template used for the Scan to My Files feature. See also [Making Routing Sheet templates available and setting a default template](#) (116).

10-4-1-2 Enabling the Address Book lookup functionality

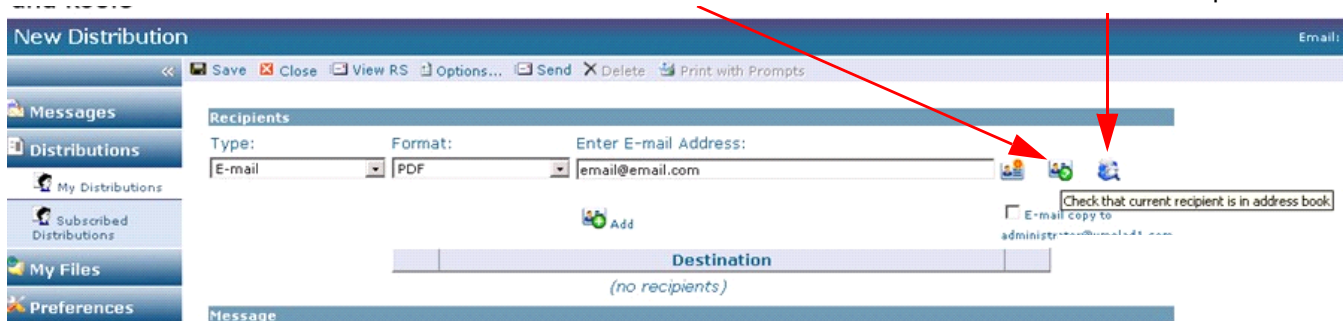
The end user can use the OCX for Address Book browsing. Enabling this feature requires two steps:

- Selecting the **Use Addressbook OCX** option on the **General** tab of the **Web Client View Properties** page
- Enabling ActiveX options on the desktop

After you complete these steps (described below), the End User Interface will have two additional buttons:

One new button checks that the current recipient is in the End User Interface user's LOCAL Address Book.

The other new button browses the End User Interface user's LOCAL Address Book to add recipients.



Step 1: Enabling the Use Addressbook OCX option:

1. On the **Web Client View Properties** page (**General** tab), select the **Use Addressbook OCX** option in the **Options** section.
2. Click **OK** to save your changes.

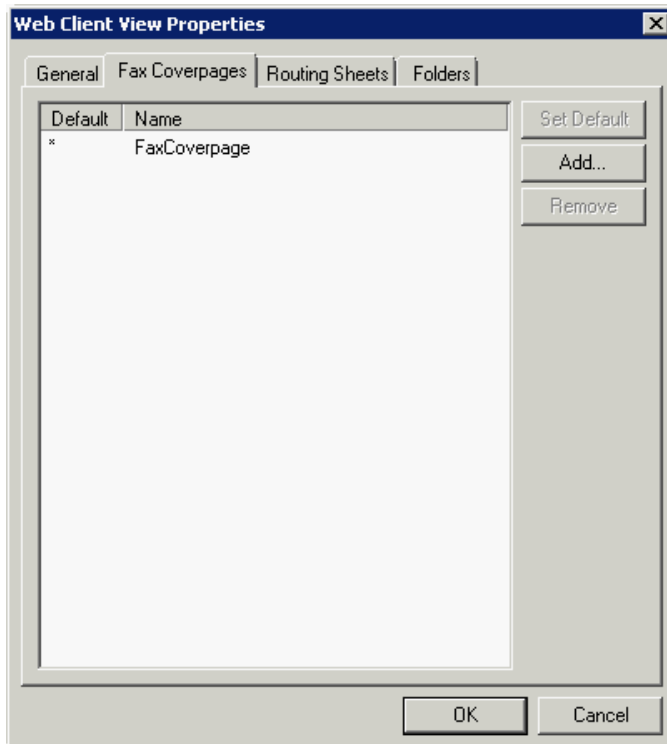
Step 2: Enabling ActiveX options on the desktop

1. In Internet Explorer, open the **Tools** menu and select **Internet Options**.
2. Click the **Security** tab.
3. Click **Trusted sites** (the green tick mark).
4. Click the **Sites** button.
5. Enter the Web Client URL in the **Add this website to the zone** box. Click the **Add** button to add the Web Client URL to the trusted sites.
6. Click **Close**.
7. Click the **Custom level** button.

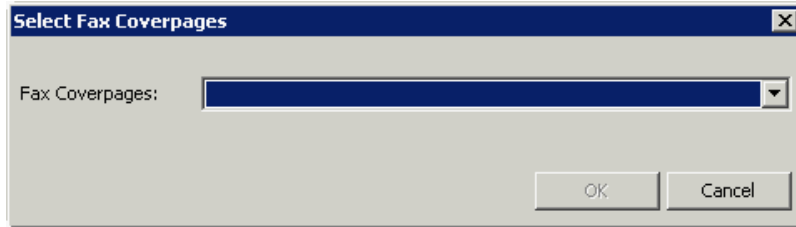
8. Scroll down to **ActiveX controls and plug-ins** in the **Security Settings - Trusted Sites Zone** page.
9. Set the following conditions:
 - **Allow previously unused ActiveX controls to run without prompt** — select **Enable**
 - **Allow Scriptlets** — select **Enable**
 - **Automatic prompting for ActiveX controls** — select **Enable**
 - **Binary and script behaviors** — select **Enable**
 - **Download Signed ActiveX controls** — select **Enable**
 - **Download unsigned ActiveX controls** — select **Prompt**
 - **Initialize and script ActiveX controls not marked as safe for scripting** — select **Prompt**
 - **Run ActiveX controls and plugins** — select **Enable**
 - **Script ActiveX controls marked safe for scripting** — select **Enable**
10. Click **OK** and **Apply**.
11. Close all the instances of Internet Explorer and relaunch the site.

10-4-1-3 Making fax cover page templates available and setting a default template

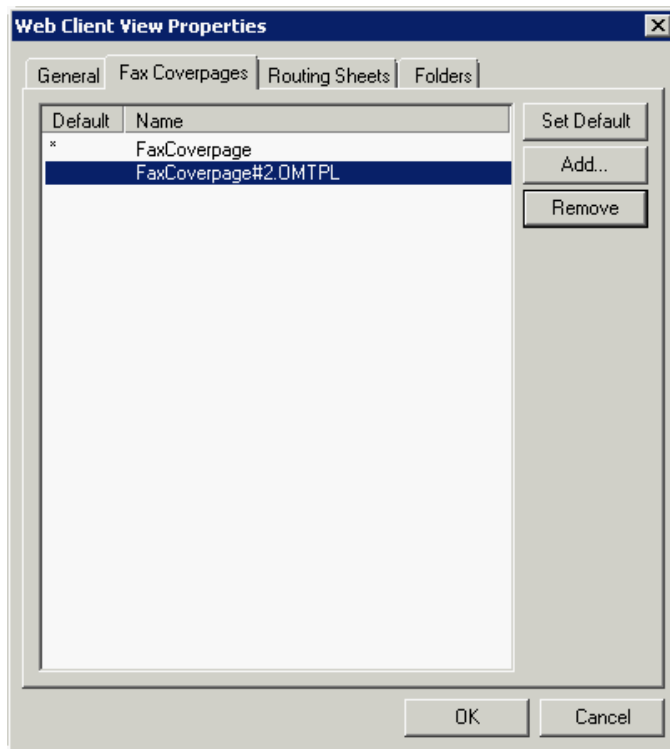
1. On the **Web Client View Properties** page, click the **Fax Coverpages** tab.



2. To add a cover page, click the **Add** button. The **Select Fax Coverpages** dialog is displayed.



3. Select a cover page file. Click **OK**. The file is added to the list. For example:



4. If you want to change the default cover page selection, highlight the name and click the **Set Default** button. An asterisk (*) appears in the **Default** column to the left of the cover page name.
5. Click **OK** to save your changes.

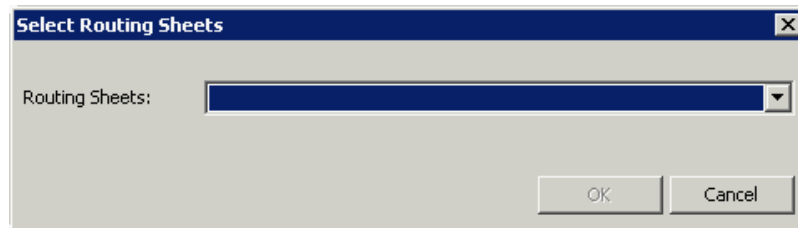
10-4-1-4 Making Routing Sheet templates available and setting a default template

NOTE: Typically, the default Routing Sheet template for Personal and Public Distributions is different from the template used for the Scan to My Files feature. See also [Setting a default Routing Sheet template for use with the Scan to My Files feature](#) (113).

1. On the **Web Client View Properties** page, click the **Routing Sheets** tab.



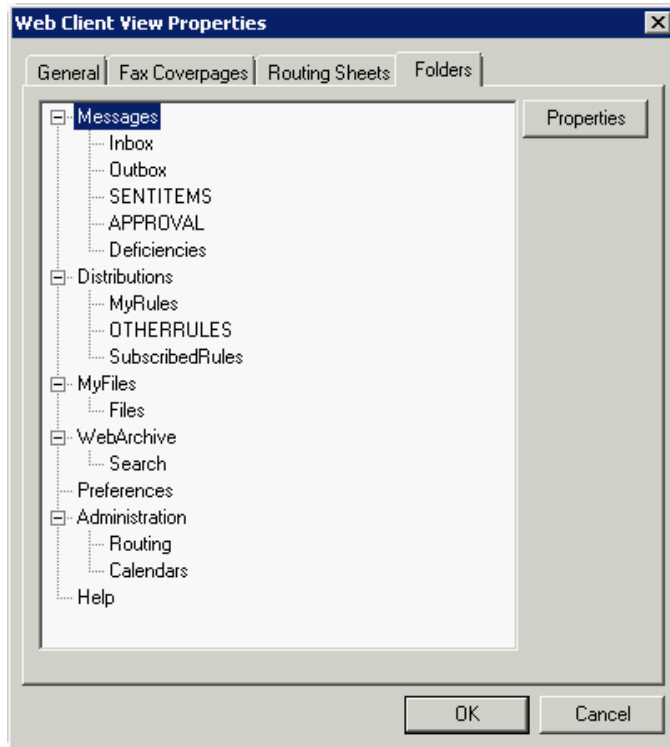
2. To add a Routing Sheet, click the **Add** button. The **Select Routing Sheets** dialog is displayed.



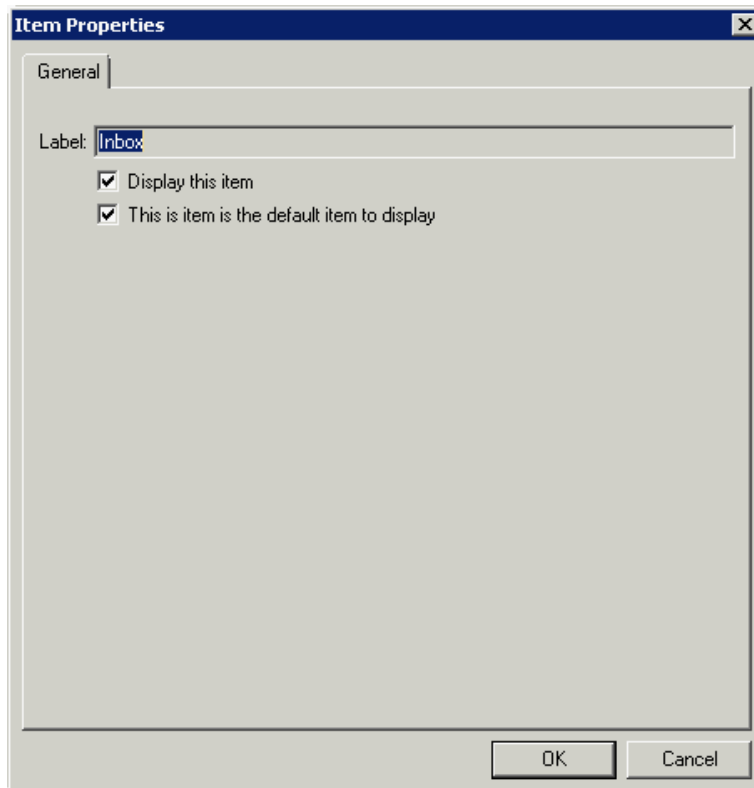
3. Select a Routing Sheet file. Click **OK**. The file is added to the list.
4. If you want to change the default Routing Sheet selection, highlight the name and click the **Set Default** button. An asterisk (*) appears in the **Default** column to the left of the Routing Sheet name.
5. Click **OK** to save your changes.

10-4-1-5 Setting tabs/folders that are enabled and specifying a default display

1. On the **Web Client View Properties** page, click the **Folders** tab.



2. To set the properties for a folder, click the **Properties** button. The **Item Properties** dialog is displayed.



3. For each feature (Messages, Distributions, etc.) and related folder (Inbox, Outbox, etc.), select to:
 - Display the item for the end user
 - Set the item as the default to display when the user starts to use the End User Interface (Only one feature and one related folder within the feature can be set as the default to display. In the example shown above, Inbox (in Messages) will display by default.)
4. Click **OK** twice to save your changes.

10-4-2 Modifying the View.default.xml file for secondary customized options

You can modify the **View.default.xml** file for secondary customized options. Two such options are:

- [Displaying multiple email accounts](#) (118)
- [Configuring row count](#) (118)

10-4-2-1 Displaying multiple email accounts

The HP CR End User Interface displays all email accounts associated with a user. However, if you want, you can configure the HP CR End User Interface to display only the primary email address for each user. This is useful if users have multiple email addresses associated with their user records in Active Directory.

For example, if ABC company gets purchased by XYZ company, then some users might have two email addresses—one with the ABC domain name, and the other with the XYZ domain name. In this instance, Active Directory defines the primary email address for users as the address with the XYZ domain name. Therefore when you configure the HP CR End User Interface to display only the primary email address of each user, users see faxes associated with the XYZ address only.

To configure the HP CR End User Interface to display only the primary email address of each user:

1. Navigate to `\\HP\WebClient\Configuration` on the system where you installed the client.
2. Open the **view.default.xml** file in Notepad.
3. Locate the `<ShowAllProxies>` node.
4. Set the value to `false`.
If you set the value to `true`, it will show all primary and secondary email addresses.
5. Save and close the file.

10-4-2-2 Configuring row count

By default, 10 documents are displayed in a page. To configure the row count, configure the folder's item attribute. Generally, there are not a lot of files for an user, as they will have a tight cleanup schedule.

1. Navigate to `\\HP\WebClient\Configuration` on the system where you installed the client.
2. Open the **view.default.xml** file in Notepad.
3. Locate the Folder node for which you want to make the changes. For example:

```
<Folder type="MyFiles" label="My Files" visible="true"
image="Myfiles.gif" default="true"
items="" sortexpression="" sortdirection="" filter="">
```

4. Enter a value for the row count in the item attribute. For example:


```
<Folder type="MyFiles" label="My Files" visible="true"  
image="Myfiles.gif" default="true"  
items="20" sortexpression="" sortdirection="" filter="">
```

NOTE: If no value is mentioned for the item attribute, the default value is 10.

5. Save your changes and close the file.
6. Perform an **iisreset** for the changes to take effect.

10-5 Optional configuration - Configuring the HP CR Server Administrator

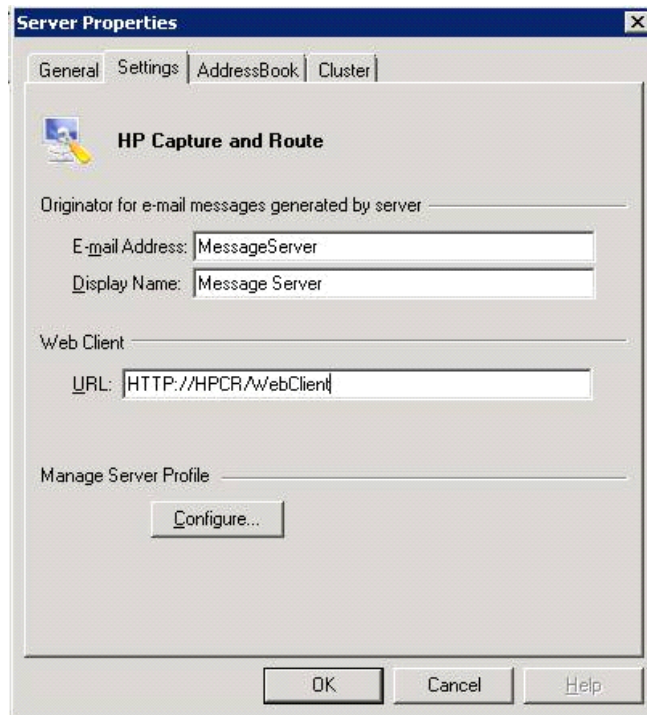
The instructions in this section are for the HP CR Server Administrator. All configurations listed are optional and are to be used as needed.

10-5-1 Adding the HP CR End User Interface URL to the HP CR Server Administrator

Add the HP CR End User Interface URL to the HP CR Server Administrator following the instructions below. Once you add the link, email notification messages for deficiency recipients generated by IIQ operators will contain a link to access the deficiency using HP CR End User Interface. To add the HP CR End User Interface URL:

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator**.
2. In the console tree, expand the HP CR server.
3. Right-click server name and select **Properties** from the drop-down menu.
4. Click **Settings** to open the **Settings** page.

5. In the Web Client section, go to the URL text box and enter the HP CR End User Interface URL:
<http://WebServerName/WebClient>



6. Click **OK** to save your changes.

10-5-2 Configuring prompts

See the [HP CR administrator on-line help](#).

10-5-3 Configuring additional custom options

See the [HP CR administrator on-line help](#).

11 HP CR for Microsoft SharePoint

HP CR enables Microsoft SharePoint users to import hardcopy documents into SharePoint libraries. The process is driven from the native SharePoint user interface using its screens and menus. HP CR can convert the scanned documents into text-searchable format (PDF or DOC), and then save the resulting document into the proper SharePoint library, fully profiled and stored alongside other electronic content. Once imported, you can browse through the document libraries to locate these documents, or use SharePoint enterprise search capabilities.

11-1 Microsoft SharePoint requirements

HP CR for Microsoft SharePoint can be installed on any of the following supported Microsoft SharePoint environments:

- Microsoft SharePoint 2007 64-bit server on Windows 2003 64-bit environment
- Microsoft SharePoint 2010 64-bit server on Windows 2008 R2 64-bit environment

11-2 Installing HP CR for SharePoint client on the Microsoft SharePoint server

1. Log in to the Microsoft SharePoint Server system using an account that belongs to the Administrators group.
2. Navigate to the HP CR server system and find the following directory:
`\\HP\Clients\Extensions for MS SharePoint`
3. Run `Setup.Exe`. The setup configures your system and opens the **InstallShield** wizard showing the **Welcome** message.
4. Click **Next**. The **Specify URLs** page opens.
Enter the HP CR Client URL. This is usually:
`http://HP CR Server Name}/WebClient`
Enter the specific SharePoint site URL or sub-site URL. For example:
`http://vmsharepoint201/sales`
5. Click **Next**. The **Ready to Install the Program** page opens.
6. Click **Install** to begin the installation. When installation is complete, you will see the **Installation Completed** message.
7. Click **Finish** to close the **InstallShield** wizard.

11-3 Configuration

11-3-1 Disabling the pop-up blocker in Internet Explorer

This required configuration will allow HP CR to access the SharePoint dialog. This procedure needs to be applied to each user's system.

1. Open Internet Explorer v8.0 / 7.0.
2. Select **Tools** from the menu bar.
3. Select the **Turn Off Pop-Up Blocker** option from the **Pop-Up Blocker** node.

11-3-2 Configuring the HP CR connector for Microsoft SharePoint

This required configuration is done from the HP CR server. All documents that are processed by the HP CR server are sent to Microsoft SharePoint via the HP CR Connector for MS SharePoint.

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator**.
2. Right-click on **Connectors** and select **New HP Capture and Route connector for > MS SharePoint**.
3. On the **Advanced** tab, select the **Configure...** button under **DMS Configuration**.
4. In the **SharePoint Location** text box, enter the location of the Microsoft SharePoint document library (for example: http://server/site/document_library).
5. Click **Finish** to complete the DMS configuration.

11-3-3 Setting anonymous authentication for UploadFile.aspx

This required configuration is done from the HP CR server where the End User Client is installed.

1. Go to the server system running the HP CR Server.
2. Open Internet Information Manager (IIS) 7.
3. Go to **Sites > Default Web Site > WebClient**.
4. Right-click on **WebClient** and select the **Switch To Content View** option.
5. Select the **UploadFile.aspx** file and select **Switch to Features View** in the **Actions** pane.
6. Select **Authentication** in **Feature View** under **IIS**.
7. Select **Open Feature** in **Actions**.
8. Disable all except for **Anonymous Authentication**.

11-3-4 Configuring full control permissions for members of the group

This can be run from any system that is logged in with SharePoint Administrator credentials.

1. Launch the SharePoint site in Internet Explorer.
2. Click the **Site Actions** drop-down and select the **Site Settings** option.

3. Select the **People And Groups** option in the **Users and Permissions** column.
4. Select the **Home Owners** option in the **Groups** section.
5. Click on **New** and select the **Add Users** option.
6. In the **Under User/Groups** field, add users and check for the required members.
7. Click **OK** to save your changes.

Full Control permissions are available to the selected members of the group.

11-3-5 Setting PDF documents to append date/time stamp for unique file name

By default, Routing Sheets should be set as single use, to avoid documents being overwritten. In some environments where PDF is used as the final format, the configuration.xml file can be modified to append a date/time stamp to the imported document creating a unique file name that will result in a new file added to the SharePoint.

1. On the SharePoint server, find the Configuration.xml and open it in Notepad:

```
C:\Program Files\Common Files\Microsoft Shared\Web Server  
Extensions\12\14\TEMPLATE\FEATURES\MessageServer
```
2. Locate the `<Recipient Destination>` tag of the configuration.xml file and REMOVE the following:

```
<prDMSDocumentUpdateOptions>1</prDMSDocumentUpdateOptions>
```

3. Find the `<Recipient>` tag of the configuration.xml file and add the following:

```
<prDMSDocumentUpdateOptions>4</prDMSDocumentUpdateOptions>
```

The values equal:

4 = create new document

1 = overwrite document

NOTE: Only documents that are PDF final formats can have the date and time appended to the file name.

12 HP CR for Autonomy WorkSite

HP CR enables Autonomy iManage WorkSite users to import hardcopy documents into WorkSite libraries. The process is driven from the native WorkSite user interface using its screens and menus. HP CR can convert the scanned documents into text-searchable format (PDF or DOC), and then save the resulting document into the proper WorkSite library, fully profiled and stored alongside other electronic content. Once imported, you can browse through the document libraries to locate these documents, or use WorkSite enterprise search capabilities.

A user within the iManage FileSite or DeskSite client interface can select an **Import Scan** option to specify profile information for the document that will be scanned later. When the document is scanned, it is uploaded to iManage in the target folder with the specified profile information. The scan can be accomplished using an HP MFP or other network-connected scanning device.

The **Send to HP CR** option also is available from iManage FileSite or DeskSite. With this option, a user can extract one or more documents from the iManage repository and have these documents uploaded and attached to a new message composed using the HP CR Web Client.

12-1 Autonomy iManage WorkSite requirements

HP CR for Autonomy WorkSite can be installed with any of the following supported WorkSite environments:

- Autonomy iManage WorkSite (DeskSite and FileSite) v8.01, v8.2, v8.3, v8.5, v9.0

12-2 Installing HP CR for Autonomy WorkSite client on the DeskSite or FileSite client system

1. Log in to the system using an account that belongs to the Administrators group.
2. Navigate to the HP CR server system and find the following directory:
`\\HP\HPCR\Clients\Extensions for Autonomy Worksite`
3. Run `Setup.Exe`. The setup configures your system and opens the **InstallShield** wizard showing the **Welcome** message.
4. Click **Next**. The **Specify URLs** page opens.
Enter the HP CR Client URL. This is usually:
`http://[ServerName]/WebClient`
5. Click **Next**. The **Destination Folder** page opens. Optionally, change the folder location.
6. Click **Next**. The **Ready to Install the Program** page opens.
7. Click **Install** to begin the installation. When installation is complete, you will see the **Installation Completed** message.
8. Click **Finish** to close the **InstallShield** wizard.

12-3 Setting up end user extensions

This required configuration is done from the HP CR server. All documents that are processed by the HP CR server are sent to WorkSite via the WorkSite (DMS) connector.

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator**.
2. Right-click on **Connectors** and select **New HP Capture and Route connector for > WorkSite**. The **Create New WorkSite DMS Connector** page is displayed.
3. Select the **Run on the Message Server** option or specify a remote server.

Create New WorkSite DMS Connector

Server Address
Enter the name of the computer where the connector is installed.

Server Address:

Run on the Message Server

Remote Server

< Back Next > Cancel

4. Click **Next**. Then, enter a name for the WorkSite connector.

Create New WorkSite DMS Connector

Display Name
Enter a friendly name for the connector.

Name:

WorkSite on the Server

< Back Next > Cancel

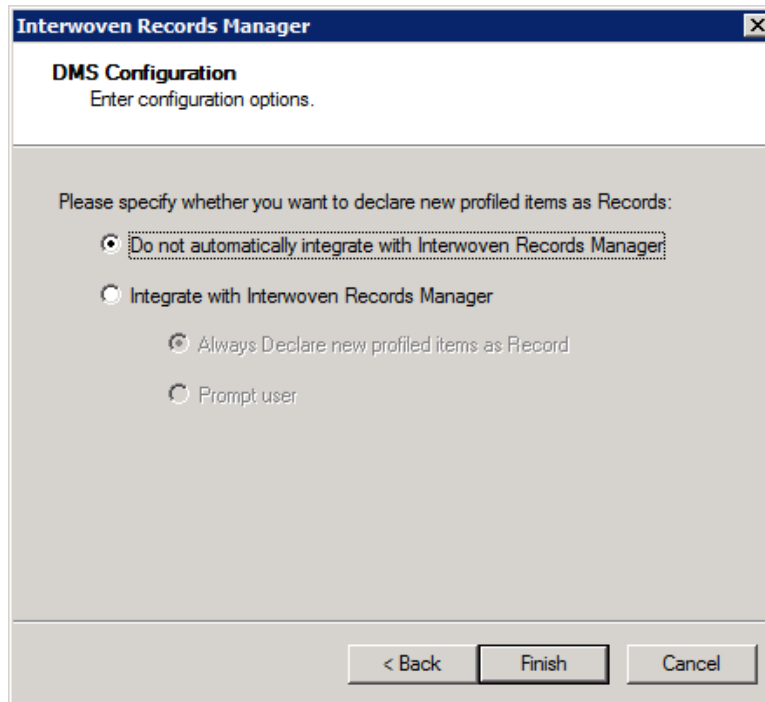
5. Click **Next**.

6. On the **Congratulations** page, click **Finish**. The **WorkSite Login Configuration** page is displayed.

7. Specify a **WorkSite Server**.
8. Enter the user name and password for a **Specific User**.
Or, select the **Use Trusted Login** option.
9. Click **Next**. The **WorkSite Configuration** page is displayed.

10. Select options for the **Login configuration** and **Profile type**.
11. Select the **Placeholder** option if you want to retain placeholder profiles in WorkSite after creating an Embedded Directive.

- Click **Next**. The **Interwoven Records Manager** page is displayed.



The screenshot shows a dialog box titled "Interwoven Records Manager" with a close button (X) in the top right corner. Below the title bar, the text "DMS Configuration" is displayed, followed by the instruction "Enter configuration options." The main area of the dialog contains the text "Please specify whether you want to declare new profiled items as Records:" followed by three radio button options: "Do not automatically integrate with Interwoven Records Manager" (which is selected), "Integrate with Interwoven Records Manager", and "Integrate with Interwoven Records Manager" with two sub-options: "Always Declare new profiled items as Record" and "Prompt user". At the bottom of the dialog, there are three buttons: "< Back", "Finish", and "Cancel".

- Select an option to indicate whether or not you want to declare new profiled items as records.
- Click **Finish** to complete the configuration.

13 HP CR Server Monitor

HP CR Server Monitor is a stand-alone application that monitors various components of an HP CR server. It executes custom-created tests to detect workflow bottlenecks and system failures.

Conditions that can be monitored include the message database size, available disk space on the HP CR server, Send and Receive folder sizes, HP CR services status, and connectors status. Additionally, with its versatile monitoring capabilities, HP CR Server Monitor runs test in specified frequencies; maintains a suspend schedule; supports custom actions for each test which can include sending e-mail notifications, writing entries to the event log, and changing the status of HP CR services; supports custom email addresses for the source and destination of notification messages; and monitors HP CR server clusters.

HP CR Server Monitor consists of:

- **HP CR Server Monitor Administrator** - A snap-in to the Microsoft Management Console, the Administrator plays two essential roles. First, it serves as the user interface where you create “tests” for each HP CR server you monitor. (Each test consists of criteria and at least one action.) Second, the Administrator connects to the HP CR Server Monitor Service. Because the HP CR Server Monitor Administrator can run on a different system than the HP CR Server Monitor Service, you can manage your server monitoring methods from another Windows system in the local area network, including your desktop.
- **HP CR Server Monitor Service** - This Windows service performs all monitoring activities from a high-availability server. It logs on to the HP CR server using the HP CR server account, which has DCOM access and launch permissions on the HP CR server, and then executes the tests created in the Administrator.

This section provides details on installing and using HP CR Server Monitor, an application that monitors the HP CR server environment. This information is written for an advanced computer user or network administrator with working knowledge of the HP CR server environment.

[Requirements](#) (129)

[Installing HP CR Server Monitor](#) (130)

[Required configuration](#) (131)

For additional information (including optional configuration and troubleshooting), refer to the [HP CR administrator on-line help](#).

13-1 Requirements

13-1-1 HP CR Server Monitor service requirements

The system where the HP CR Server Monitor Service is installed must meet these minimum requirements:

- Windows NT domain computer that always runs in the same domain as the HP CR server and is not a domain controller, an HP CR server, or a remote server
- Pentium III-compatible processor, 1 GHz, 512 MB RAM, 20 GB available hard disk space, CD-ROM drive, and Microsoft mouse or compatible pointing device
- Windows 2008 (64-bit), Windows 2003 Standard Edition (64-bit)
- IIS configured for SMTP mail delivery

13-1-2 HP CR Server Monitor Administrator requirements

The system where HP CR Server Monitor Administrator is installed must meet the following minimum requirements:

- Windows NT domain computer that belongs to the same domain as the HP CR server
- Pentium III-compatible processor, 1 GHz, 512 MB RAM, 200 MB hard disk space, CD-ROM drive, and Microsoft mouse or compatible pointing device
- Windows 2003 Standard Edition, Windows 2000 Server SP4, Windows 2000 Advanced Server SP4, or Windows 2003/2000

13-1-3 Additional installation requirements

HP CR Server Monitor also requires the following:

- HP CR service account or another account that belongs to the HP CR Admins group on the HP CR server

13-2 Installing HP CR Server Monitor

HP CR Server Monitor is installed with two components: HP CR Server Monitor Administrator and HP CR Server Monitor service. The HP CR Server Monitor service, a Windows service that monitors the HP CR server environment, is installed on one system only. The HP CR Server Monitor Administrator can be installed multiple systems so that one or more administrators can conveniently manage HP CR Server Monitor.



TIP: HP CR Server Monitor Administrator and HP CR Server Administrator are snap-ins to the Microsoft Management Console. Both snap-ins are supported on the same system so that administrators can manage the HP CR server and the application that monitors it from the same location.

The HP CR Server Monitor setup files are installed on the HP CR server in a folder that is not shared by default. Before installing HP CR Server Monitor, log on to the HP CR server using an account that belongs to the local Administrators group, share

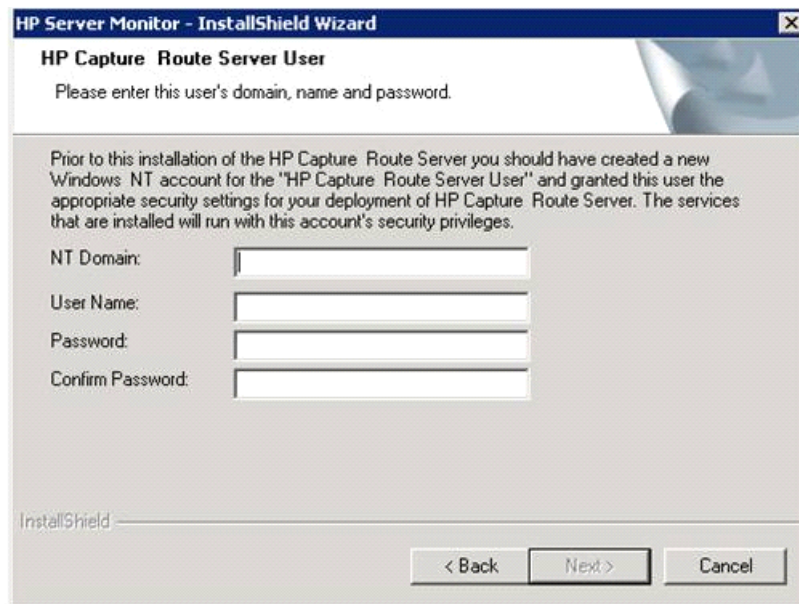
`C:\Program Files (x86)\HP\HPCR\Tools\ServerMonitor`

and give the HP CR Server Monitor installation user read access to the share.

To install HP CR Server Monitor:

1. Log on to the system where HP CR Server Monitor is being installed using an account that belong to the local Administrators group:
`C:\Program Files (x86)\HP\HPCR\Tools\ServerMonitor`
Copy the setup files to the system where HP CR Server Monitor is being installed.
2. Run **setup.exe**. The setup starts and displays a welcome message.
3. Click **Next**. The setup shows the license agreement.
4. Read the license agreement and click **Yes** if you agree to the terms. The setup shows setup options.
5. Click **Next**. The setup requests logon credentials for the HP CR Server Monitor Service.

NOTE: To install only the HP CR Server Monitor Administrator, select **Custom**. Clear **Server Monitor Service** and click **Next**. Go to step 7.



6. Enter the logon credentials of the HP CR service account or another account that belongs to the HP CR Admins group on the HP CR server, and click **Next**. The setup shows installation settings.
7. Review the installation settings and click **Next** to begin the installation. The setup shows a message indicating that the installation is complete.
8. Click **Finish**.

13-3 Required configuration

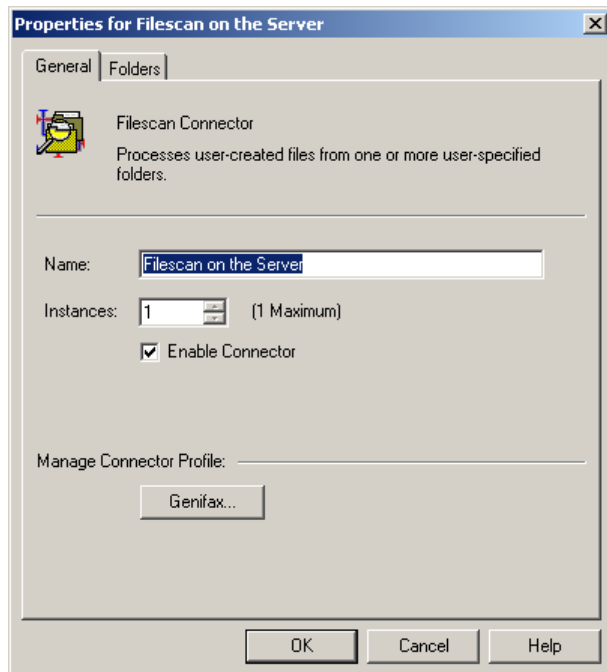
13-3-1 Configuring HP CR connectors for Filescan and Telco

HP CR Server Monitor can run tests on folders associated with HP CR connectors for Filescan and Telco. In order to run tests on these folders, the folders must be configured in UNC format. (UNC uses the format `\\computer\folder`. Drive letter mappings, such as `G:\folder\folder`, are not supported.) If an HP CR server has either of these connectors, complete the required configuration in this section.

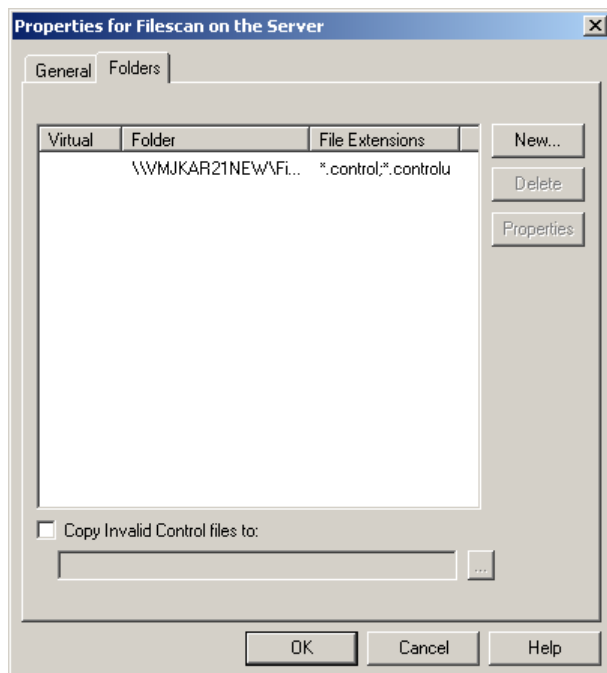
NOTE: If you configure HP CR Server Monitor to run tests on a folder, verify that the Windows user account associated with the HP CR Server Monitor Service has sharing permissions on that folder and security permissions with read access.

13-3-1-1 Configuring the Filescan connector folders with UNC paths

1. Click **Connectors** in the console tree and double-click the **Filescan** connector in the details pane.



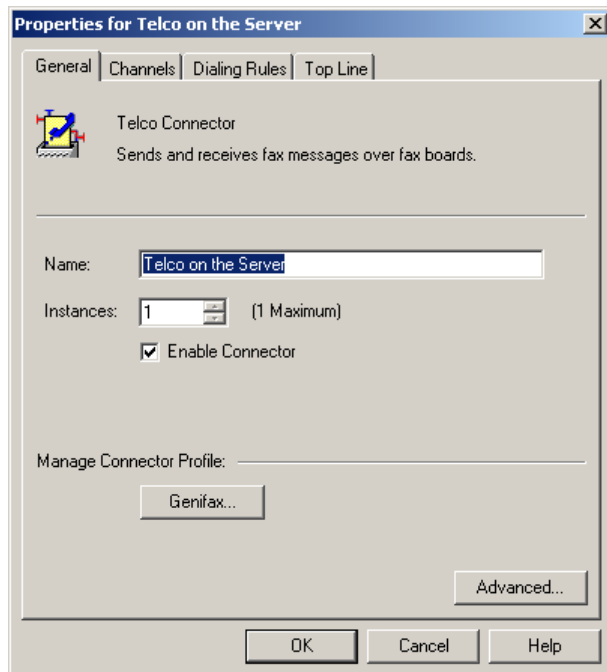
2. Click the **Folders** tab.



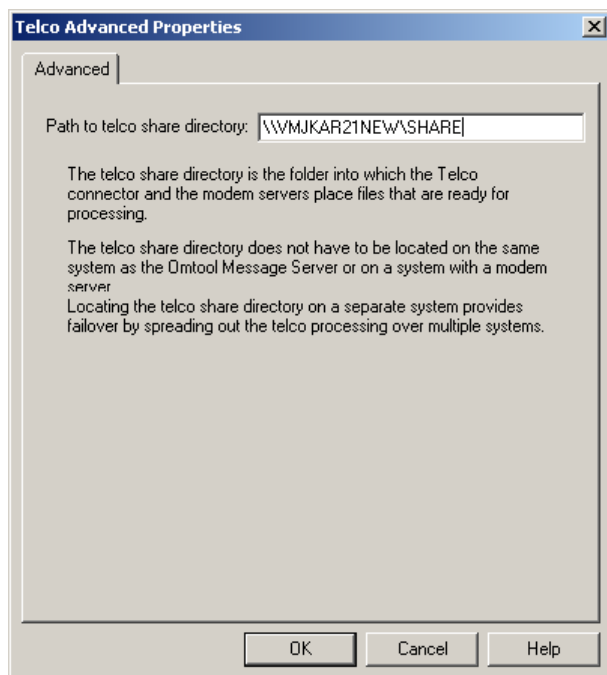
3. Verify that each folder has been configured with a UNC path. (If you need to change a folder configuration, select the folder and click **Properties**. Type the UNC path to the folder in the Folder to scan field and click **OK**.)
4. Click **OK** to save your changes to the connector.

13-3-1-2 Configuring the Telco connector with a UNC path

1. Click **Connectors** in the console tree and double-click the **Telco** connector in the details pane.



2. Click **Advanced** on the **General** tab.



3. Verify that the path to the Telco share directory is in UNC format. Change it if necessary, and then click **OK**.
4. Click **OK** to save your changes to the connector.

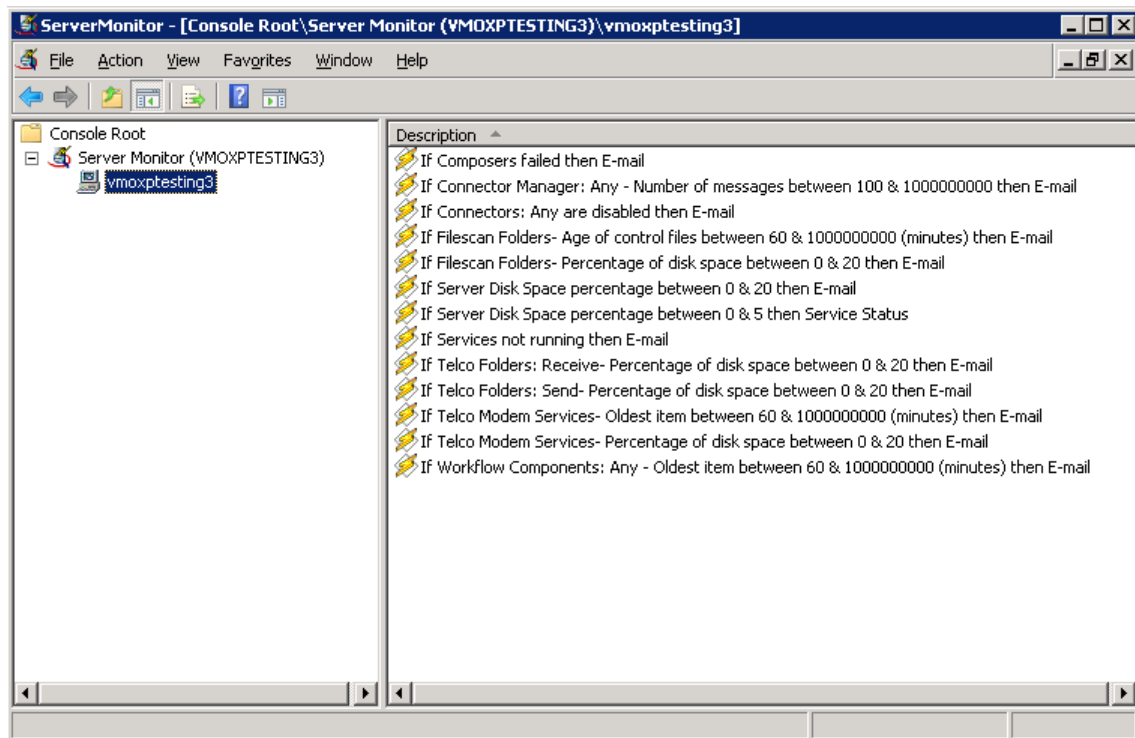
13-3-2 Configuring HP CR server properties

After you add an HP CR server to the HP CR Server Monitor Administrator, right-click the server (or, highlight the server and click **Action** on the toolbar) to open the available options menu.

The available options are:

- **Properties** - Select this menu item to configure options on the General and Suspend Monitor tabs.
- **Remove** - Select this menu item to remove the server from the HP CR Server Monitor Administrator.
- **New** - Select this menu item to create a new test.

Figure 13-1 HP CR Server Monitor Properties



13-3-3 Clustering

When adding a clustered server to the HP CR Server Monitor Administrator, it must be active. The server icon in the HP CR Server Monitor Administrator changes when you add a clustered server.

If you are using a clustered server environment, please consider the following while configuring HP CR Server Monitor:

- You need to cluster a server before you add it to the HP CR Server Monitor Administrator.
- Make sure you add the preferred server in the cluster to the HP CR Server Monitor Administrator.
- If the failover time in a clustered environment exceeds 90 seconds, HP CR Server Monitor performs all actions specified in the Cluster Failover Action option located on the server properties General tab. It also performs all these actions if both the preferred and secondary servers are shut down.
- After control is moved from the preferred server to the secondary server, the test will be performed for the backup server, but the stored configurations are not updated with the backup server name.

13-3-4 Defining sender and recipient email addresses

When you add a server to the HP CR Server Monitor Administrator, you are prompted to enter two email addresses in the Default Test Criteria screen.

Figure 13-2 Default Test Criteria screen

The email address in the **From** field is used as the default sender's email address whenever you add a new email action for your test criteria.

The email address in the **To** field is used as the default recipient's email address whenever you add a new email action for your test criteria.

NOTE: The **From** and **To** email addresses are also used for email notifications of critical errors in a clustered environment.



TIP: You can enter multiple email addresses in the **To** field by separating each email address with a semicolon (;), or you can enter a distribution list address. Distribution list aliases are not supported.

You can update the email addresses in the server properties at any time, as well as override the default email addresses when creating new test criteria.

13-3-5 Defining server properties: The General tab

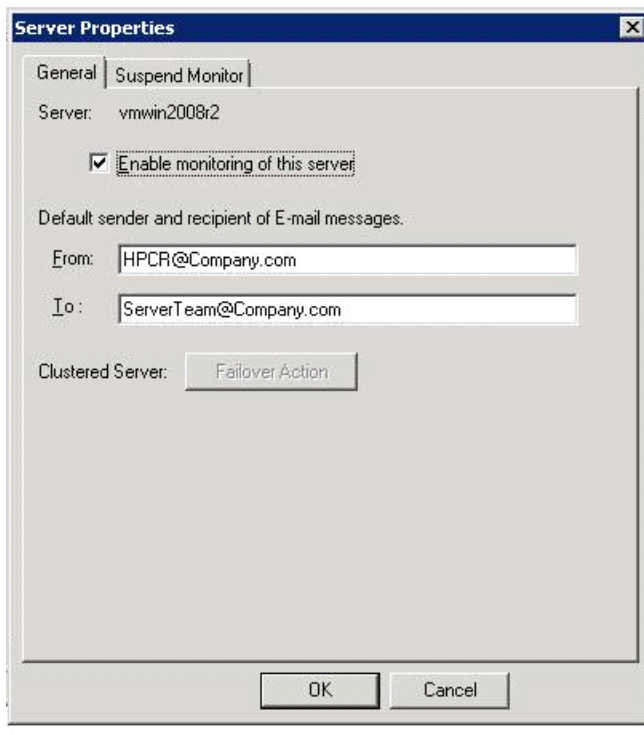
The **General** tab is where you define server properties in the HP CR Server Monitor.

13-3-5-1 Opening the General tab

Right-click the server and select **Properties**. (Or, highlight the server, click **Action** on the toolbar, and select **Properties**.) The General tab is selected by default.

On this tab, you can:

- Enable or disable monitoring of this server by selecting or clearing **Enable monitoring of this server**. The icon displayed in the HP CR Server Monitor Administrator changes based on your selection.
- Change the sender and recipient email addresses. You defined these email addresses when you added the server to the HP CR Server Monitor Administrator.
- Define actions for when a failover occurs.



TIP: You can enter multiple email addresses in the To field by separating each email address with a semicolon (;), or you can enter a distribution list address. Distribution list aliases are not supported.

13-3-5-2 Defining failover actions

In a clustered environment, you can define the actions that happen when a failover event occurs in the cluster. For example, you can define a Failover Action that sends an email if the secondary server takes over from the preferred server.

1. Click **Failover Action** on the Server Properties General tab. The Cluster Failover Action screen appears.
2. Specify the actions to take when a failover occurs.

Complete the wizard for the action you specified.

13-3-6 Optional configuration

For additional, optional configuration procedures, refer to the [HP CR administrator on-line help](#).

Part III:
Additional Information

14 Setting up an HP CR server cluster

This section describes:

[Introduction to failover](#) (139)

[Requirements for an HP CR server cluster](#) (141)

[Setting up the database server](#) (142)

[Setting up the active server](#) (142)

[Setting up the passive server](#) (144)

[Adding and activating the failover server license](#) (145)

[Enabling failover by setting up an HP CR server cluster](#) (145)

[Testing the failover configuration by simulating a localized system failure on the active server](#) (146)

[Optional configurations for cluster environments](#) (147)

[Disabling SMB2 on a Windows 2008 R2 HP CR server cluster](#) (148)

14-1 Introduction to failover

Automatic failover, a native HP CR capability, ensures seamless and immediate recovery from a localized system failure on the HP CR server. It requires two redundant HP CR servers that are joined to form an HP CR server cluster, and a third system where critical server resources are stored.

The redundant HP CR servers are referred to as:

- **Active server** - the current HP CR server
- **Passive server** - the standby server

The third system that stores critical resources is called the “database server” because it hosts the server databases along with server configuration files. If the HP CR server is enabled for faxing, the database server also hosts the Telco share, which is an intermediary repository for inbound and outbound faxes. (The database server can also function as a remote server such as remote administrator, remote composer, or remote modem server.)

In some environments, where multi-function devices are used, a fourth system - Remote IIS - can be added to host the HP CR Intelligent Device client and specific HP CR device client installs.

Failover is driven by the HP Cluster Service which is installed on the HP CR server. (This service does not appear in the Services applet because it is not registered by default.) When an HP CR server cluster is created, this service is immediately registered and runs simultaneously on both HP CR servers in the cluster. During regular operation, the active server in the HP CR server cluster continuously writes to the server databases while HP Cluster Service on the passive server polls the database server in 45-second intervals to verify that the active server remains active.

When a localized system failure occurs on the active server, it loses communication with the database server and cannot write to the server databases. As soon as the HP Cluster Service on the passive server polls the database server again and finds no recent activity from the active server, the HP Cluster Service on the passive server starts all its local HP CR services and becomes the active server in the cluster. The transition is complete within 1 to 3 minutes of the failure.

Figure 14-1 HP CR server cluster basic setup

An HP CR server cluster has two redundant HP CR servers referred to as the active server and passive server, and a third system that stores critical HP CR server resources called the database server.

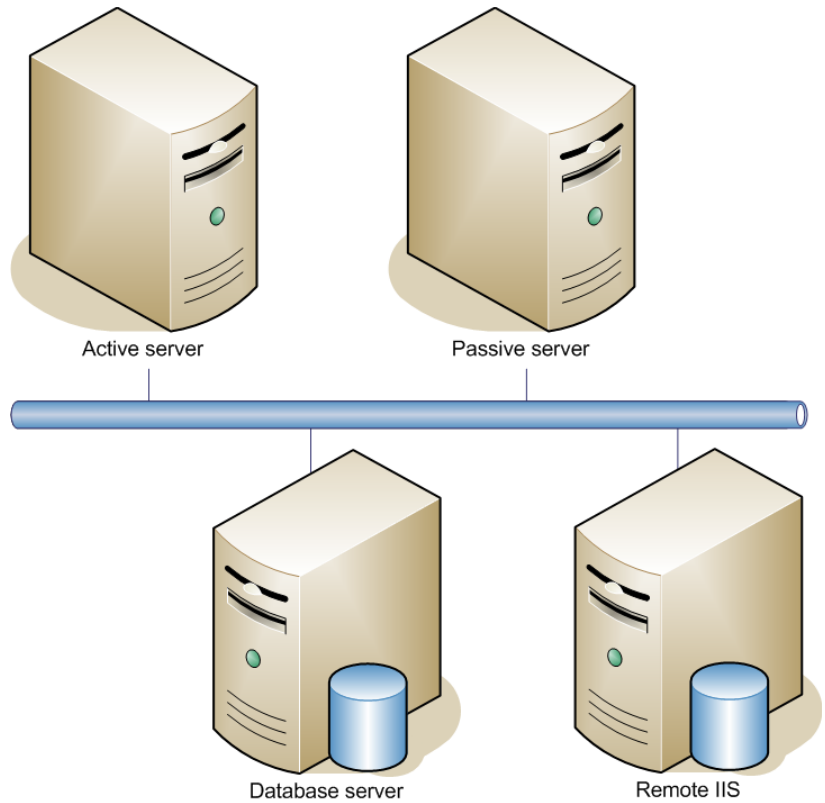
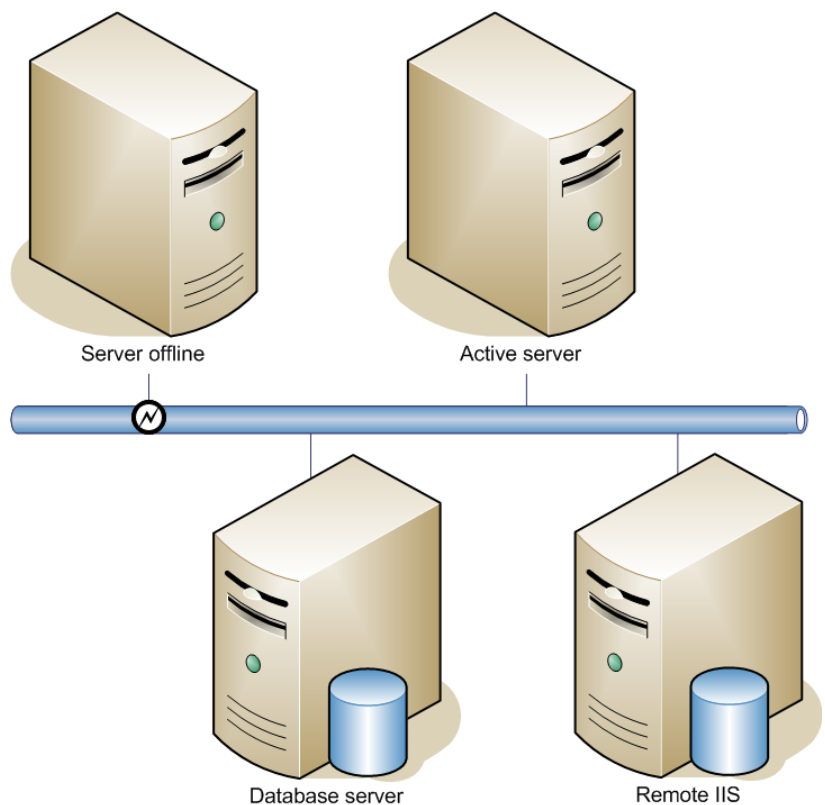


Figure 14-2 HP CR server cluster in failover mode

An HP CR server cluster enters failover mode when a localized system failure causes the current HP CR server to go offline and the other server to become active.



After a failure occurs, an administrator needs to restore the server that is offline.



TIP: HP CR Server Monitor is a monitoring application that detects failures on HP CR servers. It is recommended that HP CR Server Monitor or another monitoring application be used to alert administrators that a failure has occurred so that failures can be corrected in a timely manner.

An HP CR server in the cluster can be designated as the preferred server. If an HP CR server is preferred, it is always the active server whenever it is available. Therefore, if a system failure occurs and the preferred server goes offline, the non-preferred server becomes active, but when the preferred server is online again, it becomes the active server and the non-preferred server returns to a standby state.

14-2 Requirements for an HP CR server cluster

14-2-1 HP CR server requirements

The two HP CR servers must meet the minimum requirements for an HP CR server. For details, see [Hardware and software requirements](#) (7).

NOTE: The HP CR servers should have identical and redundant configurations. If resources are shared, for example, a remote Composer, the shared resource should be installed on the database server or another high availability system in the domain.

14-2-2 Database server requirements

The database server must meet the following minimum requirements:

- [Hardware and software requirements](#) (7) for the HP CR server
- Microsoft SQL Server 2008

NOTE: Microsoft SQL Server 2008 Express Edition does not meet this requirement.

- Template files used by the server

14-2-3 Remote device server requirements

The Remote Device server must meet the following minimum requirements:

- Requirements for the Remote Device server, as defined in [Installing the remote HP CR Intelligent Device Client](#) (95)

14-3 Setting up the database server

14-3-1 Creating folders for HP CR server resources stored on the database server

1. Log in to the system as an administrator.
2. Choose a location in the local directory structure and create the following folders:
 - **Messages** - Stores the message database.
 - **Config** - Stores server configuration files.
 - **Templates** - Template files used by the server.
3. Share each folder.
4. Give the HP CR service account read, write, and delete permissions to each folder. For more information on modifying permissions, consult Windows help.

14-3-2 Creating the Telco share

NOTE: Complete the following procedure if the HP CR server cluster supports faxing,

For an HP CR server cluster that supports faxing, create the Telco share. The Telco share is shared by both servers in the cluster. You must create it on any high availability system, such as the database server belonging to the same domain as the clustered HP CR servers.

To create the Telco share on the database server:

1. Choose a location in the local directory structure and create a folder for the Telco share. Use a self-descriptive name such as HPTelcoshare.
2. Share the folder.
3. Give the HP CR service account read and write permissions to the folder. For more information on modifying permissions, consult Windows help. (If the environment has HP CR servers that were installed with different HP CR service accounts, give all HP CR service accounts these permissions.)

14-4 Setting up the active server

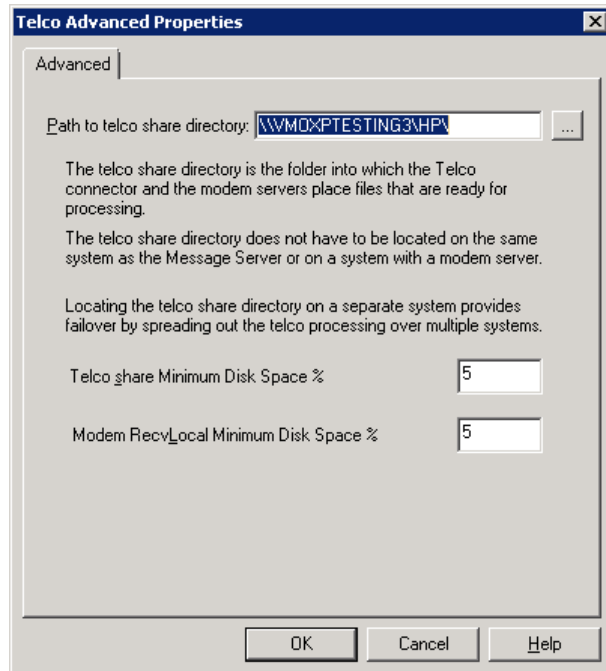
14-4-1 Installing the HP CR server

Install the HP CR server. For instructions, see [Installing the HP CR server](#) (27). When specifying a location for the message database, enter the database server name.

14-4-2 Configuring the HP CR connector for Telco to use the Telco share on the database server

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. In the console tree, expand the HP CR Server Administrator and click **Connectors**.
3. Double-click **HP CR Connector for Telco** in the details pane to open the **Telco** properties page.

4. Click **Advanced** to open the **Telco Advanced Properties** page.



5. In the **Path to telco share directory** text box, enter the UNC path (that is the `\\ServerName\ShareName\`) to the Telco share folder. Add a trailing backslash at the end (for example: `\\123.4.5.678\HPtelcoshare\`).
6. Click **OK** twice to save your changes and close the **Properties** page.

14-4-3 Moving HP CR server resources and redefining logicals

Move the contents of the Messages, Config, and Templates folders to the database server. Then, modify the logicals on the HP CR server that define the location of the Messages, Config, and Templates folders.

14-4-3-1 Moving contents from the HP CR server to the database server

To move the contents of the Messages, Config, and Templates folders from the HP CR server to the database server:

1. Log in to the HP CR server using the HP CR service account.
2. Go to `...\HP\MessageServer`.
3. Open `\Config` on the HP CR server and copy all the files. Paste them to `\Config` on the database server.
4. Repeat the copy and paste for the `\Messages` and `\Languages\Templates` folders. (These folders might not contain files.)

Continue to the next procedure and modify the logicals on the HP CR server that define the locations of these folders.

14-4-3-2 Redefining logicals on the HP CR server

To redefine the logicals on the HP CR server that represent the Messages, Config, and Templates folders:

1. Stop all HP CR services on the HP CR server.
2. Run **regedit**.

3. Go to:
[HKEY_LOCAL_MACHINE\SOFTWARE\Omtool\Genifax\Current Version\Logicals](#)
4. Edit **MESSAGES** and **MESSAGES_UNC** by specifying the path to [\Messages](#) on the database server.
5. Edit **CONFIG** by specifying the path to [\Config](#) on the database server.
6. Edit **TEMPLATES** by specifying the path to [\Templates](#) on the database server.
7. Close the Registry Editor.
8. Restart all HP CR services.

Now that the active server setup is complete, verify that you can send and receive messages. Use the same send and receive methods that are being deployed to users. For example, if users send messages using HP CR End User Interface, install an instance of the HP CR End User Interface and verify that a user can send messages and that the HP CR server delivers them correctly. Then set up the passive server.

NOTE: It is very important that HP CR Views folder is on a system that is always available such as the Database server.

14-5 Setting up the passive server

To set up the passive server, follow the setup procedures for the active server with these instructions:

1. Complete the procedure in [Installing the HP CR server](#) (142).



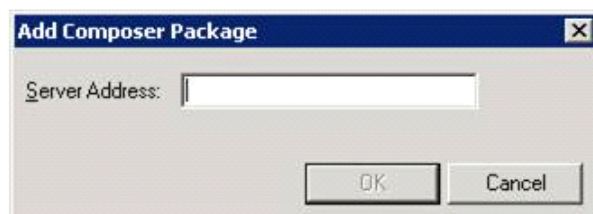
IMPORTANT: The passive server setup creates a database, but the HP CR server cluster does not utilize this database. Both HP CR servers in the cluster share the database that was created on the database server when the active server was set up. The database server should not be used when installing the passive server.

The server configuration wizard starts after HP CR server installation is complete.

2. Exit the server configuration wizard and select **No** when prompted to run the wizard again when HP CR Server Administrator starts.

NOTE: Both HP CR servers in the cluster are configured to use the configuration settings that already exist on the database server.

3. Create a local Composer following the instructions below:
 - a Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
 - b In the console tree, expand the HP CR Server Administrator and click **Components**.
 - c Double-click **Compose** in the details pane to open the **Properties for Compose** page.
 - d Click the **Composers** tab to open the **Composers** page.
 - e Click **Add**. Then, enter [localhost](#) in the **Server Address** field.



- f Click **OK** twice to save your changes.
- g Close the HP CR Server Administrator.

14-6 Adding and activating the failover server license

NOTE: The Failover server license is added to the active server in the environment.

After installation, the server uses a 30-day demonstration license. Before you create the cluster, you should activate the server license as well as the failover license on the active server in the environment.

This can be accomplished in two ways:

- Automatically when you enter an activation code and the HP CR server is on a system that has access to the internet.
- Manually if the HP CR server does not have access to the internet. In this case, you will:
 - Submit and validate the activation code.
 - Create an Export file into which the activation code is copied.
 - Create an Import file and use this file for activation from a system that does have internet access.

Refer to the procedure for [Activating the server license](#) (33).

14-7 Enabling failover by setting up an HP CR server cluster

NOTE: The following procedure is performed on the passive server.

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. In the console tree, expand the HP CR Server Administrator and right-click the passive HP CR server.
3. Select **Properties**.

NOTE: You must select the passive HP CR server in the cluster because the passive server is in a standby state when the active server is available.

4. Click **Cluster** and then click **Set up cluster**.

The **Set Up Cluster** page opens.

5. Under the **Specify the server to join with** section, enter the preferred server name in the **Name** text box.
6. Under the **Specify the credentials to use for the Cluster Manager Service** section, enter the logon credentials for the HP CR service account.
7. Click **Finish**. The HP CR Server Administrator connects to the preferred server and creates the cluster.
8. Click **OK** to save the changes to the server properties.
9. Restart the active server and verify that the HP Cluster Service process (OMSvrClusterMgr) and the connector processes (OmCon*) are running.
10. Restart the passive server. Verify that the HP Cluster Service process (OMSvrClusterMgr) is running.

14-8 Testing the failover configuration by simulating a localized system failure on the active server

1. **Simulate a failure** - Shut down the active server. Wait approximately five minutes and then verify that the HP Cluster Service process (OMSvrClusterMgr) and the connector processes (OmCon*) are running on the other server, which is now the active server.
2. **Restore the failed server** - Start the server that was shut down and wait for it to boot up. Wait approximately five minutes and then verify that the HP Cluster Service process (OMSvrClusterMgr) and the connector processes (OmCon*) are running.

14-9 Optional configurations for cluster environments

14-9-1 Setting up the remote device server

Refer to the procedure for [Installing the remote HP CR Intelligent Device Client](#) (95).

14-9-2 Configuring the HP CR Web Client for failover

The Web Client should be installed on a system remote from the active and passive servers and meet all of the installation requirements.

1. Navigate to:

```
\Program Files (X86)\HPCR\WebClient\Configuration
```

Open the `Web.xml` file for editing.

2. In the **<Connection>** section of the xml, add the name of the secondary server in your cluster. For example:

```
<Connection>
<Server>MAGNOLIA</Server>
<FailoverServer>JASMINE</FailoverServer>
<Authentication type="Exchange">
```

NOTE: In this example, the name of the active HP CR server is MAGNOLIA and the passive server is JASMINE.

3. Save your changes and close the xml file.
4. Restart the IIS services.

14-9-3 Clustering and Composer thread awareness

In a typical configuration, you use the local Composer on the active server while the passive server is in the waiting state. To improve throughput, an additional compose license can be added to access the compose engines on the passive server. However in the event of a failover, both the local and remote Composers would be on the same physical machine, and using them simultaneously can cause significant performance issues on the passive server. In order to utilize both servers, the active server compose should be removed and reinstalled with the server name specified. The passive server then can be added with its server name specified and, in the subsequent event of a failover, the passive server will not be subject to performance issues due to duplicate composers.

14-10 Disabling SMB2 on a Windows 2008 R2 HP CR server cluster

When using a remote Windows 2008 R2 system, it is recommended to disable SMB2 on the HP CR server.

NOTE: This is a required configuration for HP CR Cluster.

If you do not disable SMB2, you will notice that on sending any file after changing the Config, Messages, and Templates folder paths to point to the remote Windows 2008 R2 system, composing a document fails and shows the following error:

```
Compose error: Failed to save the Final form attachment
```

To disable SMB2 on the HP CR server:

1. Open a command prompt on the primary Windows 2008 HP CR server.
2. Run “regedit” and then expand and locate the sub tree as follows.

```
HKLM\System\CurrentControlSet\Services\LanmanServer\Parameters
```

3. Add a new **REG_DWORD** key with the name of **Smb2** and configure as shown below:

Value name: Smb2

Value type: REG_DWORD

where 0 = disabled and 1= enabled

4. Set the value to 0 to disable SMB 2.0.

If you need to re-enable SMB 2.0, you can set the value to 1.

5. Close all open dialogs and reboot the server.
6. Repeat Steps 1 to 5 and disable SMB2 on the secondary Windows 2008 R2 HP CR server system.

15 Installing and configuring a Dialogic modem driver

This section contains instructions on installing and configuring the following Dialogic modem driver. It is written for system administrators with detailed knowledge of the HP CR server and the following modem driver.

SR140 module (virtual board)

For information on BrookTrout T.38 SR140, go to the BrookTrout [on-line documentation](#).

Each subsection details the procedure involved in installing and configuring the modem driver. This section also provides information for [Testing](#) (154).

15-1 Requirements for installing and configuring the SR140 module

15-1-1 HP CR software requirements

- HP CR v1.1 or higher
- Telco connector (to configure the HP CR message server for faxing messages)

15-1-2 Driver requirement

- Brooktrout v6.4.0 or higher

15-1-3 Gateway requirement

For a list of supported gateways, go to the BrookTrout [on-line documentation](#).

15-1-4 Additional Requirements

In addition to meeting the requirements listed above, you need the following:

- Proper T1 fax card on the gateway
- Enough memory to run the desired amount of channels

15-2 Installing the BrookTrout SR140 module

15-2-1 Installing Brooktrout v6.4.0 drivers

1. Verify that the HP CR Modem Manager service is not running.
2. Go to the location where you extracted the ZIP file and locate the HP CR directory.

3. Double-click **Boston6.4.0.msi**. The **Welcome** page opens.
4. Click **Next**. The **License Agreement** page opens.
5. Read the license agreement and, if you agree, select **I accept the terms in the license agreement**.
6. Click **Next**. The **Destination Folder** page opens.
7. Change the destination location if necessary and click **Next**.
8. Click **Install**.
9. When installation is complete, click **Finish**.
10. Reboot the server.

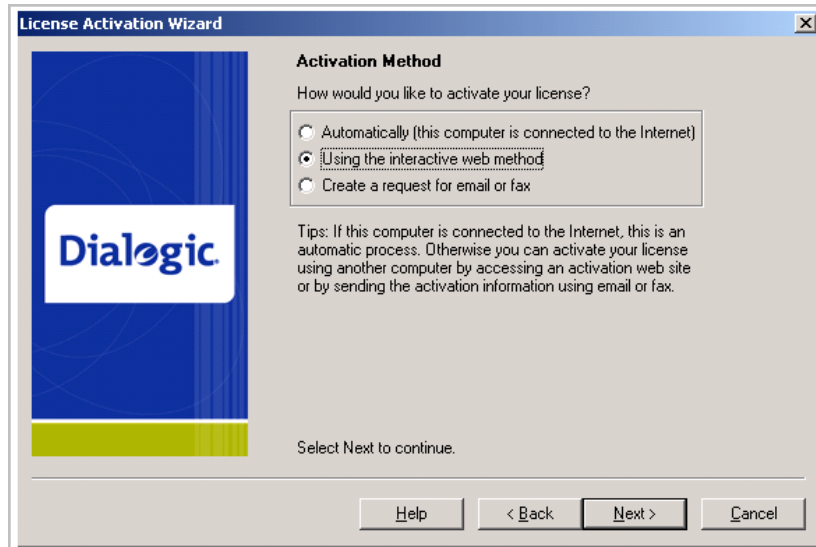
15-2-2 Installing 6.4.0_x64.msi

1. After you finish installing the Brooktrout System Software, install the required add-on, Brooktrout 6.4.0_x64.msi.
2. Verify that the Model Manager service is not running.
3. Go to the location where you extracted the ZIP file and locate the HP CR 64 directory.
4. Double-click **Boston6.4.0_x64.msi**. The **Welcome** page opens.
5. Click **Next**. The **License Agreement** page opens.
6. Read the license agreement and, if you agree, select **I accept the terms in the license agreement**.
7. Click **Next**. The **Destination Folder** page opens.
8. Modify the destination location if necessary and click **Next**.
9. Click **Install**.
10. When installation is complete, click **Finish**.
11. Reboot the server.

15-2-3 Activating the license

1. Click **Start >Program Files > Brooktrout License Manager**.
The **BrookTrout License Manager** opens.
2. In the menu bar click **License >Activate License**. The **License Activation** wizard opens and you see the **Welcome** message.

3. Click **Next**. Select **Using the interactive web method**.



4. Click **Next**. You get the **Node Lock** value.
5. Click the **Save the instructions into a file** option.
6. Click **Next**.
7. Browse and save the file to a known location.
8. Go to the location where you saved the file. Open the file.

The file contains the text similar to what is shown below and gives you the Node Lock value of your system:

```
To request a license, please visit our website:
http://www.dialogic.com/activation
and follow the instructions provided on the website.
Dialogic will email the license to you immediately.
When prompted, supply the following information:
Node Lock: [Node Lock value]
```

9. Open Internet Explorer and go to <http://www.dialogic.com/activation>.



10. In the **License Key** text box, enter the License key and the Node Lock value of your system.



IMPORTANT: For the license key, contact your software representative.

Brooktrout sends you the license for your BrookTrout SR140 module.

NOTE: This license key will enable the Brooktrout SR140 fax feature on the system the node value was retrieved from. It cannot be transferred without assistance from Cantata.

11. Save the license file to the local drive of the system.

15-2-4 Applying the license

1. Launch the **Brooktrout License Manager**.
2. From the file menu option, select **License**.
3. Select the **Install License** drop-down.
4. Browse to the license file you saved to the system.

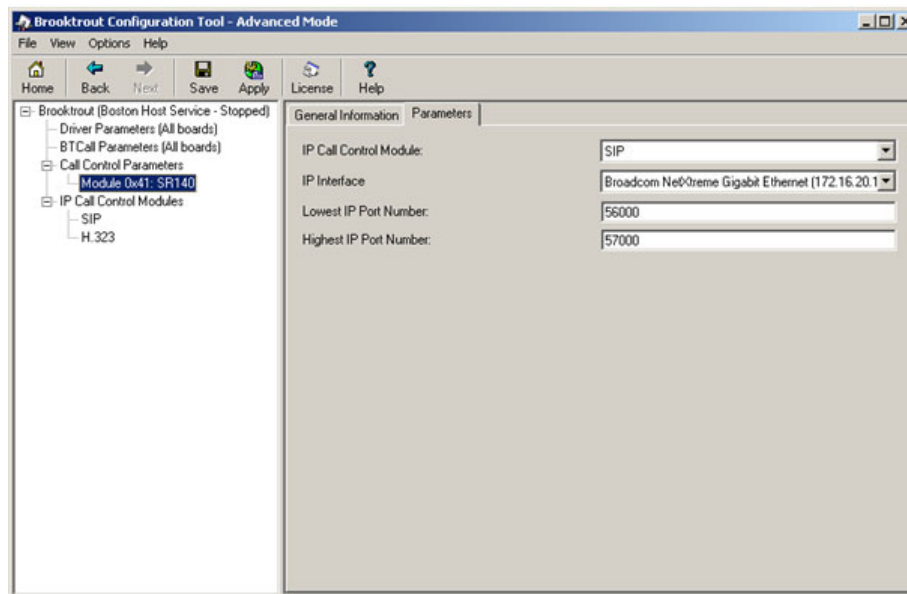
15-3 Configuring Brooktrout SR140

1. Click **Start > Program Files > BrookTrout Configuration Tool**.

The **Configure IP Stack** page opens.

2. Select the protocol appropriate to your environment.

The **BrookTrout Configurations Tool** opens.



3. Expand **Call Control Parameters**.
4. Select **Module0x41:SR140**.
5. In the right pane, click the **Parameters** option.
6. Verify that the **IP Call Control Module** value is **SIP** or **H.323** (depending on which protocol is configured for your company).

- Continue to [Additional SIP configuration](#) (153) or [Additional H.323 configuration](#) (153). You can configure SIP or H.323, but not both.

15-3-1 Additional SIP configuration

- Click **Start > Program Files > BrookTrout Configuration Tool**.

The **BrookTrout Configurations Tool** opens.

- Expand **IP Call Control Modules**.
- Select **SIP**.



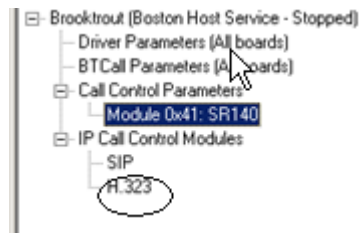
- In the right pane, select the **IP Parameters** option.
- In the **SIP_default_gateway** add the IP address of your Cisco Gate followed by **5060** in the second field.
- Select the **T.38 parameters** option.
- Set **Media Renegotiate Delay Outbound, msec** to **-1**.
- In **Advanced settings**, change the **Maximum T.38 version** from **3** to **0**.
- The prompt **Parameter Maximum Bit Rate, bps** value should not be greater than **14400** when **Maximum T.38 version is 0** is displayed.
- Click **OK** and the **Maximum bit rate, bps** is automatically reset to **14400**.

15-3-2 Additional H.323 configuration

- Click **Start > Program Files > BrookTrout Configuration Tool**.

The **BrookTrout Configurations Tool** opens.

- Expand **IP Call Control Modules**.
- Select **H.323**.



- In the right pane, select **IP Parameters** option.
- Add the IP address of your Cisco Gateway in the **h323_default_gateway** followed by **1720**.
- Add the IP address of your HP CR server in the **h323_local_ip_address** followed by **1720**.
- Expand **Advanced Settings** option.
- Change **Called Party Options** to **2**.
- Change **Calling Party Options** to **2**.

15-3-3 Setting the maximum page size

Brooktrout modems have a known problem with sending document with greater than 30 pages. You must change the `Maximum Number of Pages` property value to `200` in order to send messages greater than 30 pages successfully.

1. Click **Start > All Programs > BrookTrout > Brooktrout Configuration Tool**.
2. Select **BTCall Parameters (All boards)**.
3. In the **Advanced Settings** section, go to the **Maximum Number of pages** option.
4. Set the value to `200`.
5. Save your changes.
6. Click **Apply** to make the Brooktrout server read your changes.

15-4 Testing

After you have installed and configured the modem drivers, test to see that the Dialogic fax board/module are working properly.

1. Stop Modem Manager Service.
2. Login to the system running the modem server.
3. Navigate to:

```
C:\Program Files (x86)\HP\HPCR\Tools\Modem\Tools\BrookTrout\Config
```

4. Copy **fax.exe** and **test.ips**.
5. Paste the copied files to:

```
C:\Program Files\Brooktrout\Config
```

6. To send a test fax:

- a Open a command prompt window.
- b Change directory to:

```
C:\Program Files\Brooktrout\Config.
```
- c Type:

```
..\bin\firmload.bat
```


Press **Enter**.
- d Type:

```
fax -u 0 -s PhoneNumber test.ips
```


where `PhoneNumber` is the destination fax number.

Press **Enter**.

The test fax is delivered to the destination.

Part IV:

Software Technology Integrations

16 Software Integrations

HP CR integrates with software provided by several third-party vendors:

[Multi-vendor device configuration](#) (157)

[HP Access Control](#) (161)

[HP Autonomy TeleForm](#) (162)

Each is described in this section.

16-1 Multi-vendor device configuration

HP CR features are accessible where the users need them most—on the web, office machines, multifunction devices, and business systems that are an integral part of the communication workflow.

HP CR is an intranet-based application for multifunction devices and business systems. HP CR supports software solutions complementing the hardware solutions offered by Hewlett Packard as well as integrating with other vendor devices such as [Ricoh Corporation](#), [Sharp Electronics Corporation](#), and [Xerox Corporation](#).

Procedures for multi-vendor device testing are provided in this section.

NOTE: For Embedded Device Client for HP OXPd download, installation, and configuration instructions, refer to the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#).

16-1-1 Ricoh

NOTE: When scanning from Ricoh devices, users must choose **Multi-paged PDF** in the scan options of the device.

16-1-2 Sharp: Address registration with the Sharp MX-C311

1. Set up FTP Role Service on the destination server (HPCR).
2. Once the FTP service is installed, create an FTP site in IIS. Review the information at this link if you are not familiar with creating an FTP site:
<http://learn.iis.net/page.aspx/301/creating-a-new-ftp-site-in-iis-7/>
3. When creating the site, the physical path will be the Filescan directory.
4. Select **No SSL**.
5. Allow **Anonymous** and **Basic Authentication** with Read and Write Permissions.
6. Set up the Filescan directory in virtual mode and add a virtual control file.
7. Open the Embedded Web Server on the Sharp device.
8. Log in and click **Address Book**.

9. Click **Add**.

SHARP
MX-C311

Address Book

Update(R)

Index: /
Display Items: 1

Address Name ▲ ▾	Type ▲ ▾
<input type="checkbox"/> BillF Folder	Network Folder
<input type="checkbox"/> Prashant Email	E-mail
<input type="checkbox"/> Prashant FTP	FTP
<input type="checkbox"/> Rob Folder	Network Folder
<input type="checkbox"/> Rob FTP	FTP
<input type="checkbox"/> TerastationScans	Network Folder
<input type="checkbox"/> 195 network folder	Network Folder
<input type="checkbox"/> Prashant FTPS	FTP
<input type="checkbox"/> vmpd2k3vs2008	Network Folder

Total Address: 9
Previous(M) 1 / 1 Next(N)
Select All(S) Clear Checked(Z)

Delete(O) **Add(Y)**

Update(R)

Navigation menu (left sidebar):

- Top Page
- Status
- Address Book**
- Custom Index
- Document Operations
- Job Programs
- User Control
- System Settings
- Network Settings
- Application Settings
- E-mail Alert and Status
- Storage Backup
- Device Cloning
- Job Log
- Security Settings
- Custom Links
- Operation Manual Download

10. Select **FTP** as the **Address Type**.

Address Registration

Address Type: FTP ▾

Search Number: (1-999)

Address Name (Required): (Up to 36 characters)

Initial (Optional): (Up to 10 characters)

Key Name: (Up to 18 characters)

Custom Index: User 1 ▾

Register this Address to be added to the [Frequent Use] index.

Hostname or IP Address (Required): (Up to 127 characters)

File Format: File Type: PDF ▾

Black & White: Compression Mode: None ▾

Color/Grayscale: Compression Ratio: Low ▾

Directory: (Up to 200 characters)

User Name: (Up to 32 characters)

Password: (1-32 digits)

Change Password

Enable SSL

Enable Hyperlink to FTP server to be e-mailed

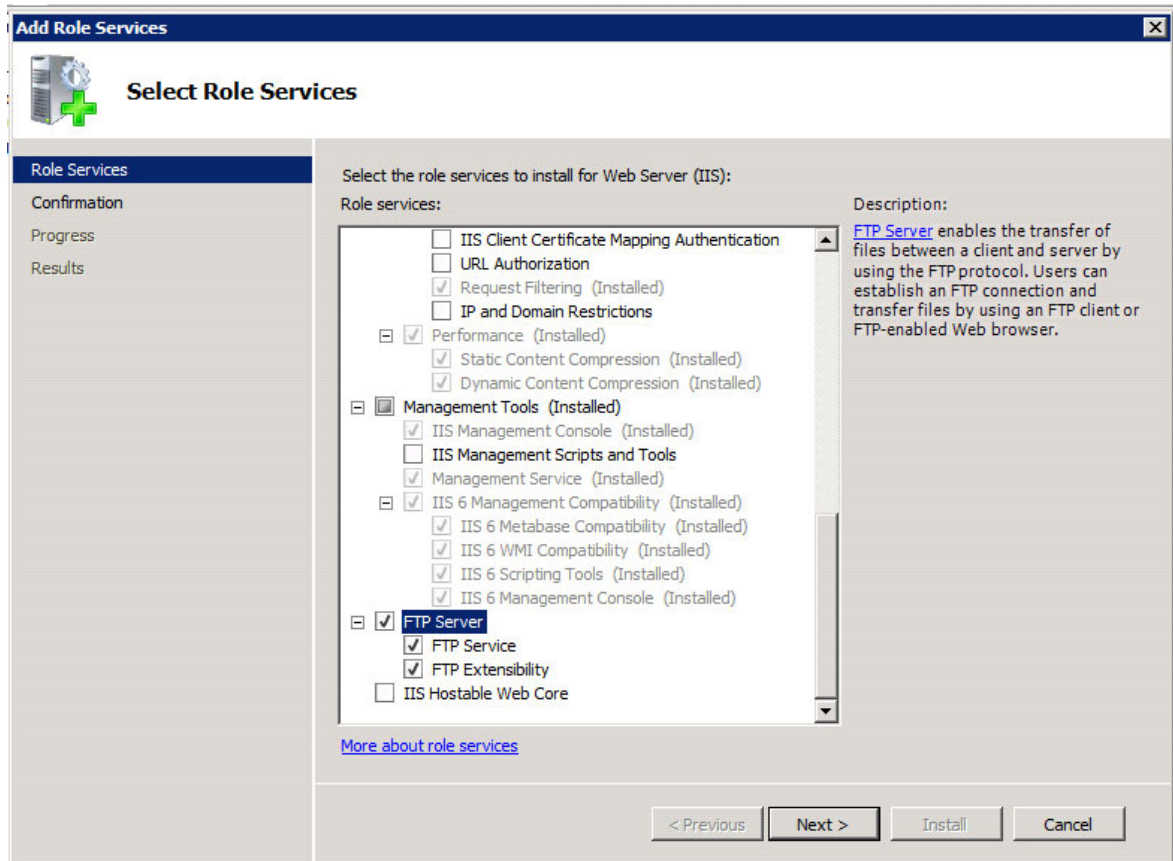
E-mail Destination:

Prashant Email ▾

11. Enter an address name in the **Address Name (Required)** field.
12. Enter the IP address of the HPCR server in the **Hostname or IP Address (Required)** field.
13. Enter the FTP root (\) for the **Directory**.
14. Add the **User Name** credentials and **Password**.
15. Click **Submit**.
16. On the device, select **Image Send\Address Book**.
17. Locate the address and scan a job.
18. The file will be scanned to the Filescan folder on the HPCR server.

16-1-3 Xerox: Creating a new workflow template with the Xerox WorkCentre 6400

1. Set up FTP Role Service on the destination server (HP CR).



2. Once the FTP service is installed, create an FTP site in IIS. Review the information at this link if you are not familiar with creating an FTP site:
<http://learn.iis.net/page.aspx/301/creating-a-new-ftp-site-in-iis-7/>
3. When creating the site, the physical path will be the Filescan directory.
4. Select **No SSL**.
5. Allow **Anonymous** and **Basic Authentication** with Read and Write Permissions.
6. Set up the Filescan directory in virtual mode and add a virtual control file.
7. Open the Embedded Web Server for the device and log in.
8. Click the **Scan** tab.
9. Click **Templates** in the **Display** section.
10. Enter a name in **Template Name**.
11. Select the **Enter a Scan Destination** radio button.
12. Enter a friendly **Name**.
13. Select **FTP** for the **Protocol**.
14. Select **IPv4 Address** for the **Name or IP Address**.

15. Enter the IP address and port.

The following is an example:

Distribution: RobTest

Filing Destination

Friendly Name:
Example: Purchasing Department

Protocol:

Name or IP Address:

IPv4 Address
 IPv6 Address
 Host Name

IP Address:Port :

Document Path:

Filing Policy:

Login Credentials to Access the Destination

Authenticated User and Domain
 Authenticated User
 Prompt at User Interface
 Stored in Template

Login Name

Password

Retype password

Select to save new password

Note

It is recommended that User Data Encryption be enabled by the System Administrator because passwords are saved within the template files.

16-2 HP Access Control

The integrated HP CR and HP Access Control (HP AC) solution provides for:

- “Advanced” single-sign between HP AC and HP CR. This includes the ability for HP AC to capture a user’s network password and then securely transfer that password to HP CR. From that point, HP CR could use the name and password of the logged in user to upload documents to SharePoint or store documents in a network folder as that user.
- Transfer of job accounting details from HP CR to HP AC. The following job accounting details on each job processed through HP CR are captured and made available for import into the HP AC system:
 - Master Job ID
 - Source scanning device or fax channel, if known
 - Source originating user, if known

- Date/time of submission for processing
- Date/time of completion of processing
- Final delivery status (success, failure, reason for failure if applicable)
- Size of documents submitted, delivered, expressed in pages
- Size of documents submitted, delivered, expressed in bytes
- Delivery destination type (for example, fax, email, folder, SharePoint, etc.), delivery address (such as 1-800-555-1212, user@company.com, etc.)

Any individual job may be delivered to multiple individual recipients. A separate job tracking record is captured and transferred for each recipient. All deliveries for a single, submitted job share a common master job ID.

It is not necessary for the HP CR and HP AC servers to install and run together on the same Windows server.

16-3 HP Autonomy TeleForm

HP Autonomy TeleForm is a software-based solution for document capture used to extract and validate information from complex, forms-related documents. HP CR integrates with TeleForm so that documents captured through HP CR can be transferred to TeleForm for processing. HP CR also has the ability to receive documents and meta-data sent to HP CR from TeleForm so that HP CR can deliver the content to one or more intended destinations.

16-3-1 Configuring the HP CR server

The XMLScan and XMLStore connectors enable HP CR to support integration with HP Autonomy TeleForm. HP CR integrates with TeleForm so that documents captured through HP CR can be transferred to TeleForm for processing. HP CR also can receive documents and meta-data sent from TeleForm and deliver the content to one or more intended destinations

HP CR and TeleForm integration:

- Uses HP CR's XMLScan connector to receive documents and meta-data which have been exported from TeleForm. An XSLT translation parses the XML sent back from TeleForm and maps this information to appropriate properties of the job created on the HP CR server. HP CR then processes the returned job based on these properties and routes it to its intended destination(s).
- Uses HP CR's XMLStore connector to output scanned documents and meta-data to a target network folder which is monitored by TeleForm as a source for incoming documents to process. The XMLStore connector stores a scanned document as well as an XML file which may include meta-data regarding the scanned document. The XMLStore is configured to use an XSLT, which formats the output meta-data from the HP CR server in a documented format that can be parsed and imported to TeleForm.

The remainder of this section describes:

[Enabling HP CR XMLStore](#) (163)

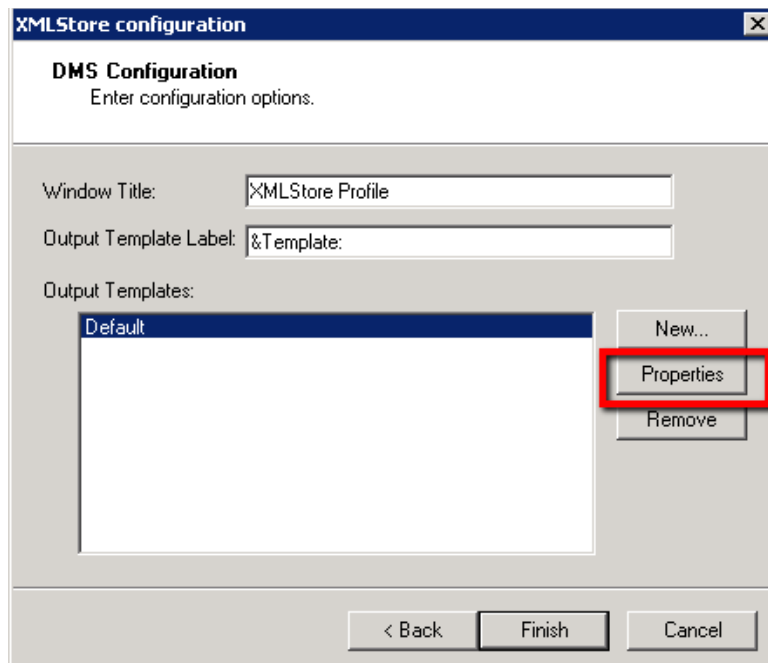
[Enabling HP CR XMLScan](#) (175)

16-3-2 Enabling HP CR XMLStore

16-3-2-1 Configuring the XMLStore connector

HP CR server installation includes an XMLStore connector (**XMLStore on the Server**) by default. To configure the connector:

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. In the console tree, expand the HP CR server.
3. Select **Connectors**. The details pane lists the connectors that are licensed with your server.
4. Double-click the **XMLStore** connector to view its properties.
5. Click the **Advanced** tab.
6. Click the **Configure** button in the **DMS configuration** section. The **DMS Configuration** page is displayed.



7. Select the output template and click **Properties**. The **Output Template Properties** page is displayed.

Output Template Properties

Name:

Folder: ...

XSLT: ...

Filename:

Check for <Result> node

Store failures in:

OK Cancel

8. In the **Folder** field, indicate the folder that TeleForm will monitor.
9. In the **XSLT** fields, indicate the TeleformsOut.xsl that is supplied with the installation.
10. Click **OK** to save the settings and close the **Output Template Properties** page.
11. Click **Finish** to close the **DMS Configuration** page.
12. Click **Create...** to create a default profile

NOTE: The profile screen will appear minimized in the task bar.

13. Click **OK** to accept the Default template, or select a template if you created one earlier. The **DMS Rule Properties** page is displayed.
14. Verify that the prPathName value matches the desired XSL file.

DMS Rule Properties

View: Core Properties Custom Properties

Columns to display:

Name	Value
prName	Default
prTemplateFilena...	Document-%prRecipientID%
prFolder	\\vmteleforms\hpcrtele
prPathname	C:\Program Files (x86)\HP\HPCR\Samples\XMLStore\TeleformsOut.xsl
prAttachCurrentP...	
prDMSDocName	DmtoolStub.pdf
prDMSDocIdentifi...	[NOTVALID]
prDMSDocDescri...	DmtoolStub.pdf
prDMSSourceDo...	C:\Program Files (x86)\Common Files\
prDMSDocFriendl...	Default
prDMSTransactio...	16
prDMSshowUI	4
prDMSsubmissio...	1
prDMSParentWin...	526172

Properties Add Remove ^ v Import XML

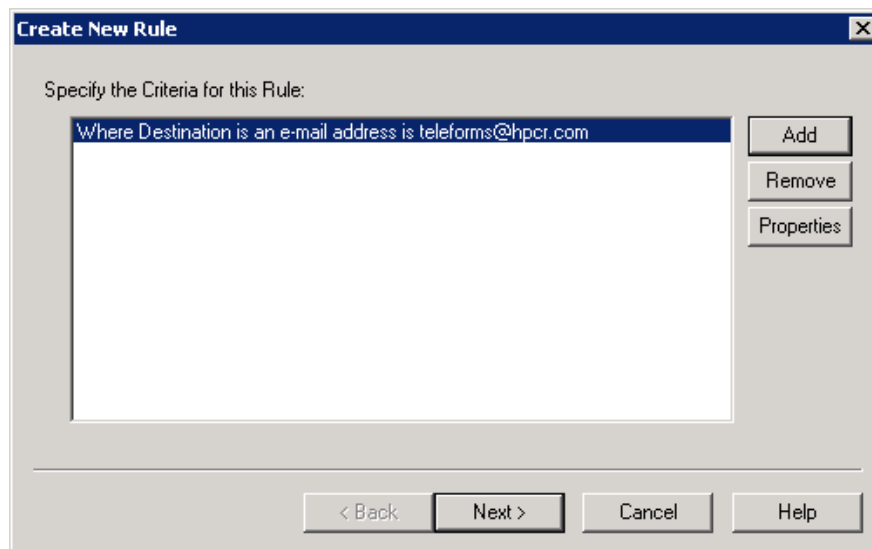
OK Cancel

15. Click **OK**.
16. Click **OK** again to close the **Properties for XMLStore on the Server** page.

16-3-2-2 Creating a rule for HP CR

HP CR can pass a job to TeleForm based on certain criteria. This can be the sender's email address, the destination, or various other options. For this example, let's assume that anything going to the email address destination TeleForm@hpcr.com should be forwarded to the TeleForm server.

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. In the console tree, expand the HP CR server.
3. Expand **Rules > Outbound**.
4. Right-click to choose a new rule.
5. Click **Add**.
6. Select **Destination is an e-mail address**.
7. Click **is**.
8. Enter:
TeleForm@hpcr.com
9. Click **Add**.
10. Click **Finish**.



11. Click **Next**.
12. Click **Add**.
13. Select **Route to Connector**.

14. Click **Next**. The **Route to Connector** page is displayed.

15. From the **Route to Connector**, select **XMLStore on the Server**.
16. Set the **Document Delivery Format** to **PDF**.
17. Be sure **Include Template** is not selected.
18. Click **Advanced**.
19. Click **Custom Properties**.
20. Under **Core Properties**, click **Add**.
- For the Name enter:
`prDMSUseDefaultProfile`
 - For the value enter:
`1`
21. Click **OK** to close the **DMS Rule Properties** page.
22. Click **OK** to close the **Advanced Routing Options** page.
23. Click **Finish**.
24. Click **Next** on the **Specify the Actions to take for this Rule** page.
25. Click **Next**.
26. Click **Finish**.

16-3-2-3 Configuring TeleForm to work with XMLStore

1. Navigate to the directory where the ScriptAPI.cfg file is located:
Windows XP:
`C:\Documents and Settings\All Users\Application Data\Cardiff\TeleForm\scripts\AddIns`
Windows 7:
`C:\ProgramData\Cardiff\TeleForm\scripts\AddIns`

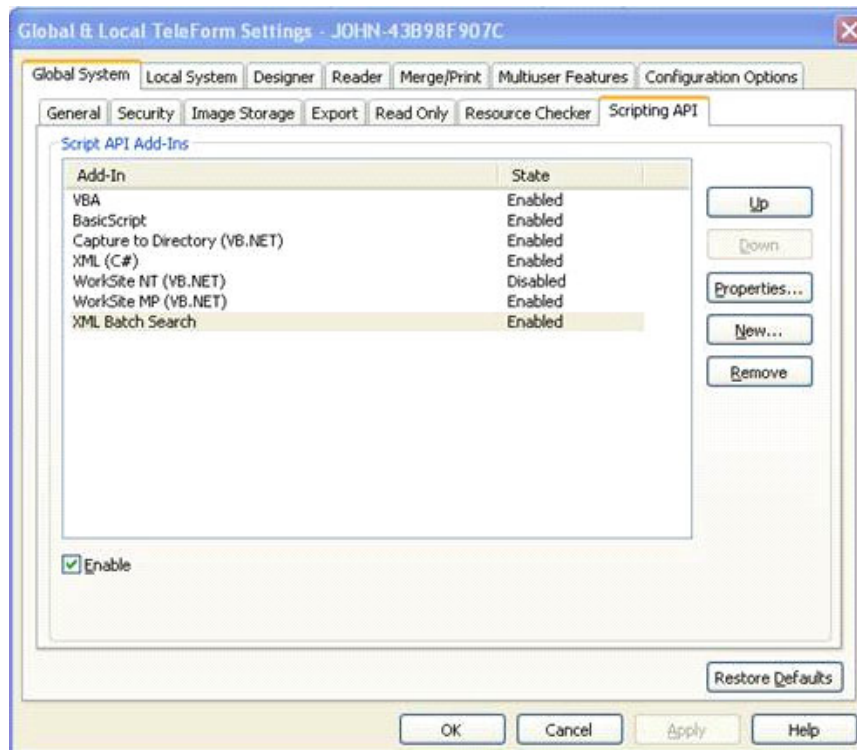
- Modify the ScriptAPI.cfg file. The “X” in “AddIn_X” needs to be changed to the next number in the sequence after the highest existing number in the ScriptAPI.cfg file. In most cases for new installs, this will be “7” as shown in the example below.

```
AddIn_X.GUID={044CD12D-6426-4C25-8874-5DF94C559BBB}
AddIn_X.Name=XML Batch Search
AddIn_X.DLL=
AddIn_X.RegCmd=
AddIn_X.Enabled=1
AddIn_X.InstallType=0
```

For example:

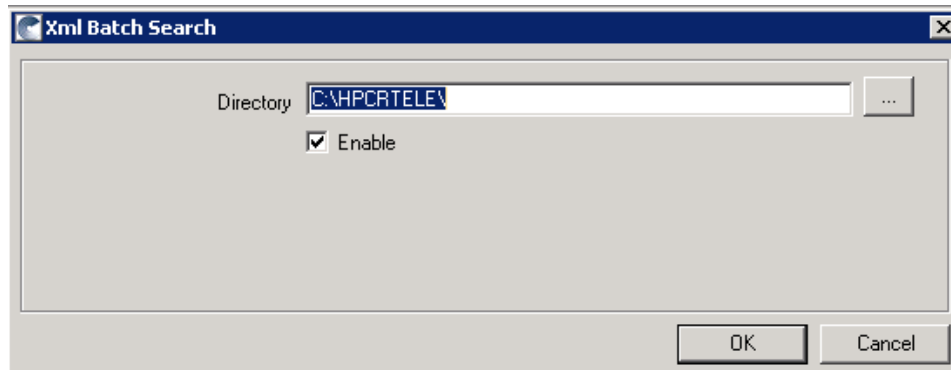
```
AddIn_7.GUID={044CD12D-6426-4C25-8874-5DF94C559BBB}
AddIn_7.Name=XML Batch Search
AddIn_7.DLL=
AddIn_7.RegCmd=
AddIn_7.Enabled=1
AddIn_7.InstallType=0
```

- Once the above changes are made, start TeleForm Designer and go to the **ScriptingAPI** tab on the **Utilities > Configuration** dialog.
- Confirm that **XML Batch Search** is listed and enabled:



- To configure the input method, go to **Utilities > Connect Agent Setup > 7. Xml Batch Search**.

6. Enter the path to the directory you entered in HP CR in [Step 8](#) on page (164) in [Configuring the XMLStore connector](#).

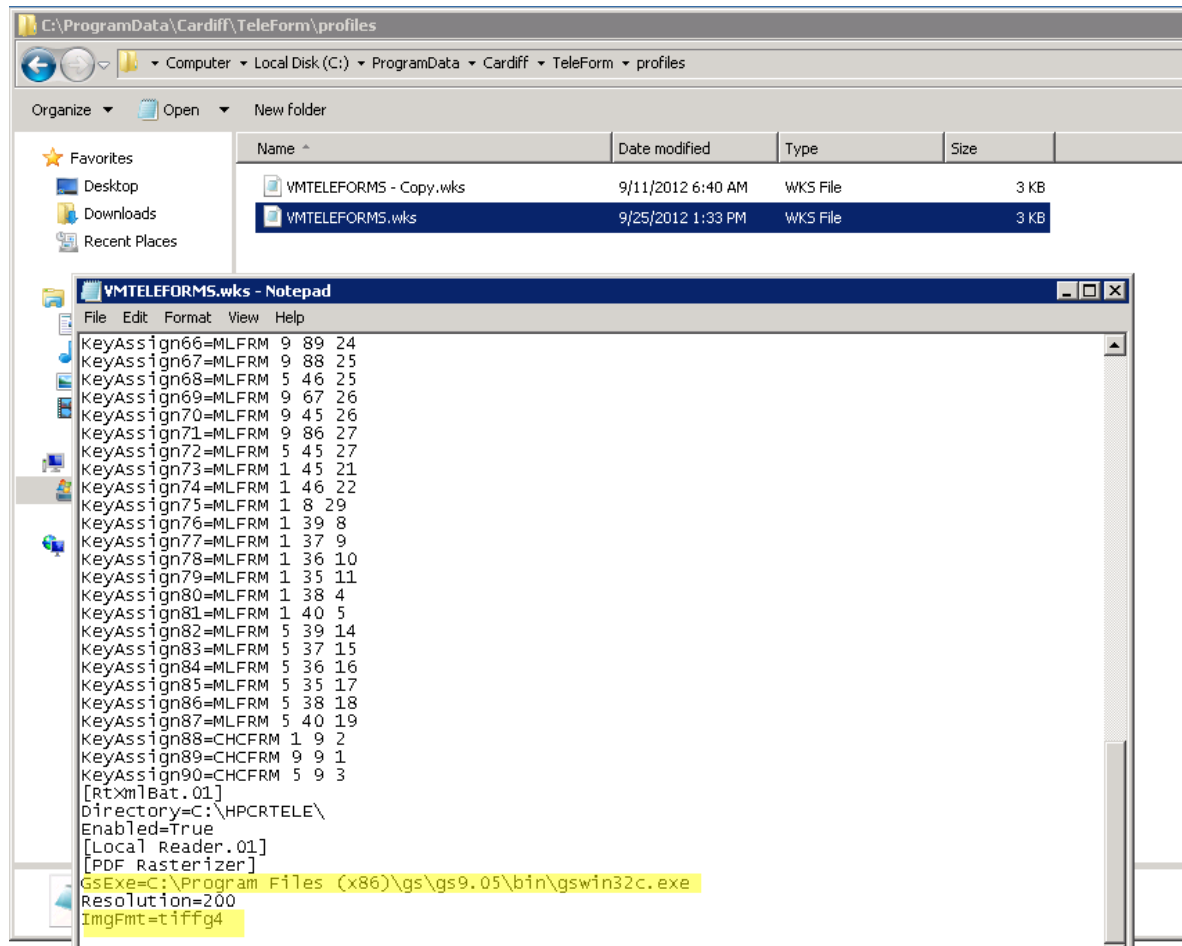


7. Continue with the following procedures ([Configuring Ghostscript with TeleForm](#) through [Configuring the form](#)).

Configuring Ghostscript with TeleForm

1. Download [gs905w32.exe](#) and install it.
2. Once installed, configure TeleForm to use Ghostscript by editing the WKS file in this folder:

`c:\program data\cardiff\Teleform\profiles`



NOTE: For more information on configuring TeleForm for Ghostscript, contact TeleForm Support.

Outputting a job to TeleForm

To output a job to TeleForm, you will first create a TeleForm job that matches the HP CR JobID, as described in the procedure below.

NOTE: The JobID in HP CR should be hard coded to = HPCR. This is based on the Teleforms.xml file in the samples directory. The batchID must = "".

1. Open the TeleForm Scan Station.
2. Select **File > Job Configuration**.
3. On the **Job Configuration** page, select **New**. The **Job Properties** page is displayed.

4. Enter **HPCR** as the **Job name**.

The screenshot shows a dialog box titled "Job Properties - New Job 01" with a close button (X) in the top right corner. The dialog has several tabs: "General", "Review/Export", "Preprocessing", "Form ID/Capture", "Custom Fields", and "Page Handling". The "General" tab is active. Inside the dialog, there are several input fields and controls:

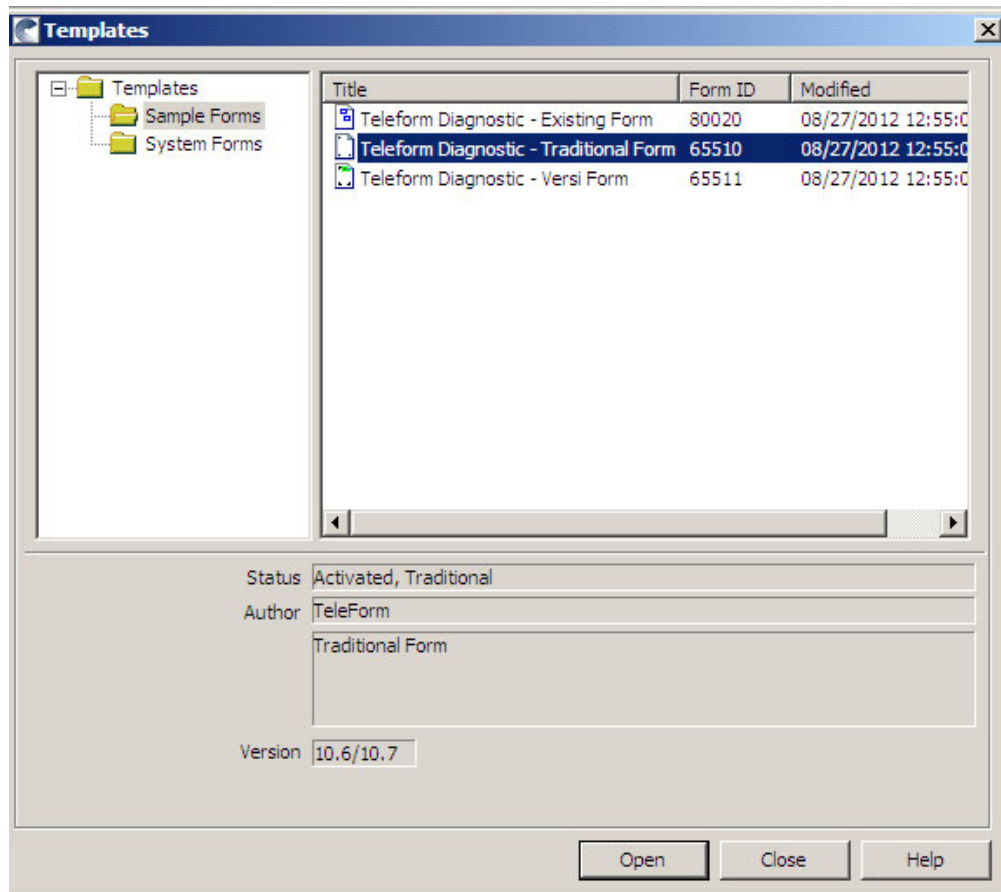
- Job name:** A text box containing "HPCR".
- Tracking ID:** An empty text box.
- Date:** An empty text box.
- Operator:** An empty text box.
- Priority:** A spin box set to "100". To its right, the text "0 High, 255 Low, 100 Normal" is displayed.
- Forms/Documents:** A spin box set to "0". To its right, the text "0 = Don't care" is displayed.
- Total pages in batch:** A spin box set to "0".
- Error handling:** A dropdown menu with "Prompt for rejecting or accepting" selected.
- Event logging:** An unchecked checkbox.
- Comment:** A large text area with a vertical scrollbar.

At the bottom of the dialog, there are three buttons: "OK", "Cancel", and "Help".

If you have custom fields, click the **Custom Fields** tab and enter information, as applicable, in the custom fields. (This is not required by default.)

Creating a sample form

1. Open the TeleForm Designer.
2. Select **File > Templates**.
3. Under **Sample Forms**, select a form.



4. From the **Forms** menu, select **Activate**.

NOTE: Activating a form locks the image in place for zonal OCR and structured forms recognition.

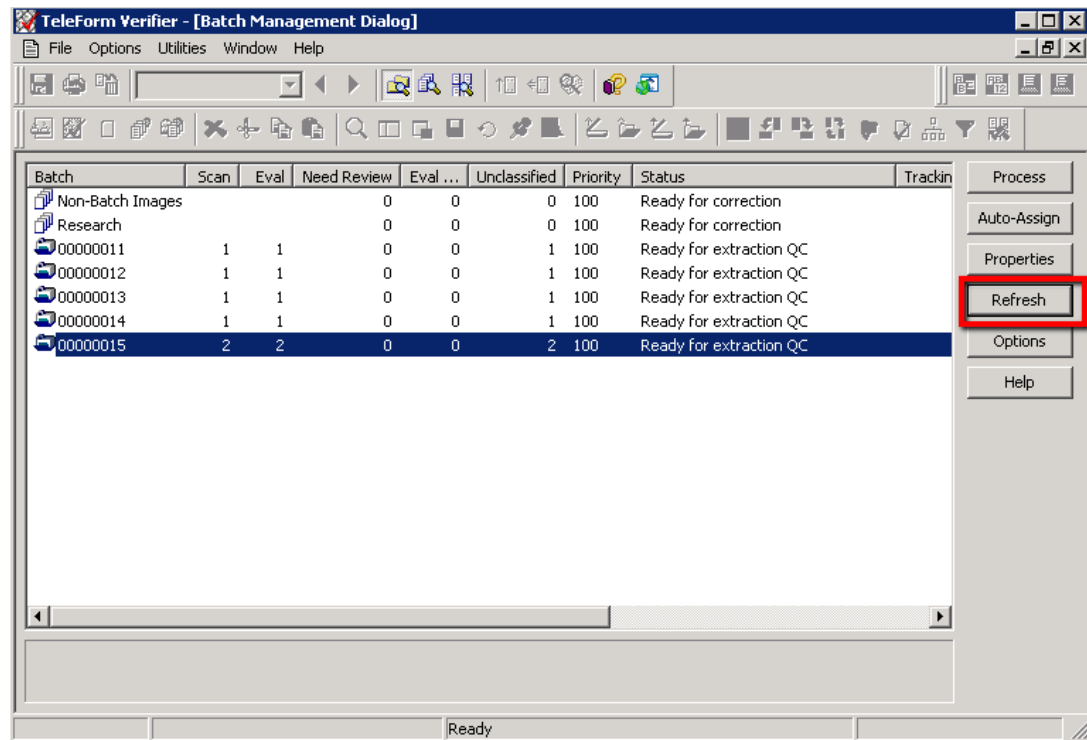
Testing

1. Scan a job to the destination that matches the rule that was created.
2. The message should arrive on the shared directory with the XML file and the scanned image in PDF format.
3. Open the XML and verify that the format is correct.

Enabling TeleForm

1. Open the TeleForm Reader. This is the software that picks up the files and reads the forms.
2. Verify that the files were picked up from the directory specified.
3. Open the TeleForm Verifier.

If you do not see the new job, click the **Refresh** button.



NOTE: There is no time or date field by default. The only way to know this is your job is to look for any custom fields that may have been passed over with the job.

4. Highlight the job and click **Process**. This will open the job and display the scan.

Sending a form from TeleForm back to HPCR

You can set a form to feed back to a directory that the HPCR server is monitoring.

Configuring the form

1. Using the TeleForm Designer, open the form that will be used for scans:
 - a Select **File > Templates > Sample Forms**.
 - b Open the form you plan to use.
2. With the form open, select **Form > Auto Export Setup**.

3. Click the **New** button and select **Capture to Directory (VB.NET)** from the drop-down in the **Table Format** field. This will capture an image file.

The screenshot shows a dialog box titled "HPCRtestWithExport - Auto Export Setup[1]". It has three tabs: "Main", "File Export", and "Fields". The "Table" section contains a "Format" dropdown menu set to "Capture to Directory (VB.NET)", a "Separator" dropdown menu, and a "Save As..." button. Below the separator is a text box containing "<Capture to Directory (VB.NET) Configuration Data>". The "Settings" section has four checkboxes: "Enable" (checked), "Fail commit if this export fails" (checked), "Disable export locks" (unchecked), and "Include header" (checked). The "Conditional Export" section has a checkbox "Skip this export if" (unchecked) and a table with three columns: "Field", "Condition", and "Value". The table is currently empty. At the bottom of the dialog are buttons for "OK", "Cancel", "Restore", and "Help".

4. Click the **File Export** tab.

5. Enable **Export files** and enter a directory that the HP CR XMLScan connector can access.

The screenshot shows the 'HPCRtestWithExport - Auto Export Setup[1]' dialog box with the 'File Export' tab selected. The 'File Export' section has the 'Export files' checkbox checked and the 'Directory' field set to 'C:\ProgramData\Cardiff\TeleForm\exp'. The 'Image File Conversion' section has the 'Format' set to 'PDF+Text' and 'Options' set to 'Monochrome'. The 'Page Options' section has 'Pages' set to 'Do not export form pages (unless there are no nonforms)' and 'Page order' set to 'Group form pages at the beginning (default)'. The dialog box has 'OK', 'Cancel', 'Restore', and 'Help' buttons at the bottom.

HPCRtestWithExport - Auto Export Setup[1]

Main File Export Fields

File Export

Export files

Directory C:\ProgramData\Cardiff\TeleForm\exp Browse...

Use the data from this field as a subdirectory

Dynamic folder field

Image File Conversion

Format PDF+Text Setup ...

Options Monochrome

Description All pages stored in a PDF+Text document.

Page Options

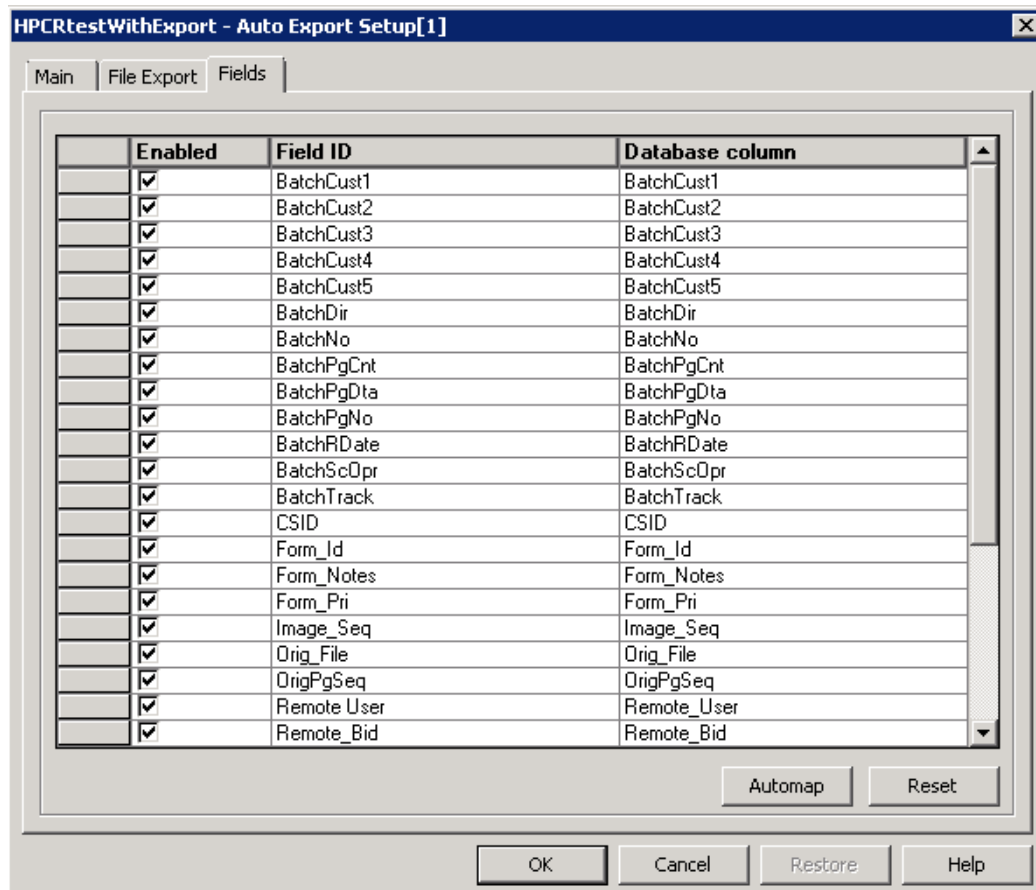
Pages Do not export form pages (unless there are no nonforms)

Page order Group form pages at the beginning (default)

OK Cancel Restore Help

6. Repeat Steps 3 through 5 and select XML (C#) as the format. This will create an XML file.

- On the **Fields** tab, select the fields to export in the XML file.



- Save the form when complete.

16-3-3 Enabling HP CR XMLScan

16-3-3-1 Creating an XMLScan connector

- Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
- In the console tree, click **Connectors > New HP Capture and Route Connector for > XmlScan**. The **Server Address** page opens.
- Click **Next**. Alternately, if you want the connector to run on a remote server, click **Remote Server** and enter the server name. Click **Next**. The **Display Name** page opens.
- Enter a descriptive name and click **Next**. You are prompted to specify the folder to scan.
- Click **Browse** and select the folder to scan.
- Click **Next**. The connector is configured and added. The **Congratulations** page opens.
- Click **Finish**.

The new XMLScan connector is listed in the details pane.

16-3-3-2 Enabling XML translation

1. Click **Start > All Programs > HP Capture and Route > HP Capture & Route Server Administrator** to open the HP CR Server Administrator.
2. In the console tree, click **Connectors**. All connectors in the environment are listed in the details pan.
3. Double-click the XMLScan connector to open the **Properties** page.
4. Click **Folders**.
5. Select the folder that is listed and click **Properties**. The **New Folder** page opens.
6. Select the **Enable XML Translation** option and click **Add**. The **Enter Extension** page opens.
7. Enter:
`*.xml`
8. Click **OK** to close the page.
9. Click **OK** to save your changes and close the **New Folder** page.

Now you can copy the TeleformsIn.XSL file to the XMLScan folder:

1. Browse to:
`C:\Program Files (x86)\HP\HPCR\Samples\XMLScan`
2. Copy the file **TeleformsIn.xsl** to the folder specified for the XMLScan connector.

Part V:
Appendices

A Upgrading HP CR v1.1 to HP CR v1.2.0

Upgrading your current version of HP CR involves several steps, as detailed in this appendix:

[Backing up the database](#) (179)

[Cancelling messages in the In Process queue](#) (180)

[Backing up the templates](#) (180)

[Uninstalling clients](#) (180)

[Uninstalling device clients from HP CR Server Administrator](#) (181)

[Deleting device clients and the Default group from the HP CR Server Administrator](#) (181)

[Uninstalling HP CR v1.1 clients from Programs and Features](#) (181)

[Running the server installation on the HP CR v1.1 system](#) (182)

[Installing clients](#) (183)

Complete all of the procedures in this appendix in the order in which they are presented.

A-1 Backing up the database

Before you upgrade your current version of HP CR, you must back up the database. To back up and shrink the database:

1. Log in to the system that has the HP CR Server database.
2. Click **Start > All Programs > Administrative Tools > Services**.
3. Locate all HP Capture and Route services.
4. Right-click each service and click **Properties** from the drop-down menu.
5. On the **Properties** page, go to the **Startup Type** section and select **Disabled** from the drop-down menu.
6. Stop all HP Capture and Route services.
7. Using the Task manager, verify that all HP CR processes (beginning with Om*) are stopped.
8. Click **Start > Run** to open a Windows command prompt.
9. Back up the database using instructions provided by Microsoft in:

[http://msdn.microsoft.com/en-us/library/ms130214\(SQL.90\).aspx](http://msdn.microsoft.com/en-us/library/ms130214(SQL.90).aspx)

If necessary, change the name of the database while backing it up. You can also change the name of the backup file and the file path.

10. Locate the HP CR services and set the **Startup Type** to **Automatic**.
11. Start all HP CR services.

A-2 Cancelling messages in the In Process queue

When preparing for the upgrade, you must wait for all messages to complete or cancel all messages in the **In Process** queue.

NOTE: Any message located in the **In Process** queue at the time of the upgrade fails to compose. This is indicated in the message journal.

You must also notify HP CR users that they cannot send documents and faxes until the server upgrade and configuration is complete. It is recommended that you upgrade the server during off hours or when the volume of documents traffic is low.

A-3 Backing up the templates

The setup program for the server upgrade overwrites all the files in these directories. Before you upgrade, you must back them up prior to running the server upgrade.

To backup your templates:

1. Make a backup copy of the Templates directory. The Templates directory is located in:

`C:\Program Files (x86)\HP\HPCR\Languages\ENU\Notifications`

where C: is the drive where the HP CR Server is installed.

NOTE: "ENU" in the path above is an example of a default language used by the system. Other supported languages are in separate directories. When navigating to the Templates directory, go to the Languages folder, select the language you use, and create a backup of the templates for that language.

2. Make a backup copy of the Embedded Directives directory. This directory is located in:

`C:\Program Files (x86)\HP\HPCR\Languages\ENU\EmbeddedDirectives`

where C: is the drive where the HP CR Server is installed.

NOTE: These directories contain cover page templates, Routing Sheet templates, and notification templates for your server.

A-4 Uninstalling clients

HP CR v1.2 requires that all previously installed client programs are uninstalled. To do so:

1. From **Control Panel > Programs and Features**, select **Uninstall a program**.
2. Continue to uninstall specific clients as described below.

Uninstalling Embedded Device Client for HP OXPd v1.4

1. Select the Embedded Device Client for HP OXPd v1.4.
2. Select **Uninstall** from the menu bar.
3. After uninstall is complete, verify that the OXP1.4 directory has been removed from:

`C:\Program Files (x86)\HP location`

4. Delete any folder that remains.

Uninstalling Embedded Device Client for HP OXPd v1.6

1. Select the Embedded Device Client for HP OXPd v1.6.
2. Select **Uninstall** from the menu bar.
3. After uninstall is complete, verify that the OXP1.6 directory has been removed from:
`C:\Program Files (x86)\HP location`
4. Delete any folder that remains.

Uninstalling HP Capture and Route Web Client

1. Select the HP Capture and Route Web Client.
2. Select **Uninstall** from the menu bar.
3. After uninstall is complete, verify that the Web Client directory has been removed from:
`C:\Program Files (x86)\HP location`
4. Delete any folder that remains.

A-5 Uninstalling device clients from HP CR Server Administrator

1. Launch the **HP CR Server Administrator > Select Devices > Default**. The list of installed devices appears in the results pane.
2. Right-click on the device and select **Uninstall**.
3. Repeat these steps for all installed device clients.

A-6 Deleting device clients and the Default group from the HP CR Server Administrator

1. Launch the **HP CR Server Administrator > Select Devices > Default**. The list of installed devices appears in the results pane.
2. Right-click on the device and select **Delete**.
3. Right-click on the **Default** group and select **Delete**.

A-7 Uninstalling HP CR v1.1 clients from Programs and Features

HP CR v1.2 requires that all previously installed client programs are uninstalled. To do so:

From **Control Panel > Programs and Features**, select **Uninstall a program**.

Continue to uninstall specific clients as described below.

Uninstalling Embedded Device Client for HP OXPd v1.4

1. Select the Embedded Device Client for HP OXPd v1.4.
2. Select **Uninstall** from the menu bar.

3. After uninstall is complete, verify that the OXP1.4 directory has been removed from:

`C:\Program Files (x86)\HP\`

4. Delete the OXP1.4 directory if it remains.

Uninstalling Embedded Device Client for HP OXPd v1.6

1. Select the Embedded Device Client for HP OXPd v1.6.
2. Select **Uninstall** from the menu bar.
3. After uninstall is complete, verify that the OXP1.6 directory has been removed from:

`C:\Program Files (x86)\HP\`

4. Delete the OXP1.6 directory if it remains.

Uninstalling HP Capture and Route Web Client

1. Select the HP Capture and Route Web Client.
2. Select **Uninstall** from the menu bar.
3. After uninstall is complete, verify that the Web Client directory has been removed from:

`C:\Program Files (x86)\HP\`

4. Delete the Web Client directory if it remains.

A-8 Running the server installation on the HP CR v1.1 system

To upgrade the server:

1. Close all applications on the server.
2. Navigate to the directory where you saved the download.
3. Run **Setup.exe**.
4. Click **Next**. The **License Agreement** page opens.
5. Read the license agreement. After scrolling to the bottom of the agreement, click the button beside the **I Accept The Terms Of The License Agreement** option.
6. Click **Next**. The setup checks the system for installation requirements and displays the results.
7. Review the results and click **Next**.
8. The setup requests logon credentials for the HP CR service account. Provide the logon credentials:
 - a In the **NT Domain** text box, enter the domain name.
 - b In the **User Name** text box, enter the user name.
 - c In the **Password** and **Confirm Password** text boxes, enter the password for the user.
9. Click **Next**. The **Ready to Install** page opens listing all the installation settings.
10. Review the installation settings. Click **Next** to begin the server upgrade.
The InstallShield Wizard upgrades the server. When upgrade is complete, you will see the **InstallShield Wizard Complete** page.
11. Click **Finish** to close the InstallShield wizard. The Server Configuration Wizard launches and shows the **Welcome** page.

12. Click **Next**. You are prompted to save the changes you made to the server configuration.

13. Click **Finish**.

The server configuration wizard saves your changes to the server configuration. The HP CR Server Administrator starts automatically.

A-9 Installing clients

Refer to [Section 16](#) (157), the [HP Capture and Route \(HP CR\) Embedded Device Client for HP OXPd Installation Guide](#), and the [On-line help for the administrator](#) for installation and troubleshooting procedures.

B Installing HP CR in a Non-English Environment

HP CR End User clients (devices, HP CR End User Interface, HP CR for HP OXPd 1.4 Client, HP CR for HP OXPd 1.6 Client, HP CR for Microsoft SharePoint, and HP CR for Autonomy WorkSite) have been localized for Simplified Chinese, French, German, Italian, Brazilian Portuguese, and Spanish. Installing HP CR in a non-English environment involves several steps, as detailed in this appendix:

[Setting up a server before installing HP CR](#) (185)

[Installing HP CR](#) (185)

[Troubleshooting](#) (186)

Standard device buttons have been localized. Note, however, that the Administrator can modify the text as it appears on a device button. These buttons will not appear as localized unless the Administrator enters the text in the applicable language.

B-1 Setting up a server before installing HP CR

Through the Windows Control Panel (Region and Language) on the HP CR server, set regional settings for the number format to US/UK.

This is necessary because, after the HP CR installation, a first-time wizard runs and attempts to create the default configuration (including implementing the default connectors). When the operating system that is set to non-US/UK regional settings, the numbering system often is altered to use commas as decimal points rather than periods. For example, in US regional settings, 100.00 is used to signify 100 with two decimal places. Throughout continental Europe, the value 100,00 (with a comma rather than a period). Use of the comma conflicts with HP CR saving certain data to the database (including while creating a connector).

B-2 Installing HP CR

Complete the installation procedures in [Section 3: Installing the HP CR server](#) (27). Then, complete the configuration procedures in [Section 4: HP CR post installation review and configurations](#) (33).

B-2-1 Note about Routing Sheet templates

After installation, the HP CR server includes templates to allow for localization of each language that the server uses to process messages. The templates are located in the HPCR\Languages folder:

```
...\Program Files\HP\HPCR\Languages\ENU\Coverpages
```

When a Desktop Client (such as the End User Interface) contacts the server, it passes the local language to the HP CR server, which then uses the appropriate template based on the Client's language code. If the language code does not exist, it defaults to US English.

In the case of English (Ireland), for example, the language code ENI may be found in the language directory because it was manually created. But, HP CR does not automatically include a matching template in the HPCR\Languages folder. If you are setting up the HP CR server for English (Ireland), copy Routing Sheet templates from the ENU (US English) folder into the ENI folder.

B-2-2 Application pool for the End User Interface must be changed when installing on a non-US operating system

1. Open Internet Information Services (IIS) Manager on the server where the End User Interface was installed.
2. Browse to **Application Pools**.
3. Select **WebClient_Pool**.
4. Select **Advanced Settings** on the Actions Pane.
5. Locate the **Identity** property under **Process Model**.
6. Click the ellipsis (...) next to **NetworkService**.
7. Select **Custom account**.
8. Click **Set**.
9. Enter the domain and user name of the HP CR Service Account (domain\username).
10. Enter the password.
11. Click **OK** on the **Set Credentials** page.
12. Click **OK** on the **Application Pool Identity** page.
13. Click **OK** to close the **Advance Settings** page.
14. Open the HP CR End User Interface to the test settings.

B-3 Troubleshooting

B-3-1 “Failed to save new object (0x80040e14)” message

This message may display when installing HP CR v1.2 to a Windows operating system that is set to non-US/UK regional settings.

After the HP CR installation, a first-time wizard runs and attempts to create the default configuration, including implementing the default connectors. When the operating system that is set to non-US/UK regional settings, the numbering system often is altered to use commas as decimal points rather than periods. For example, in US regional settings, 100.00 is used to signify 100 with two decimal places. Throughout continental Europe, the value 100,00 (with a comma rather than a period).

Use of the comma conflicts with HP CR saving certain data to the database (including while creating a connector). A resolution is in development.

To work around this issue, set regional settings to US/UK on the HP CR server. These settings have been tested and confirmed to work.

B-3-2 Installing in an environment without Microsoft Exchange or Lotus Notes causes logon issues for the End User Interface

After installing the HP CR End User Interface to an environment without Microsoft Exchange, the user may not be able to log in to the End User Interface. An LDAP warning is displayed. The End User Interface is attempting to look up attributes from Active Directory that are not available since the Active Directory Scheme was not modified (as it would be by installing Microsoft Exchange). This is addressable through a configuration change.

1. On the HP CR server, open Windows Explorer and browse to:

`HP\HP CR\Config\AttributeMaps`

2. Open the `Exchange.default.xml` file in Notepad (or an xml editor).

NOTE: Make a copy of `Exchange.default.xml` prior to changes.

3. The `Exchange.default.xml` file is set to read only. This option must be removed before any changes can be made.

4. In `Exchange.default.xml`, find the Exchange 2000 attributes section.

```
<!--
  Exchange 2000 attributes
-->
  <Attribute>
```

5. Remove (cut) the trailing `-->`

The section should appear as:

```
<!--
  Exchange 2000 attributes
  <Attribute>
```

6. Paste the `-->` after the `</Attribute>` line in the file so that it looks like this:

```
<!--
  Exchange 2000 attributes
  <Attribute>
-->
```

