

# HP OfficeJet Pro X and HP PageWide Pro Series - IT Administrators Install Guide

---

This document provides information to IT administrators about HP's Enterprise Environment printer software installation. The document describes how to deploy the software in an automated or managed environment. It also specifies which files are required from the install CD and how to customize what software gets installed.

## Table of Contents

How to Install .....	2
Creating a Small Release Image.....	3
Language Selection .....	4
Feature Selection.....	4
Enterprise or Full Install.....	4
Print.....	5
Scan.....	5
Fax.....	6
Uninstall Shortcut in the Start Menu .....	6
"Connect a New Printer" Shortcut in the Start Menu .....	6
Hide the Scan to PC Activation Option .....	6
Installing on Windows Servers .....	6
Installing a Network Printer .....	7
Potential Issues .....	7
Logs .....	8
Multicast Discovery .....	8
Off-Subnet Devices.....	8
Updating the Software to Use a New IP Address .....	9
Command Line Tool to Update IP Address of Installed Printer .....	10
Command Line Tool to Update Hostname of Installed Printer .....	10
Plug and Play Suppression .....	11
Common Msiexec Command Line Parameters .....	11
Installing .....	11
Specifying Logging .....	11
Specifying the UI Level.....	11
Reboot Suppression.....	12

MSI Property Reference.....	12
Firewall Requirements .....	14
Technical Details .....	14
Related Topics for Network Installs .....	15
CD Image File Descriptions.....	15
Driver Files .....	15
Software Installer (MSI) .....	17
Optional Files .....	17
Compatibility with Full Software Solution.....	18
Installing Enterprise First .....	18
Upgrading to Full Solution .....	18
Installing Full Solution First.....	18
Attempting to Install Older Enterprise Release .....	18
Upgrading to Enterprise Solution .....	18

## How to Install

To install the software that supports the printer, the appropriate MSI on the CD image must be installed. There are two MSIs at the root of the CD image, one with an x86 suffix and one with an x64 suffix. The MSI will have the product's model number as the name of the MSI, for example D3050x86.msi or A910x64.msi. The x86 MSI is to be installed on 32-bit versions of Windows and the x64 MSI is for 64-bit versions of Windows. The MSI will install all supporting software and will preinstall the drivers for the printer, so that the drivers will be available when the printer is connected to the PC or a network printer is installed.

Use your favorite tool (msiexec.exe, etc.) to install the MSI onto client PCs. If you choose to use msiexec.exe, we have provided a short section that documents [common command line parameters that might be helpful](#). To create a CD image that is smaller (for faster network deployment), read the section [Creating a Small Release Image](#). To customize the install, read the section [Feature Selection](#).

Once the software and drivers have been installed using the MSI, the client PC is ready for USB connections or network printer installations. To install a network printer, see the section, [Installing a Network Printer](#).

**Requirement: .NET Framework 3.0 or 3.5 is required for installation of some drivers.**

Please make sure the target system meets the system requirements to ensure proper installation.

## Creating a Small Release Image

This section describes how to remove files from the release image. The instructions are to copy the batch file below to your system. Open a command prompt to the directory containing the image that you would like to customize, and then run the batch file from that directory. The batch file will ask a few questions, and then delete any files that are not necessary. See the section [CD Image File Descriptions](#) for a description of each file, if you would like to customize the CD image without using the batch file.

```
@echo off
echo Creating Enterprise Release
echo This will delete files in the current directory to create the release.
echo Press Ctrl+C now if this is not what you want to do
pause

SET /P FAX="Include FAX? [Y|N] "
SET /P PLATFORM="32 bit, 64 bit, or Both? [32|64|Both] "
SET /P LANGUAGE="Specify Language ID or All? [{LanguageID}]All] "

rmdir /Q /S Optional
rmdir /Q /S HP
rmdir /Q /S Microsoft
rmdir /Q /S Toolbar
rmdir /Q /S Required
rmdir /Q /S licensing
del /F /Q Full_*.cab
del /F Setup.exe
del /F HP-DQEX5.exe
del /F autorun.inf
del /F ReadMe.chm

if "%FAX%"=="N" (
  pushd Drivers
  rmdir /Q /S Fax
  popd
  del /F /Q HP*_fax.inf
  del /F /Q HP*_fax*.cat
) ELSE (
  REM The nullfax driver might be inside of the MSI in K3.5/K4, but we'll try to remove it anyway
  del /F /Q HP*_nullfax*.inf
  del /F /Q HP*_nullfax*.cat
)

if "%PLATFORM%"=="32" (
  del /F /Q *x64.msi
  del /F /Q *x64.cab
  del /F /Q *x64*.mst
)
if "%PLATFORM%"=="64" (
  del /F /Q *x86.msi
  del /F /Q *x86.cab
  del /F /Q *x86*.mst
)

if "%LANGUAGE%"=="All" GOTO :SKIP_LANGUAGES

FOR %%F in (*%LANGUAGE%.mst) DO ren "%%F" "%~-nF._mst"
del /F /Q *.mst
FOR %%F in (*.mst) DO ren "%%F" "%~-nF.mst"

:SKIP_LANGUAGES
echo All Done!
```

## Language Selection

Almost all of the files that are installed support MUI and therefore have all language resources included. However, the shortcuts that are installed are language specific. By default, the shortcuts are installed in English. To set the language of the shortcuts that are installed, determine the language transform to use and include its name on the command line when installing the MSI. The transforms have the same filename as the MSI, followed by an underscore and the language ID. For example:

```
msiexec.exe /i D3050x86.msi /qn ENTERPRISE=YES TRANSFORMS=D3050x86_1034.mst
```

Below is a table of languages and language IDs to simplify choosing the correct transform.

**Note:** There is no English transform file since the default language is English.

Language	Language ID
Arabic	1025
Traditional Chinese	1028
Czech	1029
Danish	1030
German	1031
Greek	1032
English	1033
Spanish	1034
Finnish	1035
French	1036
Hebrew	1037
Hungarian	1038
Italian	1040
Japanese	1041
Korean	1042
Dutch	1043
Norwegian	1044
Polish	1045
Portuguese	1046
Russian	1049
Swedish	1053
Turkish	1055
Simplified Chinese	2052

## Feature Selection

This section describes properties that can be set when installing the MSI that will turn off certain features in the software so that they are not installed.

For common Windows Installer properties, see the section [Common Msiexec Command Line Parameters](#). All properties are summarized in the table [MSI Property Reference](#).

## Enterprise or Full Install

By default, the MSI will install all of the software that is available. A minimum set of software and drivers has been selected for deployment in Enterprise environments. To enable the

minimum software solution, set the ENTERPRISE property to “YES” during the install. For example, if using msixec.exe:

```
msixec.exe /i D3050x86.msi /qn ENTERPRISE=YES
```

### Features Included during Enterprise Install

The following is a list of the features included when the ENTERPRISE property is set to “YES” during install:

- Drivers (Print, Scan, Fax)
- Device Setup / USB Setup
- Status (this depends on the STATUS flag)
- Device Update
- Instance Finder
- Uninstall Shortcuts
- Product Support URLs
- Scan Application (if device has a scanner)

### Features Excluded during Enterprise Install

The following is a list of the features that are excluded when the ENTERPRISE property is set to “YES” during install:

- Desktop Sure Supply (DTSS)
- Help Viewer
- Coupons (registry value)
- DXP (UDC)
- SCLite
- Smart Deals
- Digital Solutions
- ePrint Center Shortcut
- WebReg
- Fax Software
- Toolbox

### Print

By default, the Print driver will be installed. To turn off this feature (and instead install a small driver that will not create a printer), set the PRINT property to “NO” during the install. For example, if using msixec.exe:

```
msixec.exe /i D3050x86.msi /qn ENTERPRISE=YES PRINT=NO
```

### Scan

By default, the Scan driver will be installed. To turn off this feature (and instead install a small driver that will not create a scanner device), set the SCAN property to “NO” during the install. For example, if using msixec.exe:

```
msixec.exe /i D3050x86.msi /qn ENTERPRISE=YES SCAN=NO
```

## Fax

By default, the Fax driver (to support print-to-fax) will be installed. To turn off this feature (and instead install a small driver that will not create a fax printer), set the FAX property to “NO” during the install. For example, if using msiexec.exe:

```
msiexec.exe /i D3050x86.msi /qn ENTERPRISE=YES FAX=NO
```

## Uninstall Shortcut in the Start Menu

By default, a shortcut will be created in the Windows Start menu to uninstall the software and drivers. To disable this shortcut, set the UNINSTALL\_SHORTCUT property to “NO” during the install. For example, if using msiexec.exe:

```
msiexec.exe /i D3050x86.msi /qn ENTERPRISE=YES UNINSTALL_SHORTCUT=NO
```

## “Connect a New Printer” Shortcut in the Start Menu

By default, a shortcut will be created in the Windows Start menu to allow the user to add a new printer. This shortcut can be disabled by setting the CONNECT\_NEW\_PRINTER\_SHORTCUT to “NO” during the install. For example, if using msiexec.exe:

```
msiexec.exe /i D3050x86.msi /qn ENTERPRISE=YES CONNECT_NEW_PRINTER_SHORTCUT=NO
```

## Hide the Scan to PC Activation Option

By default, and during a Network installation, the user will have the option to activate the “Scan to Computer” option (also known as “Walk up Scan”). This will allow users to push the scan button on the device and direct the scan to a computer. This activation option can be disabled by setting the SCANTOPC parameter to “NO” during install. For example, if using msiexec.exe:

```
msiexec.exe /i D3050X86.msi /qn SCANTOPC=NO
```

## Installing on Windows Servers

If installing on Windows Server 2003 or 2008, some of the software and driver features might not function properly without configuring the features of the server.

If the device being installed supports scanning, then the following must be considered for scanning to work. Otherwise, the “Scan” icon on the desktop will appear to do nothing.

- On Windows Server 2003, the Windows Image Acquisition (WIA) service is installed, but is disabled by default. For scanning to work, the WIA service must be enabled.
- On Windows Server 2003 R2, the Windows Image Acquisition (WIA) service is installed, but is disabled by default. For scanning to work, the WIA service must be enabled.
- On Windows Server 2008, the Windows Image Acquisition (WIA) service is not installed by default. For scanning to work, you must install the “Desktop Experience” feature. The WIA service will then be enabled by default.
- On Windows Server 2008 R2, the “Desktop Experience” feature must be installed before plug and playing a USB device or installing a network printer.

- On Windows Server 2012, the “Desktop Experience” feature must be installed before plug and playing a USB device or installing a network printer.

## Installing a Network Printer

This section describes the steps to install a network device on a client PC.

First, ensure the software package (MSI) is installed using the process described earlier in this document.

The following steps describe how to install a network device:

### Step 1

Make sure the device you want to install is already on the network and has a valid IP address.

### Step 2

Write down the IP address or hostname of the network device that you want to install.

### Step 3

Using an administrator account, run the following command on the target PC to start the network install process:

```
START /WAIT /D"C:\Program Files\HP\<Product Name>\Bin" DeviceSetup.exe /networkaddress <ip address or hostname>
```

**NOTE:** On Vista and Windows 7, the above command must run from an elevated process when UAC is enabled.

This starts a process that attempts to find and install the network device using the specified IP address or hostname. The entire process is done silently without displaying any UI. If the install is successful, it will return a value of 0; otherwise, it will return a non-zero error code.

## Potential Issues

The following is a list of potential issues that might cause the install to fail:

- **A firewall could be blocking the installer from communicating with the network device.**  
If the target PC is running a firewall, make sure the firewall allows the installer process (DeviceSetup.exe) to establish a TCP connection to the network device. See [the firewall section](#) that describes which processes need to be allowed access through a firewall.
- **The hostname might not be resolving to a valid IP address.**  
If you are using the device hostname to install, make sure there is a name resolution service (e.g., DNS, WINS) running on the network that can resolve the hostname to a valid IP address.
- **DeviceSetup.exe could be failing on Vista/Windows7 due to UAC.**  
Make sure you run DeviceSetup.exe in elevated mode when UAC is enabled.
- **You might have entered an incorrect IP address or hostname.**  
Make sure you specify the correct IP address or hostname in the command line.

- **The printer might be turned off or off the network.**

Check that the printer is plugged in and turned on. If the printer is connected to the network over Ethernet cable, check the cable and its connection. If the printer is connected wirelessly, ensure that the printer is still connected to the network.

## Logs

Each execution of DeviceSetup.exe generates a new log file which can be found at `C:\Users\<NTUserAccount>\AppData\Local\HP\AtInstall\<execution#\>\DeviceSetup.log`

on Vista and Win7 and at

`C:\Documents and Settings\<NTUserAccount>\Local Settings\Application Data\HP\AtInstall\<execution#\>\DeviceSetup.log`

on XP.

## Multicast Discovery

The normal behavior for our software is that it discovers (and rediscovers) printers on the network using Web Services Discovery (WSD), which sends multicast UDP packets. When installing using the UI, the software will attempt a multicast resolve and will inform the user that rediscovery will not properly function. It allows the user to correct anything blocking the issue and retry or to install by IP address. This will enable the software to function properly on a network where multicast is disabled. This also results in the software being unable to find and use the device if the IP address changes and the printer's hostname won't resolve the IP address.

When installing a printer using DeviceSetup.exe on the command line (passing an IP address), this check is not performed, and the software assumes that multicast resolves will be able to find the printer after install.

To disable multicast discovery for a printer when the device is installed by command line, the ini file for the printer must be modified. After installing the printer, a data file is created in `C:\ProgramData\HP\<Model Name>\NetworkDevices\<Serial Number>.ini`. In the [DeviceInfo] section, a key called MulticastEnabled will be set to "true". This can be changed to "false" to disable multicast rediscovery of the printer. But if the printer's IP address changes, the IP address in this ini file will need to be updated, or the user can run the "Update IP Address" tool from the Start Menu.

## Off-Subnet Devices

The process described in the section [Installing a Network Printer](#) is the same process to install a printer that is on a different subnet than the PC on which it is being installed. Follow those instructions to install such a printer. However, since the printer is installed on a different subnet than the PC, the client PC cannot rediscover the printer if the IP address or hostname of the printer changes. The section below describes how to update the client PC if the IP or hostname of the printer is changed.

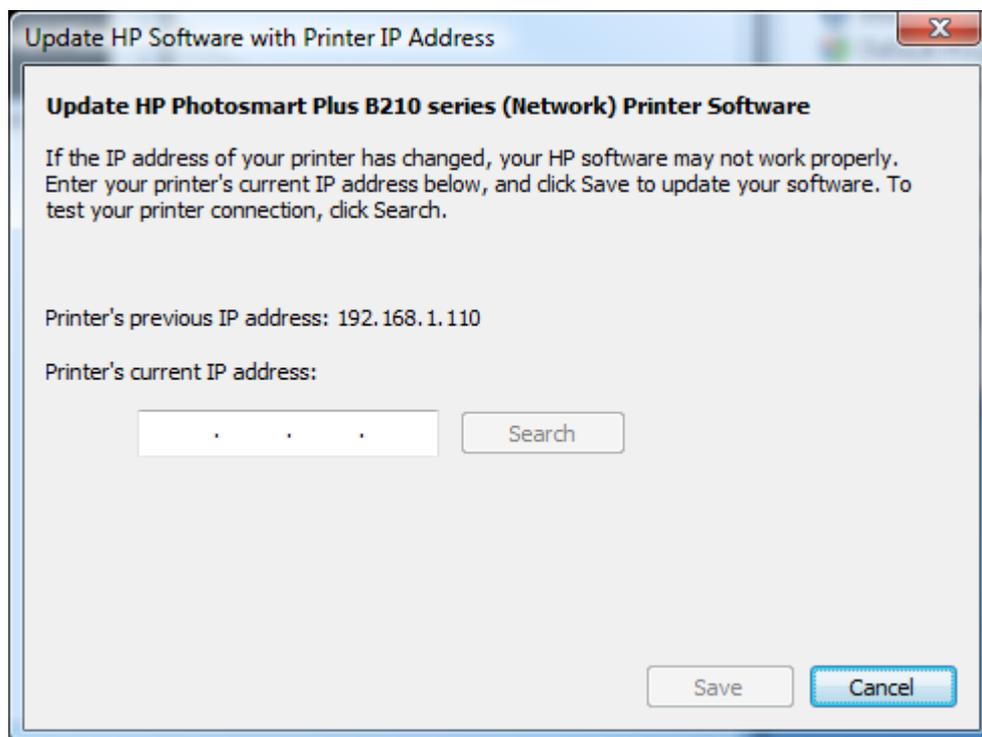
## Updating the Software to Use a New IP Address

The IP address or hostname of a network device can change after the device has been installed on the PC. In the case of an off-subnet device, the software cannot always detect the new IP address or hostname of the device. This section describes the steps on how the user can update the IP address or hostname for an installed device.

A shortcut to the tool is in the Windows Start menu:

Start -> Programs -> HP -> [device model name] -> Update IP Address

Clicking on this shortcut will open the tool. If there are multiple instances of the device installed, you might be presented with a dialog asking you to choose which device you want to update. After you choose the device you want to update, you will be presented with the following screen:



Entering an IP address in the field will enable the "Search" button, which can be used to make sure the IP address is correct. The "Save" button will also be enabled once an IP address is entered. Clicking on this button will save the IP address in the field and the installed software will then use the new IP address. Please note that searching and not saving will not update the IP address. You must click "Save" to actually update the IP address.

## Command Line Tool to Update IP Address of Installed Printer

Using an administrator account, run the following command on the target PC to change the IP address of a network installed device:

```
START /WAIT /D"C:\Program Files\HP\<Product Name>\Bin" DeviceSetup.exe /serialnumber <device serial number> /changeip <new ip address>
```

**NOTE:** On Vista and Windows 7, the above command must run from an elevated process when UAC is enabled.

This starts a process that attempts to find the network installed device with the given serial number and change it to use the new IP address. The entire process is done silently without displaying any UI. If the operation is successful, it will return a value of 0; otherwise, it will return a non-zero error code.

## Command Line Tool to Update Hostname of Installed Printer

Using an administrator account, run the following command on the target PC to change the hostname of a network installed device:

```
START /WAIT /D"C:\Program Files\HP\<Product Name>\Bin" DeviceSetup.exe /serialnumber <device serial number> /changehostname <new hostname>
```

**NOTE:** On Vista and Windows 7, the above command must run from an elevated process when UAC is enabled.

This starts a process that attempts to find the network installed device with the given serial number and change it to use the new hostname. The entire process is done silently without displaying any UI. If the operation is successful, it will return a value of 0; otherwise, it will return a non-zero error code.

## Potential Issues

The following is a list of potential issues that might cause the update to fail:

- **DeviceSetup.exe could be failing on Vista/Windows7 due to UAC.**  
Make sure you run DeviceSetup.exe in elevated mode when UAC is enabled.
- **You might have entered an incorrect serial number.**  
Make sure you specify the correct serial number for the network device in the command line.

## Logs

Each execution of DeviceSetup.exe generates a new log file, which can be found at

```
C:\Users\<NTUserAccount>\AppData\Local\HP\AtInstall\<execution#>\DeviceSetup.log
```

on Vista and Win7 and at

```
C:\Documents and Settings\<NTUserAccount>\Local Settings\Application Data\HP\AtInstall\<execution#>\DeviceSetup.log
```

on XP.

## Plug and Play Suppression

The installer supports adding a registry value that will instruct Windows to ignore the serial number when plug and playing a USB printer (for the printer model being installed). This will allow an Enterprise to service a USB printer at a user's desk, and return a printer with a different serial number which, when connected to the PC, will appear as if it were the same printer to the user.

To enable this feature, set the property IGNORE\_SERIALNUM to "YES". For example, if using msiexec.exe:

```
msiexec.exe /i D3050x86.msi /qn ENTERPRISE=YES IGNORE_SERIALNUM=YES
```

## Common Msiexec Command Line Parameters

This section documents some useful common parameters for msiexec.exe in order to make it easier to configure the install of the HP MSIs.

The following document at Microsoft's website provides more thorough documentation of msiexec: [http://technet.microsoft.com/en-us/library/cc759262\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc759262(WS.10).aspx)

Please refer to the Microsoft documentation for further questions. In the event that anything described in this section conflicts with Microsoft documentation, it should be assumed that the Microsoft documentation is correct.

## Installing

Installing an MSI is done by passing the path to msiexec with the /i parameter:

```
msiexec.exe /i D:\D3050x86.msi
```

## Specifying Logging

Logging can be enabled on the command line by passing the /l parameter, followed by the logging options, and then the log filename:

```
msiexec.exe /i D:\D3050x86.msi /l*v C:\Logs\D3050_Install.log
```

\*v as the log level will give a full, verbose log. For more detailed explanations of the log levels, please see the following Microsoft Web page:

[http://technet.microsoft.com/en-us/library/cc759262\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc759262(WS.10).aspx)

## Specifying the UI Level

The UI level can be specified using the /q parameter. This will determine whether any UI is shown and whether Windows Installer will show any prompts to the user (for reboots or error messages, for example). There is no authored UI in the HP MSIs, so the basic UI will be used without specifying any value. This parameter can still be used to suppress all UI and any prompts.

Example:

```
msiexec.exe /i D:\D3050x86.msi /qn
```

Common UI Levels:

Parameter	Description
qn	No UI and no prompts
qb	Basic UI (progress bar)
qb-	Basic UI and no prompts

## Reboot Suppression

Use the REBOOT property to specify how Windows Installer deals with reboots at the end of install. Use "REBOOT=ReallySuppress" to suppress all reboot requests. Msiexec.exe will still return 3010, if a reboot is required.

msiexec.exe /i D:\D3050x86.msi **REBOOT=ReallySuppress**

## MSI Property Reference

This section summarizes the properties that are described in more detail above in the sections [Feature Selection](#) and [Common Msiexec Command Line Parameters](#).

Property Name	Values	Description	Default Value
ENTERPRISE	YES NO	Selects whether to install the full software (NO) or the minimum software for enterprise (YES)	NO
PRINT	YES NO	Selects whether to install the driver or not.	YES
SCAN	YES NO	Selects whether to install the scan driver or not.  If SCAN=YES and ENTERPRISE=NO, the scan software is also installed. Otherwise, scan software is not installed.	YES
FAX	YES NO	Selects whether to install the print-to-fax driver or not.  If FAX=YES and ENTERPRISE=NO, the fax software is also installed. Otherwise, fax software is not	YES

Property Name	Values	Description	Default Value
		installed.	
STATUS	DISABLE_ALL_STATUS PRINT_ONLY	If STATUS=DISABLE_ALL_STATUS then no status is shown at all, either during printing or normal usage. If STATUS=PRINT_ONLY then status alerts are only seen during printing.	PRINT_ONLY
UNINSTALL_SHORTCUT	YES NO	Selects whether to install the Start menu shortcut to uninstall the software	YES
CONNECT_NEW_PRINTER_SHORTCUT	YES NO	Selects whether to install the Start menu shortcut to add a new printer	YES
IGNORE_SERIALNUM	YES NO	Selects whether Windows should ignore the serial number when plug and playing the printer	NO
TRANSFORMS	Transform file name, ex: D3050x86_1055.mst	The filename or path to the transform file to apply	[None]
REBOOT	Force Suppress ReallySuppress	Sets the behavior for what should happen if Windows Installer requires a reboot to complete the install.	[None]
SCANTOPC	NO	If this property is set then the option to activate the scan to computer software will be hidden and the user will have to initiate scans from their computer instead of from the device. If the option is set to anything other than NO the option to activate the scan to pc software will be displayed. If the property is not set we default to	YES

Property Name	Values	Description	Default Value
		showing the option.	

## Firewall Requirements

When installing a network device, the HP software and drivers must communicate with the printer over the network. Firewall software can interfere with this communication. If so, rules must be added to any firewall software to allow the following applications to communicate with devices on the local subnet:

- {Program Files}\HP\{Model Name}\bin\HPNetworkCommunicator.exe

Most of the data transfer between the computer and the device will be done over HTTP (typically port 80 or port 8080). Printing also uses a TCP connection on ports 3910 and 9100. In most cases, firewalls will allow this type of traffic through without any problems. If your firewall software does not, then a rule must be created for HP software to communicate to the device.

We use Web Services Discovery (WSD) to find and establish communication with our devices.

Other parts of our software communicate with the device via HTTPS (this will usually be port 443 or 8443). In most cases, firewalls will let this type of traffic through without any problem. The applications that will be affected if this traffic is blocked are:

- {Program Files}\HP\{Model Name}\bin\DigitalFaxWizard.exe (if using print to fax)
- {Program Files}\HP\{Model Name}\bin\ScanToFolderWizard.exe
- {Program Files}\HP\{Model Name}\bin\ScanToEmailWizard.exe

## Technical Details

### Web Services Discovery (WSD)

The HPNetworkCommunicator.exe uses Web Services Discovery (WSD) to communicate with our devices during and after installation. When searching for a device, we send either multicast or unicast UDP packets. Once the device receives the probe, it will respond to the software on a port in Microsoft Windows's ephemeral port range 49152-65535 with pertinent information.

### Search Protocols (UDP/TCP)

When searching for a list of devices, WSD initiates a multicast (UDP) probe to IP 239.255.255.250 at port 3702. Once the device is installed and before every device operation, for example, print, scan, or fax, we check to see if communication can be established. We call this action "rediscovery"; to do the rediscovery WSD sends a multicast UDP packet to resolve the IP address of the device.

When searching for a device using the IP address, WSD creates a TCP socket over port 80. This is usually only done under specific circumstances. See below.

## Windows XP Users

Windows XP does not support the standard WSD protocol. We have developed an internal solution that operates almost identically to the way it's implemented for Windows Vista and Windows 7. The main difference is when you are searching for a device by IP address. For an IP address-initiated search under XP, we will send out unicast UDP probes.

## Installing by providing an IP Address

If you are installing via the command line and you provide an IP address to the command line, we use the IP address to find your device. However, for rediscovery purposes, we will attempt a unicast UDP probe or a TCP connection (to port 80). Your firewall software might block this type of activity. You will have to create a rule for the HPNetworkCommunicator.exe for it to establish communication.

If you are installing via the graphical user interface and your device cannot be discovered through the multicast probe method, you will have the option to install the device by providing the IP address. If you get the option of installing by IP, it means that either your firewall is blocking the traffic or your network does not support multicasting. From the software's perspective it is the same thing. If it is a firewall issue and your device is on the same subnet as the computer, we recommend creating rules in your firewall software to allow for multicast probes from the HPNetworkCommunicator.exe. See [Multicast Discovery](#) for more information.

## Related Topics for Network Installs

[Multicast Discovery](#)

[Off-Subnet Devices](#)

[Updating the Software to Use a New IP Address](#)

## CD Image File Descriptions

This section describes the files that are on the CD image and when they are required. This will allow an administrator to set up an image that contains only the files necessary for the specified install.

### Color Key:

Folders

File Names

Required

Optional in some configurations

Not required

## Driver Files

### Required

File Name	Description
i386	Folder containing 32 bit print driver files (required for installs on all PCs –64 bit & 32 bit computers)

File Name	Description
AMD64	Folder containing 64 bit print driver files (required for installs on all PCs –64 bit & 32 bit computers)
Hp_*.gpd	Print driver file
HPMACRONAMES.gpd	Print driver file
Hpvpl04.inf	Print driver file
Hpvpl04.ini	Print driver file
Hpvpl04.cat	Print driver file
Hpvplargb.icc	Print driver file
Locale.gpd	Print driver file
Pl.bmp	Print driver file
STDNAMES.gpd	Print driver file
Drivers\Scanner	Folder containing scan driver files
HPScanMiniDrv_*.inf	Scan driver file
HPScanMiniDrv_*.cat	Scan driver file

### Required Files when Not Using Print

File Name	Description
p*_nullprint.inf	Replacement driver for Print (Required if NOT installing printer)
p*_nullprint.cat	Replacement driver for Print (Required if NOT installing printer)

### Scan

File Name	Description
HPWia_*.inf	Scan driver file (Required if installing Scanner)
HPWia_*[x32 x64].cat	Scan driver file (Required if installing Scanner)

### Required Files when Not Using Scan

File Name	Description
nullscan.inf	Replacement driver for Scan (Required if NOT installing Scanner)
nullscan.cat	Replacement driver for Scan (Required if NOT installing Scanner)

### Fax

File Name	Description
Drivers\Fax	Folder containing fax driver files (Required if installing Fax printer)
HP*_fax.inf	Fax driver file (Required if installing Fax printer)
HP*_fax[x32 x64].cat	Fax driver file (Required if installing Fax printer)

### Required Files when Not Using Fax

File Name	Description
nullfax.inf	Replacement driver for Fax (Required if NOT installing Fax printer)
nullfax.cat	Replacement driver for Fax (Required if NOT installing Fax printer)

## Software Installer (MSI)

File Name	Description
Utils	Folder containing required utilities
HP	Folder containing Solution Center packages (only required if installing full software -- also required only for installs on Windows XP or Vista)
Microsoft	Folder containing Device Stage packages (only required if installing full software)
<ModelNumber>[x86 x64].msi <ModelNumber>[x86 x64].cab <ModelNumber>[x86 x64]_*.mst	Software installer MSI, cab, and language transforms x86 – for 32 bit versions of Windows x64 – for x64 versions of Windows
Full_[x86 x64].cab	Software install cab file for full solution (only required if installing full software) x86 – for 32 bit versions of Windows x64 – for x64 versions of Windows
ErrorReporter.exe HPCommunication.dll HPCommunication.X.manifest HPeDiag.dll HPeDiag.X.manifest HPeSupport.dll HPeSupport.X.manifest HPScripting.dll HPScripting.X.manifest InstallMetrics.dll InstallMetrics.X.manifest InternetUtil.dll InternetUtil.X.manifest RulesEngine.dll RulesEngine.X.manifest	Required utility files

## Optional Files

File Name	Description
Toolbar	Folder containing the Microsoft Live Toolbar and SmartPrint installers
Required\lp<ModelNumber>*	Installer for Product Help
Optional\<ModelNumber>U[x86 x64]*	“Product Improvement Study” MSI, cab, and language transforms (x86 is 32 bit version, x64 is 64 bit version)
Optional\HP Update* Optional\Data1.cab	HP Update MSI, cab, and language transforms
Optional\IrisOCR*	Optical Character Recognition software (for scanning text)
Optional\Marketsplash_setup.msi	Marketsplash installer
Readme.chm	Readme documentation
Setup.exe	Installer (not required when installing the MSI without UI)
HP-DQEX5.exe	Installer (not required when installing the MSI without UI)

## Compatibility with Full Software Solution

This section describes the behavior of the software that is deployed in enterprises when an end user also has a full software CD from one of the printers.

This software solution for enterprises is simply a configuration of the full software, so the software installer behaves as if the enterprise software is the same as the normal software solution, specifically, if either is already installed, the software will believe that the software is already installed.

The sections that follow list some specific scenarios and what the behavior will be.

### Installing Enterprise First

1. Install Enterprise v2.0
2. Run Software CD v2.0 or earlier (v1.0)  
The software CD will tell the user that the software is already installed. Any other MSI packages that are not yet installed (Help, Customer Experience Program, MS Toolbar) will be offered to the user.

### Upgrading to Full Solution

1. Install Enterprise v2.0
2. Run Software CD v3.0  
The software CD will allow the user to upgrade the solution and will install the full software solution.

### Installing Full Solution First

1. Install full Software from CD v2.0
2. Run Enterprise install v2.0 (assume simply running `msiexec /i <MSI>`)  
The Enterprise install will return success and will not change what was installed (the full solution will remain installed).

### Attempting to Install Older Enterprise Release

1. Install full Software from CD v2.0
2. Run Enterprise install v1.0 (assume simply running `msiexec /i <MSI>`)  
The Enterprise install will fail because a newer version of the software is already installed.

### Upgrading to Enterprise Solution

1. Install full Software from CD v2.0
2. Run Enterprise install v3.0 (assume simply running `msiexec /i <MSI>`)  
The Enterprise install will successfully upgrade the software and will remove the full solution and install only what is configured for the enterprise install.

