



Network Guide

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Contents

Safety Instructions

Warning, Caution, Important, and Note.	6
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Chapter 1 Introduction

About Your Printer.	7
About This Guide.	7
Operating Environment.	8
Laser printers.	8
Features of the Network Interface.	9
Network Interface Operation.	9
Status light.	9
Network connector.	10
About the Software.	10

Chapter 2 How To

Overview.	11
Selecting a Printing Method.	12
Printing from Windows.	12
Printing from Mac OS.	12
Features of the Printing Methods.	12
Installing Components on Your Computer.	13
About Installing Components on Your Computer.	13
Windows 8/7/Vista/Server 2012/Server 2008.	14
Windows XP.	15
Windows Server 2003.	17
Mac OS.	18
Setting Up the Network Interface.	18
Connecting the Network Interface to the Network.	18
Configuring the Network Interface.	19
Installing the Printer Driver.	20
About Installing the Printer Driver.	20
Windows 8/7/Vista/Server 2012/Server 2008.	20

Windows XP.	24
Windows Server 2003.	28
Mac OS.	32

Chapter 3 **Network Software**

EpsonNet Config.	34
About EpsonNet Config.	34
System Requirements.	34
Installing EpsonNet Config.	35
Accessing the EpsonNet Config User's Guide.	36
EpsonNet Config with Web Browser.	36
About EpsonNet Config.	36
Configuring the Network Interface Using EpsonNet Config with Web Browser.	37
Opening Screen.	39
EpsonNet Print (For Windows Users).	40
About EpsonNet Print.	40
System Requirements.	40
Installing EpsonNet Print.	41
For Windows 8/7/Vista/XP/Server 2012/Server 2008/Server 2003 Users.	41
Configuring the Printer Port.	47

Chapter 4 **Troubleshooting**

General Problems.	49
Cannot configure the network interface or cannot print from the network.. . . .	49
Cannot print even if you have assigned the IP address to the computer and the printer.. . . .	49
Unable to start EpsonNet Config.. . . .	49
The message "EpsonNet Config cannot be used because no network is installed." appears when you start EpsonNet Config.. . . .	50
The message "Could not complete communicating configuration data" appears when you send settings to the network interface.. . . .	50
Unable to start EpsonNet Config with Web Browser.. . . .	50
The Model Name and IP Address do not appear in the EpsonNet Config dialog box.. . . .	51
Printing a Network Status Sheet.	51

Chapter 5 Tips for Administrator

Setting an IP Address on the Printer's Control Panel.	52
Network Menu.	53
Secure Communication Using IPsec, Access Control, SSL, and IEEE 802.1X.	54
IPsec protocol.	55
Access Control.	55
SSL.	55
SNMPv3.	55
IEEE 802.1X.	55
Secure Communications (IPsec/Access Control).	56
Overview and Sample Settings.	57
Configuration Workflow.	58
Product Security Policies.	59
Supported Security Methods.	62

Index

Safety Instructions

Warning, Caution, Important, and Note

**Warning**

must be followed carefully to avoid serious bodily injury.

**Caution**

must be followed carefully to avoid bodily injury.

**Important**

must be observed to avoid damage to your equipment.

Note

contains important information and useful tips on the operation of your printer.

Chapter 1

Introduction

About Your Printer

Your printer has a built-in Ethernet interface and can connect anywhere on your network using 10Base-T_e, 100Base-T_X, and 1000Base-T Ethernet. The built-in Ethernet interface, which is called the network interface in this manual, automatically selects the correct standard when it connects to a network. In addition, it automatically selects appropriate network protocols.

Because the network interface supports multiple protocols and automatically detects protocols on your network, you can print from Microsoft® Windows® and Apple® Mac OS® applications.

Use the Software Disc or the Epson website (<http://support.epson.net/setupnavi/>), to easily configure the network interface for use on the TCP/IP network and install the printer driver. You can use the printer on the TCP/IP network at once.

If you want to configure the network interface for protocols such as TCP/IP, WSD, LLTD, IPP/IPPS, UPnP, Bonjour, MS Network, and SNMP, use EpsonNet Config, the configuration utility provided with your product, to quickly and easily configure the network interface to use those protocols.

Note:

The EpsonNet Config utility configures the network interface to work only with protocols that exist on your network. This does not imply that you can use all of the above-mentioned protocols on your network or operating system. The protocols that the network interface can use may vary depending on the operating system and the network configuration.

About This Guide

This Network Guide contains information about using the network interface on a network. It includes how to set up the network interface, install the configuration software, and modify network settings of your printer and computers.

For information about your printer, see your User's Guide.

Note:

- ❑ *To read the online guide, you must have Adobe Reader or Adobe Acrobat Reader installed on your computer.*

- ❑ *This guide is written for network administrators, and many of the steps included here require detailed network knowledge and administrator rights.*
- ❑ *The term “network administrator” refers to the person responsible for maintaining the network. “Administrator” is synonymous with “Supervisor” in this guide.*
- ❑ *The term “network interface” refers to the built-in Ethernet interface of the printer in this guide.*
- ❑ *Some screen shots in this guide may list a printer name other than your printer. This difference does not alter the instructions.*
- ❑ *The supported operating systems are different depending on the printer. See your printer’s User’s Guide for the supported operating systems.*

Operating Environment

The network interface supports the following environments.

Laser printers

Check what is available. See your printer's User's Guide for the supported operating systems.

OS	Protocol	IPv4	IPv6
Windows 8 (includes 8.1 or later)	TCP/IP (Standard TCP/IP port)	✓	✓
Windows 7 Windows Vista Windows Server 2012 (includes R2) Windows Server 2008 (includes R2)	TCP/IP (EpsonNet Print port)	✓	-
Windows XP (Home, Professional)	TCP/IP (Standard TCP/IP port)	✓	-
Windows Server 2003 (includes R2)	TCP/IP (EpsonNet Print port)	✓	-
Mac OS X 10.6 or later	Bonjour	✓	✓

Features of the Network Interface

- ❑ Connects your Epson printer using a built-in Ethernet interface, which is called the network interface in this manual, to the network.
- ❑ Supports multiple protocols, such as TCP/IP, WSD, LLTD, IPP/IPPS, UPnP, Bonjour, MS Network, and SNMP.
- ❑ Supports 10Base-Te, 100Base-TX, and 1000Base-T Ethernet.
- ❑ Supports Bonjour on Mac OS X 10.6 or later.
- ❑ Supports access control to your printer by filtering client computer's IP addressees.
- ❑ Supports SSL (Secure Sockets Layer) for IPPS and HTTPS protocols.
- ❑ Supports IPsec.
- ❑ Supports IEEE 802.1X.
- ❑ Supports EpsonNet Config with a Web browser, which allows you to configure and monitor your printer using a Web browser.

Network Interface Operation

Status light

The indicator lights provide you with important information on the operations of the network interface.

Laser printers

Data light	Status light	Network Status
Green	Green	Ready (1000 M link)
Green (Flashing)	Green	Receiving packets (1000 M link)
Green	Orange	Ready (100 M link)
Green (Flashing)	Orange	Receiving packets (100 M link)
Green	Off	Ready (10 M link)

Data light	Status light	Network Status
Green (Flashing)	Off	Receiving packets (10 M link)
Off	Green	Deep sleep mode (1000 M link)
Off	Off	Deep sleep mode (100 M / 10 M link) Power off mode

Network connector

RJ-45 connector: This connector is used to connect an Ethernet cable to a network. You can use this cable for 10Base-Te, 100Base-TX, and 1000Base-T Ethernet.



Important:

You must use the following shielded twisted-pair cable to connect the network interface to a network.

- Category-5 or higher for the 10Base-Te or 100Base-TX connection*
- Category-6 or higher for the 1000Base-T connection*

About the Software

The Software Disc provided with your printer includes the following network software.

Note:

The software provided varies depending on your printer model.

- EpsonNet Config is a configuration utility for administrators that allows you to configure the network interface for various protocols such as TCP/IP, MS Network, IPP, and SNMP. See “EpsonNet Config” on page 34.
- EpsonNet Config with Web Browser is a Web-based configuration utility that allows you to configure the network interface for TCP/IP, MS Network, IPP, and SNMP. See “EpsonNet Config with Web Browser” on page 36.
- EpsonNet Print is a utility program that provides peer to peer printing to Epson printers on the TCP/IP network. See “EpsonNet Print (For Windows Users)” on page 40.

Chapter 2

How To

Overview

This section describes the general procedure on how to set up the network interface for use on a network.

1. Check the network interface operation.

Check the functions and operations of the network interface, such as status lights and RJ-45 connector. See “Network Interface Operation” on page 9 for details.

2. Select a printing method.

Select a printing method appropriate for your network environment and operating system. If you are not sure, see “Printing from Windows” on page 12 or “Printing from Mac OS” on page 12 for details.

3. Install the necessary components on your computer.

Make sure the necessary components (such as TCP/IP) are installed on the computer, and network settings (such as IP address, subnet mask, etc.) of the computer is set. See “About Installing Components on Your Computer” on page 13 for details.

4. Connect the network interface to the network.

Connect the network interface to the network. See “Connecting the Network Interface to the Network” on page 18 for details.

5. Configure the network interface and install the printer driver.

See “Configuring the Network Interface” on page 19 for details.

6. If necessary, configure the network settings of the network interface using EpsonNet Config.

Configure the network interface using EpsonNet Config. See “About EpsonNet Config” on page 34 for details.

Selecting a Printing Method

Printing from Windows

Check if there is a Windows 8/7/Vista/XP/Server 2012/Server 2008/Server 2003 print server on your network, and then use the suggestions below.

Note:

Only the recommended printing methods are introduced here. See “Features of the Printing Methods” on page 12 for information on additional methods.

If no Windows 8/7/Vista/XP/Server 2012/Server 2008/Server 2003 print server exists

We recommend TCP/IP printing. See “Windows 8/7/Vista/Server 2012/Server 2008” on page 20, “Windows XP” on page 24, or “Windows Server 2003” on page 28.

If a Windows 8/7/Vista/XP/Server 2012/Server 2008/Server 2003 print server exists

On the server, set the printer to connect and turn it into a shared printer. Your clients can then print to this shared printer.

Printing from Mac OS

Mac OS X 10.6 or later

- Bonjour

Features of the Printing Methods

This section describes features of the printing methods available for you to choose.

TCP/IP printing

Advantages

- No computer as a network interface is required.
- No special utility for Windows 8/7/Vista/XP/Server 2012/Server 2008/Server 2003 is required.

- You can see the printer status using EPSON Status Monitor.
- You can print via a router.

Disadvantages

- You need to set up TCP/IP.

Internet printing

Advantages

- You can print to the printer over the Internet.

Disadvantages

- EPSON Status Monitor cannot be used.
- TCP/IP and DNS settings are required.
- For Windows 8/7/Vista/XP/Server 2012/Server 2008/Server 2003, you cannot share the Internet printer.

Installing Components on Your Computer

About Installing Components on Your Computer

Before configuring the network interface and printing from the computer, you need to install the necessary components (such as TCP/IP) and assign an IP address and subnet mask for your computer, depending on the printing method you want to use. See the section in this chapter appropriate for your operating system.

Note:

- The Windows operating system disk may be required during the installation.*
- When using TCP/IP for printing, you need to set the IP address, the subnet mask, and the default gateway of the computer.*

Windows 8/7/Vista/Server 2012/Server 2008

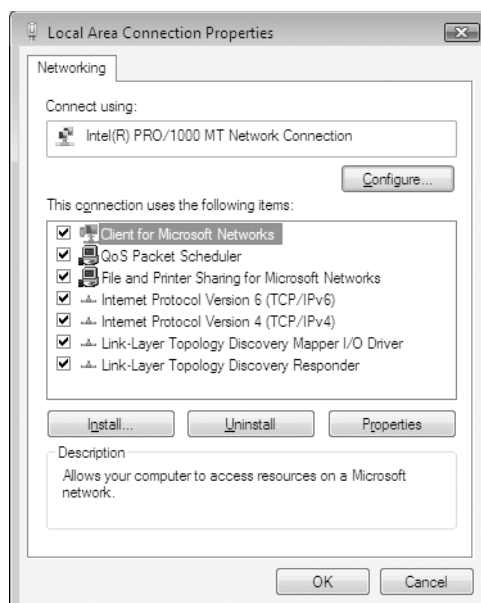
Use the following procedure to install the necessary components.

1. Open the **Control Panel**, and then click **View network status and tasks** or double-click **Network and Sharing Center**.
2. Click **Ethernet** (Windows 8/Server 2012), **Local Area Connection** (Windows 7), or **View Status** (Windows Vista/Server 2008), and then click the **Properties** button.

Note:

*If the User Account Control screen appears, click the **Yes** or **Continue** button.*

3. Check if the following necessary components are in the list.



The following table lists the components required for configuring the network interface with EpsonNet Config.

EpsonNet Config's setting screens	Necessary components
TCP/IP, WSD, IPP/IPPS, UPnP, Bonjour, MS Network	Internet Protocol (TCP/IP IPv4) or Internet Protocol (TCP/IP IPv6)

The following table lists the components required for network printing.

Printing method	Necessary components
TCP/IP printing	Internet Protocol (TCP/IP IPv4) or Internet Protocol (TCP/IP IPv6)

4. Double-click **Internet Protocol Version 4 (TCP/IPv4)** or **Internet Protocol Version 6 (TCP/IPv6)** on the Local Area Connection Properties dialog box to open the properties dialog box. Set the IP address, the subnet mask, etc. and then click **OK**.
5. Restart the computer.

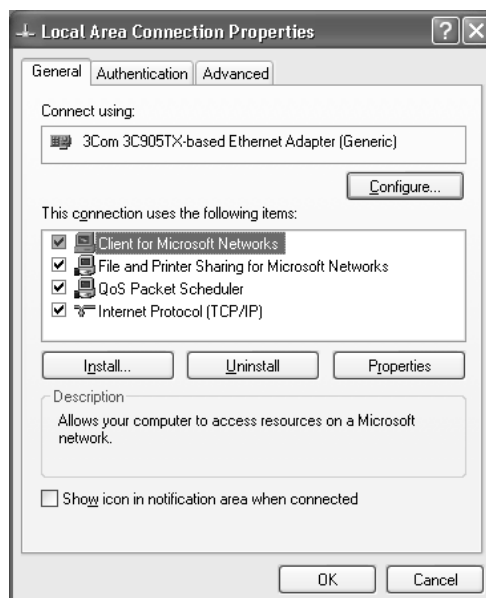
The necessary components are now installed. Go to the section “Setting Up the Network Interface” on page 18.

Windows XP

For Windows XP, use the following procedure to install the necessary components.

1. Click **Start**, highlight **Control Panel**, and then click **Network and Internet Connections**. Select **Network Connections**.
2. Under **LAN or High-Speed Internet**, click the **Local Area Connection** icon.
3. Under **Network Tasks**, click **Change settings of this connection**.

4. Check if the following necessary components are in the list.



The following table lists the components required for configuring the network interface with EpsonNet Config.

EpsonNet Config's setting screens	Necessary components
TCP/IP, WSD, IPP/IPPS, UPnP, Bonjour, MS Network	Internet Protocol (TCP/IP)

The following table lists the components required for network printing.

Printing method	Necessary components
TCP/IP printing	Internet Protocol (TCP/IP)

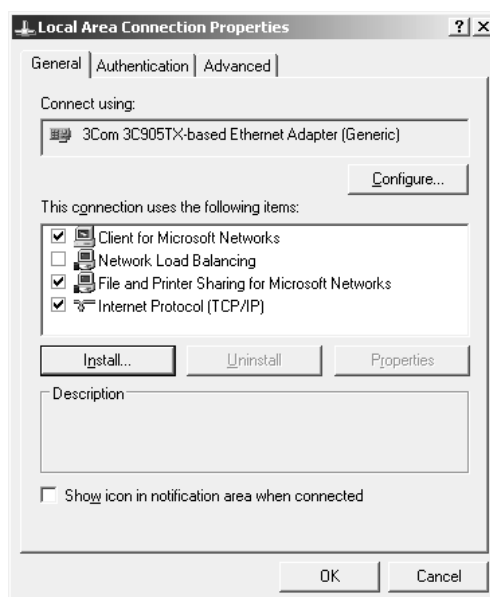
5. Double-click **Internet Protocol (TCP/IP)** on the Local Area Connection Properties dialog box to open the Internet Protocols (TCP/IP) Properties dialog box. Set the IP address, the subnet mask, etc. and then click **OK**.
6. Restart the computer.

The necessary components are now installed. Go to the section “Setting Up the Network Interface” on page 18.

Windows Server 2003

For Windows Server 2003, use the following procedure to install the necessary components.

1. Click **Start**, point to **Control Panel**, and then select **Network Connections**. Click **Local Area Connections**.
2. Click the **Properties** button.
3. Check if the following necessary components are in the list.



The following table lists the components required for configuring the network interface with EpsonNet Config.

EpsonNet Config's setting screens	Necessary components
TCP/IP, WSD, IPP/IPPS, UPnP, Bonjour, MS Network	Internet Protocol (TCP/IP)

The following table lists the components required for network printing.

Printing method	Necessary components
TCP/IP printing	Internet Protocol (TCP/IP)

4. Double-click **Internet Protocol (TCP/IP)** on the Local Area Connection Properties dialog box to open the Internet Protocols (TCP/IP) Properties dialog box. Set the IP address, the subnet mask, etc. and then click **OK**.
5. Restart the computer.

The necessary components are now installed. Go to the section “Setting Up the Network Interface” on page 18.

Mac OS

To assign an IP address, subnet mask, etc. to your Mac, follow the steps below.

1. From the Apple menu, select **System Preferences**.
2. Open the **Network** control panel. Click the **TCP/IP** tab.

Note:

*For Mac OS X 10.6 or later, select **Ethernet** as the connecting method on the Network control panel, select the method to assign the IP address from the Configure menu, and then assign the IP address.*

3. Select **Built-in Ethernet** from the Show pull-down menu.
4. Assign an IP address and other settings if necessary.
5. Click the **Apply Now** button to save any changes.

Go to the section “Setting Up the Network Interface” on page 18.

Setting Up the Network Interface

Connecting the Network Interface to the Network

Follow the instructions below to connect the network interface to the network.

1. Make sure that your printer is turned off.

2. Connect one end of the network cable to the RJ-45 connector on the network interface, and the other end to the network.

**Important:**

- ❑ You must use the following shielded twisted-pair cable to connect the network interface to a network.

-- Category-5 or higher for the 10Base-Te or 100Base-TX connection

-- Category-6 or higher for the 1000Base-T connection

- ❑ Do not connect the network interface and the computer directly. Be sure to use a HUB to connect the network interface to the network.

Note:

You can use 10Base-Te, 100Base-TX, and 1000Base-T Ethernet. When you print a lot of data, we recommend you use a higher-speed with light network traffic.

3. Turn on your printer. After the status lights go off, print a network status sheet.

**Important:**

After turning off the printer, wait until the status lights go off before turning it back on; otherwise the network interface may not work correctly.

Note for Mac OS X 10.6 or later:

Since the printer supports Bonjour and is on by default, you can use the printer on a network just by connecting it to the network. If you want to disable the Bonjour setting, use the printer's control panel. See "Setting an IP Address on the Printer's Control Panel" on page 52 for details.

Now, you can configure the network interface to use on the TCP/IP network and also install the printer driver using the Software Disc shipped with your printer. See "Configuring the Network Interface" on page 19 for details.

Configuring the Network Interface

Configure the network interface for use on the TCP/IP network by installing the EpsonNet Print (For Windows Users), and install the printer driver on your computer.

For details about EpsonNet Print, see "EpsonNet Print (For Windows Users)" on page 40.

For installation of the printer driver, see "Installing the Printer Driver" on page 20.

Installing the Printer Driver

About Installing the Printer Driver

To print to the network printer, you need to install the printer driver on the computer. The following section explains how to install the printer driver manually. See the section in this chapter appropriate for your operating system.

Note:

- ❑ For Windows users, you can get the printer driver from the Software Disc shipped with your printer.
- ❑ If your computer does not have a CD/DVD drive, download the driver from the Epson website, and then install it.

<http://www.epson.eu/support/> (Europe)

<http://support.epson.net/> (outside Europe)

Windows 8/7/Vista/Server 2012/Server 2008

The printer driver installation procedure differs depending on the printing method you prefer.

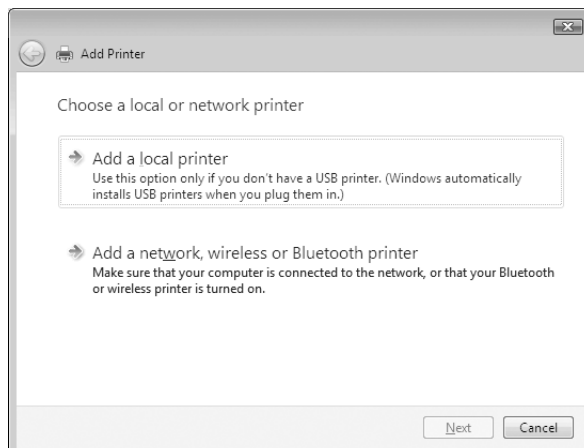
TCP/IP printing

Note:

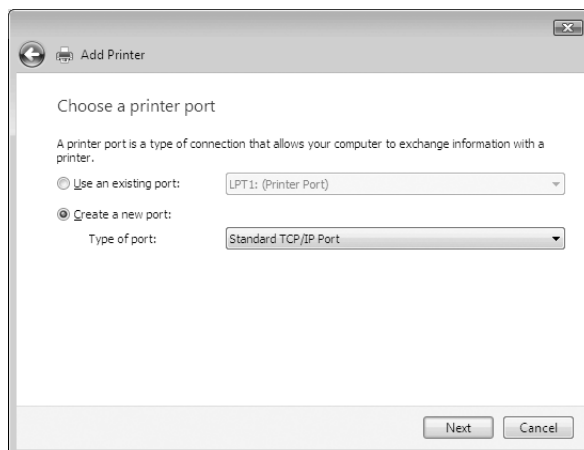
If you are using EpsonNet Print, the setup procedure is different. See “About EpsonNet Print” on page 40 for details. Note that EpsonNet Print does not support IPv6 environment.

1. Open the **Control Panel**, and then **View devices and printers** (Windows 8/7/Server 2012) or **Printers** (Windows Vista/Server 2008).
2. Click **Add a printer** to start the Add Printer wizard.

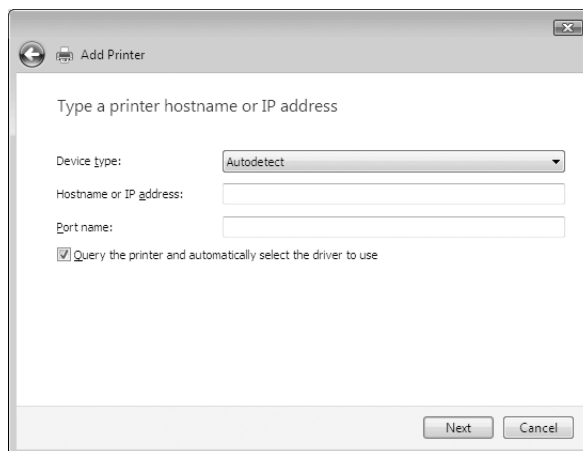
3. Click **Add a local printer**.



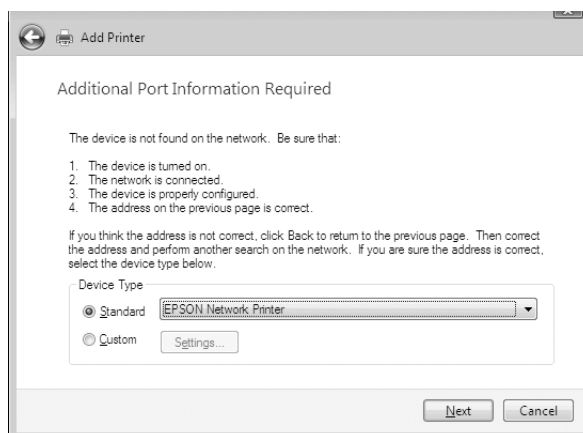
4. Select the **Create a new port** radio button, and then select **Standard TCP/IP Port** from the list. Then click **Next**.



5. Enter the IP address of the network interface and then click **Next**.



6. If an error occurs, the following dialog box appears. Select the **Standard** radio button and then select **EPSON Network Printer**. Click **Next**.



7. Click **Finish**.
8. See “Installing a printer driver” on page 23 to install the printer driver.

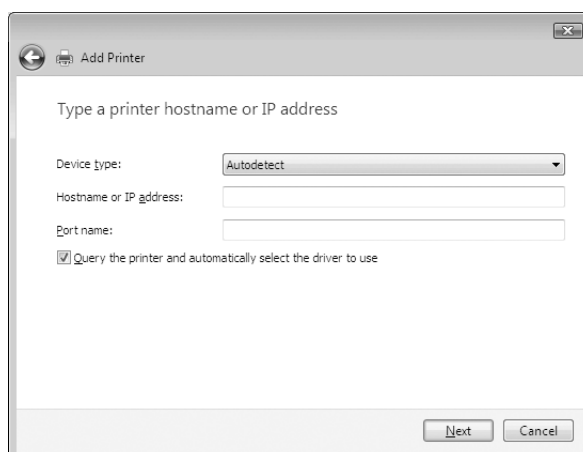
Internet printing (IPP/IPPS)

1. Open the **Control Panel**, and then **View devices and printers** (Windows 8/7/Server 2012) or **Printers** (Windows Vista/Server 2008).
2. Click **Add a printer** to start the Add Printer wizard.

3. Click **Add a network, wireless or Bluetooth printer**.
4. Click **The printer that I want isn't listed**.
5. Select the **Add a printer using a TCP/IP address or hostname** radio button and then click **Next**.
6. Enter the URL of the target device to the **Hostname** or **IP address** box using the format below. The URL should be the same as the URL you set on EpsonNet Config's IPP/IPPS Information page.

http://IP address of network interface:631/Printer name

Example: http://192.168.100.201:631/EPSON_IPP_Printer



Note:

To check the IP address of the network interface, use EpsonNet Config. See “About EpsonNet Config” on page 34 for details.

7. Follow the on-screen instructions to set up the device. See “Installing a printer driver” on page 23 if necessary.
8. If you want to print with IPPS (Secure IPP printing), you have to import a digital certificate to your printer using EpsonNet Config with Web browser. See “EpsonNet Config with Web Browser” on page 36 for details.

Installing a printer driver

1. Insert the Software Disc shipped with the device.

Note:

If your computer does not have a CD/DVD drive, download the printer driver from the Epson website, and then install it.

<http://www.epson.eu/support/> (Europe)

<http://support.epson.net/> (outside Europe)

2. Close the Epson Install Navi screen if it appears.
3. On the Add Printer screen, click the **Have Disk** button. The Install From Disk dialog box appears.
4. Click **Browse**.
5. Select the CD/DVD drive for Drives, and double-click the **WINX64** folder or the **WINX86** folder depending on your operating system. Click **Open**.
6. Click **OK** in the Install From Disk dialog box.
7. Select the model name of the device, and then click **Next**.

Note:

If the Add Printer wizard prompts you to select either **Keep existing driver** or **Replace existing driver**, be sure to select the **Replace existing driver** radio button.

8. Click **Finish** and follow the on-screen instructions to complete the setup.

Windows XP

The printer driver installation procedure differs depending on the printing method you prefer.

TCP/IP printing

Note:

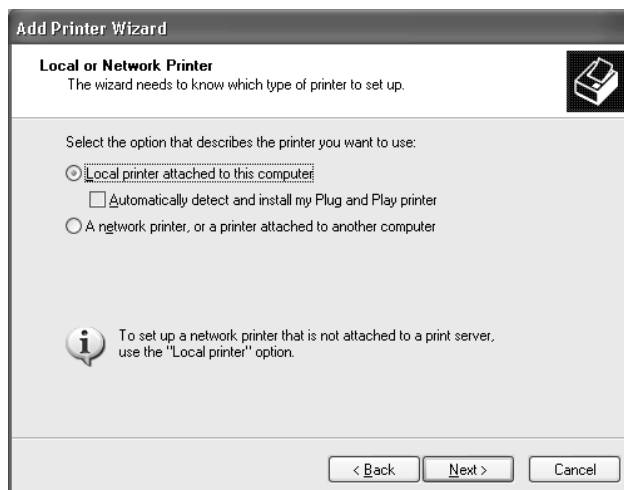
If you are using EpsonNet Print, the setup procedure is different. See "About EpsonNet Print" on page 40 for details.

1. Click **Start**, click **Control Panel**, click **Printers and Other Hardware**, and then click **Printers and Faxes**.
2. Under **Printer Tasks**, click **Add a printer** to start the Add Printer wizard, and then click **Next**.

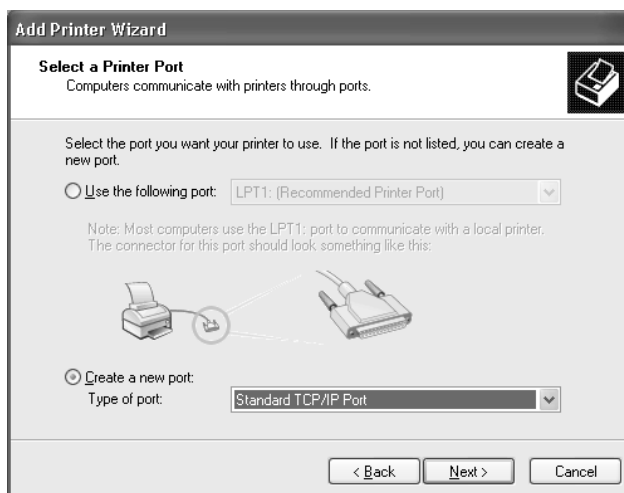
3. Click **Local printer attached to this computer**, clear the **Automatically detect and install my Plug and Play printer** check box, and then click **Next**.

Note:

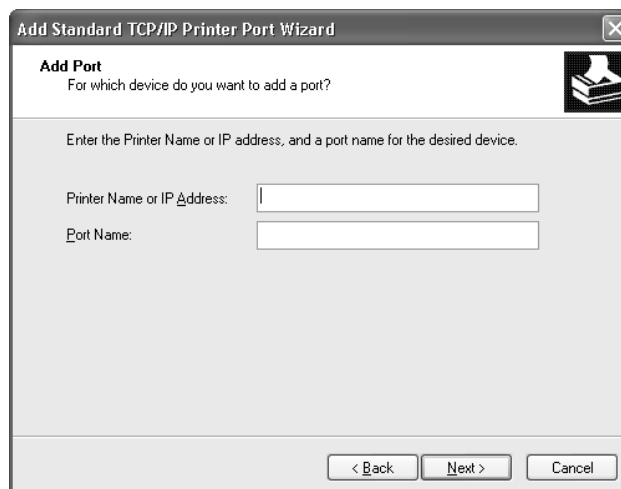
You must clear the **Automatically detect and install my Plug and Play printer** check box because the printer is attached directly to the network, not to a Windows XP computer.



4. Select the **Create a new port** radio button, and then select **Standard TCP/IP Port** from the list. Then click **Next**.



5. Enter the IP address of the network interface and then click **Next**.



6. If an error occurs, the following dialog box appears. Select the **Standard** radio button and then select **EPSON Network Printer**. Click **Next**.



7. Click **Finish**.
8. See “Installing a printer driver” on page 27 to install the printer driver.

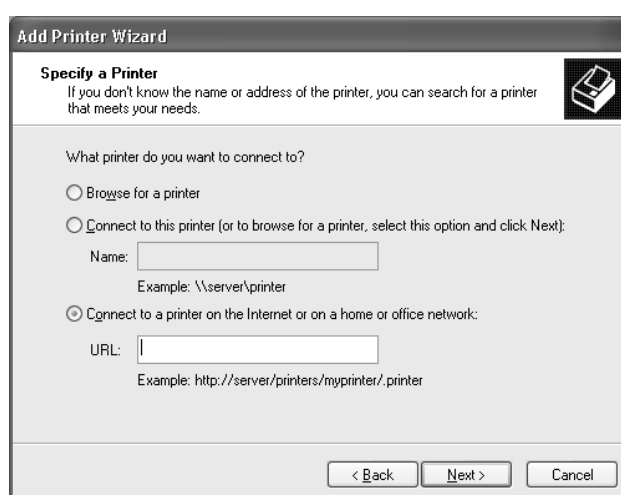
Internet printing (IPP/IPPS)

1. Click **Start**, click **Control Panel**, click **Printers and Other Hardware**, and then click **Printers and Faxes**.

2. Under **Printer Tasks**, click **Add a printer** to start the Add Printer wizard, and then click **Next**.
3. Click **A network printer, or a printer attached to another computer**, and then click **Next**.
4. Select the **Connect to a printer on the Internet or on a home or office network** radio button.
5. Enter the URL of the target printer using the format below. The URL should be the same as the URL you set on EpsonNet Config's IPP/IPPS Information page.

http://IP address of printer:631/Printer name

Example: http://192.168.100.201:631/EPSON_IPP_Printer



Note:

To check the IP address of the network interface, use EpsonNet Config. See “About EpsonNet Config” on page 34 for details.

6. Follow the on-screen instructions to set up the printer. See “Installing a printer driver” on page 27 if necessary.
7. If you want to print with IPPS (Secure IPP printing), you have to import a digital certificate to your printer using EpsonNet Config with Web browser. See “EpsonNet Config with Web Browser” on page 36 for details.

Installing a printer driver

1. Insert the Software Disc shipped with the printer.

Note:

If your computer does not have a CD/DVD drive, download the printer driver from the Epson website, and then install it.

<http://www.epson.eu/support/> (Europe)

<http://support.epson.net/> (outside Europe)

2. Close the Epson Install Navi screen if it appears.
3. On the Add Printer screen, click the **Have Disk** button. The Install From Disk dialog box appears.
4. Click **Browse**.
5. Select the CD/DVD drive for Drives, and double-click the **WINX64** or **WINX86** folder. Click **Open**.
6. Click **OK** in the Install From Disk dialog box.
7. Select the model name of the printer, and then click **Next**.

Note:

*If the Add Printer wizard prompts you to select either **Keep existing driver** or **Replace existing driver**, be sure to select the **Replace existing driver** radio button.*

8. Click **Finish** and follow the on-screen instructions to complete the setup.

Windows Server 2003

The printer driver installation procedure differs depending on the printing method you prefer.

TCP/IP printing

Note:

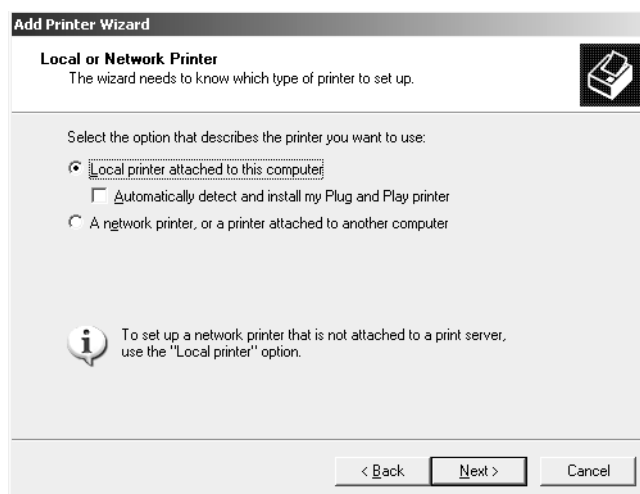
If you are using EpsonNet Print, the setup procedure is different. See “About EpsonNet Print” on page 40 for details.

1. Click **Start**, and then select **Printers and Faxes**.
2. Double-click the **Add Printer** icon to start the Add Printer wizard, and then click **Next**.

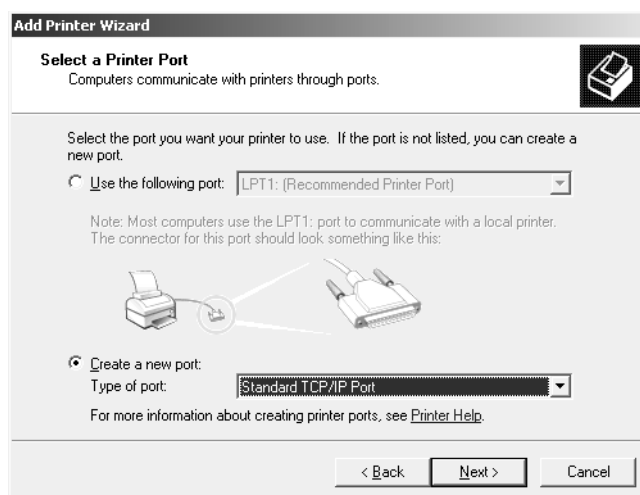
- Click **Local printer attached to this computer**, clear the **Automatically detect and install my Plug and Play printer** check box, and then click **Next**.

Note:

You must clear the **Automatically detect and install my Plug and Play printer** check box because the printer is attached directly to the network, not to a computer.



- Select the **Create a new port** radio button, and then select **Standard TCP/IP Port** from the list. Click **Next**.



- When Add Standard TCP/IP Printer Port Wizard dialog box appears, click **Next**.

6. Enter the IP address of the network interface and then click **Next**.

7. If an error occurs, the following dialog box appears. Select the **Standard** radio button and then select **EPSON Network Printer**. Click **Next**.

8. Click **Finish**.
9. See “Installing a printer driver” on page 31 to install the printer driver.

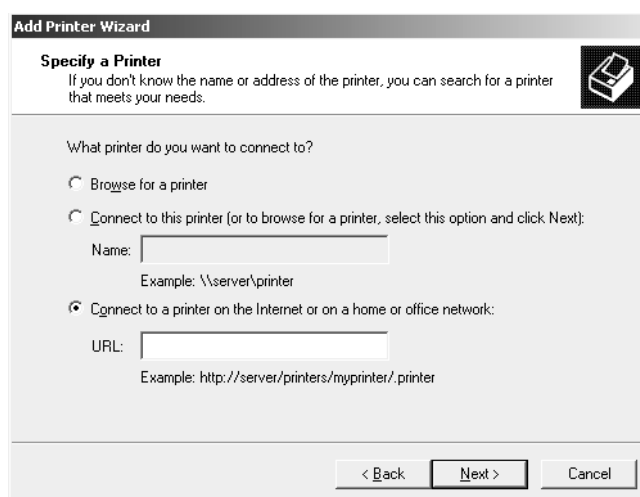
Internet printing (IPP/IPPS)

1. Click **Start**, and then select **Printers and Faxes**.

2. Double-click the **Add Printer** icon to start the Add Printer wizard, and then click **Next**.
3. Select **A network printer, or a printer attached to another computer**, and then click **Next**.
4. Select the **Connect to a printer on the Internet or on a home or office network** radio button.
5. Enter the URL of the target printer using the format below. The URL must be the same URL you set on EpsonNet Config's IPP/IPPS Information page.

http://IP address of printer:631/Printer name

Example: http://192.168.100.201:631/EPSON_IPP_Printer



Note:

To check the IP address of the network interface, use EpsonNet Config. See “About EpsonNet Config” on page 34 for details.

6. Follow the on-screen instructions to set up the printer. See “Installing a printer driver” on page 31 if necessary.
7. If you want to print with IPPS (Secure IPP printing), you have to import a digital certificate to your printer using EpsonNet Config with Web browser. See “EpsonNet Config with Web Browser” on page 36 for details.

Installing a printer driver

1. Insert the Software Disc shipped with the printer.

Note:

If your computer does not have a CD/DVD drive, download the printer driver from the Epson website, and then install it.

<http://www.epson.eu/support/> (Europe)

<http://support.epson.net/> (outside Europe)

2. Close the Epson Install Navi screen if it appears.
3. On the Add Printer screen, click the **Have Disk** button. The Install From Disk dialog box appears.
4. Click **Browse**.
5. Select the CD/DVD drive for Drives, and double-click the **WINX64** or **WINX86** folder. Click **Open**.
6. Click **OK** in the Install From Disk dialog box.
7. Select the model name of the printer, and then click **Next**.

Note:

*If the Add Printer wizard prompts you to select either **Keep existing driver** or **Replace existing driver**, be sure to select the **Replace existing driver** radio button.*

8. Click **Finish** and then follow the on-screen instructions to complete the setup.

Mac OS

Installing a printer driver

Go to the following Epson website to download and install the driver.

<http://www.epson.eu/support/> (Europe)

<http://support.epson.net/> (outside Europe)

Mac OS X 10.6 or later

Follow the steps below to set a printer.

Bonjour printing

1. Open **System Preferences**.
2. Open **Print & Fax**.
3. Click the + button to add a new printer.
4. Select the desired printer model that is connected with Bonjour.
5. Click **Add**.

TCP/IP printing

1. Open **System Preferences**.
2. Open **Print & Fax**.
3. Click the + button to add a new printer.
4. Click **IP**.
5. Select the desired printing protocol from the pull-down list.
6. Enter the host name or IP address of the printer.
7. Select the desired printer model.
8. Click **Add**.

Chapter 3

Network Software

This chapter explains how to use the network software provided with your printer.

Note:

The software provided varies depending on your printer model.

EpsonNet Config

About EpsonNet Config

EpsonNet Config is a configuration software for administrators to configure the network interface for TCP/IP.

Note:

Be sure to use EpsonNet Config for your printer.

System Requirements

The following table lists the system requirements of EpsonNet Config.

Windows

Operating systems	Windows 8 (includes 8.1 or later) Windows 7 Windows Vista Windows XP (Home, Professional) Windows Server 2012 (includes R2) Windows Server 2008 (includes R2) Windows Server 2003 (includes R2)
Hard disk drive space	30 MB

Mac OS

Operating systems	Mac OS 10.4 or higher
Hard disk drive space	30 MB

Installing EpsonNet Config

You can install EpsonNet Config on your computer from the Software Disc shipped with your printer (for Windows users), or from the following Epson website (for both Windows and Mac OS users).

Installing from the Software Disc (For Windows users)

Note:

Log on to the operating system with an administrator account to install EpsonNet Config.

1. Insert the Software Disc shipped with the device.
2. If your CD/DVD drive is D:, double-click **setup.exe** in the **D:\Network\EpsonNetConfig**.

Note:

Change the drive letter as needed for your system.

Note:

- If you add or delete protocols or services from your operating system after installing EpsonNet Config, EpsonNet Config may not work correctly. If this happens, uninstall EpsonNet Config and then install it again.*
- If the Windows Security Alert window appears after you start EpsonNet Config, click the **Allow access** or **Unblock** button; otherwise the devices are not listed on the screen of EpsonNet Config.*

Installing from the Epson website (For both Windows users and Mac OS users)

Go to the following Epson website to download and install EpsonNet Config.

<http://www.epson.eu/support/> (Europe)

<http://support.epson.net/> (outside Europe)

Accessing the EpsonNet Config User's Guide

The EpsonNet Config User's Guide contains detailed information on EpsonNet Config. Follow the steps below to access the EpsonNet Config User's Guide.

Windows

1. Click **Start**, point to **All Programs**, select **EpsonNet**, and then select **EpsonNet Config V4**.
2. Click **EpsonNet Config User's Guide**.

The EpsonNet Config User's Guide appears. By clicking the links on the front page or contents page, you can get information on using EpsonNet Config.

Mac OS

1. Start the Finder.
2. In the **Applications** folder, double-click the **EpsonNet** folder, and then double-click the **EpsonNet Config V4** folder. Finally, double-click the **EpsonNet Config** icon.

EpsonNet Config starts.

3. From the Help menu, select **EpsonNet Config Help**.

The EpsonNet Config User's Guide appears. By clicking the links on the front page or contents page, you can get information on using EpsonNet Config.

EpsonNet Config with Web Browser

About EpsonNet Config

EpsonNet Config with Web Browser is a Web-based utility designed to configure the printer for use on a network.

By typing the IP address of the network interface for the URL in your browser, you can start EpsonNet Config to allow you to configure the network interface for TCP/IP, NetWare, MS Network, IPP, and SNMP.

Supported Web browser

- Microsoft Internet Explorer version 6.0 or later
- Apple Safari 3 or later
- Mozilla Firefox version 3.6 or later

Configuring the Network Interface Using EpsonNet Config with Web Browser

After you have assigned an IP address to the network interface using EpsonNet Setup, EpsonNet Config for Windows or Mac OS, or the arp/ping command, you can configure the network interface using EpsonNet Config with Web Browser.

Note:

- A Web browser must be installed on your computer.*
- TCP/IP must be correctly set for the computer and the network interface.*
- Do not run both EpsonNet Config for Windows or Mac OS and EpsonNet Config with Web Browser at the same time.*
- Your browser may restrict some characters you can use. For details, see your browser or operating system documentation.*

The following procedure shows an example of configuring the network interface on a TCP/IP IPv4 network.

1. Turn on your printer.
2. Run EpsonNet Config using one of the following ways.
 - Run EpsonNet Config for Windows or Mac OS. Select the printer you want to configure from the list and then click **Launch Browser**.
 - Open your browser, and then type in the IP address of the network interface directly. Do not run EpsonNet Config for Windows or Mac OS.

https://IP address of network interface/

Example: **https://192.168.100.201/**

Note:

To check the IP address of the network interface, use *EpsonNet Config*. See “About *EpsonNet Config*” on page 34 for details.

If Windows security alert screen appears, click **Continue** to start *EpsonNet Config* with Web Browser.

3. Click **TCP/IP** under Network on the Configuration menu, then click **IPv4 Address** to display the TCP/IP IPv4 settings screen.

Note:

If you want to configure a protocol other than TCP/IP, configure the desired settings on Configuration - Network screen.

4. Select a method for acquiring the IP address. When you select **Auto**, DHCP becomes available and assigns an IP address automatically. If you want to set the IP address manually, select **Manual**.

Note:

The network administrator must check any changes made to the IP address settings.

When **Auto** is selected, DHCP becomes available. To use the DHCP server, make sure it is installed on your computer and correctly configured. See your operating system’s online help for detailed instructions.

If **Set Using Automatic Private IP Addressing (APIPA)** is enabled, a private IP address is automatically assigned to the network interface even when there are no DHCP servers on your system or your network.

If the DNS function is not supported, we recommend that you select **Manual** and then enter an IP address. This is because if you select **Auto**, the IP address of the network interface changes every time you turn on the printer so that you need to change the printer port setting accordingly.

5. To assign an IP address manually, enter the IP address, the subnet mask, and the default gateway. Be sure the IP address does not conflict with any other devices on the network.

Note:

If there is a server or a router functioning as a gateway, enter the IP address of the server or the router for the gateway address. If there is no gateway, leave the default values there.

6. If you want to get a private address between 169.254.1.1 and 169.254.254.254 automatically when an IP address cannot be obtained by the DHCP server, leave it at **Enable** for **Set Using Automatic Private IP Addressing (APIPA)**; otherwise, select **Disable**.

7. When setting an IP address using the ping command, select **Enable** for **Set Using PING**. Select **Disable** when setting an IP address with EpsonNet Config; this prevents any unexpected change of the IP address.
8. Select **Enable** for **Acquire DNS Server Address Automatically** if you want to acquire the DNS server address using the DHCP server.

If you want to enter the DNS server address manually, select **Disable** and then enter the IP address of the DNS server.

9. Select **Enable** for **Acquire Host Name and Domain Name Automatically** if you want to acquire the host name and the domain name using the DHCP server.

If you want to specify manually, enter the host name and the domain name in the text boxes.

10. Select **Enable** for **Register Network Interface Address to DNS Server** if you want to register the host name and domain name to the DNS server through the DHCP server that supports Dynamic DNS.

If you want to register the host name and the domain name directly to the DNS server, select **Enable** for **Register Network Interface Address Directly to DNS Server**.

11. Mac OS X only:
Select **Enable** or **Disable** for **Use Bonjour**. If you select **Enable**, enter the Bonjour Name and the Bonjour Printer Name.
12. Do not exit the Web browser and do not send a job to the printer until this message appears. Follow the on-screen instructions to reset the printer.

Note:

- Since the new IP address becomes available after the printer is reset, you need to restart EpsonNet Config by entering the new IP address.*
- Only changes on the page where you press the **Transmit** button take effect.*

Opening Screen

Any user can access the opening screen by typing the IP address of the network interface into the address bar of your browser.

Note:

- ❑ *The item appears only if your printer supports the function, and the name of the item may vary depending on the model.*
- ❑ *See the EpsonNet Config with Web Browser help for details about each item.*

EpsonNet Print (For Windows Users)

About EpsonNet Print

EpsonNet Print is a utility program that provides peer to peer printing to Epson printers on the TCP/IP network.

By using EpsonNet Print, you can find a printer located in the same segment or beyond a router. You can select LPR standard printing, LPR enhanced printing, or High-speed printing.

Note:

EpsonNet Print does not support IPv6 environment.

System Requirements

The following table lists the system requirements of EpsonNet Print.

Operating systems	Windows 8 (includes 8.1 or later) Windows 7 Windows Vista ^{*1} Windows XP (Home, Professional) ^{*2} Windows Server 2012 (includes R2) Windows Server 2008 ^{*1} (includes R2) Windows Server 2003 ^{*1} (includes R2) ^{*1}
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^{*1} With Service Pack 2 or higher

^{*2} With Service Pack 3 or higher

Installing EpsonNet Print

Note:

Log on to the operating system with an administrator account to install EpsonNet Print.

Installing from the Software Disc

1. Insert the Software Disc shipped with the device.
2. If your CD/DVD drive is D:, double-click **ENPE.exe** in the **D:\Network\EpsonNetPrint**.

Note:

Change the drive letter as needed for your system.

Installing from the Epson website

Go to the following Epson website to download and install EpsonNet Print.

<http://www.epson.eu/support/> (Europe)

<http://support.epson.net/> (outside Europe)

For Windows 8/7/Vista/XP/Server 2012/Server 2008/Server 2003 Users

Follow the steps below to add a port using the Add Printer Wizard.

- If you want to add a port for a printer with its IP address assigned automatically by the DHCP server or router, see “Adding a port for a printer assigned with a dynamic IP address” on page 41.
- If you want to add a port for a printer with its IP address assigned manually, see “Adding a port for a printer assigned with a static IP address” on page 44.

Note:

- Be sure that the computer is connected to the network and TCP/IP is correctly set.
- A valid IP address must be assigned to the printer.

Adding a port for a printer assigned with a dynamic IP address

1. For Windows 8/7/Vista/Server 2012/Server 2008: Open the **Control Panel**, and then **View devices and printers** (Windows 8/7/Server 2012), or **Printers** (Windows Vista/Server 2008). Click **Add a printer** to start the Add Printer Wizard.

For Windows XP: Click **Start** and then **Printers and Faxes**. Under Printer Tasks, click **Add a printer** to start the Add Printer Wizard. Click **Next**.

For Windows Server 2003: Click **Start** and then **Printers and Faxes**. Double-click **Add Printer** in the Printers folder to start the Add Printer Wizard. Click **Next**.

2. **For Windows 8/7/Vista/Server 2012/Server 2008:** Click **Add a local printer**. Select the **Create a new port** radio button, and then select **EpsonNet Print Port** from the list. Click **Next**.

Note:

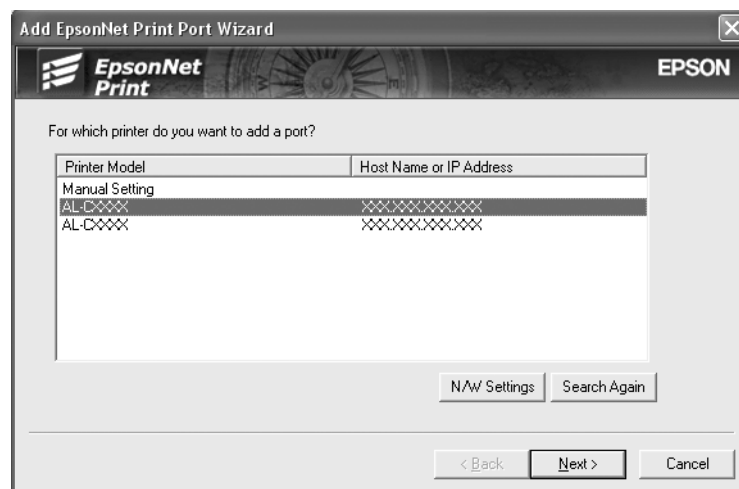
If the Windows Security Alert screen appears, click the **Allow access** or **Unblock** button, and then click the **Search Again** button to search the printers.

For Windows XP/Server 2003: Click **Local printer attached to this computer**, clear the **Automatically detect and install my Plug and Play printer** check box, and then click **Next**. Select the **Create a new port** radio button, and then select **EpsonNet Print Port** from the list. Click **Next**.

Note:

If the Windows Security Alert screen appears, click the **Unblock** button, and then click the **Search Again** button to search the printers.

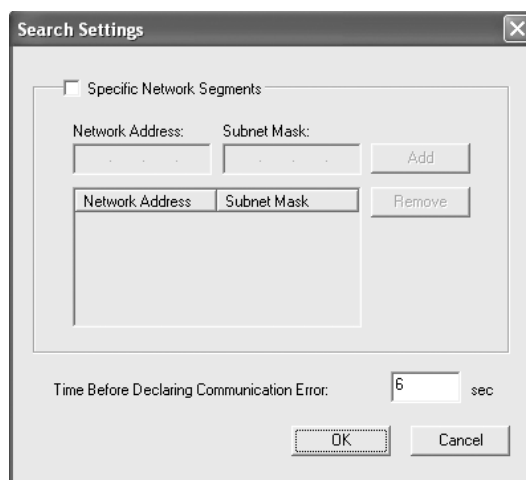
3. Select the target printer, and then click **Next**.



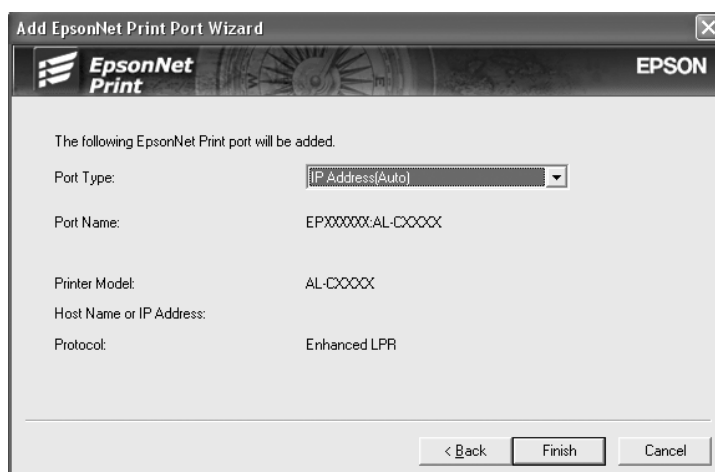
Note:

- ❑ If the target printer is not in the list, click the **Search Again** button to search the printers using new parameters.

- ❑ Each column can be sorted in ascending or descending order by clicking the column header. However, **Manual Setting** is always displayed on the top of the list regardless of sorting.
- ❑ If you want to search printers in other segments, click the **N/W Settings** button. Select the **Specific Network Segments** check box, and then enter the network address and subnet mask of the network segment for the search. Then click the **Add** button. You can also specify the time before declaring communication error.



4. Confirm the information about the printer's port you want to configure, and then click **Finish**.



Items	Explanations
Port Type	<p>The following items are listed in the pull-down menu, and you can select the port type you need.</p> <p>IP Address (Auto): Configure the port automatically. If the IP address of the printer is acquired automatically and the computer and the printer are in the same segment, you can select this port type.</p> <p>IP Address (Manual): Use the printer's IP Address for the port name.</p> <p>HostName (DNS): Use the printer's host name registered in the DNS server for the port name.</p> <p>MS Network: Use the NetBIOS name registered in the printer for the port name.</p>
The port Information	<p>The following items are displayed:</p> <ul style="list-style-type: none"> - Port Name (If the port type is changed, the port name and the host name or IP address are also changed.) - Printer Model - Host Name or IP Address - Protocol
Finish button	Register the port information to the system and close the Add EpsonNet Print Port Wizard.
Back button	Go back to the printer list window.
Cancel button	Close the Add EpsonNet Print Port Wizard.

The new printer port is created in your computer. To install the printer driver, see “Installing the Printer Driver” on page 47.

Adding a port for a printer assigned with a static IP address

1. **For Windows 8/7/Vista/Server 2012/Server 2008:** Open the **Control Panel**, and then **View devices and printers** (Windows 8/7/Server 2012), or **Printers** (Windows Vista/Server 2008). Click **Add a printer** to start the Add Printer Wizard.

For Windows XP: Click **Start** and then **Printers and Faxes**. Under Printer Tasks, click **Add a printer** to start the Add Printer Wizard. Click **Next**.

For Windows Server 2003: Click **Start** and then **Printers and Faxes**. Double-click **Add Printer** in the Printers folder to start the Add Printer Wizard. Click **Next**.

2. **For Windows 8/7/Vista/Server 2012/Server 2008:** Click **Add a local printer**. Select the **Create a new port** radio button, and then select **EpsonNet Print Port** from the list. Click **Next**.

Note:

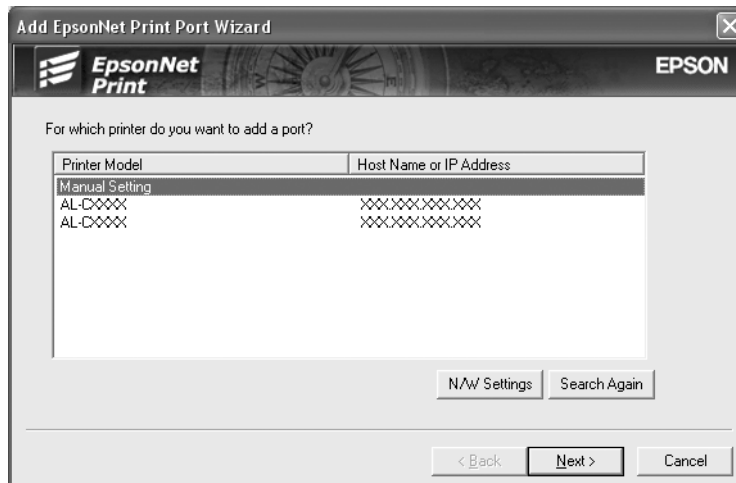
If the Windows Security Alert screen appears, click the **Allow access** or **Unblock** button, and then click the **Search Again** button to search the printers.

For Windows XP/Server 2003: Click **Local printer attached to this computer**, clear the **Automatically detect and install my Plug and Play printer** check box, and then click **Next**. Select the **Create a new port** radio button, and then select **EpsonNet Print Port** from the list. Click **Next**.

Note:

If the Windows Security Alert screen appears, click the **Unblock** button, and then click the **Search Again** button to search the printers.

3. Select **Manual Setting** from the list, and then click **Next**.



4. Enter the printer's name and the port name is automatically entered to the Port Name edit box. Then click **Next**.

5. Confirm the information about the printer's port you want to configure, and then click **Finish**.

Items	Explanations
The port Information	The following items are displayed: <ul style="list-style-type: none"> - Port Name - Host Name or IP Address - Protocol
Finish button	Register the port information to the system and close the Add EpsonNet Print Port Wizard.
Back button	Go back to the printer list window.

Items	Explanations
Cancel button	Close the Add EpsonNet Print Port Wizard.

The new printer port is created in your computer. To install the printer driver, see “Installing the Printer Driver” on page 47.

Installing the Printer Driver

Install the printer driver. See the section appropriate for your operating system.

- ❑ For Windows 8/7/Vista/Server 2012/Server 2008, see “Installing a printer driver” on page 23.
- ❑ For Windows Server 2003, see “Installing a printer driver” on page 31.
- ❑ For Windows XP, see “Installing a printer driver” on page 27.

Then the printer is ready for peer-to-peer printing.

To configure the printer port, see “Configuring the Printer Port” on page 47.

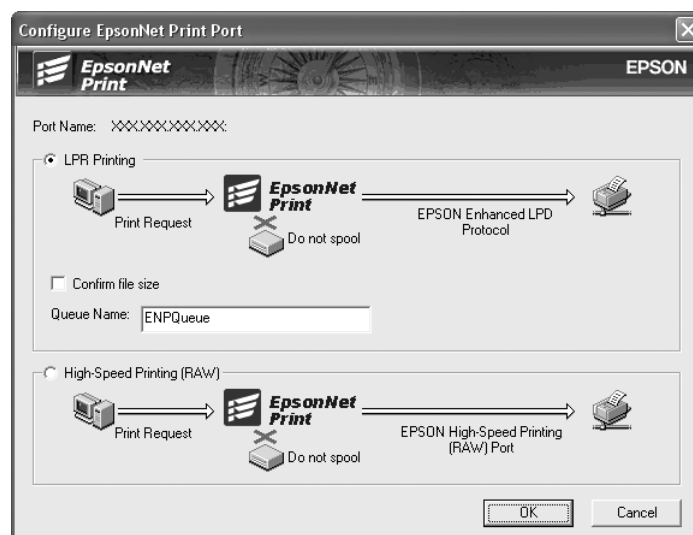
Configuring the Printer Port

Follow the steps below to configure the printer port. The printing speed differs depending on your selection.

1. **For Windows 8/7/Vista/Server 2012/Server 2008:**
Open the **Control Panel**, and then **View devices and printers** (Windows 8/7/Server 2012) or **Printers** (Windows Vista/Server 2008).

For Windows XP/Server 2003:
Click **Start** and then **Printers and Faxes**.
2. Right-click the target printer, and then click **Properties**.
3. Click the **Ports** tab, and then click the **Configure Port** button.

4. Make the appropriate settings for the desired port.



LPR enhanced printing:

Select the **LPR Printing** radio button, and then specify the queue name (up to 32 characters). LPR enhanced printing sends a print job to the target network printer without spooling all of the print data. LPR enhanced printing is faster than LPR standard printing.

LPR standard printing:

Select the **Confirm file size** check box, and then specify the queue name (up to 32 characters). Print data is spooled by the computer before being sent to the target network printer.

Note:

When the print data size is 20 MB or more, we recommend that you use LPR enhanced printing.

High-speed printing:

Select the **High-Speed Printing (RAW)** radio button. The Epson high-speed printing port sends a print job to the target network printer without spooling all of the print data. High-Speed printing is faster than the other two printing methods.

5. Click **OK**.

If you select the **High-Speed Printing (RAW)** radio button and if the printer does not support High-Speed printing, or if you fail to connect to the printer, an error message appears. Follow the message to remedy the problem.

Chapter 4

Troubleshooting

General Problems

Cannot configure the network interface or cannot print from the network.

Cause	What to do
The printer settings or network settings may be wrong.	First, check to see if you can print a status sheet, as described in "Printing a Network Status Sheet" on page 51. If you can print a status sheet, check the network settings; otherwise, set the interface mode of the printer's control panel to Auto or Option .

Cannot print even if you have assigned the IP address to the computer and the printer.

Cause	What to do
You have assigned an IP address to the computer manually, but you assigned the IP address to the printer by Automatic Private IP Addressing (APIPA).	Assign the printer's IP address so that it belongs to the same segment of the computer. Use EpsonNet Config and the printer's control panel.

Unable to start EpsonNet Config.

Cause	What to do
You have added or deleted protocols after installing EpsonNet Config.	Uninstall EpsonNet Config and then reinstall it. See "Installing EpsonNet Config" on page 35.

The message “EpsonNet Config cannot be used because no network is installed.” appears when you start EpsonNet Config.

Cause	What to do
Both TCP/IP and IPX/SPX are not installed on the computer.	Install the TCP/IP or IPX/SPX protocol.
TCP/IP is installed on the computer, but its IP address is not set correctly.	Set a correct IP address for the computer.

The message “Could not complete communicating configuration data” appears when you send settings to the network interface.

Cause	What to do
This may happen when using a dial-up router.	Run Command Prompt from the computer on which EpsonNet Config is installed, and then enter the following command: Format: >ROUTE_ADD_the IP address of the network interface_ the IP address of the computer (the under bar represents one space) Example: >ROUTE ADD 192.168.192.168 22.33.44.55.

Unable to start EpsonNet Config with Web Browser.

Cause	What to do
You have not set the IP address for the network interface.	Set the IP address for the network interface using EpsonNet Config for Windows or Mac OS, the printer’s control panel. You can check the IP address on a status sheet. See the EpsonNet Config User’s Guide.

The Model Name and IP Address do not appear in the EpsonNet Config dialog box.

Cause	What to do
If the valid IP address is not set, the items indicated in the dialog box mentioned above may not appear.	<p>Set a valid IP address.</p> <p>Refresh the status by selecting Refresh from the View menu.</p> <p>Increase the length of time before a timeout. To do this, select Options from the Tool menu, and then select Timeout. Note that doing so can cause EpsonNet Config to run more slowly.</p>

Printing a Network Status Sheet

Before you start configuring the network interface, be sure to print a network status sheet that contains important information such as the current configuration and the MAC address of the network interface.

For information on printing network status sheets, see the printer *User's Guide*.

Chapter 5

Tips for Administrator

Setting an IP Address on the Printer's Control Panel

After connecting the printer to the network, you need to set the IP address for the network interface.

To set the IP address, subnet mask, and default gateway from the control panel, follow the steps below.

Note:

If you are using a printer model that does not have an LCD panel, you cannot use the steps below.

1. Turn on your printer.
2. Press the **Right** button on the printer's control panel once to enter the SelecType mode.
3. Press the **Up** or **Down** button until `Network Menu` appears. Then press the **Right** button.
4. Press the **Down** button until `Common Settings` menu appears. Then press the **Right** button.
5. Check that `Network I/F = On` appears.

If `Network I/F = Off` appears instead, press the **Right** button and then the **Up** or **Down** button to change to `Network I/F = On`. Press the **Right** button, the **Left** button twice, and then the **Up** or **Down** button to select `Yes (Unprinted data is deleted)`. Then press the **Right** button to reboot your printer.

6. Press the **Up** or **Down** button until `Get IP Address = Auto` appears. Press the **Right** button and then the **Up** or **Down** button to change to `Get IP Address = Panel`. Then press the **Right** button. You can use the following methods to get an IP address.
 - Choose `Panel` when setting the IP address, subnet mask, and default gateway using the printer's control panel.
 - Choose `Auto` when getting the IP address from a DHCP server. The IP address is automatically obtained from the DHCP server whenever the printer is reset or turned on.
 - Choose `PING` when setting the IP address using the arp/ping command. The network interface uses the IP address set by the arp/ping command. The settings become available when the printer is reset or turned off and then back on.

Note:

- To use **Auto**, a DHCP server must be correctly configured on the network. See the online help of your operating system for detailed instructions.
- Choose **PING** only when setting the IP address using the `arp/ping` command.

7. Press the **Up** or **Down** button to select IP = xxx.xxx.xxx.xxx. Press the **Right** button.
8. Press the **Up** or **Down** button until the desired value appears. Then press the **Right** button to set the value.

Note:

Repeat steps 6 and 7 to set the IP address, subnet mask, and default gateway.

9. Press the **Left** button three times to exit the control panel menus. The Do you want to reboot to apply the settings? screen appears.
10. Press the **Up** or **Down** button to select Yes (Unprinted data is deleted). Then press the **Right** button to reboot your printer. Be sure to wait until Ready is displayed on the LCD panel.

Print a network status sheet to confirm the new IP address.

Note:

- You must first set the IP address before using EpsonNet Config with Web Browser.
- See the User's Guide for more information about settings on the printer's control panel.

Network Menu

These items are used to make network settings on the printer's control panel.

Item	Settings
Network I/F	On, Off
Get IPAddress	Panel, Auto, PING
IP	0.0.0.1 to 255.255.255.254
SM	0.0.0.0 to 255.255.255.255
GW	0.0.0.0 to 255.255.255.255
MS Network	On, Off

Item	Settings
WSD	On, Off
LLTD	On, Off
Bonjour	On, Off
IPv6	On, Off
IPsec	On, Off
Pre-Shared Key	Enter the pre-shared key (up to 20 characters).
Redirect(HTTP->HTTPS)	Enable, Disable
IEEE802.1X	On, Off
Link Speed	Auto, 100 Full, 100 Half, 10 Full, 10 Half
Buffer Size	Normal, Maximum, Minimum

Note:

- To activate the Network Menu settings, you must turn off the printer for more than five seconds and then turn it back on. Or, you can perform a Reset All operation, as explained in “Reset Menu” in the User’s Guide.
- Resetting the printer erases all print jobs. Make sure the Ready light is not flashing when you reset the printer.

Secure Communication Using IPsec, Access Control, SSL, and IEEE 802.1X

The following table lists the system requirements of secure data communication using the IPsec protocol and the access control function.

	IPsec	Access Control
Data format	Encrypted data	Unencrypted data
Supported operating systems	Windows 8 (includes 8.1 or later) Windows 7 Windows Vista	All operating systems supported by this product

IPsec protocol

IPsec is a protocol that is suitable for securing IP communication by encrypting the data or by authenticating client users in a network. To use this function, make the necessary settings on your printer using EpsonNet Config with Web Browser. Security settings on the client computers on the network are also required. For details on the settings, refer to the EpsonNet Config with Web Browser help.

Access Control

Access control function allows you to restrict network access to the printer.

- Restrict access to the printer from specified client users only
- Restrict data communication to the printer to specified purposes only (such as accessing administrative information by the administrators)

To use this function, make the necessary settings on your printer using EpsonNet Config with Web Browser. For details on the settings, refer to the EpsonNet Config with Web Browser help.

SSL

SSL prevents unauthorized external access or other malicious acts such as data being read while the product is connected to a network. Enabling SSL allows product settings to be managed securely via a web browser. For details on the settings, refer to the EpsonNet Config with Web Browser help.

SNMPv3

SNMPv3 is a UDP protocol that authenticates users, encrypts data, prevents the interception of communications and tampering of data.

To use this function, enable the SNMPv3 and appropriate settings using EpsonNet Config with Web Browser. For details on the settings, refer to EpsonNet Config with Web Browser help.

IEEE 802.1X

IEEE 802.1X is the standard protocol for allowing client users to be authenticated to the network before obtaining a connection. It provides effective access control to both wired and wireless networks.

IEEE 802.1X network consists of an authentication server (RADIUS server) and authenticator (switching hub with authentication function). Supplicants (devices such as printers) can join the IEEE 802.1X network by being authenticated by the authentication server and authenticator.

To print via an IEEE 802.1X network, you have to make the necessary network settings using a computer that is not connected to the IEEE 802.1X network before connecting the printer to the IEEE 802.1X network.

1. Connect the printer and computer, which is not connected to the network, using an Ethernet cable.
2. Assign an IP address to the printer and print the network status sheet to confirm the IP address.
3. Start EpsonNet Config with Web Browser on the computer and import the digital certificate, then make the IEEE 802.1X settings and other necessary settings.
4. Turn off the printer and disconnect the printer and computer.
5. Connect the printer to the destination IEEE 802.1X network and turn it on, then print the network status sheet to confirm the settings.

For details on the settings, refer to the EpsonNet Config with Web Browser help.

Secure Communications (IPsec/Access Control)

This feature prevents unauthorized external access, spoofing, or other malicious acts such as data theft or falsification while the product is connected to a network.

Enabling IPsec/Access Control allows the following tasks to be performed securely:

- Network printing
- Managing settings via a web browser

Some printers may not support secure communications using IPsec/Access Control. For information on whether your printer supports these features, see the printer manual. This document provides sample IPsec/Access Control configurations and information on setup and troubleshooting.

Overview and Sample Settings

IPsec and Access Control are configured differently and use different connection types. Review the sample settings and choose a configuration suited to your objectives.

	IPsec	Access Control
Data format	Secure (encrypted)	Not secure (unencrypted)
Supported operating systems	Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2008, Windows Server 2012	All operating systems supported by the printer
Configuration	Configure both product and client.	Configure product only.
Sample settings	Sample 1: Accept IPsec only	Sample 2: Accept print data only Sample 3: Accept specified data types only

Sample 1

The product accepts from the client only data secured using IPsec. Normal data (i.e. data not secured using IPsec) are not accepted.

Sample 2

The product accepts print data from specific clients only. Data from other clients and non-print data from the specified clients are not accepted.

Sample 3

The product accepts only specific types of data from specific clients. In this example, security levels are set separately for each client type so that the product accepts all data from administrator clients (including product management and print data) but only print data from print clients and no data at all from other clients.

Product Security Policies: An Overview

- You can create one Default Policy and Group Policy 1-10.
- If there is more than one policy, the product will check the policies in order from the top of the display (“Group Policy 1”) and initiate a network connection when it finds a matching policy.
- Because the product checks the policies in order from the top, more restrictive policies should precede the more general policies on which they are based.

Configuration Workflow

IPsec requires a client with secure access to the product and configured according to your purposes. Access Control requires that the product be configured according to your purposes.

The configuration workflow is shown below.

Note:

If your network is already secure, we recommend that you connect the product to a computer on a different network before adjusting settings. There is potential for data theft if the product is connected to a secure network when settings are adjusted. If no other network is available, refer to the “Encrypting communications”, below.

1. Connect the product and the computer that will be used to configure the product to the network.
2. Adjust the settings using EpsonNet Config with Web Browser.

See the following page information on the settings using EpsonNet Config with Web Browser.

3. Transmit the settings to the printer.*
4. Adjust client computer security settings (not required for Access Control).
5. Connect the printer to a secure network.

* **Encrypting communications:** There is potential for data theft if product settings are adjusted over a secure network. If no other network is available, follow the steps below to encrypt the data for transmission.

(1) In the product control panel, select `Common Settings > Network Menu > IPsec > On` and enter the pre-shared key.

(2) Set up IPsec on the computer that will be used to configure the product.

(3) Connect the product and the computer that will be used to configure the product to the network.



Important:

The network connection will close if `Common Settings > Network Menu > IPsec` is enabled in the product control panel and a blank key is entered for `Pre-Shared Key` (i.e. no pre-shared key is entered). Be sure to enter a key for `Pre-Shared Key` after enabling `Common Settings > Network Menu > IPsec` in the product control panel.

Product Security Policies

Start EpsonNet Config with Web Browser by typing the printer's IP address in the address bar of your browser, and adjust the **Network Administrator > Security > IPsec/Access Control** settings for security policies that match how the product will be used.

Note:

We recommend that the product be assigned a static IP address for secure access using IPsec or Access Control. Settings will be invalidated if the IP address changes.

Sample 1

Access the EpsonNet Config with Web Browser and configure **Security > IPsec/Access Control > Default Policy** settings as follows:

Option	Setting
IPsec/Access Control	Enable
Default Policy > Access Control	Use IPsec
Pre-Shared Key	Enter a key (maximum 127 alphanumeric characters)

Sample 2

Access the EpsonNet Config with Web Browser and configure **Security > IPsec/Access Control > Group Policy** settings for each client.

Refusing Access from Unauthorized Clients

Access the EpsonNet Config with Web Browser and configure **Security > IPsec/Access Control > Default Policy** settings as follows:

Option	Setting
IPsec/Access Control	Enable
Default Policy > Access Control	Access Refuse

Print Client Settings

Separate **IPsec/Access Control > Group Policy** settings must be created for each of the **Service Name > RAW (Port 9100)**, **ENPC**,¹ and **SNMP** options as shown in the example below. Group policies are applied in order from Group Policy 1.

Option	Setting		
	RAW (Port 9100)	ENPC	SNMP
Group Policy n (n = 1–10)	Enable		
Access Control	Access Permission		
Remote Address (Host) ²	Enter the print client IP address (prefix length can be used to specify range if desired). Example (IPv4): 192.168.0.0/24		
Method of Choose Port	Service Name		
Service Name	RAW (Port 9100)	ENPC	SNMP

1. An Epson protocol used by Epson printer and scanner drivers and such applications as EpsonNet Config to find the printer.
2. A static IP address is recommended. If DHCP or “obtain automatically” (IPv6) is selected, the connection may terminate when the lease or address expires.

Note:

Select **TCP** or **UDP** for **Protocol** when **Local Port** is selected for **Method of Choose Port > Port Number**.

Sample 3

Access the EpsonNet Config with Web Browser and configure **Security > IPsec/Access Control > Group Policy** settings for each client.

Refusing Access from Unauthorized Clients

Access the EpsonNet Config with Web Browser and configure **Security > IPsec/Access Control > Default Policy** settings as follows:

Option	Setting
IPsec/Access Control	Enable
Default Policy > Access Control	Access Refuse

Administrator Client Settings

Separate settings must be created for each **Group Policy** in **IPsec/Access Control**. Group policies are applied in order from Group Policy 1.

Option	Setting
Group Policy n (n = 1–10)	Enable
Access Control	Access Permission
Remote Address (Host) *	Enter the administrator client IP address

* A static IP address is recommended. If DHCP or “obtain automatically” (IPv6) is selected, the connection may terminate when the lease or address expires.

Print Client Settings

Create separate settings for each of the **Service Name > RAW (Port 9100)**, **ENPC**,¹ and **SNMP** options using **Network Administrator > Security > IPsec/Access Control > Group policy** settings that differ from those used by the administrator. Group policies are applied in order from Group Policy 1; when setting up policies for both administrators and print clients, order the list so that the group policies for administrators precede those for print clients.

Note that EpsonNet Config (Windows/Mac OS) will be unable to detect the printer if separate group policies are not created for the **Service Name > ENPC, SNMP** options.

Sample settings are shown below.

Option	Setting		
	RAW (Port 9100)	ENPC	SNMP
Group Policy n (n = 1–10)	Enable		
Access Control	Access Permission		
Remote Address (Host) ²	Enter the print client IP address (prefix length can be used to specify range if desired). Example (IPv4): 192.168.0.0/24		
Method of Choose Port	Service Name		
Service Name	RAW (Port 9100)	ENPC	SNMP

1. An Epson protocol used by Epson printer and scanner drivers and such applications as EpsonNet Config to find the printer.
2. A static IP address is recommended. If DHCP or “obtain automatically” (IPv6) is selected, the connection may terminate when the lease or address expires.

Note:

Select **TCP** or **UDP** for **Protocol** when **Local Port** is selected for **Method of Choose Port > Port Number**.

Supported Security Methods

The product supports the security methods listed below; choose one of these combinations when selecting the computer security method. In most cases computers can use default IPsec settings.

Security method	Option
Authentication algorithm	SHA-256 SHA-1 MD5
Encryption algorithm	AES-CBC 256 AES-CBC 192 AES-CBC 128 3DES DES
Key exchange algorithm	Elliptic Curve Diffie-Hellman P-384 Elliptic Curve Diffie-Hellman P-256 Diffie-Hellman Group 14 Diffie-Hellman Group 2 Diffie-Hellman Group 1

Index

- A**
- Access Control.....54, 55 , 56
- E**
- EpsonNet Config (Mac OS).....34
- EpsonNet Config (Web Browser).....36
- EpsonNet Config (Windows).....34
- EpsonNet Print.....40
- I**
- IEEE 802.1X.....54, 55
- Installation
- EpsonNet Config (Mac OS).....35
 - EpsonNet Config (Windows).....35
 - EpsonNet Print.....41
- IP address.....52
- IPsec.....54, 55 , 56
- N**
- Network status sheet.....51
- O**
- Operating environment.....8
- P**
- Protocols.....8
- R**
- RJ-45 connector.....10
- S**
- Setting the IP address.....37, 52
- SNMPv3.....55
- SSL.....54, 55
- U**
- Using the printer with
- Mac OS.....32
 - Windows 7.....20
 - Windows 8.....20
 - Windows Server 2003.....28
 - Windows Server 2008.....20
 - Windows Server 2012.....20
 - Windows Vista.....20
 - Windows XP.....24