



HP Jetdirect 2700w USB Wireless Print Server

Setup Guide



www.hp.com/support/jd2700



HP Jetdirect 2700w USB Wireless Print Server - Setup Guide

SUMMARY

This guide provides configuration, installation, warranty, safety and environmental information.

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1 Introduction

HP Jetdirect print servers and wireless accessories add wireless printing capability to supported HP LaserJet printers, HP PageWide printers, and select HP OfficeJet Enterprise printers, in order to receive print jobs from a wireless-capable laptop, smartphone, or tablet.

This document applies to the HP Jetdirect 2700w Print Server only. It provides the following information:


- Installation requirements.
- Instructions on how to install the product.
- Specifications for the product.
- Supported HP software solutions and network protocols.
- Basic troubleshooting steps for installation issues.
- Regulatory, environmental, and HP service and support information.

Install an HP Jetdirect 2700w USB Wireless Print Server

Use the following information to setup and install the HP Jetdirect 2700w USB Wireless Print Server, to configure wireless printing capabilities on the printer, and to configure custom network settings for the print server(s).

Installation requirements

Learn about the operating systems, supported printers, and connection requirements when installing the HP Jetdirect 2700w USB Wireless Print Server.

 **NOTE:** The HP Jetdirect 2700w USB Wireless Print Server allows the printer to be accessible on a Wi-Fi network or WLAN through a specific access point.

Use the following list for installation:

- The HP Jetdirect 2700w USB Wireless Print Server.
- **Operating system**

A laptop or tablet running the following supported Microsoft Windows, macOS, or Linux/Unix operating system:

- Windows Vista and newer.

 **NOTE:** For Windows systems, make sure that the latest driver or software available for the printer is installed. Go to <https://support.hp.com> to download it.

- macOS X 10.6 and newer.
- Microsoft Windows Server 2008 and newer.
- UNIX/Linux: HP-UX, Sun Microsystems Solaris, IBM AIX, HP MPE-i, RedHat Linux, SuSE Linux.

- **Printer requirements**

- Make sure that the HP Enterprise and Managed printer is compatible with the HP Jetdirect 2700w USB Wireless Print Server. The Enterprise printers include HP LaserJet Enterprise, HP OfficeJet Enterprise, and HP PageWide Enterprise printers.

To view a list of supported printers, go to [Printers that can use HP Jetdirect print servers and NFC/wireless accessories](#).

- Ensure that the supported HP Enterprise and Managed printer has been configured and able to print.
- Make sure that the printer has the latest firmware installed.


- **Wireless or Wired connections**

In an infrastructure mode, wireless devices can communicate with each other in a network either through a wired or wireless connection using an access point, such as a router.

- For wireless connections (infrastructure mode): Make sure that you have an access point, wireless router, or Apple AirPort base station.
- For wired connections (station or infrastructure mode): Make sure that you have an access point that allows wireless devices to connect to the LAN (wired or wireless).

Guidelines when installing an HP Jetdirect 2700w USB wireless print server

Ensure that the following guidelines are met when installing the product:

 **WARNING!** Do not install an HP Jetdirect 2700w and HP Jetdirect 2800w on a printer as these print servers cannot operate at the same time.


- Make sure that you have the correct part number for an HP Jetdirect wireless print server.
HP Jetdirect 2700w USB Wireless Print Server part number: J8026A
- Ensure that you do not have an HP Jetdirect 2800w printer server installed on the printer.
- If you require the mobility support of the 2800w and the wireless infrastructure connection of the 2700w, use the external HP Jetdirect ew2500 802.11b/g Wireless Print Server instead of the HP Jetdirect 2700w print server model. The ew2500 model will provide both wireless and gigabit-wired connectivity (with certain limitations).

For information about printers that support the HP Jetdirect ew2500, go to [Printers that can use HP Jetdirect print servers](#)

Step one: Update the printer firmware

To ensure printer compatibility and maintain regulatory compliance, update the printer firmware to the latest firmware version.

A firmware update might require 10 to 30 minutes or more depending on the computer speed and connection type.

 **NOTE:** For Enterprise printers with third-party solutions installed, make sure that the latest firmware version is compatible with the solutions installed.


If the latest firmware version is not installed on the printer, follow the steps below to download and update the printer firmware:

1. Make sure that the HP Jetdirect accessory or print server is disconnected from the printer.
2. Go to www.hp.com/go/FutureSmart and select **Upgrade now**.
3. Find the printer in the list, and then select the associated link in the "**Link to Firmware download page**" column.
4. Expand the **Firmware** section, locate the latest FutureSmart Bundle version, and then click **Download**.


For detailed instructions on how to perform a firmware update, go to [Update the printer firmware](#).

Step two: Connect the HP Jetdirect to the printer

Learn how to connect the HP Jetdirect 2700w print server as an external accessory to the printer.

 **WARNING!** HP Jetdirect print servers contain electronic components that can be damaged by static electricity through electrostatic discharge (ESD).

To prevent ESD damage, maintain frequent contact with any bare sheet metal surface on the printer. A grounding wrist strap (or similar device) is useful for this purpose. Avoid touching electronic components or circuit paths.

 **NOTE:** Do not install more than one HP Jetdirect 2700w on a single printer.

If more than one HP Jetdirect 2700w is installed on the same printer (using both external USB ports, for example), an error message "**Unsupported configuration detected error**" displays on the printer. To resolve the error, follow these steps:

1. Press the power button to turn off the printer.
2. Remove the extra HP Jetdirect 2700w print server.
3. Press the power button to turn on the printer.

Follow these steps to connect the HP Jetdirect 2700w print server to the printer:

1. Make sure that your printer is installed with the latest firmware version.
2. Plug the HP Jetdirect into the USB connector on the back of the printer to enable a wireless connection and wait while the printer detects the print server.
3. Tighten the thumb screws and ensure that the print server is held securely in place.
4. When prompted, restart or reboot the printer.

After a reboot, the printer enters into a "Wireless Configuration" mode.

5. Locate the Jetdirect IP address by printing a Configuration page from the printer control panel.





 **NOTE:** The steps vary according to the type of control panel.


Figure 1-1 FutureSmart 3 control panels




Figure 1-2 FutureSmart 4 control panels



- **FutureSmart 3:** From the Home screen on the printer control panel, select the Wireless icon , and then select **Print**.
- **FutureSmart 4:** From the Home screen on the printer control panel, touch the Information icon , select **Ethernet**, and then touch the Print icon  to print a Configuration page.

 **NOTE:** If a USB error is displayed on the control panel, then make sure that the latest printer firmware is installed.


6. Check the printed Configuration page to verify that the HP Jetdirect is connected successfully.


 **NOTE:** If the HP Jetdirect is connected, it will be listed on the Configuration page in the **Installed Personalities and Options** section.

- If an HP Jetdirect 2700w entry is listed and a wireless network icon is displayed on the printer's control panel, the HP Jetdirect is installed correctly.
- If an HP Jetdirect 2700w entry is not listed, or a wireless network icon is not displayed on the printer's control panel, check that the power cable and USB cable are securely connected to the HP Jetdirect print server and to the printer.

Step three: Enable wireless printing

Use the Embedded Web Server (EWS) or the printer control panel to enable wireless printing on the printer and the HP Jetdirect print server.

 **NOTE:** After connecting the HP Jetdirect wireless print server, the printer defaults to "Wireless Configuration" mode and displays the following message on the control panel "**Wireless Configuration**".


 **IMPORTANT:** For initial configuration, use the Embedded Web Server method to enable wireless printing. After completing the configuration, reboot the printer to exit the "**Wireless Configuration**" mode. Any additional configuration can be performed from the printer control panel.

Method one: Enable wireless printing in the Embedded Web Server (EWS)


Use this method to enable wireless printing using the EWS and ensure that the following requirements are met to configure the EWS wireless settings.

Requirements before you begin:

- Make sure that the printer is connected (wired) to the local network using the printer's embedded HP Jetdirect connection.

 **NOTE:** If the printer is not connected to a wired network, then connect the PC/laptop directly to the printer using an Ethernet cable (not provided).

- Obtain the wireless network name (SSID), security level, and password from your system administrator.
- Locate the Jetdirect IP address by printing a configuration page from the printer control panel.




 **NOTE:** The steps vary according to the type of control panel.

FutureSmart 3 control panels



FutureSmart 4 control panels



- **FutureSmart 3:** From the Home screen on the printer control panel, select the Wireless icon , and then select [Print](#).
- **FutureSmart 4:** From the Home screen on the printer control panel, touch the Information icon , select [Ethernet](#), and then touch the Print icon  to print a Configuration page.


FutureSmart 3

Follow these steps if your printer has a FutureSmart 3 firmware version installed to enable wireless printing using the EWS.

1. Open the HP Embedded Web Server (EWS).
 - a. On your computer, open a web browser.
 - b. In the address field, type the HP Jetdirect IP address or host name exactly as it displays on the Configuration page, and then press the [Enter](#) key on the computer keyboard.

The EWS opens.
2. On the EWS Home page, click the **Networking** tab.


3. In the left navigation pane, click the **Wireless Station** menu, and then select **On**.

 **NOTE:** The **Wireless** page displays all the 802.11 wireless configuration parameters required to create a wireless connection to the local network.


4. Under the **General** section, select **Wireless Wizard**.

 **NOTE:** You might need to type a password if security is enabled on the network.


5. Select the desired security level from the available options:

 **NOTE:** HP printers with two or more network interfaces cannot bridge, route, or switch data.

- **WPA:** This is the most common type of wireless network security. A single password is shared by all users to connect to the wireless network.
 - **WPA – Enterprise (802.1x):** This option provides more advanced network security. Each device connecting to the Wi-Fi network requires a unique user name and password. Network administrators need to setup a username and password specific to that printer and install a CA-signed certificate on the printer.
6. Follow the remaining on-screen prompts to complete the configuration.
 7. Click **Apply** to save all the configuration settings.
 8. If the printer is in **Config mode**, reboot the printer to return the printer to a **Ready** state.
 9. Make sure that the "HP Jetdirect 2700w USB Wireless Print Server" IP address has been assigned.

 **NOTE:** The wireless IP address is different than the printer's IP address. It may take some time for the "HP Jetdirect 2700w USB Wireless Print Server" to display depending on the network speed.

- a. Navigate to the Wireless settings menu on the printer control panel:

 **NOTE:** The steps vary according to the type of control panel.

For touchscreen FutureSmart 3 control panels: From the Home screen on the printer control panel, select the Wireless icon  to display the IP address or host name.

- b. Wait for the "HP Jetdirect 2700w USB Wireless Print Server" IP address to display in the list of IP addresses or host names on the printer control panel screen.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address does **not** display in the list, wait a few minutes and try again.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address displays in the list, you are ready to print.

For information on how to print, go to www.hp.com/go/MobilePrinting.

After completing the configuration, reboot the printer to exit the "**Wireless Configuration**" mode.

FutureSmart 4


Follow these steps if your printer has a FutureSmart 3 firmware version installed to enable wireless printing using the EWS.

1. Open the HP Embedded Web Server (EWS).

- a. On your computer, open a web browser.
- b. In the address field, type the HP Jetdirect IP address or host name exactly as it displays on the Configuration page, and then press the **Enter** key on the computer keyboard.

The EWS opens.


2. On the EWS Home page, click the **Networking** tab.
3. In the left navigation pane, click the **Wireless Station** menu, and then select **On**.

 **NOTE:** The **Wireless** page displays all the 802.11 wireless configuration parameters required to create a wireless connection to the local network.


4. Under the **General** section, select **Wireless Wizard**.

 **NOTE:** You might need to type a password if security is enabled on the network.


5. Select the desired security level from the available options:

 **NOTE:** HP printers with two or more network interfaces cannot bridge, route, or switch data.

- **WPA:** This is the most common type of wireless network security. A single password is shared by all users to connect to the wireless network.
 - **WPA - Enterprise (802.1x):** This option provides more advanced network security. Each device connecting to the Wi-Fi network requires a unique user name and password. Network administrators need to setup a username and password specific to that printer and install a CA-signed certificate on the printer.
6. Follow the remaining on-screen prompts to complete the configuration.
 7. Click **Apply** to save all the configuration settings.
 8. If the printer is in **Config mode**, reboot the printer to return the printer to a **Ready** state.
 9. Make sure that the "HP Jetdirect 2700w USB Wireless Print Server" IP address has been assigned.

 **NOTE:** The wireless IP address is different than the printer's IP address. It may take some time for the "HP Jetdirect 2700w USB Wireless Print Server" to display depending on the network speed.

- a. Navigate to the Wireless settings menu on the printer control panel:

 **NOTE:** The steps vary according to the type of control panel.

For touchscreen FutureSmart 4 control panels: From the Home screen on the printer control panel, touch the Information icon , and then select the Wireless icon  to display the IP address or host name.

- b. Wait for the "HP Jetdirect 2700w USB Wireless Print Server" IP address to display in the list of IP addresses or host names on the printer control panel screen.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address does **not** display in the list, wait a few minutes and try again.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address displays in the list, you are ready to print.

For information on how to print, go to www.hp.com/go/MobilePrinting.

After completing the configuration, reboot the printer to exit the "Wireless Configuration" mode.


Method two: Enable wireless printing on the control panel

Use this method to enable wireless printing on the printer and the HP Jetdirect on the printer control panel.

Depending on the FutureSmart firmware installed on the printer, follow the instructions to complete the configuration using the printer control panel.

FutureSmart 3

Follow these steps if your printer has a FutureSmart 3 firmware version installed.

1. From the Home screen on the printer control panel, scroll to and select **Administration**.
2. Open the following menus:
 - a. **Network Settings**
 - b. **Wireless**
 - c. **Wireless Station**
3. Select **Wireless Radio**, select **On**, and then select **Save**.
4. Select **SSID**, type the wireless network SSID provided from your system administrator, and then select **Save**.
5. Select **Authentication**, select the security level provided from your system administrator, and then select **Save**.
6. If you selected **WPA-PSK** as the authentication type, then set the password:
 - a. Select **Configure PSK** and then select **Pass-Phrase**.
 - b. Type the password provided from your system administrator, and then select **Save**.
7. If the printer is in **Config mode**, reboot the printer to return the printer to a **Ready** state.
8. Verify that the "HP Jetdirect 2700w USB Wireless Print Server" IP address has been assigned using the following steps:
 - a. From the Home screen on the printer control panel, select the Wireless icon .



NOTE: The wireless IP address is different than the printer's IP address. It may take some time for the "HP Jetdirect 2700w USB Wireless Print Server" IP address to display depending on the network speed.



- b. Wait for the "HP Jetdirect 2700w USB Wireless Print Server" to display in the list of IP addresses on the printer control panel screen.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address does **not** display in the list, wait a few minutes and try again.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address displays in the list, you are ready to print.

For information on how to print, go to www.hp.com/go/MobilePrinting.

After completing the configuration, reboot the printer to exit the "**Wireless Configuration**" mode.

FutureSmart 4

Follow these steps if your printer has a FutureSmart 4 firmware version installed.

1. From the Home screen on the printer control panel, navigate to and select **Settings**.
2. Open the following menus:
 - a. **Networking**
 - b. **Wireless Direct**
3. Select **Status**, and then select **On**.
4. Select **SSID**, type the wireless network SSID provided from your system administrator, and then select **Done**.
5. Select **Authentication**, select the security level provided from your system administrator, and then select **Done**.
6. If you selected **WPA-PSK** as the authentication type, then set the password that you obtained from your system administrator, and then select **Done**.
7. If the printer is in **Config mode**, reboot the printer to return the printer to a **Ready** state.
8. Verify that the "HP Jetdirect 2700w USB Wireless Print Server" IP address has been assigned using the following steps:
 - a. From the Home screen on the printer control panel, touch the Information icon , and then select the Wireless icon .



NOTE: The wireless IP address is different than the printer's IP address. It may take some time for the "HP Jetdirect 2700w USB Wireless Print Server" IP address to display depending on the network speed.

- b. Wait for the "HP Jetdirect 2700w USB Wireless Print Server" address to display in the list of IP addresses on the printer control panel screen.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address does **not** display in the list, wait a few minutes and try again.
 - If the "HP Jetdirect 2700w USB Wireless Print Server" IP address displays in the list, you are ready to print.

For information on how to print, go to www.hp.com/go/MobilePrinting.

After completing the configuration, reboot the printer to exit the "**Wireless Configuration**" mode.

For more information

For additional configuration information about HP print servers, including the HP Jetdirect 2700w Print Server, see the *HP Jetdirect Print Servers Administrator's Guide Addendum*.

The *HP Jetdirect Print Servers Administrator's Guide Addendum* is available at <http://www.hp.com/support/jd2700w>.

2 Specifications

Review the technical specifications for the product.



NOTE: The following specifications are correct at the time of publication, but they are subject to change. For current information, see <http://www.hp.com/support/jd2700w>.

Electrical specifications

Electrical power is supplied by the printer's rear USB host port.

Power requirements are based on the country/region where the product is sold. Do not convert operating voltages. This will damage the product and void the product warranty.

Table 2-1 Power requirements

Product	Current and voltage
HP Jetdirect 2700w USB Wireless Print Server	500ma maximum @ 5.0 V nominal DC <ul style="list-style-type: none">• Maximum output current: 500mA• Voltage: 5.0 V nominal DC

Network (for print server setup)

View the network specification for the product.

- HP Jetdirect 2700w USB Wireless Print Server : USB 2.0 compliant connector.
- Networking connectivity technology: Wireless

Supported network protocols

The supported network protocols, and popular network printing environments that use those protocols, are listed in the following table.

Table 2-2 Supported network protocols

Supported network protocols	Typical network printing environments
TCP/IPv4	<p>NOTE: Refer to the current HP Jetdirect product data sheets for additional network systems and versions. For operation with other network environments, consult your system vendor or authorized HP dealer.</p> <ul style="list-style-type: none"> • (Direct Mode printing) Microsoft Windows Server 2003 (32- and 64-bit), Windows Server 2008 (32- and 64-bit), Windows 7 (32- and 64-bit), Windows Vista (32- and 64-bit), and Windows XP (32- and 64-bit). • Microsoft Terminal Server and Citrix MetaFrame environments. <p>NOTE: Contact your network system vendor for software, documentation, and support.</p> <ul style="list-style-type: none"> • macOS 10.4 and later. • UNIX and Linux, including: HP-UX 10.2, 11.x, 11.i, Sun Microsystems Solaris 2.5 and later (SPARCsystems only), IBM AIX 3.2.5 and later2, HP MPE-iX2, RedHat Linux 7.x and later2, SuSE Linux 8.x and later. <p>NOTE: Contact your network system vendor for software, documentation, and support.</p> <ul style="list-style-type: none"> • LPR/LPD (Line Printer Daemon, RFC 1179-compliant) systems. <p>NOTE: Contact your network system vendor for software, documentation, and support.</p> <ul style="list-style-type: none"> • IPP (Internet Printing Protocol) • FTP (File Transfer Protocol) printing
TCP/IPv6	<ul style="list-style-type: none"> • Microsoft Windows Server 2003 (32- and 64-bit), Windows Server 2008 (32- and 64-bit), Windows 7 (32- and 64-bit), Windows Vista (32- and 64-bit), and Windows XP (32- and 64-bit), Direct Mode port 9100 printing. (Requires HP IPv6/IPv4 port monitor software running on the system.) • macOS 10.4 and later. • LPR/LPD (Line Printer Daemon, RFC 1179-compliant) systems with IPv6 client support. • IPP (Internet Printing Protocol) systems with IPv6 client support • FTP (File Transfer Protocol) printing

Environmental specifications

View the recommended temperature and relative humidity conditions for the product.

Table 2-3 Operating-environment specifications

Environment	Operating	Non-Operating
Temperature	0° to 50°C (32° to 131°F)	-40° to 70°C (-40° to 158°F)

Table 2-3 Operating-environment specifications (continued)

Environment	Operating	Non-Operating
Relative humidity (non-condensing)	15% to 95% at 40° C (104°F)	15% to 95% at 65° C (149°F)

Radio characteristics

View the HP Jetdirect 2700w Print Server channel frequencies.

HP sub assemblies

The HP Jetdirect 2700w Print Server is designed for operation for radio frequencies in the license-free 2.4 GHz band. However, due to local radio regulations and restrictions, the radio characteristics of your particular HP Jetdirect 2700w Print Server can vary according to the location in which the product is used.

Channel frequencies

The channel frequencies are listed below:

Table 2-4 Channel frequencies

Channel	Frequency (MHz)
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462
12	2467
13	2472

Wireless telecommunications

Learn about the wireless telecommunication standards for the product.

The HP Jetdirect 2700w USB Wireless Print Server complies with the following standards:

- EN 300 328
- EN 301 489-17

- FCC 15.247

3 Supported HP software solutions

View the supported HP software solutions to set up or manage your HP Jetdirect-connected network devices.

HP support software

View the supported software for the product

- HP Web Jetadmin software (TCP/IP networks)
- HP Embedded Web Server (EWS)
- HP network printing setup software
 - HP LaserJet Utility for Macintosh (macOS)

Embedded services

Key services embedded in the HP Jetdirect 2700w Print Server are listed below.

For the latest features and services, go to <http://www.hp.com/support/jd2700w>.

Configuration and management

- BootP/DHCP (IPv4 only)
- DHCPv6
- TFTP (IPv4 only)
- Web Proxy (Automatic/Manual cURL)
- Web Proxy (Automatic/Manual cURL)
- LLMNR
- Telnet (IPv4 only)
- SNMP (v1, v2c, v3) agents
- Bonjour (for macOS, the operating system was previously Mac OS X.)
- FTP (File Transfer Protocol)
- WS Discovery (Microsoft Web Services)
- HP Embedded Web Server, HTTP (TCP port 80)
- HP Embedded Web Server, HTTPS (TCP port 443)
- IP Security (IPsec)
- Fleet configuration

Printing

- Raw IP printing (HP-proprietary TCP ports 9100, 9101, 9102)
- LPD printing (TCP port 515)
- IPP printing (TCP port 631)
- FTP printing (TCP ports 20, 21)
- WS Print (Microsoft Web Services)

Security

- SNMP v3
- SSL/TLS
- 802.1X authentication: WEP, WPA, WPA2, LEAP, PEAP, and EAP-TLS
- Kerberos
- Access Control List
- Firewall

Supported Web browsers (for HP Embedded Web Server)

- Microsoft Internet Explorer 6.x and higher
- Google Chrome
- Mozilla Firefox 2.x and higher
- Opera 9.0 and higher
- Safari 2.0 and higher

4 Troubleshooting

Use the following information to troubleshoot issues encountered when using the product. Additional information is provided in the *HP Jetdirect Print Servers Administrator's Guide Addendum*.

To troubleshoot the HP Jetdirect 2700w Print Server, you might need the following:

- An HP Jetdirect configuration page.
- A printer configuration or diagnostic page.
- Documentation that came with the printer.
- Documentation for the HP Jetdirect 2700w Print Server (available from <http://www.hp.com/support/jd2700w>).
- The diagnostic tools and utilities provided with your network software (for example, TCP/IP utilities, or network printer management applications such as HP Web Jetadmin).

HP Jetdirect configuration page

The HP Jetdirect configuration page provides comprehensive print server status. It is an important diagnostic tool, especially if network communication with the print server is not available.

The HP Jetdirect configuration page lists the status of your network and the HP Jetdirect print server. In most HP Enterprise or Managed printers, an HP Jetdirect configuration page automatically prints when you print the printer's Configuration page.

Refer to your printer documentation for instructions about printing configuration pages.

Reset to factory defaults

Use the following information when attempting to reset the HP Jetdirect print server to factory default values.

After you have configured the HP Jetdirect 2700w Print Server, the settings are saved in memory. If you lose communication with the HP Jetdirect 2700w Print Server, or if it fails to operate correctly, you might need to reset the print server to its factory-default configuration. This is called a cold reset



NOTE: Resetting the HP Jetdirect 2700w Print Server to factory-default settings will cause the print server to lose its wireless connection to your network. Reconfiguration of wireless network settings and reinstallation of the print server will be required.

Parameters on the HP Jetdirect 2700w Print Server can be reset to factory default values using the following procedures.

HP Enterprise and Managed printer reset

In most cases, the HP Jetdirect 2700w Print Server is reset to factory defaults when factory settings are reset on the printer.

IMPORTANT: Be sure to print an HP Jetdirect configuration page before performing a reset to obtain the correct TCP/IP address and other user-specified printer settings.

CAUTION: Resetting the printer clears all data from the printer memory and resets all printer settings, including network configurations, to their factory default values. After a reset, users will be affected due to changes in user-specified printer settings. Network systems will lose their connection to the printer.

Example to reset factory settings

To perform a reset on many recent HP LaserJet printers:

1. At the control panel, press the Home button.
2. Press the down arrow and highlight the **Administration** menu, then press the **OK** button.
3. Press the down arrow and highlight the **General Settings** menu, then press the **OK** button.
4. Press the down arrow and highlight the **Restore Factory Settings** option, then press the **OK** button to reset the product to the original factory settings.

After a reset, print an HP Jetdirect configuration page to confirm that factory-default values were assigned.

Depending on the FutureSmart firmware installed on the printer, follow the steps provided to reset the factory settings on a printer.

Use the printer control panel or the Embedded Web Server to reset the printer settings to the original settings from the factory.

Method one: Reset the factory settings from the printer control panel

Use this method to reset the factory settings from the printer control panel.

NOTE: The steps vary according to the type of control panel.

Figure 4-1 FutureSmart 3 control panels




Figure 4-2 FutureSmart 4 control panels



Find your printer control-panel type in the options below, and then follow the steps provided.

FutureSmart 3

Follow these steps if your printer has a FutureSmart 3 control panel.

1. Press the Home button  on the printer control panel.
2. Open the following menus:
 - a. [Administration](#)
 - b. [General Settings](#)
 - c. [Restore Factory Settings](#)

A verification message advises that completing the reset function might result in loss of data.

3. Select [Reset](#) to complete the process.

The printer restarts automatically after the reset operation completes.

FutureSmart 4

Follow these steps if your printer has a FutureSmart 4 control panel.

1. From the Home screen on the printer control panel, open the [Settings](#) menu.
2. Open the following menus:
 - a. [General](#)
 - b. [Reset Factory Settings](#)
3. Select [Reset](#).

A verification message advises that completing the reset function might result in loss of data.

4. Select [Reset](#) again to complete the process.

The printer restarts automatically after the reset operation completes.

Network computers cannot communicate with the printer

Use the following information to resolve issues when the network computers are unable to communicate with the printer.

If the network computers cannot communicate with the printer, check the following:

- The network configuration settings. Print an HP Jetdirect configuration page to verify all configuration settings for your network.



NOTE: If you previously configured the HP Jetdirect 2700w Print Server with a wireless connection to your network, the network computers might not be able to communicate with the printer.

- The wireless computer is configured to match the wireless network settings on the HP Jetdirect 2700w Print Server. Common errors include incorrect entries for the following items:
 - Communication mode.
 - Network name (SSID) which is case sensitive.



NOTE: NOTE: The network name (SSID) is case-sensitive. Be sure to specify “hpsetup” using lowercase characters.

- Security type or Authentication method.
 - Encryption level, encryption key entries, or the specified transmit key.
 - IP address
 - Basic service set identifier (BSSID), which distinguishes one wireless LAN from another even though they have the same SSID.
- The wireless function is turned on and operating correctly (print an HP Jetdirect configuration page).
 - The printer/computer is within range of the HP Jetdirect 2700w Print Server.
 - If the HP Jetdirect 2700w Print Server is in peer-to-peer mode, there are fewer than six devices total.
 - If you are initially setting up the HP Jetdirect 2700w Print Server, and the connection fails after entering the configuration settings, reset the print server to factory-default settings (cold reset) and try again.

Configured channel does not match the configuration page

Use the following information when a configured channel does not match the configuration page.

Use the HP configuration tools to select channel 10 (default) or 11 on the HP Jetdirect 2700w Print Server.

- This channel is used by the print server to broadcast its network name (SSID) if it fails to detect and join an existing wireless network.
- If this channel is able to join a network, the printer server will reconfigure its channel to the one used by the network.



NOTE: The HP Jetdirect configuration page identifies the network channel being used on a network. It does not show the broadcast channel used when a network is not detected.

Improve reception and performance

The HP Jetdirect wireless print server's data transfer rates might decrease with increasing distance, obstructions, and interference. Use the following guidelines to improve the reception and performance of the product.

Wireless LAN radio signals can penetrate many indoor structures and can reflect around obstacles. However, wireless communication range and performance depends on a variety of factors, including the number of users, the quality and physical placement of the wireless hardware, and the sources of radio signal interference.

For example, microwave ovens and cordless telephones use similar frequencies that can interfere with wireless LAN signals.

For these symptoms

- The signal strength is poor or marginal.
- Print jobs are excessively slow.

Troubleshoot reception and performance issues

- Re-orient the printer. In general, having the print server pointed toward the access point or wireless computer improves reception and performance.
- Reduce or remove sources of interference. Metallic objects can absorb or attenuate radio signals, and devices such as microwave ovens and cordless phones operate using similar radio frequencies.
- Reduce the distance between the printer and the access point or wireless computer. This can be accomplished by performing the following actions:
 - moving the print server.
 - moving the access point or wireless computer.
 - adding an additional access point.

A Regulatory statements

Regulatory model identification numbers

For regulatory identification purposes, your product is assigned a regulatory model number. Regulatory model numbers should not be confused with marketing names or product numbers. The Regulatory Model Number for your product is RSVLD-1001. The regulatory number should not be confused with the HP marketing model number (for example, HP Jetdirect) or the HP product number (J8026A).

Table A-1 Regulatory model number for the product

Product model number	Regulatory model number
J8026A	RSVLD-1001

European Union & United Kingdom Regulatory Notice



Products bearing the CE marking and UKCA marking comply with one or more of the following EU Directives and/or equivalent UK Statutory Instruments as may be applicable: Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, Eco Design Directive 2009/125/EC, RED 2014/53/EU, RoHS Directive 2011/65/EU.

Compliance with these directives is assessed using applicable European Harmonized Standards. The full EU and UK Declaration of Conformity can be found at the following website: www.hp.com/go/certificates (Search with the product model name or its Regulatory Model Number (RMN), which may be found on the regulatory label.)

The point of contact for regulatory matters is: Email techregshelp@hp.com

The EU point of contact for regulatory matters is:

HP Deutschland GmbH, HP HQ-TRE, 71025 Boeblingen, Germany

The UK point of contact for regulatory matters is:

HP Inc UK Ltd, Regulatory Enquiries, Earley West, 300 Thames Valley Park Drive, Reading, RG6 1PT

FCC regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio

frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



NOTE: Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

Canada - Industry Canada ICES-003 Compliance Statement

CAN ICES-003(B)/NMB-003(B)

Wireless statements

FCC compliance statement—United States

Exposure to radio frequency radiation

- CAUTION:** The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 in) during normal operation.

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

- CAUTION:** Based on Section 15.21 of the FCC rules, changes of modifications to the operation of this product without the express approval by HP may invalidate its authorized use.

Notice to users in Argentina

CONTIENE
 C-7248

Brazil: (Português)

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Para maiores informações consulte o site da ANATEL - www.anatel.gov.br



Canadian statements

For Indoor Use. This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications. The internal wireless radio complies with RSS 210 of Industry Canada.

Pour l'usage d'intérieur. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada. Le composant RF interne est conforme à la norme CNR-210 d'Industrie Canada.

Exposure to Radio Frequency Radiation (Canada)

⚠ WARNING! Exposure to Radio Frequency Radiation The radiated output power of this device is below the Industry Canada radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact is minimized during normal operation.

To avoid the possibility of exceeding the Industry Canada radio frequency exposure limits, human proximity to the antennas should not be less than 20 cm (8 inches).

AVERTISSEMENT! Exposition aux émissions de fréquences radio. La puissance de sortie émise par ce périphérique est inférieure aux limites fixées par Industrie Canada en matière d'exposition aux fréquences radio. Néanmoins, les précautions d'utilisation du périphérique doivent être respectées afin de limiter tout risque de contact avec une personne.

China CMIIT Wireless Statement

CMII ID: 2009DJ0895

中国无线电发射设备通告

型号核准代码显示在产品本体的铭牌上。

European Regulatory Notice

This product complies with the following EU Directives:

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC

If this product has telecommunications functionality, it also complies with the essential requirements of:

R&TTE Directive 1999/5/EC

Compliance with these directives implies conformity to harmonized European standards (European Norms) that are listed in the EU Declaration of Conformity issued by HP for this product or product family. This compliance is indicated by the following conformity marking placed on the product.

The telecommunications functionality of this product may be used in the following European countries/ regions:

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

Notice for France and Italy for use of 2.4 GHz wireless communication:

Italy:

È necessaria una concessione ministeriale anche per l'uso del prodotto. Verifici per favore con il proprio distributore o direttamente presso la Direzione Generale Pianificazione e Gestione Frequenze and Management (Direzione Generale Pianificazione e Gestione Frequenze).

License required for use. Verify with your dealer or directly with the General Direction for Frequency Planning

Contact for European regulatory topics:

HP Deutschland GmbH, HP HQ-TRE, 71025 Böblingen, Germany www.hp.eu/certificates

Notice to users in Indonesia

10946/POSTAL/2009 1835

Notice to users in Korea



HPK-SDGOB-0914

Mexico statement

Aviso para los usuarios de México

“La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.”

Para saber el modelo de la tarjeta inalámbrica utilizada, revise la etiqueta regulatoria de la impresora.

IFT: RCPHPRS20-2501

Notice to users in Singapore

Complies with IMDA Standards DB106008

Complies with
IMDA Standards
DB106008

Notice to users in South Africa



Notice to users in the Ukraine



RFID/NFC Statement

China Short Range Device Statement

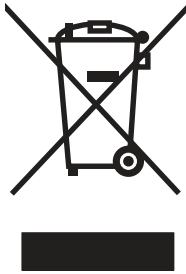
若产品为微功率短距离无线电发射设备，在此承诺：本设备符合《微功率短距离无线电发射设备目录和技术要求》，不得擅自做任何改变，不会对其他合法的无线电台（站）产生有害干扰，也不会提出免受有害干扰保护，不会在任何管制区域内使用。

B Environmental product stewardship program

HP is committed to providing quality products in an environmentally sound manner. Design for recycling has been incorporated into this product. The number of materials has been kept to a minimum while ensuring proper functionality and reliability. Dissimilar materials have been designed to separate easily. Fasteners and other connections are easy to locate, access, and remove using common tools. High priority parts have been designed to access quickly for efficient disassembly and repair.

For more information, visit HP's Commitment to the Environment Web site at: <http://www.hp.com/hpinfo/globalcitizenship/environment/index.html>.

Disposal of waste equipment by users (EU, UK, and India)



This symbol means do not dispose of your product with your other household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your household waste disposal service, or go to: www.hp.com/recycle.

WEEE (Turkey)

Türkiye Cumhuriyeti: AEEE Yönetmeliğine Uygundur

China RoHS

产品中有害物质或元素的名称及含量
根据中国《电器电子产品有害物质限制使用管理办法》



部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
机械/结构部件	X	0	0	0	0	0
电气/电子部件	X	0	0	0	0	0

本表格依据 SJ/T 11364 的规定编制。

0: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

此表中所有名称中含“X”的部件均符合欧盟 RoHS 立法。

注: 环保使用期限的参考标识取决于产品正常工作的温度和湿度等条件

0751-17

Restriction on Hazardous Substances statement (India)

This product, as well as its related consumables and spares, complies with the reduction in hazardous substances provisions of the "India E-waste Rule 2016." It does not contain lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except where allowed pursuant to the exemptions set in Schedule 2 of the Rule.

C Service and support

HP limited warranty statement



NOTE: Warranty and support options vary by product, country, and local legal requirements. Go to support.hp.com to learn about HP award-winning service and support options in your region.

Table C-1 Duration of limited warranty for the product

HP PRODUCT	Duration of Limited Warranty*
HP Jetdirect 2700w USB Wireless Print Server	One-year
HP Jetdirect software	90 days

* Warranty and support options vary by product, country, and local legal requirements. Go to support.hp.com to learn about HP award-winning service and support options in your region.

HP warrants to you, the end-user customer, this HP Limited Warranty applies only to HP branded products sold or leased a) from HP Inc., its subsidiaries, affiliates, authorized resellers, authorized distributors, or country distributors; and, b) with this HP Limited Warranty, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary

according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Your authorized dealer

If you encounter difficulty, begin by contacting the person who sold you the HP Jetdirect 2700w USB Wireless Print Server to you. Your HP authorized dealer will be familiar with your requirements and can provide assistance.

During the warranty period, HP will replace the unit at no charge provided the defective unit is returned. You may return the unit to your HP authorized dealer or your local HP sales and service office representative. *Be sure to include a copy of your purchase receipt.*

For warranty service on HP Jetdirect products, call HP support. When calling, please have the following information ready:

- HP Jetdirect product you are calling about.
- Model number of the product.
- Serial number of the product.
- Complete description of the problem.
- Proof of purchase of your product.
- Your shipping address.

The HP support representative will help you with troubleshooting, and advise you on warranty service.

Service billing (out of warranty)

When ordering a replacement unit for out-of-warranty service, you may be charged a repair cost. See your HP authorized dealer or your local HP sales and service office representative. Or, you can call HP at (800) 227-8164 (USA only).

Service outside the USA

Customers outside the USA should contact their HP authorized dealer or HP sales and service office to obtain information on prices, exchange unit availability and instructions.

Local warranty statements

Australia and New Zealand

For consumer transactions in Australia and New Zealand: The warranty terms contained herein except to the extent lawfully permitted, do not exclude, restrict, or modify and are in addition to the mandatory statutory rights applicable to the sale of this product to you.

Customer support

For warranty information, see [HP limited warranty statement on page 28](#).

For advanced configuration topics and other information, see the *HP Jetdirect Print Servers Administrator's Guide Addendum*.

HP support online

For the latest support documentation for the HP Jetdirect 2700w, go to <http://www.hp.com/support/jd2700w> and then select **Manuals**.

Product accessibility

For information on our commitment to accessibility of HP Jetdirect print server products:

- Visit the HP Web site at www.hp.com/accessibility.
- Send an email message to: **accessibility@hp.com**.

Glossary for Network printing terms and concepts

Client-server printing

On a client-server network, client computers send print jobs to a dedicated network server that controls the use of each installed printer. The HP Jetdirect print server receives print jobs over the network under the network server's control, or can automatically monitor print queues and de-spool print jobs from the network server.

Hardware address

Each device on a network contains a unique LAN hardware (or station) address that is assigned by the manufacturer of the device. Because HP Jetdirect print servers connect printers to a network, each print server contains a LAN hardware address assigned by HP.

The address consists of 12 hexadecimal digits (0 through F). The first 6 digits uniquely identify the manufacturer, and the second 6 digits uniquely identify the device.

The LAN hardware address is important because it might be needed to identify the printer during installation. It is listed on the HP Jetdirect configuration page for each print server.

Network address

Each device on a network must be identified by a unique network address for the specific network protocol used. On an IP network, network addresses are configured and stored on each HP Jetdirect print server during installation, and are listed on the HP Jetdirect configuration page for the print server.

Network protocols

For network computers and printers to communicate on a network, they must use a common language, or network protocol. The HP Jetdirect print server can support different network protocols simultaneously. For a list of supported protocols, see "[Supported network protocols on page 10](#)".

TCP/IP is the most commonly used protocol in network environments.

Peer-to-peer (direct mode) printing

On a peer-to-peer network, dedicated network servers are not used. Instead, an HP Jetdirect-connected network printer is installed on each client computer that sends print jobs directly to the printer.

Glossary for Wireless LAN terms and concepts

Access point

An access point is a device that typically serves as a bridge or gateway between wireless devices and the devices on a cabled network. An access point must be able to receive and forward network traffic between wireless and cabled network devices. Multiple access points can act as repeaters to extend the range of a wireless network. Connecting via an access point is called infrastructure mode. On Apple networks, this is called AirPort network mode.

Channels


IEEE standards for 802.11 wireless LANs specify a spectrum of radio waves for wireless communications. The allowed spectrum is divided into channels. 802.11b uses 22 MHz channels, 802.11g uses 20 MHz channels, and 802.11n can use either 20 MHz or 40 MHz channels (because of channel bonding). The number of available channels authorized for use might be restricted based on your location.

- If the print server is powered on and discovers a wireless network whose SSID (network name) is also *hpsetup*, it automatically adjusts its channel to match that network.
- If the print server is reconfigured for infrastructure mode, it automatically adjusts its channel to match the access point.


Encryption

Wireless networks use radio signals for network communications, which can be easily monitored by someone eavesdropping on the network. To deter eavesdropping and to help ensure data privacy, encryption of wireless communications should be used.

For HP Jetdirect print servers in their factory-default state, encryption of wireless communications is disabled. However, the print servers support wi-fi protected access (WPA/WPA2) and other popular dynamic encryption protocols.

 **NOTE:** Wireless performance might be reduced when using encryption keys due to the additional processing time required.

- **Static encryption:** WEP (Wired Equivalent Privacy) encryption protocols were developed to provide a basic level of data privacy. WEP protocols use static encryption keys to encrypt and decrypt wireless communications.

 **NOTE:** WEP encryption levels are sometimes called 40-bit, 64-bit, 104-bit, or 128-bit encryption. Forty-bit and 64-bit encryption are really the same, as are 104-bit and 128-bit encryption. When entering WEP keys, the user specifies 40 bits for 64-bit encryption, or 104 bits for 128-bit encryption. An additional 24 initialization vector (IV) bits are automatically added for a total of 64 bits and 128 bits, respectively. In this setup guide, 40/64-bit and 104/128bit are used to specify these WEP encryption levels.

For basic encryption, static WEP keys are configured on each device on the wireless network. WEP keys are considered static because they remain the same unless manually reconfigured. For example, on a typical infrastructure mode network that uses static WEP encryption, a change to the WEP key on an access point requires a manual change to the WEP key on each wireless device.

HP Jetdirect wireless print servers support configuration of up to four static WEP keys, for either 40/64-bit or 104/128-bit encryption.

- **Dynamic encryption:** For advanced encryption methods, dynamic encryption protocols are used. For dynamic encryption protocols, encryption keys are automatically changed at routine intervals making them difficult to decipher.

Dynamic encryption protocols, such as dynamic WEP and Wi-Fi Protected Access (WPA/WPA2), provide a more secure wireless environment.

When configured for WPA/WPA2-Personal authentication, HP Jetdirect print servers use WPA encryption.

Infrastructure mode

Infrastructure mode is a wireless network topology where all wireless communications go through an access point. Infrastructure mode is called a Basic Service Set (BSS), and is sometimes referred to as enterprise mode. On Apple networks, infrastructure mode is called Airport network mode. When set in this mode, the HP Jetdirect print server receives print jobs from wireless network computers through an access point.

Peer-to-peer mode

Peer-to-peer mode is a wireless network topology where wireless devices communicate with each other directly. An access point is not used. On Apple networks, this method is called computer-to-computer mode.



NOTE: HP recommends that you use infrastructure mode if you plan to use six or more devices.

When set in this mode, the HP Jetdirect print server receives print jobs directly from wireless computers.

Security type

Security is used to validate the identification of each device or computer that is attempting to access a network. The security type used on a network is determined during network design and depends on the network security requirements. Consequently, security methods are closely associated with encryption options that are also used on the network.

HP Jetdirect wireless print servers support the following security types:

- **No security:** No encryption or authentication is used. Open system. Your wireless network does not require device authentication or security to access the network. However, your network might use WEP encryption keys for data privacy.
- **WEP-Personal:** Each device on your wireless network uses a shared encryption key (a shared password value) for network access and communication. Each device on the network must use the same key. The HP Jetdirect print server supports IEEE 802.11 WEP keys for encrypted network communications.
- **WEP-Enterprise:** The network uses WEP with EAP/802.1x authentication. This type of security utilizes a central authentication server, such as RADIUS, to authenticate users on the network. The HP Jetdirect print server supports these server-based authentication protocols: LEAP, PEAP, and EAP-TLS.
- **WPA/WPA2-Personal:** Your network uses Wi-Fi Protected Access (WPA) with a pre-shared key that is typically generated by a pass-phrase. WPA encryption is normally used for wireless communication and offers improved security.
- **WPA/WPA2-Enterprise:** Your network uses WPA with EAP/802.1x authentication. This type of security utilizes a central authentication server, such as RADIUS, to authenticate users on the network. The HP Jetdirect print server supports these server-based authentication protocols: LEAP, PEAP, and EAP-TLS.

For more information about these authentication protocols, see the *HP Jetdirect Print Servers Administrator's Guide Addendum*.

Service Set Identifiers (SSID)

An SSID is a logical name assigned to a wireless LAN. It is typically used to provide LAN access control. For example, if the SSID for a wireless network is *mycompany*, then each wireless device on the network must be configured with this SSID.

In infrastructure mode, the access point requires wireless devices to be configured with the appropriate SSID before network access is allowed.

Signal range

The range over which wireless devices can communicate depends on the physical environment and the orientation of the HP Jetdirect print server.

In general, while radio waves can bounce off obstacles to access print servers, it is best to have clear line-of-sight access between devices without obstacles through which the signal must pass.



NOTE: Signal range and wireless transmission performance is reduced with increasing distance between devices, and with obstacles that block or absorb signals.

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