EPSON

Administrator's Guide

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About this Manual

About this Manual

Marks and Symbols



Instructions that must be followed carefully to avoid bodily injury.



Important:

Instructions that must be observed to avoid damage to your equipment.

Note:

Instructions containing useful tips and restrictions on printer operation.

Related Information

→ Clicking this icon takes you to related information.

Descriptions Used in this Manual

	Details of screen	n shots and illus	trations may va	arv by n	nodel but	t the instruc	tions are t	he same
_	Details of server	i siiots and mus	ii aii0iis iiiay va	ary by m	mouch but	i iiic monuc	lions are t	nic samic.

- ☐ Screen shots are from Windows Server 2012 R2. Details may vary between OS versions.
- ☐ Some of the menu items in the screen shots may vary by model.

Operating System References

Windows

In this manual, terms such as "Windows 11", "Windows 10", "Windows 8.1", "Windows 8", "Windows 7", "Windows Server 2022", "Windows Server 2019", "Windows Server 2016", "Windows Server 2012 R2", "Windows Server 2012", and "Windows Server 2008 R2" refer to the following operating systems. Additionally, "Windows" is used to refer to all versions.

		Microsoft [®]	Windows®	11 (operating	syster
--	--	------------------------	----------	------	-----------	--------

- ☐ Microsoft[®] Windows[®] 10 operating system
- ☐ Microsoft[®] Windows[®] 8.1 operating system
- ☐ Microsoft® Windows® 8 operating system
- ☐ Microsoft® Windows® 7 operating system
- ☐ Microsoft® Windows Server® 2022 operating system
- ☐ Microsoft[®] Windows Server[®] 2019 operating system
- ☐ Microsoft[®] Windows Server[®] 2016 operating system

About this Manual

$Microsoft^{\circledR}$	Windows	Server®	2012	R2 operating system
$Microsoft^{\circledR}$	Windows	Server [®]	2012	operating system
$Microsoft^{\circledR}$	Windows	Server [®]	2008	R2 operating system

Mac OS

In this manual, "Mac OS" is used to refer to Mac OS X 10.9.5 or later.

Introduction

This is a common manual for the administrator to use and manage the printer.

There are unavailable functions and unshown menus because this is a common manual. Therefore, information is given near setting items or menus.

See the *User's Guide* for function usage information.

Manual Component

Printer Settings and Managing

Explains the flow from network connection, to setting each function, to managing the printer.

Connection

Explains how to connect a device to the network. Also explains the using port of the printer, DNS server, and proxy server.

Function Settings

Explains the settings to use each function of the printer.

Product Security Settings

Explains the basic security settings, such as administrator password setting.

Operation and Management Settings

Explains the operations and management after beginning use of the printer, such as checking the printer's information and the notification settings when an event is occurring.

Solving Problems

Explains settings initialization and troubleshooting of the network.

Advanced Security Settings for Enterprise

Explains the advanced security settings used on the network, such as SSL/TLS communication and IPsec / IP filtering.

Terms Used in this Guide

Terms

The following terms are used in this guide.

Administrator

The person in charge of installing and setting the device or the network at an office or organization. For small organizations, this person may be in charge of both device and network administration. For large organizations, administrators have authority over the network or devices on the group unit of a department or division, and network administrators are in charge of the communication settings for beyond the organization, such as the Internet.

Network administrator

The person in charge of controlling network communication. The person who set up the router, proxy server, DNS server and mail server to control communication through the Internet or network.

User

The person who uses devices such as printers or scanners.

Server / client connection (printer sharing using the Windows server)

The connection that indicates the printer is connected to the Windows server through the network or by USB cable, and the print queue set on the server can be shared. Communication between the printer and the computer goes through the server, and the printer is controlled on the server.

Peer to peer connection (direct printing)

The connection that indicates the printer and the computer are connected to the network through the hub or access point, and the print job can be executed directly from the computer.

Web Config(device's web page)

The web server that is built into the device. It is called Web Config. You can check and change the device's status on it using the browser.

Print queue

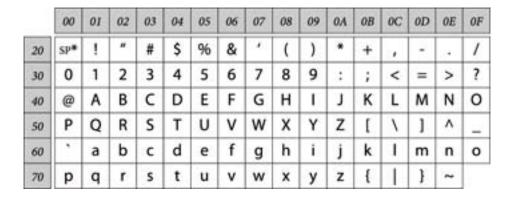
For Windows, the icon for each port displayed on **Device and Printer** such as a printer. Two or more icons are created even for a single device if the device is connected to the network by two or more ports, such as standard TCP/IP and WSD network.

Tool

A generic term for Epson software to set up or manage a device, such as Epson Device Admin, EpsonNet Config, EpsonNet SetupManager, etc.

ASCII (American Standard Code for Information Interchange)

One of the standard character codes. 128 characters are defined, including such characters as the alphabet (a-z, A-Z), Arabic numbers (0-9), symbols, blank characters, and control characters. When "ASCII" is described in this guide, it indicates the 0x20 - 0x7E (hex number) listed below, and does not involve control characters.



^{*} Space character.

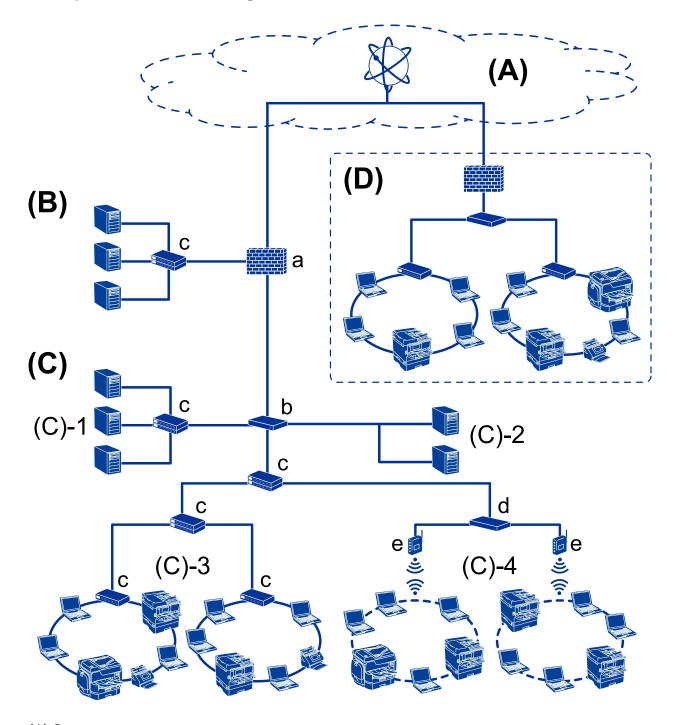
Unicode (UTF-8)

An international standard code, covering the major global languages. When "UTF-8" is described in this guide, it indicates coding characters in UTF-8 format.

Example of Network Environment

This is an example of the network environment connection products. Functions and services that are not available in your product may be included.

Example of Medium to Large Office Network Environment



(A): Internet

The following services are available if the printer is able to connect to the Internet.

- ☐ Epson Connect Email Print, Remote Print, etc.
- ☐ Cloud Services
 Google Cloud Print, Evernote etc.
- ☐ Site of Epson

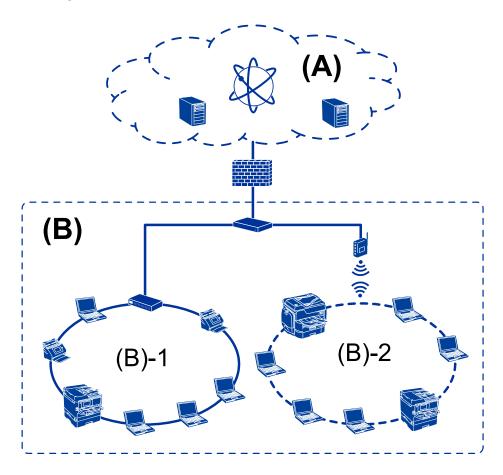
 Downloading the driver and software and updating the printer's firmware, etc.

(B): DMZ (demilitarized zone)

This zone is placed between the internal network (intranet) and the external network (internet), and both networks
are segments isolated by the firewall. It is common to put the server that is opened for the external network. It is
able to protect diffusion of an external threat to the internal network. Also, it is able to protect against
unauthorized access from the internal network to the server that is opened.
DNS server

□ DNS server
☐ Proxy server
☐ Email transfer server
☐ Web server
☐ FTP server
(C): Trust Zone (Intranet)
This is a trust network that is protected by the firewall or UTM (Unified Threat Management).
☐ (C)-1: Server inside of the intranet
This server applies each service to the organization's computers.
□ DNS server
☐ DHCP server
☐ Email server
☐ Active Directory server / LDAP server
☐ File server
☐ (C)-2: Application server
This server applies the function of the server application as follows.
☐ Epson Print Admin
☐ Document Capture Pro Server
☐ (C)-3: Wired LAN (Ethernet), (C)-4: Wireless LAN (Wi-Fi)
Connect printers, scanners, computers, etc. to the LAN by using a LAN cable or radio wave.
(D): Other branch
This is the other branch network. It is connected by the Internet, leased line, etc.
Network devices
☐ a: Firewall, UTM
□ b: Router
☐ c: LAN switch
☐ d: Wireless LAN controller
☐ e: Access point

Example of Small Office Network



(A): Internet

- ☐ Epson Connect
- ☐ Cloud services
- ☐ Email server, FTP server

(B): Trust Zone (Intranet)

- ☐ (B)-1: Wired LAN (Ethernet)
- ☐ (B)-2: Wireless LAN (Wi-Fi)

Printer Connection Types

The following two methods are available for the printer's network connection.

- ☐ Server / client connection (printer sharing using the Windows server)
- ☐ Peer to peer connection (direct printing)

Server / Client Connection Settings

This is the connection that the server computer shares with the printer. To prohibit the connection without going through the server computer, you can enhance the security.

When using USB, the printer without the network function can be also shared.

Connection method:

Connect the printer to the network via LAN switch or access point.

You can also connect the printer to the server directly by USB cable.

Printer driver:

Install the printer driver on the Windows server depending on the OS of the client computers.

By accessing the Windows server and linking the printer, the printer driver is installed on the client computer and can be used.

Features:

Manage t	the printer	and the	printer c	lriver in	batch
----------	-------------	---------	-----------	-----------	-------

- ☐ Depending on the server spec, it may take time to start the print job because all print jobs go through the print server.
- ☐ You cannot print when the Windows server is turned off.

Related Information

→ "Terms" on page 8

Peer to Peer Connection Settings

This is the connection to connect the printer on the network and the computer directly. Only a network-capable model can be connected.

Connection method:

Connect the printer to the network directly via hub or access point.

Printer driver:

Install the printer driver on each client computer.

When using EpsonNet SetupManager, you can provide the driver's package that includes the printer settings.

Features:

_ `	The print	job	starts	immedi	iately	because	the	print	job i	s sent	to	the	printer	direct	y.
-----	-----------	-----	--------	--------	--------	---------	-----	-------	-------	--------	----	-----	---------	--------	----

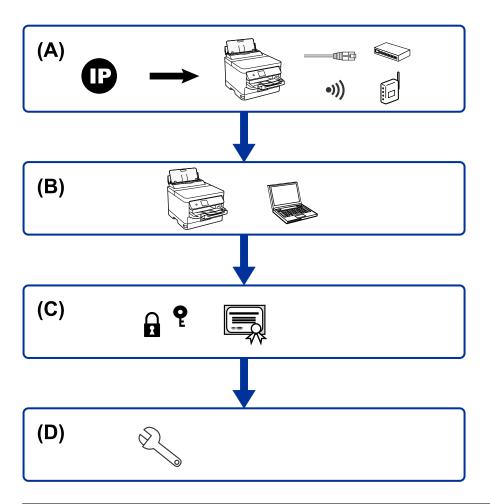
☐ You can print as long as the printer runs.

Related Information

→ "Terms" on page 8

Printer Settings and Management

Flow of the Printer Settings and Management



А	Network Connection for the Printer	В	Print function Setting
С	Security Settings	D	Operation and Management Settings

Network Connection for the Printer

Set the IP address to the printer and connect it to the network.

- ☐ IP address setting
- ☐ Connecting to the network (LAN cable connection / Wi-Fi settings)

Related Information

→ "Network Connection" on page 17

Printer Settings and Management

Print Function Setting
Make setting to enable print function.
☐ Print settings for Server / Client Connection
☐ Print settings for Peer to Peer Connection
Related Information
→ "Using the Print Functions" on page 23
Security Settings
☐ Administrator password setting
☐ Controlling using Protocols
☐ Advanced Security setting
Related Information
→ "Product Security Settings" on page 31
→ "Advanced Security Settings for Enterprise" on page 61
Operation and Management Setting
☐ Checking the device status
☐ Responding to the event occurrence
☐ Backing up the device settings
Related Information

→ "Operation and Management Settings" on page 35

Network Connection

This chapter explains the procedure to connect the printer to the network.

Before Making Network Connection

To connect to the network, check the connection method and setting information for connection in advance.

Gathering Information on the Connection Setting

Prepare the necessary setting information to connect. Check the following information in advance.

Divisions	Items	Note
Device connection method	☐ Ethernet	Decide how to connect the printer to the network.
metriod	☐ Wi-Fi	For Wired LAN, connects to the LAN switch.
		For Wi-Fi, connects to the network (SSID) of the access point.
LAN connection	☐ IP address	Decide the IP address to assign to the printer.
information	☐ Subnet mask	When you assign the IP address statically, all values are required.
	☐ Default gateway	When you assign the IP address dynamically using the DHCP function, this information is not required because it is set automatically.
Wi-Fi connection information	□ SSID □ Password	These are the SSID (network name) and the password of the access point that the printer connects to.
		If MAC address filtering has been set, register the MAC address of the printer in advance to register the printer.
		For the supported standards, see the User's Guide.
DNS server information	☐ IP address for primary DNS ☐ IP address for secondary DNS	These are required when assigning a static IP address to the printer. The secondary DNS is set when the system has a redundant configuration and there is a secondary DNS server.
		If you are in a small organization and do not set the DNS server, set the IP address of the router.
Proxy server information	□ Proxy server name	Set this when your network environment uses the proxy server to access the internet from the intranet, and you use the function that the printer directly accesses to the internet.
		The printer directly connects to the Internet for the following function.
		☐ Firmware updating
Port number information	☐ Port number to release	Check the port number used by the printer and computer, then release the port that is blocked by a firewall, if necessary.
		For the port number used by the printer, see the Appendix.

IP Address Assignment

These are the following types of IP address assignment.

Static IP address:

Assign the predetermined IP address to the printer (host) manually.

The information to connect to the network (subnet mask, default gateway, DNS server and so on) need to be set manually.

The IP address does not change even when the device is turned off, so this is useful when you want to manage devices with an environment where you cannot change the IP address or you want to manage devices using the IP address. We recommend settings to the printer, server, etc. that many computers access. Also, when using security features such as IPsec / IP filtering, assign a fixed IP address so that the IP address does not change.

Automatic assignment by using DHCP function (dynamic IP address):

Assign the IP address automatically to the printer (host) by using the DHCP function of the DHCP server or router.

The information to connect to the network (subnet mask, default gateway, DNS server and so on) is set automatically, so you can easily connect the device to the network.

If the device or the router is turned off, or depending on the DHCP server settings, IP address may change when re-connecting.

We recommend managing devices other than the IP address and communicating with protocols that can follow the IP address.

Note

When you use the IP address reservation function of the DHCP, you can assign the same IP address to the devices at any time.

DNS Server and Proxy Server

The DNS server has a host name, domain name of the email address, etc. in association with the IP address information.

Communication is impossible if the other party is described by host name, domain name, etc. when the computer or the printer performs IP communication.

Queries the DNS server for that information and gets the IP address of the other party. This process is called name resolution.

Therefore, the devices such as computers and printers can communicate using the IP address.

Name resolution is necessary for the printer to communicate using the email function or Internet connection function.

When you use those functions, make the DNS server settings.

When you assign the printer's IP address by using the DHCP function of the DHCP server or router, it is automatically set.

The proxy server is placed at the gateway between the network and the Internet, and it communicates to the computer, printer, and Internet (opposite server) on behalf of each of them. The opposite server communicates only to the proxy server. Therefore, printer information such as the IP address and port number cannot be read and increased security is expected.

When you connect to the Internet via a proxy server, configure the proxy server on the printer.

Connecting to the Network from the Control Panel

Connect the printer to the network by using the printer's control panel.

For the printer's control panel, see the *User's Guide* for more details.

Assigning the IP Address

Set up the basic items such as Host Address, Subnet Mask, Default Gateway.

This section explains the procedure for setting a static IP address.

- 1. Turn on the printer.
- 2. Select Menu on the home screen on the printer's control panel.
- 3. Select General Settings > Network Settings > Advanced.
- 4. Select TCP/IP.
- 5. Select Manual for Obtain IP Address.

When you set the IP address automatically by using the DHCP function of router, select **Auto**. In that case, the **IP Address**, **Subnet Mask**, and **Default Gateway** on step 6 to 7 are also set automatically, so go to step 8.

6. Enter the IP address.

Focus moves to the forward segment or the back segment separated by a period if you select \triangleleft and \triangleright . Confirm the value reflected on the previous screen.

7. Set up the **Subnet Mask** and **Default Gateway**.

Confirm the value reflected on the previous screen.



| Important:

If the combination of the IP Address, Subnet Mask and Default Gateway is incorrect, **Start Setup** is inactive and cannot proceed with the settings. Confirm that there is no error in the entry.

8. Enter the IP address for the primary DNS server.

Confirm the value reflected on the previous screen.

Note:

When you select **Auto** for the IP address assignment settings, you can select the DNS server settings from **Manual** or **Auto**. If you cannot obtain the DNS server address automatically, select **Manual** and enter the DNS server address. Then, enter the secondary DNS server address directly. If you select **Auto**, go to step 10.

9. Enter the IP address for the secondary DNS server.

Confirm the value reflected on the previous screen.

10. Tap Start Setup.

Setting the Proxy Server

Set up the proxy server if both of the following are true.

- ☐ The proxy server is built for Internet connection.
- You want to update the printer firmware via the Internet from the printer's control panel or Web Config.
- 1. Select Menu on the home screen.

When making settings after IP address setting, the **Advanced** screen is displayed. Go to step 3.

- 2. Select General Settings > Network Settings > Advanced.
- 3. Select **Proxy Server**.
- 4. Select **Use** for **Proxy Server Settings**.
- 5. Enter the address for the proxy server by IPv4 or FQDN format.

Confirm the value reflected on the previous screen.

- 6. Enter the port number for the proxy server.
 - Confirm the value reflected on the previous screen.
- 7. Tap Start Setup.

Connecting to LAN

Connect the printer to the network by Ethernet or Wi-Fi.

Related Information

- → "Connecting to Ethernet" on page 20
- → "Connecting to the Wireless LAN (Wi-Fi)" on page 21

Connecting to Ethernet

Connect the printer to the network by using the Ethernet cable, and check the connection.

- 1. Connect the printer and hub (LAN switch) by Ethernet cable.
- 2. Select Menu on the home screen.
- 3. Select General Settings > Network Settings.
- 4. Select Connection Check.

The connection diagnosis result is displayed. Confirm the connection is correct.

5. Tap **OK** to finish.

When you tap **Print Check Report**, you can print the diagnosis result. Follow the on-screen instructions to print it.

Related Information

→ "Changing from Ethernet Connection to Wi-Fi Connection" on page 58

Connecting to the Wireless LAN (Wi-Fi)

You can manually set up the information necessary to connect to an access point from the printer's control panel. To set up manually, you need the SSID and password for an access point.

Note:

When the access point supports WPS, you can automatically make the Wi-Fi connection settings by using the push button or PIN code, without using the SSID and password.

- 1. Tap on the home screen.
- 2. Select Router.
- 3. Tap Start Setup.

If the network connection is already set up, the connection details are displayed. Tap **Change Settings** to change the settings.

If the printer is already connected by Ethernet, the connection details are displayed. Tap **Change to Wi-Fi connection.**, and then tap **Yes** after confirming the message.

- 4. Select Wi-Fi Setup Wizard.
- 5. Select the SSID for the access point.

If the SSID you want to connect to is not displayed on the printer's control panel, tap **Search Again** to update the list. If it is still not displayed, tap **Enter Manually**, and then enter the SSID directly.

6. Tap **Enter Password**, and then enter the password.

Note:

- ☐ *The password is case-sensitive.*
- $oxedsymbol{\square}$ If you enter the SSID directly, select **Available** for **Password**, and then enter the password.
- 7. When you have finished, tap **OK**.
- 8. Check the settings, and then tap **Start Setup**.
- 9. Tap **OK** to finish.

If you fail to connect, select **Print Check Report** to print a network connection report, and then check the printed solutions.

10. Close the network connection settings screen.

Related Information

- → "Messages and Solutions on the Network Connection Report" on page 42
- → "Making Wi-Fi Settings from the Control Panel (WPS)" on page 55
- → "Changing from Wi-Fi Connection to Ethernet Connection" on page 59

Function Settings

This chapter explains the first settings to make in order to use each function of the device.

Software for Setting

In this topic, the procedure for making settings from the administrator's computer using Web Config is explained.

Web Config (Web Page for Device)

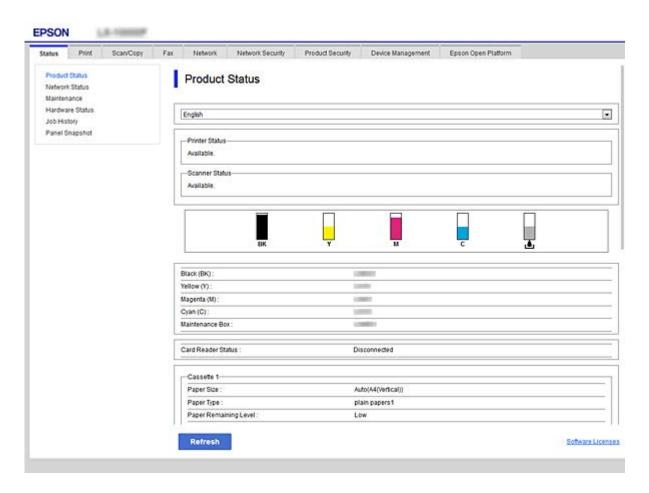
About Web Config

Web Config is a built-in web page of the printer for configuring the printer's settings. You can operate the printer connected to the network from the computer.

To access Web Config, you need to have first assigned an IP address to the printer.

Note

You can lock the settings by configuring the administrator password to the printer.



Accessing Web Config

Enter the printer's IP address into a web browser. JavaScript must be enabled. When accessing Web Config via HTTPS, a warning message will appear in the browser since a self-signed certificate, stored in the printer, is used but there is no problem.

☐ Accessing via HTTPS IPv4: https://<printer IP address> (without the < >) IPv6: https://[printer IP address]/ (with the []) ☐ Accessing via HTTP IPv4: http://<printer IP address> (without the < >) IPv6: http://[printer IP address]/ (with the [])

Examples

☐ IPv4:

https://192.0.2.111/ http://192.0.2.111/

☐ IPv6:

https://[2001:db8::1000:1]/ http://[2001:db8::1000:1]/

If the printer name is registered with the DNS server, you can use the printer name instead of the printer's IP address.

| Important:

This printer allows you to restrict access for users other than the administrator.

You need to log in with an administrator password to use all the functions. The administrator password has already been configured.

We recommend changing the administrator password to your own password instead of continuing to use the initial password after you start using the printer.

Changing the password

"Changing the Administrator Password" on page 31

The initial value of administrator user name is blank (nothing is entered).

Related Information

- → "SSL/TLS Communication with the Printer" on page 63
- → "About Digital Certification" on page 64

Using the Print Functions

Enable to use the print function through the network.

To use the printer on the network, you need to set the port for network connection on the computer as well as the printer's network connection.

- ☐ Server / client connection : Set the port on the server computer

 For the server / client connection, explain how to set the port manually.
- ☐ Peer to peer connection: Set the port on each computer

 For peer to peer connection, explain how to set the port automatically using the installer available from the software disc or Epson's website.

Print Settings for Server / Client Connection

Enable to print from the printer that is connected as the server / client connection.

For the server / client connection, set up the print server first, and then share the printer on the network.

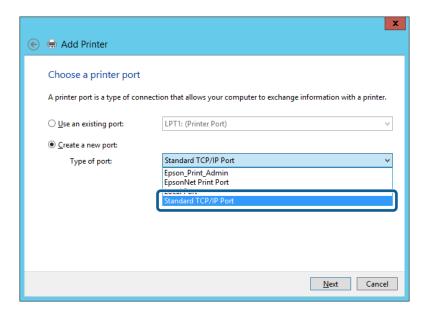
When using the USB cable to connect to the server, also set the print server first, and then share the printer on the network.

Setting Up the Network Ports

Create the print queue for network printing on the print server by using standard TCP/IP, and then set the network port.

This example is when using Windows 2012 R2.

- 1. Open the devices and printers screen.
 - Desktop > Settings > Control Panel > Hardware and Sound or Hardware > Devices and Printers.
- 2. Add a printer.
 - Click **Add printer**, and then select **The printer that I want isn't listed**.
- 3. Add a local printer.
 - Select Add a local printer or network printer with manual settings, and then click Next.
- 4. Select Create a new port, select Standard TCP/IP Port as the Port Type, and then click Next.



5. Enter the printer's IP address or printer name in **Host Name or IP Address** or **Printer Name or IP Address**, and then click **Next**.

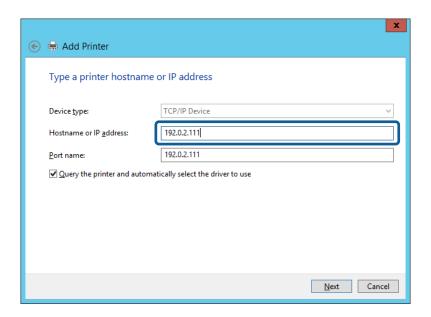
Example:

☐ Printer name : EPSONA1A2B3C

☐ IP address: 192.0.2.111

Do not change Port name.

Click Continue when the User Account Control screen is displayed.



Note:

If you specify the printer name on the network where the name resolution is available, the IP address is tracked even if printer's IP address has been changed by DHCP. You can confirm the printer name from the network status screen on the printer's control panel or network status sheet.

- 6. Set the printer driver.
 - ☐ If the printer driver is already installed:

Select Manufacturer and Printers. Click Next.

☐ If the printer driver is not installed:

Click **Have Disc** and then insert the software disc supplied with the printer. Click **Browse**, and then select the folder on the disc containing the printer driver. Make sure you select the correct folder. The location of the folder may change depending on your operating system.

32 bit version of Windows: WINX86 64 bit version of Windows: WINX64

7. Follow the on-screen instructions.

When using the printer under the server / client connection (printer sharing using the Windows server), make the sharing settings hereafter.

Related Information

→ "Sharing the Printer (Windows only)" on page 26

Checking the Port Configuration - Windows

Check if the correct port is set for the print queue.

1. Open the devices and printers screen.

Desktop > Settings > Control Panel > Hardware and Sound or Hardware > Devices and Printers.

2. Open the printer properties screen.

Right-click the printer icon, and then click **Printer properties**.

- 3. Click the **Ports** tab, select **Standard TCP/IP Port**, and then click **Configure Port**.
- 4. Check the port configuration.

☐ For RAW

Check that **Raw** is selected in **Protocol**, and then click **OK**.

☐ For LPR

Check that **LPR** is selected in **Protocol**. Enter "PASSTHRU" in **Queue name** from **LPR Settings**. Select **LPR Byte Counting Enabled**, and then click **OK**.

Sharing the Printer (Windows only)

When using the printer under the server / client connection (printer sharing using the Windows server), set up the printer sharing from the print server.

- 1. Select **Control Panel** > **View devices and printers** on the print server.
- 2. Right-click the printer icon (print queue) that you want to share with, and then select **Printer Properties** > **Sharing** tab.
- 3. Select **Share this printer** and then enter to **Share name**.

For Windows Server 2012, click **Change Sharing Options** and then configure the settings.

Note

Issues when Sharing Printers

- ☐ "The Shared Server is Slow" on page 51
- ☐ "Printer Settings on the Print Server are not Reflected on the Client Computer" on page 52

Installing Additional Drivers (Windows only)

If the Windows versions for a server and clients are different, it is recommended to install additional drivers to the print server.

- 1. Select **Control Panel** > **View devices and printers** on the print server.
- 2. Right-click the printer icon that you want to share with the clients, and then click **Printer Properties** > **Sharing** tab.
- 3. Click Additional Drivers.

For Windows Server 2012, click Change Sharing Options and then configure the settings.

- 4. Select versions of Windows for clients, and then click OK.
- 5. Select the information file for the printer driver (*.inf) and then install the driver.

Related Information

→ "Using the Shared Printer – Windows" on page 27

Using the Shared Printer - Windows

The administrator needs to inform the clients of the computer name assigned to the print server and how to add it to their computers. If the additional driver(s) have not been configured yet, inform the clients how to use **Devices** and **Printers** to add the shared printer.

If additional driver(s) have already been configured on the print server, follow these steps:

- 1. Select the name assigned to the print server in Windows Explorer.
- 2. Double-click the printer that you want to use.

Related Information

- → "Sharing the Printer (Windows only)" on page 26
- → "Installing Additional Drivers (Windows only)" on page 26

Print Settings for Peer to Peer Connection

For peer to peer connection (direct printing), a printer and a client computer have a one-to-one relationship. The printer driver must be installed on each client computer.

Related Information

→ "Setting the Printer Driver" on page 27

Setting the Printer Driver

For small organizations, we recommend installing the printer driver on each client computer. Use the installer on Epson website or on the software disc.

Note:

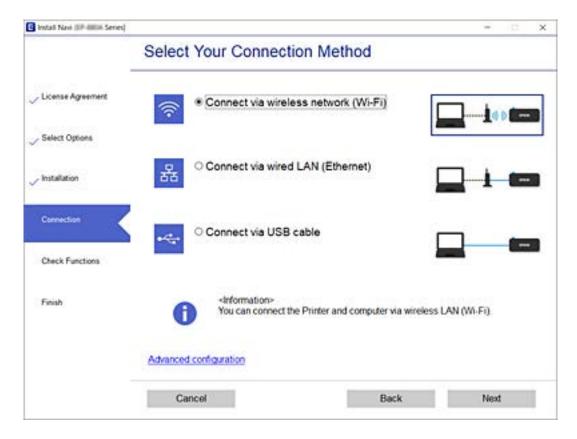
When the printer is used from many client computers, by using EpsonNet SetupManager and delivering the driver as a package, install operation time can be reduced dramatically.

- 1. Run the installer.
 - ☐ Running from the website

Access the following website, and then enter the product name. Go to **Setup**, download the software, and then run it.

http://epson.sn

- ☐ Running from the software disc (only for the models that come with a software disc and users with computers with disc drives.)
 - Insert the software disc into the computer.
- 2. Select the connection method for the printer, and then click **Next**.



Note:

If Install Software is displayed, select Set up Printer connection again (for new network router or changing USB to network, etc.) and then click Next.

3. Follow the on-screen instructions.

Related Information

→ "EpsonNet SetupManager" on page 54

Making System Settings

Setting the Control Panel

Setup for the printer's control panel. You can set up as follows.

1. Access Web Config and select the **Device Management** tab > **Control Panel**.

2.

Function Settings

2.	Set up the following items as necessary.
	☐ Language
	Select the displayed language on the control panel.
	☐ Panel Lock
	If you select ON , the administrator password is required when you perform an operation that requires the administrator's authority. If the administrator password is not set, the panel lock is disabled.
	☐ Operation Timeout
	If you select ON , when you log in as the administrator, you are automatically logged out and go to the initial screen if there is no activity for a certain period of time.
	You can set between 10 seconds and 240 minutes by the second.
	Note:
	You can also set up from the printer's control panel.
	☐ Language : Menu > General Settings > Basic Settings > Language
	☐ Panel Lock : Menu > General Settings > System Administration > Security Settings > Admin Settings > Lock Setting
	• Operation Time Out: Menu > General Settings > Basic Settings > Operation Time Out (You can specify On or Off.)
3.	Click OK .

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Power Saving Settings During Inactivity

You can set up the time to shift to the power saving mode or to turn the power off when the printer's control panel is not operated for a certain period of time. Set the time depending on your usage environment.

- Access Web Config and select the **Device Management** tab > **Power Saving**.
- 2. Enter the time for the **Sleep Timer** to switch to power saving mode when inactivity occurs.

Note:

You can also set up from the printer's control panel.

Menu > General Settings > Basic Settings > Sleep Timer

3. Select the turning off time for the **Power Off Timer**.

You can also set up from the printer's control panel.

Menu > General Settings > Basic Settings > Power Off Timer

4. Click OK.

Related Information

→ "Accessing Web Config" on page 23

→ "Logging on to the Printer Using Web Config" on page 35

Synchronizing the Date and Time with Time Server

When synchronizing with the time server (NTP server), you can synchronize the time of the printer and the computer on the network. The time server may be operated within the organization or published on the Internet.

When using the CA certificate, time-related trouble can be prevented by synchronizing with the time server.

- 1. Access Web Config and select the **Device Management** tab > **Date and Time** > **Time Server**.
- 2. Select **Use** for **Use Time Server**.
- 3. Enter the time server address for **Time Server Address**.

You can use IPv4, IPv6 or FQDN format. Enter 252 characters or less. If you do not specify this, leave it blank.

4. Enter **Update Interval (min)**.

You can set up to 10,080 minutes by the minute.

5. Click **OK**.

Note:

You can confirm the connection status with the time server on Time Server Status.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Product Security Settings

This chapter explains the security settings of the device.

Introduction of Product Security Features

This printer allows you to restrict access for users other than the administrator.

You need to log in with an administrator password to use all the functions. The administrator password has already been configured.



Important:

We recommend changing the administrator password to your own password instead of continuing to use the initial password after you start using the printer.

Changing the password

"Changing the Administrator Password" on page 31

You can use all the Web Config functions by logging in with an administrator password.

Immediately after purchase, you can use all functions without any restrictions from the printer's control panel menus. To enable function restrictions, set Lock Setting to On from the menu.

"Enabling the Lock Setting" on page 33

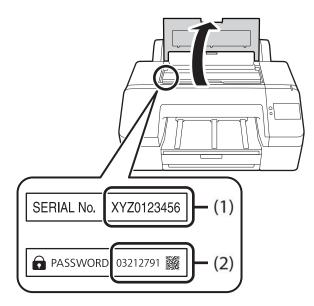
When Lock Setting is set to On, you need to log in with the administrator password to use the restricted functions on the printer. See the following for instructions on logging in.

"Logging on to the Printer as an Administrator" on page 35

Changing the Administrator Password

The initial administrator password for this printer has already been configured. You can find the initial password on the label stuck to the location shown in the figure.

Product Security Settings



- ☐ When there is only one label: Use the value of the SERIAL No. shown in (1). In the example shown, this is "XYZ0123456".
- ☐ When there are two labels: Use the value of the PASSWORD shown in (2). In the example shown, this is "03212791".

We recommend changing the initial password after you start using the printer.

You can change the password through Web Config, on the control panel, or by using your software (Epson Device Admin). When using Epson Device Admin, see the documentation supplied with Epson Device Admin.

Starting Epson Device Admin

"Epson Device Admin" on page 53

Changing the Administrator Password from the Control Panel

You can change the administrator password from the printer's control panel.

- 1. Select Menu on the printer's control panel.
- 2. Select General Settings > System Administration > Security Settings.
- 3. Select Admin Settings.
- 4. Select **Admin Password** > **Change**.
- 5. Enter the current password.
- 6. Enter the new password.
- 7. Enter the password again.

Note:

You can restore the administrator password to the initial password by selecting **Restore Default Settings** on the **Admin Password** screen and entering the administrator password.

Product Security Settings

Changing the Administrator Password Using Web Config

You can change the administrator password using Web Config.

- 1. Access Web Config and select the **Product Security** tab > **Change Administrator Password**.
- 2. Enter the current password in **Current password**.
- 3. Enter the new password in **New Password** and in **Confirm New Password**. Enter the user name, if necessary.
- 4. Select OK.

Note:

- ☐ To set or change the locked menu items, click **Log in**, and then enter the administrator password.
- ☐ To restore the administrator password to the initial password, click **Restore Default Settings** on the **Change**Administrator Password screen.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Enabling the Lock Setting

If you set the administrator password and enable the Lock Setting, you can lock the items related to the printer's system settings so that users cannot change them.

Enabling the Lock Setting from the Control Panel

- 1. Select Menu on the printer's control panel.
- 2. Select General Settings > System Administration > Security Settings.
- 3. Select Admin Settings.
- 4. Select **On** on **Lock Setting**.
- 5. Select **Yes** on the confirmation screen.

Check that sis displayed on the home screen.

Enabling the Lock Setting from Web Config

- 1. Access Web Config and click the **Log in**.
- 2. Enter the user name and password, and then click **OK**.
- 3. Select the **Device Management** tab > **Control Panel**.

4. On the **Panel Lock**, select **ON**.

Product Security Settings

5.	Click OK .
6.	Check that is displayed on the home screen on the printer's control panel.
Lc	ock Setting Items
Wł	nen Lock Setting is set to On from the control panel menu, usage of the following items is restricted.
	Menu > General Settings > Basic Settings
1	☐ Sleep Timer
I	☐ Power Off Timer
I	☐ Date/Time Settings
I	☐ Language ^{*1}
1	☐ Operation Time Out
	Menu > General Settings > Network Settings*2
	Menu > General Settings > System Administration
	Menu > Maintenance > Power Cleaning
	If you do not change General Settings > System Administration > Security Settings > Restrictions > Access Language to Off , you can change the Language setting even if Lock Setting is set to On.
*2:	
	You can view the following functions for Network Settings from Menu > Printer Status/Print > Network even when administrator lock is enabled.
I	☐ Wired LAN/Wi-Fi Status
I	☐ Wi-Fi Direct Status
1	☐ Print Status Sheet
	You can perform Network Settings > Connection Check from the home screen > Description > When you cannot connect to the network , even when administrator lock is enabled.

Operation and Management Settings

Operation and Management Settings

This chapter explains the items related to the daily operations and management of the device.

Logging on to the Printer as an Administrator

You must be logged in to the printer as an administrator to use functions that are locked in Web Config or on the printer's control panel.

Logging on the Printer Using the Control Panel

- 1. Tap 2 2.
- 2. Tap Administrator.
- 3. Enter the administrator password, and then tap **OK**.
 - 8 is displayed when being authenticated, then you can operate the locked menu items.



Note:

When you select **On** for Menu > **General Settings** > **Basic Settings** > **Operation Time Out**, you log off automatically after a specific length of time if there is no activity on the control panel.

Logging on to the Printer Using Web Config

When you log in to Web Config as an administrator, you can operate items that are set in the Lock Setting.

- 1. Enter the printer's IP address into a browser to run Web Config.
- 2. Click Log in.
- 3. Enter the user name and administrator password in User Name and Current password.
- 4. Click OK.

The locked items and **Log out** are displayed when being authenticated.

Click **Log out** to log off.

Note:

When you select **ON** for the **Device Management** tab > **Control Panel** > **Operation Timeout**, you log off automatically after a specific length of time if there is no activity on the control panel.

Related Information

→ "Accessing Web Config" on page 23

Confirm Information of the Printer

Checking the Information from the Control Panel

Yo	ou can check and print the following information from the control panel.
	Supply
	Menu > Supply Status
	You can check the information for the ink and maintenance box.
	Status sheet for the product
	Menu > Printer Status/Print > Print Status Sheet
	You can print a status sheet, such as printer information and consumables information.
	Network information
	Menu > General Settings > Network Settings > Network Status
	Menu > Printer Status/Print > Network
	You can check network-related information, such as the network connection status, and print the network status sheet.
	Network connection report
	Menu > General Settings > Network Settings > Connection Check
	Home > Description > When you cannot connect to the network
	You can diagnose the network connection status of the printer and print the report.
	Network connection status
	Home > Router > Router
	You can check the connection status for Wired / Wireless LAN.
C	hecking the Information from Web Config
Yo	ou can check the following information of the operating printer from Status by using Web Config.
	Product Status
	Check the status, product number, MAC address, etc.
	Network Status
	Check the information of the network connection status, IP address, DNS server, etc.
	Hardware Status
	Check the status of each function of the printer.

Updating Firmware

When new firmware is available, updating the firmware of the printer improves the function or resolves the problem.

Operation and Management Settings

Updating the Printer's Firmware using the Control Panel

If the printer can be connected to the Internet, you can update the printer's firmware using the control panel. You can also set the printer to regularly check for firmware updates and notify you if any are available.

- 1. Select Menu on the home screen.
- 2. Select General Settings > System Administration > Firmware Update > Update.

Note

Select **Notification** > **On** to set the printer to regularly check for available firmware updates.

3. Select Start Checking.

The printer starts searching for available updates.

4. If a message is displayed on the LCD screen informing you that a firmware update is available, follow the onscreen instructions to start the update.



Important:

- \Box Do not turn off or unplug the printer until the update is complete; otherwise, the printer may malfunction.
- ☐ If the firmware update is not completed or is unsuccessful, the printer does not start up normally and "Recovery Mode" is displayed on the LCD screen the next time the printer is turned on. In this situation, you need to update the firmware again using a computer. Connect the printer to the computer with a USB cable. While "Recovery Mode" is displayed on the printer, you cannot update the firmware over a network connection. On the computer, access your local Epson website, and then download the latest printer firmware. See the instructions on the website for the next steps.

Updating Firmware Using Web Config

When the printer can connect to the Internet, you can update the firmware from Web Config.

- 1. Access Web Config and select the **Device Management** tab > **Firmware Update**.
- 2. Click Start.

The firmware confirmation starts, and the firmware information is displayed if the updated firmware exists.

3. Click **Start**, and follow the on-screen instructions.

Note:

You can also update the firmware using Epson Device Admin. You can visually confirm the firmware information on the device list. It is useful when you want to update multiple devices' firmware. See the Epson Device Admin guide or help for more details.

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "Epson Device Admin" on page 53

Operation and Management Settings

Updating Firmware without Connecting to the Internet

You can download the device's firmware from Epson website on the computer, and then connect the device and the computer by USB cable to update the firmware. If you cannot update over the network, try this method.

- 1. Access Epson website and download the firmware.
- 2. Connect the computer that contains the downloaded firmware to the printer by USB cable.
- Double-click the downloaded .exe file.
 Epson Firmware Updater starts.
- 4. Follow the on-screen instructions.

Backing Up the Settings

You can export the setting value set from Web Config to the file. You can use it for backing up the setting values, replacing the printer, etc.

The exported file cannot be edited because it is exported as a binary file.

Export the settings

Export the setting for the printer.

- 1. Access Web Config, and then select the **Device Management** tab > **Export and Import Setting Value** > **Export**.
- 2. Select the settings that you want to export.
 - Select the settings you want to export. If you select the parent category, subcategories are also selected. However, subcategories that cause errors by duplicating within the same network (such as IP addresses and so on) cannot be selected.
- 3. Enter a password to encrypt the exported file.
 - You need the password to import the file. Leave this blank if you do not want to encrypt the file.
- 4. Click Export.



Important:

If you want to export the printer's network settings such as the device name and IPv6 address, select **Enable to select the individual settings of device** and select more items. Only use the selected values for the replacement printer.

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Operation and Management Settings

Import the settings

Import the exported Web Config file to the printer.



Important:

When importing values that include individual information such as a printer name or IP address, make sure the same IP address does not exist on the same network. If the IP address overlaps, the printer does not reflect the value.

- 1. Access Web Config, and then select the **Device Management** tab > **Export and Import Setting Value** > Import.
- 2. Select the exported file, and then enter the encrypted password.
- Click Next.
- Select the settings that you want to import, and then click Next.
- Click OK. 5.

The settings are applied to the printer.

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Solving Problems

Hints to Solving Problems

Checking the error message When an issue has occurred, first check whether there are any messages on the printer's control panel or driver
screen.
Network connection report
Diagnose the network and the printer status, and then print the result.
You can find the diagnosed error from the printer side.
Checking the communication status
Check the communication status of server computer or client computer by using the command such as ping and ipconfig.
Connection test
Check the connection from the client computer to the server to check the communication status.
Initializing the settings
If the settings and communication status show no problem, the problems may be solved by disabling or initializing the network settings of the printer, and then setting up again.

Checking the Status of the Printer

To identify the cause of trouble, check the status of the printer and network.

Checking the Error Message

Checking Messages on the LCD Screen

If an error message is displayed on the LCD screen, follow the on-screen instructions or the solutions below to solve the problem.

Error Messages	Causes and Solutions
Printer error. Turn the power off and on again. If the problem persists, contact Epson Support.	☐ Causes: There is a foreign substance inside the printer or a printer error occurred.
	□ Solutions:
	Remove any paper or protective material in the printer. If the error message is still displayed, contact Epson support.

Error Messages	Causes and Solutions
The combination of the IP address and the subnet mask is invalid. See your documentation for more details.	☐ Causes: The combination of the IP address you set is invalid. ☐ Solutions: Enter the correct IP address or default gateway.
Recovery Mode	☐ Causes: Failed to update firmware and cannot return to the normal mode. ☐ Solutions:
	The printer has started in recovery mode because the firmware update failed. Follow the steps below to try to update the firmware again.
	Connect the computer and the printer with a USB cable. (During recovery mode, you cannot update the firmware over a network connection.)
	2. Visit your local Epson website for further instructions.

Printing a Network Connection Report

You can print a network connection report to check the status between the printer and the wireless router.

- 1. Load papers.
- 2. Select Menu on the home screen.
- 3. Select General Settings > Network Settings > Connection Check.

The connection check starts.

- 4. Select Print Check Report.
- 5. Print the network connection report.

If an error has occurred, check the network connection report, and then follow the printed solutions.

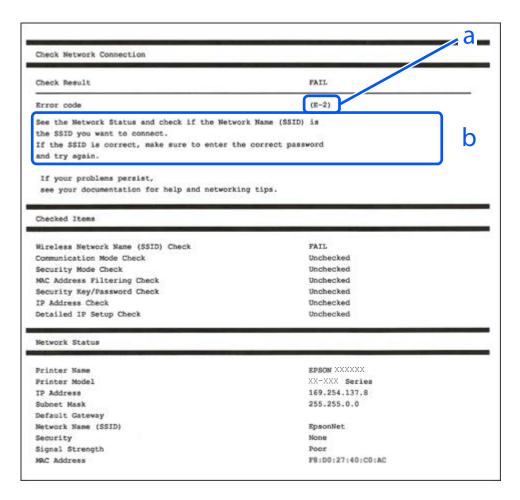
6. Close the screen.

Related Information

→ "Messages and Solutions on the Network Connection Report" on page 42

Messages and Solutions on the Network Connection Report

Check the messages and error codes on the network connection report, and then follow the solutions.



- a. Error code
- b. Messages on the Network Environment

E-1

Solutions:

- ☐ Make sure the Ethernet cable is securely connected to your printer and to your hub or other network device.
- ☐ Make sure your hub or other network device is turned on.
- ☐ If you want to connect the printer by Wi-Fi, make Wi-Fi settings for the printer again because it is disabled.

E-2, E-3, E-7

Solutions:

- ☐ Make sure your wireless router is turned on.
- ☐ Confirm that your computer or device is connected correctly to the wireless router.

	Turn off the wireless router. Wait for about 10 seconds, and then turn it on.		
	Place the printer closer to your wireless router and remove any obstacles between them.		
	If you have entered the SSID manually, check if it is correct. Check the SSID from the Network Status part on the network connection report.		
	If an wireless router has multiple SSIDs, select the SSID that is displayed. When the SSID is using a non-compliant frequency, the printer does not display them.		
	If you are using push button setup to establish a network connection, make sure your wireless router supports WPS. You cannot use push button setup if your wireless router does not support WPS.		
	Makes sure your SSID uses only ASCII characters (alphanumeric characters and symbols). The printer cannot display an SSID that contains non-ASCII characters.		
	Makes sure you know your SSID and password before connecting to the wireless router. If you are using a wireless router with its default settings, the SSID and password are located on a label on the wireless router. If you do not know your SSID and password, contact the person who set up the wireless router, or see the documentation provided with the wireless router.		
	If you are connecting to an SSID generated from a tethering smart device, check for the SSID and password in the documentation provided with the smart device.		
	If your Wi-Fi connection suddenly disconnects, check for the conditions below. If any of these conditions are applicable, reset your network settings by downloading and running the software from the following website.		
	https://epson.sn > Setup		
	☐ Another smart device was added to the network using push button setup.		
	☐ The Wi-Fi network was set up using any method other than push button setup.		
E	-5		
Sc	olutions:		
	ake sure the wireless router's security type is set to one of the following. If it is not, change the security type on e wireless router, and then reset the printer's network settings.		
	WEP-64 bit (40 bit)		
	WEP-128 bit (104 bit)		
	WPA PSK (TKIP/AES)*		
	WPA2 PSK (TKIP/AES)*		
	WPA (TKIP/AES)		
	WPA2 (TKIP/AES)		
	WPA3-SAE (AES)		
	WPA2/WPA3-Enterprise		

WPA PSK is also known as WPA Personal. WPA2 PSK is also known as WPA2 Personal.

E-6

Solutions:
☐ Check if MAC address filtering is disabled. If it is enabled, register the printer's MAC address so that it is not filtered. See the documentation provided with the wireless router for details. You can check the printer's MAC address from the Network Status part on the network connection report.
☐ If your wireless router is using shared authentication with WEP security, make sure the authentication key and index are correct.
☐ If the number of connectable devices on the wireless router is less than the number of network devices that you want to connect, make settings on the wireless router to increase the number of connectable devices. See the documentation provided with the wireless router to make settings.
E-8
Solutions:
☐ Enable DHCP on the wireless router if the printer's Obtain IP Address setting is set to Auto.
☐ If the printer's Obtain IP Address setting is set to Manual, the IP address you manually set is invalid due to out of range (for example: 0.0.0.0). Set a valid IP address from the printer's control panel.
E-9
Solutions:
Check the following.
☐ Devices are turned on.
☐ You can access the Internet and other computers or network devices on the same network from the devices you want to connect to the printer.
If still does not connect your printer and network devices after confirming the above, turn off the wireless router. Wait for about 10 seconds, and then turn it on. Then reset your network settings by downloading and running the installer from the following website.
https://epson.sn > Setup
E-10
Solutions:
Check the following.
☐ Other devices on the network are turned on.
☐ Network addresses (IP address, subnet mask, and default gateway) are correct if you have set the printer's Obtain IP Address to Manual.

Reset the network address if they are incorrect. You can check the IP address, subnet mask, and default gateway from the **Network Status** part on the network connection report.

If DHCP is enabled, change the printer's Obtain IP Address setting to Auto. If you want to set the IP address manually, check the printer's IP address from the **Network Status** part on the network connection report, and then select Manual on the network settings screen. Set the subnet mask to [255.255.255.0].

If still does not connect your printer and network devices, turn off the wireless router. Wait for about 10 seconds, and then turn it on.

E-11

Solutions:
Check the following.
☐ The default gateway address is correct if you set the printer's TCP/IP Setup setting to Manual.
☐ The device that is set as the default gateway is turned on.
Set the correct default gateway address. You can check the default gateway address from the Network Status part on the network connection report.
E-12
Solutions:
Check the following.
☐ Other devices on the network are turned on.
☐ The network addresses (IP address, subnet mask, and default gateway) are correct if you are entering them manually.
☐ The network addresses for other devices (subnet mask and default gateway) are the same.
☐ The IP address does not conflict with other devices.
If still does not connect your printer and network devices after confirming the above, try the following.
\Box Turn off the wireless router. Wait for about 10 seconds, and then turn it on.
☐ Make network settings again using the installer. You can run it from the following website. https://epson.sn > Setup
☐ You can register several passwords on a wireless router that uses WEP security type. If several passwords are registered, check if the first registered password is set on the printer.
E-13
Solutions:
Check the following.
☐ Network devices such as a wireless router, hub, and router are turned on.
☐ The TCP/IP Setup for network devices has not been set up manually. (If the printer's TCP/IP Setup is set automatically while the TCP/IP Setup for other network devices is performed manually, the printer's network may differ from the network for other devices.)

45

If it still does not work after checking the above, try the following.

Ч	Turn off the wireless router. Wait for about 10 seconds, and then turn it on.
	Make network settings on the computer that is on the same network as the printer using the installer. You can run it from the following website.
	https://epson.sn > Setup
	You can register several passwords on a wireless router that uses the WEP security type. If several passwords are registered, check if the first registered password is set on the printer.

Message on the Network Environment

Message	Solution	
The Wi-Fi environment needs to be improved. Turn the wireless router off and then turn it on. If the connection does not improve, see the documentation for the wireless router.	After moving the printer closer to the wireless router and removing any obstacles between them, turn off the wireless router. Wait for about 10 seconds, and then turn it on. If it still does not connect, see the documentation supplied with the wireless router.	
*No more devices can be connected. Disconnect one of the connected devices if you want to add another one.	Computer and smart devices that can be connected simultaneously are connected in full in the Wi-Fi Direct (Simple AP) connection. To add anothe computer or smart device, disconnect one of the connected devices or connect it to the other network first.	
	You can confirm the number of wireless devices which can be connected simultaneously and the number of connected devices by checking the network status sheet or the printer's control panel.	
The same SSID as Wi-Fi Direct exists in the environment. Change the Wi-Fi Direct SSID if you cannot connect a smart device to the printer.	On the printer's control panel, go to Wi-Fi Direct Setup screen and select the menu to change the setting. You can change the network name following after DIRECT-XX Enter within 22 characters.	

Checking the Communication Status

Check whether the communication between the printer and the computer is correct, and lead to solve the problems.

Checking Log for Server and Network Device

In case of trouble with network connection, it may be possible to identify the cause by checking the status using the network log of system equipment logs and commands, such as routers.

Printing a Network Status Sheet

You can check the detailed network information by printing it.

- 1. Load papers.
- 2. Select Menu on the home screen.
- 3. Select General Settings > Network Settings > Network Status.

- 4. Select Print Status Sheet.
- 5. Check the message, and then print the network status sheet.
- 6. Close the screen.

The screen automatically closes after a specific length of time.

Checking the Network of the Computer - Windows

By using the command prompt, check the connection status of the computer and the connection path to the printer. This will lead you to solve the problems.

☐ ipconfig command

Display the connection status of the network interface that is currently used by the computer.

By comparing the setting information with actual communication, you can check whether the connection is correct. In case there are multiple DHCP servers on the same network, you can find out the actual address assigned to the computer, the referred DNS server, etc.

- ☐ Format : ipconfig /all
- ☐ Examples:

```
_ 0
                                                Administrator: Command Prompt
c:∖>ipconfig /all
Windows IP Configuration
                                                               WIN2012R2
             adapter Ethernet:
             ction-specific DNS Suffix
iption
cal Address
Enabled
onfiguration Enabled
local IPv6 Address
                                                              Gigabit Network Connection
                                                                    0::38fh:7546:18a8:d20ex14(Preferred)
.168.111.10(Preferred)
.255.255.
.168.111.1
             00-61-90-91-20-49-2F-45-00-1D-73-6A-44-08
192-168.111.2
Enabled
         Servers . . . .
BIOS over Topip.
 unnel adapter isatap.<00000000-ABCD-EFGH-HIJK-LMNOPQRSTUVW>:
     Media State
Connection-specific DNS Suffix
Description
Physical Address
DHCP Enabled
Autoconfiguration Enabled
                                                           : Media disconnected
                                                             Microsoft ISATAP Adapter
00-00-00-00-00-00-00-E0
No
Yes
```

pathping command

You can confirm the list of routers passing through the destination host and the routing of communication.

☐ Format : pathping xxx.xxx.xxx

☐ Examples: pathping 192.0.2.222

```
C:\>pathping 192.168.111.20

Tracing route to EPSONAB12AB [192.168.111.20]

over a maximum of 30 hops:
0 WINZ012R2.pubs.net [192.168.111.20]

Computing statistics for 25 seconds...
Bounce to Here This Node/Link
Hop RTT Lost/Sent = Pct Lost/Sent = Pct Address
WINZ012R2.pubs.net [192.168.111.10]

1 38ms 0/ 100 = 0x 0/ 100 = 0x EPSONAB12AB [192.168.111.20]

Trace complete.
c:\>_____
```

Performing the Connection Test

From the printer or the computer connected to the same segment as the printer, check whether the connection with the server and folder is correct. This will lead you to solve the problems.

DNS Server

Check the DNS server that is referred by the computer. Confirm the status of the network adapter of the computer on the same network segment as the printer, and confirm whether it is the same as the DNS setting of the printer.

You can check the DNS setting of the computer as follows.

- ☐ Windows : Control Panel > Network and Internet > Network and Sharing Center > Change adapter settings When there are multiple network interfaces, you can check by entering "ipconfig/all" on the command prompt.
- ☐ Mac OS: System Preference > Network > Advanced... > DNS

Initializing the Network Settings

Disabling Wi-Fi from Web Config

Disable Wi-Fi from Web Config. If you disable Wi-Fi while some devices are connected by Wi-Fi, they are disconnected.

- Access Web Config and select the Network tab > Wi-Fi, and then select Disable Wi-Fi.
- 2. Check the message, and then select **OK**.

Disconnecting Wi-Fi Direct (Simple AP) from Web Config

Disconnect Wi-Fi Direct (simple AP) from Web Config.

- 1. Access Web Config and select the **Network** tab > **Wi-Fi Direct**.
- 2. Select **Disable** for **Wi-Fi Direct**.
- 3. Click Next
- 4. Check the message, and then select **OK**.

Disabling Wi-Fi from the Control Panel

When Wi-Fi is disabled, the Wi-Fi connection is disconnected.

- 1. Tap on the home screen.
- Select Router.

The network status is displayed.

- 3. Tap Change Settings.
- 4. Select Others > Disable Wi-Fi.
- 5. Check the message, and then start setup.
- When a completion message is displayed, close the screen.
 The screen automatically closes after a specific length of time.
- 7. Close the Network Connection Settings screen.
- 8. Press the toutton.

Disconnecting Wi-Fi Direct (Simple AP) Connection from the Control Panel

Note:

When Wi-Fi Direct (Simple AP) connection disabled, all computers and smart devices connected to the printer in Wi-Fi Direct (Simple AP) connection are disconnected. If you want to disconnect a specific device, disconnect from the device instead of the printer.

- 1. Tap on the home screen.
- 2. Select Wi-Fi Direct.

The Wi-Fi Direct information is displayed.

- 3. Tap Start Setup.
- 4. Tap Change Settings.
- 5. Select **Disable Wi-Fi Direct**.
- 6. Tap the **Disable the settings**.

7. When a completion message is displayed, close the screen.

The screen automatically closes after a specific length of time.

Restoring the Network Settings from the Control Panel

You can restore all network settings to their defaults.

- 1. Select Menu on the home screen.
- 2. Select General Settings > System Administration > Restore Default Settings > Network Settings.
- 3. Check the message, and then select **Yes**.
- 4. When a completion message is displayed, close the screen.

The screen automatically closes after a specific length of time.

Trouble Case

Cannot Access Web Config

The IP address is not assigned to the printer.

A valid IP address may not be assigned to the printer. Configure the IP address using the printer's control panel. You can confirm the current setting information with a network status sheet or from the printer's control panel.

Web browser does not support the Encryption Strength for SSL/TLS.

SSL/TLS has the Encryption Strength. Web Config can be opened by the web browser that supports the bulk encryptions as follows. Check your browser's encryption support.

■ 80bit: AES256/AES128/3DES

☐ 112bit: AES256/AES128/3DES

☐ 128bit: AES256/AES128

☐ 192bit: AES256

☐ 256bit: AES256

CA-signed Certificate is expired.

If there is a problem with the expiration date of the certificate, "The certificate has expired" is displayed when connecting to Web Config with SSL/TLS communication (https). If the message appears before its expiration date, make sure that the printer's date is configured correctly.

The common name of the certificate and the printer do not match.

If the common name of the certificate and the printer do not match, the message "The name of the security certificate does not match..." is displayed when accessing Web Config using SSL/TLS communication (https). This happens because the following IP addresses do not match.

☐ The printer's IP address entered to common name for creating a Self-signed Certificate or CSR

☐ IP address entered to web browser when running Web Config

For Self-signed Certificate, change the printer name. The certificate is updated and the printer can be connected.

For CA-signed Certificate, take the certificate again for the printer.

The proxy server setting of local address is not set to web browser.

When the printer is set to use a proxy server, configure the web browser not to connect to the local address via the proxy server.

☐ Windows:

Select Control Panel > Network and Internet > Internet Options > Connections > LAN settings > Proxy server, and then configure not to use the proxy server for LAN (local addresses).

☐ Mac OS:

Select **System Preferences** > **Network** > **Advanced** > **Proxies**, and then register the local address for **Bypass proxy settings for these Hosts & Domains**.

Example:

192.168.1.*: Local address 192.168.1.XXX, subnet mask 255.255.255.0

192.168.*.*: Local address 192.168.XXX.XXX, subnet mask 255.255.0.0

Related Information

- → "Accessing Web Config" on page 23
- → "Assigning the IP Address" on page 19

Forgotten the Administrator Password

If you forget your administrator password, contact your dealer or Epson Support.

Issues when Sharing Printers

The Shared Server is Slow

Follow the steps below if operations are slow on shared printers.

- 1. On the print server computer, select **Control Panel** > **Devices and Printers**.
- 2. Right-click the printer icon (print queue) you want to share, select **Printer properties** > **General** tab, and then select **Preferences**.
- 3. Select **Monitoring Preferences** on the **Utility** tab in the printer driver.
- 4. Select **Allow monitoring of shared printers**.

Printer Settings on the Print Server are not Reflected on the Client Computer

Follow the steps below to reinstall the driver on the client computer.

- 1. On the print server computer, select **Control Panel** > **Devices and Printers**.
- 2. Right-click the printer icon you want to share, and then select **Printer properties** > **Advanced** tab.
- 3. Select **Printing Defaults**, make the printer settings, and then click **OK**.
- 4. Remove the printer driver for the shared printer from the client computer.
- 5. Reinstall the printer driver on the client computer.

Note:

- ☐ If you change the printer settings on the client computer, the printer settings on the print server (such as the default settings) are not reflected on the client computer.
- □ Some settings, such as **Select Setting**, **User-Defined**, **Custom Settings**, **Menu Arrangement**, and so on are not reflected on the client computer. You can reflect these settings by exporting a settings file (such as your favorite settings) from the printer driver of the print server, and importing it on to the client computer.

Appendix

Introduction of Network Software

The following describes the software that configures and manages devices.

Epson Device Admin

Epson Device Admin is a multifunctional application software that manages the device on the network.
The following functions are available.
☐ Monitor or manage up to 2,000 printers or scanners over the segment
☐ Make a detailed report, such as for the consumable or product status
☐ Update the firmware of the product
☐ Introduce the device to the network
☐ Apply the unified settings to multiple devices.
You can download Epson Device Admin from Epson support website. For more information, see the documentation or help of Epson Device Admin.

Running Epson Device Admin (Windows only)

Select All Programs > EPSON > Epson Device Admin > Epson Device Admin.

Note:

If the firewall alert appears, allow access for Epson Device Admin.

EpsonNet Config

EpsonNet Config is an application software that can make settings to the device on the network. When the devices are connected to the network via Ethernet, you can make settings, such as setting the IP address, changing the connection method and so on even for devices not assigned to the IP address. This also can be used to make network settings to the devices without the control panel.

For more information, see the documentation or help of EpsonNet Config.



Running EpsonNet Config - Windows

Select All Programs > EpsonNet > EpsonNet Config SE > EpsonNet Config.

Note

If the firewall alert appears, allow access for EpsonNet Config.

Running EpsonNet Config - Mac OS

Select Go > Applications > Epson Software > EpsonNet > EpsonNet Config SE > EpsonNet Config.

EpsonNet Print (Windows Only)

EpsonNet Print is a software to print on the TCP/IP network. This is installed from the installer together with the printer driver. To perform network printing, create an EpsonNet Print port. There are features and restrictions listed below.

- ☐ The printer's status is displayed on the spooler screen.
- ☐ If the printer's IP address is changed by DHCP, the printer is still detected.
- ☐ You can use a printer located on a different network segment.
- ☐ You can print using one of the various protocols.
- ☐ IPv6 address is not supported.

EpsonNet SetupManager

EpsonNet SetupManager is a software to create a package for a simple printer installation, such as installing the printer driver, installing EPSON Status Monitor and creating a printer port. This software allows the administrator to create unique software packages and distribute them among groups.

For more information, visit your regional Epson website.

Making Wi-Fi Settings from the Control Panel (WPS)

You can connect to Wi-Fi from the printer's control panel using the WPS function.

Related Information

- → "Making Wi-Fi Settings by Push Button Setup (WPS)" on page 55
- → "Making Wi-Fi Settings by PIN Code Setup (WPS)" on page 56

Making Wi-Fi Settings by Push Button Setup (WPS)

You can automatically set up a Wi-Fi network by pressing a button on the access point. If the following conditions are met, you can set up by using this method.

- ☐ The access point is compatible with WPS (Wi-Fi Protected Setup).
- ☐ The current Wi-Fi connection was established by pressing a button on the access point.

Note

If you cannot find the button or you are setting up using the software, see the documentation provided with the access point.

- 1. Tap on the home screen.
- 2. Select Router.
- 3. Tap Start Setup.

If the network connection is already set up, the connection details are displayed. Tap **Change to Wi-Fi connection.** or **Change Settings** to change the settings.

- 4. Select **Push Button Setup(WPS)**.
- 5. Hold down the [WPS] button on the access point until the security light flashes.



If you do not know where the [WPS] button is, or there are no buttons on the access point, see the documentation provided with your access point for details.

6. Tap Start Setup.

7. Close the screen.

The screen automatically closes after a specific length of time.

Note:

If connection fails, restart the access point, move it closer to the printer, and try again. If it still does not work, print a network connection report and check the solution.

8. Close the network connection settings screen.

Making Wi-Fi Settings by PIN Code Setup (WPS)

You can automatically connect to an access point by using a PIN code. You can use this method to set up if an access point is capable of WPS (Wi-Fi Protected Setup). Use a computer to enter a PIN code into the access point.

- 1. Tap on the home screen.
- 2. Select Router.
- 3. Tap Start Setup.

If the network connection is already set up, the connection details are displayed. Tap **Change to Wi-Fi connection.** or **Change Settings** to change the settings.

- 4. Select Others > PIN Code Setup(WPS)
- 5. Use your computer to enter the PIN code (an eight digit number) displayed on the printer's control panel into the access point within two minutes.

Note:

See the documentation provided with your access point for details on entering a PIN code.

- 6. Tap Start Setup.
- 7. Close the screen.

The screen automatically closes after a specific length of time if you do not select **Close**.

Note

If connection fails, restart the access point, move it closer to the printer, and try again. If it still does not work, print a connection report and check the solution.

8. Close the network connection settings screen.

Using Wi-Fi Direct (Simple AP) Connection

Wi-Fi Direct (simple AP) connection connects the printer and devices directly.

Because the printer can be connected directly without going through the connected network, it can be used as temporary connection of the device to the printer that is connected to the network without access authority.

See the *User's Guide* for details on how to connect the printer using a Wi-Fi Direct (simple AP) connection.

Changing the Wi-Fi Direct (Simple AP) Settings

When Wi-Fi Direct (simple AP) connection is enabled, you can change the settings from > **Wi-Fi Direct** > **Start Setup** > **Change Settings**, and then the following menu items are displayed.

Change Network Name

Change the Wi-Fi Direct (simple AP) network name (SSID) used for connecting to the printer to your arbitrary name. You can set the network name (SSID) in ASCII characters that is displayed on the software keyboard on the control panel.

When changing the network name (SSID), all connected devices are disconnected. Use the new network name (SSID) if you want to re-connect the device.

Change Password

Change the Wi-Fi Direct (simple AP) password for connecting to the printer to your arbitrary value. You can set the password in ASCII characters that is displayed on the software keyboard on the control panel.

When changing the password, all connected devices are disconnected. Use the new password if you want to reconnect the device.

Changing frequency range

Change the frequency range of Wi-Fi Direct used for connecting to the printer. You can select 2.4 GHz or 5 GHz.

When changing the frequency range, all connected devices are disconnected. Re-connect the device.

Note that you cannot re-connect from devices that do not support 5 GHz frequency range when changing to 5 GHz.

Depending on the region, this setting may not be displayed.

Disable Wi-Fi Direct

Disable Wi-Fi Direct (simple AP) settings of the printer. When disabling it, all devices connected to the printer in Wi-Fi Direct (Simple AP) connection are disconnected.

Restore Default Settings

Restore all Wi-Fi Direct (simple AP) settings to their defaults.

The Wi-Fi Direct (simple AP) connection information of the smart device saved to the printer is deleted.

Note:

You can also set up from the **Network** tab > **Wi-Fi Direct** on Web Config for the following settings.

Enabling or disabling Wi-Fi Direct (simple AP)
Changing network name (SSID)
Changing password
Changing the frequency range
Restoring the Wi-Fi Direct (simple AP) settings

Changing the Connection Method

Change the connection method. Make this setting on the network enabling condition.

If the IP address assignment setting is manual, confirm with the network administrator whether the same IP address can be used on the new network.

Note:

When the Wi-Fi connection is enabled, the Ethernet connection is disabled.

Related Information

- → "Changing from Ethernet Connection to Wi-Fi Connection" on page 58
- → "Changing from Wi-Fi Connection to Ethernet Connection" on page 59

Changing from Ethernet Connection to Wi-Fi Connection

Changing to Wi-Fi Connection from the Control Panel

Change the Ethernet connection to Wi-Fi connection from the printer's control panel. The changing connection method is basically the same as the Wi-Fi connection settings. See the topic in this guide on Wi-Fi connection settings from the printer's control panel.

Related Information

→ "Connecting to the Wireless LAN (Wi-Fi)" on page 21

Changing to Wi-Fi Connection by Using Web Config

Change the Ethernet connection to Wi-Fi connection by using Web Config.

- 1. Access Web Config and select the **Network** tab > **Wi-Fi**.
- 2. Click Setup.
- Select the SSID for the access point and enter the password.
 If the SSID you want to connect to is not displayed, select Enter SSID and enter the SSID.
- 4. Click Next.
- 5. Confirm the displayed message and click **OK**.
- 6. Disconnect the Ethernet cable from the printer.

Note

You can also change the connection method by using Epson Device Admin. For details, see the manual or help for Epson Device Admin.

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "Epson Device Admin" on page 53

Changing from Wi-Fi Connection to Ethernet Connection

Changing the Network Connection to Ethernet from the Control Panel

Follow the steps below to change the network connection to Ethernet from Wi-Fi using the control panel.

- 1. Select Menu on the home screen.
- 2. Select General Settings > Network Settings > Wired LAN Setup.
- 3. Tap Start Setup.
- Check the message, and then close the screen.
 The screen automatically closes after a specific length of time.
- 5. Connect the printer to a router using an Ethernet cable.

Related Information

→ "Connecting to Ethernet" on page 20

Changing to Ethernet Connection Using Web Config

Change the Wi-Fi connection to Ethernet connection by using Web Config.

- 1. Access Web Config and select the **Network** tab > **Wi-Fi**.
- 2. Click **Disable Wi-Fi**.
- 3. Check the message, and then select **OK**.
- 4. Connect the printer and hub (LAN switch) by Ethernet cable.

Note

You can also change the connection method by using Epson Device Admin. For details, see the guide or help for Epson Device Admin.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "Epson Device Admin" on page 53

Using Port for the Printer

The printer uses the following port. These ports should be allowed to become available by the network administrator as necessary.

Sender (Client)	Use	Destination (Server)	Protocol	Port Number
Printer	Control WSD	Client computer	WSD (TCP)	5357
Client computer	File sending (When FTP printing is			20
	used from the printer)			21
	Discover the printer from an application such as EpsonNet Config and printer driver.	Printer	ENPC (UDP)	3289
	Collect and set up the MIB information from an application such as EpsonNet Config and printer driver.	Printer	SNMP (UDP)	161
	Forwarding LPR data	Printer	LPR (TCP)	515
	Forwarding RAW data	Printer	RAW (Port9100) (TCP)	9100
	Forwarding data for IPP/IPPS printing	Printer	IPP/IPPS (TCP)	631
	Searching WSD printer	Printer	WS-Discovery (UDP)	3702
	Web Config	Printer	HTTP(TCP)	80
			HTTPS(TCP)	443

In this chapter, we describe advanced security features.

Security Settings and Prevention of Danger

When a printer is connected to a network, you can access it from a remote location. In addition, many people can share the printer, which is helpful in improving operational efficiency and convenience. However, risks such as illegal access, illegal use, and tampering with data are increased. If you use the printer in an environment where you can access the Internet, the risks are even higher.

For printers that do not have access protection from the outside, it will be possible to read the print job logs that are stored in the printer from the Internet.

In order to avoid this risk, Epson printers have a variety of security technologies.

Set the printer as necessary according to the environmental conditions that have been built with the customer's environment information.

Name	Feature type	What to set	What to prevent
Password encryption	Encrypts confidential information stored in the printer (all passwords, private keys for the certificates, hard disk authentication keys).	Configure the password encryption and back up the encryption key.	Because the encryption key is not accessible from outside the printer, encrypted confidential information can be protected.
SSL/TLS communications	The communication content is encrypted with SSL/TLS communications when accessing the Epson server from the printer, such as communicating to the computer via web browser or updating firmware.	Obtain a CA-signed certificate, and then import it to the printer.	Clearing an identification of the printer by the CA-signed certification prevents impersonation and unauthorized access. In addition, communication contents of SSL/TLS are protected, and it prevents the leakage of contents for printing data and setup information.
Control of protocol	Controls the protocols and services to be used for communication between printers and computers, and it enables and disables features.	A protocol or service that is applied to features allowed or prohibited separately.	Reducing security risks that may occur through unintended use by preventing users from using unnecessary functions.
IPsec/IP filtering	You can set to allow severing and cutting off of data that is from a certain client or is a particular type. Since IPsec protects the data by IP packet unit (encryption and authentication), you can safely communicate unsecured protocol.	Create a basic policy and individual policy to set the client or type of data that can access the printer.	Protect unauthorized access, and tampering and interception of communication data to the printer.
IEEE802.1X	Allows only a user who is authenticated to Wi-Fi and Ethernet to connect. Allows only a permitted user to use the printer.	Authentication setting to the RADIUS server (authentication sever).	Protect unauthorized access and use to the printer.

Related Information

→ "Encrypting the Password" on page 63

- → "SSL/TLS Communication with the Printer" on page 63
- → "Controlling Using Protocols" on page 69
- → "Encrypted Communication Using IPsec/IP Filtering" on page 73
- → "Connecting the Printer to an IEEE802.1X Network" on page 84

Security Feature Settings

When setting IPsec/IP filtering or IEEE802.1X, it is recommended that you access Web Config using SSL/TLS to communicate settings information in order to reduce security risks such as tampering or interception.

Also, you can use Web Config by connecting the printer directly to the computer using an Ethernet cable, and then entering the IP address into a web browser. The printer can be connected in a secure environment after the security settings have been completed.

Encrypting the Password

Password encryption allows you to encrypt confidential information (all passwords, certificate private keys) stored in the printer.

- 1. Enter the printer's IP address into a browser to access Web Config.
 - Enter the printer's IP address from a computer that is connected to the same network as the printer.
 - You can check the IP address of the printer from the following menu.
 - Menu > General Settings > Network Settings > Network Status > Wired LAN/Wi-Fi Status
- 2. Enter the administrator password to log in as an administrator.
- 3. Select in the following order.

Product Security tab > Password Encryption

Note:

You can also set up from the printer's control panel.

Menu > General Settings > System Administration > Security Settings > Password Encryption

- 4. Select **ON** to enable encryption.
- 5. Click OK.

SSL/TLS Communication with the Printer

When the server certificate is set using SSL/TLS (Secure Sockets Layer/Transport Layer Security) communication to the printer, you can encrypt the communication path between computers. Do this if you want to prevent remote and unauthorized access.

About Digital Certification

☐ CA-signed Certificate

This is a certificate signed by the CA (Certificate Authority.) You can obtain it to apply to the Certificate Authority. This certificate certifies the existence of the printer is and used for SSL/TLS communication so that you can ensure the safety of data communication.

When it is used for SSL/TLS communication, it is used as a server certificate.

When it is set to IPsec/IP Filtering or IEEE802.1x communication, it is used as a client certificate.

☐ CA Certificate

This is a certificate that is in chain of the CA-signed Certificate, also called the intermediate CA certificate. It is used by the web browser to validate the path of the printer's certificate when accessing the server of the other party or Web Config.

For the CA Certificate, set when to validate the path of server certificate accessing from the printer. For the printer, set to certify the path of the CA-signed Certificate for SSL/TLS connection.

You can obtain the CA certificate of the printer from the Certification Authority where the CA certificate is issued.

Also, you can obtain the CA certificate used to validate the server of the other party from the Certification Authority that issued the CA-signed Certificate of the other server.

☐ Self-signed Certificate

This is a certificate that the printer signs and issues itself. It is also called the root certificate. Because the issuer certifies itself, it is not reliable and cannot prevent impersonation.

Use it when making the security setting and performing simple SSL/TLS communication without the CA-signed Certificate.

If you use this certificate for an SSL/TLS communication, a security alert may be displayed on a web browser because the certificate is not registered on a web browser. You can use the Self-signed Certificate only for an SSL/TLS communication.

Related Information

- → "Obtaining and Importing a CA-signed Certificate" on page 64
- → "Deleting a CA-signed Certificate" on page 67
- → "Updating a Self-signed Certificate" on page 68

Obtaining and Importing a CA-signed Certificate

Obtaining a CA-signed Certificate

To obtain a CA-signed certificate, create a CSR (Certificate Signing Request) and apply it to certificate authority. You can create a CSR using Web Config and a computer.

Follow the steps to create a CSR and obtain a CA-signed certificate using Web Config. When creating a CSR using Web Config, a certificate is the PEM/DER format.

1. Access Web Config, and then select the **Network Security** tab. Next, select **SSL/TLS > Certificate** or **IPsec/IP Filtering > Client Certificate** or **IEEE802.1X > Client Certificate**.

Whatever you choose, you can obtain the same certificate and use it in common.

2. Click **Generate** of **CSR**.

A CSR creating page is opened.

3. Enter a value for each item.

Note

Available key length and abbreviations vary by a certificate authority. Create a request according to rules of each certificate authority.

4. Click **OK**.

A completion message is displayed.

- 5. Select the Network Security tab. Next, select SSL/TLS > Certificate, or IPsec/IP Filtering > Client Certificate or IEEE802.1X > Client Certificate.
- 6. Click one of the download buttons of **CSR** according to a specified format by each certificate authority to download a CSR to a computer.



Important:

Do not generate a CSR again. If you do so, you may not be able to import an issued CA-signed Certificate.

7. Send the CSR to a certificate authority and obtain a CA-signed Certificate.

Follow the rules of each certificate authority on sending method and form.

8. Save the issued CA-signed Certificate to a computer connected to the printer.

Obtaining a CA-signed Certificate is complete when you save a certificate to a destination.

CSR Setting Items

Items	Settings and Explanation
Key Length	Select a key length for a CSR.
Common Name	You can enter between 1 and 128 characters. If this is an IP address, it should be a static IP address. You can enter 1 to 5 IPv4 addresses, IPv6 addresses, host names, FQDNs by separating them with commas.
	The first element is stored to the common name, and other elements are stored to the alias field of the certificate subject.
	Example:
	Printer's IP address: 192.0.2.123, Printer name: EPSONA1B2C3
	Common Name: EPSONA1B2C3,EPSONA1B2C3.local,192.0.2.123
Organization/ Organizational Unit/ Locality/ State/Province	You can enter between 0 and 64 characters (Organizational Unit cannot exceed 55 characters) in ASCII (0x20-0x7E). You can divide distinguished names with commas.
Country	Enter a country code in two-digit number specified by ISO-3166.

Importing a CA-signed Certificate

Import the obtained CA-signed Certificate to the printer.

	Important:
	\square Make sure that the printer's date and time is set correctly. Certificate may be invalid.
	☐ If you obtain a certificate using a CSR created from Web Config, you can import a certificate one time.
1.	Access Web Config and then select the Network Security tab. Next, select SSL/TLS > Certificate , or IPsec/I Filtering > Client Certificate or IEEE802.1X > Client Certificate.
2.	Click Import
	A certificate importing page is opened.
3.	Enter a value for each item. Set CA Certificate 1 and CA Certificate 2 when verifying the path of the certificate on the web browser that accesses the printer.
	Depending on where you create a CSR and the file format of the certificate, required settings may vary. Enter values to required items according to the following.
	☐ A certificate of the PEM/DER format obtained from Web Config
	☐ Private Key: Do not configure because the printer contains a private key.
	☐ Password: Do not configure.
	☐ CA Certificate 1/CA Certificate 2: Optional
	☐ A certificate of the PEM/DER format obtained from a computer
	☐ Private Key: You need to set.
	☐ Password: Do not configure.
	☐ CA Certificate 1/CA Certificate 2: Optional
	☐ A certificate of the PKCS#12 format obtained from a computer
	☐ Private Key: Do not configure.
	☐ Password: Optional
	☐ CA Certificate 1/CA Certificate 2: Do not configure.
4.	Click OK .
	A completion message is displayed.

Related Information

Note:

→ "Accessing Web Config" on page 23

Click **Confirm** to verify the certificate information.

- → "Logging on to the Printer Using Web Config" on page 35
- → "CA-signed Certificate Importing Setting Items" on page 67

CA-signed Certificate Importing Setting Items

Items	Settings and Explanation
Server Certificate or Client Certificate	Select a certificate's format.
	For SSL/TLS connection, the Server Certificate is displayed.
	For IPsec/IP Filtering or IEEE802.1x, the Client Certificate is displayed.
Private Key	If you obtain a certificate of the PEM/DER format by using a CSR created from a computer, specify a private key file that is match a certificate.
Password	If the file format is Certificate with Private Key (PKCS#12) , enter the password for encrypting the private key that is set when you obtain the certificate.
CA Certificate 1	If your certificate's format is Certificate (PEM/DER) , import a certificate of a certificate authority that issues a CA-signed Certificate used as server certificate. Specify a file if you need.
CA Certificate 2	If your certificate's format is Certificate (PEM/DER) , import a certificate of a certificate authority that issues CA Certificate 1. Specify a file if you need.

Related Information

→ "Importing a CA-signed Certificate" on page 66

Deleting a CA-signed Certificate

You can delete an imported certificate when the certificate has expired or when an encrypted connection is no longer necessary.



Important:

If you obtain a certificate using a CSR created from Web Config, you cannot import a deleted certificate again. In this case, create a CSR and obtain a certificate again.

- 1. Access Web Config, and then select the Network Security tab. Next, select SSL/TLS > Certificate or IPsec/IP Filtering > Client Certificate or IEEE802.1X > Client Certificate.
- 2. Click Delete.
- 3. Confirm that you want to delete the certificate in the message displayed.

Configuring a CA Certificate

When you set the CA Certificate, you can validate the path to the CA certificate of the server that the printer accesses. This can prevent impersonation.

You can obtain the CA Certificate from the Certification Authority where the CA-signed Certificate is issued.

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

- → "CSR Setting Items" on page 65
- → "Importing a CA-signed Certificate" on page 66

Importing a CA Certificate

Import the CA Certificate to the printer.

- 1. Access Web Config and then select the **Network Security** tab > **CA Certificate**.
- 2. Click Import.
- 3. Specify the CA Certificate you want to import.
- 4. Click OK.

When importing is complete, you are returned to the **CA Certificate** screen, and the imported CA Certificate is displayed.

Deleting a CA Certificate

You can delete the imported CA Certificate.

- 1. Access Web Config and then select the **Network Security** tab > **CA Certificate**.
- 2. Click **Delete** next to the CA Certificate that you want to delete.
- 3. Confirm that you want to delete the certificate in the message displayed.
- 4. Click **Reboot Network**, and then check that the deleted CA Certificate is not listed on the updated screen.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Updating a Self-signed Certificate

Because the Self-signed Certificate is issued by the printer, you can update it when it has expired or when the content described changes.

- 1. Access Web Config and select the **Network Security** tab > **SSL/TLS** > **Certificate**.
- 2. Click Update.
- 3. Enter Common Name.

You can enter up to 5 IPv4 addresses, IPv6 addresses, host names, FQDNs between 1 to 128 characters and separating them with commas. The first parameter is stored to the common name, and the others are stored to the alias field for the subject of the certificate.

Example:

Printer's IP address: 192.0.2.123, Printer name: EPSONA1B2C3

Common name: EPSONA1B2C3,EPSONA1B2C3.local,192.0.2.123

- 4. Specify a validity period for the certificate.
- 5. Click Next.

A confirmation message is displayed.

6. Click OK.

The printer is updated.

Note:

You can check the certificate information from **Network Security** tab > **SSL/TLS** > **Certificate** > **Self-signed Certificate** and click **Confirm**.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Controlling Using Protocols

You can print using a variety of pathways and protocols.

You can lower unintended security risks by restricting printing from specific pathways or by controlling the available functions.

Controlling protocols

Configure the protocol settings.

- 1. Access Web Config and then select the **Network Security** tab > **Protocol**.
- 2. Configure each item.
- 3. Click Next.
- 4. Click OK.

The settings are applied to the printer.

Protocols you can Enable or Disable

Protocol	Description
Bonjour Settings	You can specify whether to use Bonjour. Bonjour is used to search for devices, print, and so on.
SLP Settings	You can enable or disable the SLP function. SLP is used for push scanning and network searching in EpsonNet Config.

Protocol	Description
WSD Settings	You can enable or disable the WSD function. When this is enabled, you can add WSD devices, and print from the WSD port.
LLTD Settings	You can enable or disable the LLTD function. When this is enabled, it is displayed on the Windows network map.
LLMNR Settings	You can enable or disable the LLMNR function. When this is enabled, you can use name resolution without NetBIOS even if you cannot use DNS.
LPR Settings	You can specify whether or not to allow LPR printing. When this is enabled, you can print from the LPR port.
RAW(Port9100) Settings	You can specify whether or not to allow printing from the RAW port (Port 9100). When this is enabled, you can print from the RAW port (Port 9100).
IPP Settings	You can specify whether or not to allow printing from IPP. When this is enabled, you can print over the Internet.
FTP Settings	You can specify whether or not to allow FTP printing. When this is enabled, you can print over an FTP server.
SNMPv1/v2c Settings	You can specify whether or not to enable SNMPv1/v2c. This is used to set up devices, monitoring, and so on.
SNMPv3 Settings	You can specify whether or not to enable SNMPv3. This is used to set up encrypted devices, monitoring, etc.

Protocol Setting Items

Bonjour Settings

Items	Setting value and Description
Use Bonjour	Select this to search for or use devices through Bonjour.
Bonjour Name	Displays the Bonjour name.
Bonjour Service Name	Displays the Bonjour service name.
Location	Displays the Bonjour location name.
Top Priority Protocol	Select the top priority protocol for Bonjour print.
Wide-Area Bonjour	Set whether to use Wide-Area Bonjour.

SLP Settings

Items	Setting value and Description
Enable SLP	Select this to enable the SLP function.
	This is used such as network searching in EpsonNet Config.

WSD Settings

Items	Setting value and Description
Enable WSD	Select this to enable adding devices using WSD, and print from the WSD port. If you do not want this product to search for devices, disable this item and disable the Enable IPP item.
Printing Timeout (sec)	Enter the communication timeout value for WSD printing between 3 to 3,600 seconds.
Device Name	Displays the WSD device name.
Location	Displays the WSD location name.

LLTD Settings

Items	Setting value and Description
Enable LLTD	Select this to enable LLTD. The printer is displayed in the Windows network map.
Device Name	Displays the LLTD device name.

LLMNR Settings

Items	Setting value and Description
Enable LLMNR	Select this to enable LLMNR. You can use name resolution without NetBIOS even if you cannot use DNS.

LPR Settings

Items	Setting value and Description
Allow LPR Port Printing	Select to allow printing from the LPR port.
Printing Timeout (sec)	Enter the timeout value for LPR printing between 0 to 3,600 seconds. If you do not want to timeout, enter 0.

RAW(Port9100) Settings

Items	Setting value and Description
Allow RAW(Port9100) Printing	Select to allow printing from the RAW port (Port 9100).
Printing Timeout (sec)	Enter the timeout value for RAW (Port 9100) printing between 0 to 3,600 seconds. If you do not want to timeout, enter 0.

IPP Settings

Items	Setting value and Description
Enable IPP	Select to enable IPP communication. When enabled, you will be able to print over the Internet. It is also displayed when searching for devices on the network. Only printers that support IPP are displayed.

Items	Setting value and Description
Allow Non-secure Communication	Select Allowed to allow the printer to communicate without any security measures (IPP).
Communication Timeout (sec)	Enter the timeout value for IPP printing between 0 to 3,600 seconds.
URL(Network)	Displays IPP URLs (http and https) when the printer is connected to the network. The URL is a combined value of the printer's IP address, Port number, and IPP printer name.
URL(Wi-Fi Direct)	Displays IPP URLs (http and https) when the printer is connected by Wi-Fi Direct. The URL is a combined value of the printer's IP address, Port number, and IPP printer name.
Printer Name	Displays the IPP printer name.
Location	Displays the IPP location.

FTP Settings

Items	Setting value and Description
Enable FTP Server	Select to enable FTP printing. Only printers that support FTP printing are displayed.
Communication Timeout (sec)	Enter the timeout value for FTP communication between 0 to 3,600 seconds. If you do not want to timeout, enter 0.

SNMPv1/v2c Settings

Items	Setting value and Description
Enable SNMPv1	SNMPv1 is enabled when the box is checked.
Enable SNMPv2c	SNMPv2c is enabled when the box is checked.
Access Authority	Set the access authority when SNMPv1 or SNMPv2c is enabled. Select Read Only or Read/Write .
Community Name (Read Only)	Enter 0 to 32 ASCII (0x20 to 0x7E) characters.
Community Name (Read/Write)	Enter 0 to 32 ASCII (0x20 to 0x7E) characters.
Allow access from Epson tools	Set whether or not to allow information to be written by Epson tools such a Epson Device Admin.

SNMPv3 Settings

Items	Setting value and Description
Enable SNMPv3	SNMPv3 is enabled when the box is checked.
User Name	Enter between 1 and 32 characters using 1 byte characters.
Authentication Settings	

Items		Setting value and Description	
	Algorithm	Select an algorithm for an authentication for SNMPv3.	
	Password	Enter the password for an authentication for SNMPv3. Enter between 8 and 32 characters in ASCII (0x20-0x7E). If you do not specify this, leave it blank.	
	Confirm Password	Enter the password you configured for confirmation.	
Encryption Se	ttings		
	Algorithm	Select an algorithm for an encryption for SNMPv3.	
	Password	Enter the password for an encryption for SNMPv3.	
		Enter between 8 and 32 characters in ASCII (0x20-0x7E). If you do not specify this, leave it blank.	
	Confirm Password	Enter the password you configured for confirmation.	
Context Name	•	Enter within 32 characters or less in Unicode (UTF-8). If you do not specify this, leave it blank. The number of characters that can be entered varies depending on the language.	

Encrypted Communication Using IPsec/IP Filtering

About IPsec/IP Filtering

You can filter traffic based on IP addresses, services, and port by using IPsec/IP Filtering function. By combining of the filtering, you can configure the printer to accept or block specified clients and specified data. Additionally, you can improve security level by using an IPsec.

Configuring Default Policy

To filter traffic, configure the default policy. The default policy applies to every user or group connecting to the printer. For more fine-grained control over users and groups of users, configure group policies.

- 1. Access Web Config and then select the **Network Security** tab > **IPsec/IP Filtering** > **Basic**.
- 2. Enter a value for each item.
- 3. Click Next.

A confirmation message is displayed.

4. Click **OK**.

The printer is updated.

Related Information

→ "Accessing Web Config" on page 23

- → "Logging on to the Printer Using Web Config" on page 35
- → "Default Policy Setting Items" on page 74

Default Policy Setting Items

Default Policy

Items	Settings and Explanation
IPsec/IP Filtering	You can enable or disable an IPsec/IP Filtering feature.

☐ Access Control

Configure a control method for traffic of IP packets.

Items	Settings and Explanation	
Permit Access	Select this to permit configured IP packets to pass through.	
Refuse Access	Select this to refuse configured IP packets to pass through.	
IPsec	Select this to permit configured IPsec packets to pass through.	

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Select IKEv1 or IKEv2 for IKE Version. Select one of them according to the device that the printer is connected to.

☐ IKEv1

The following items are displayed when you select **IKEv1** for **IKE Version**.

Items	Settings and Explanation
Authentication Method	To select Certificate , you need to obtain and import a CA-signed certificate in advance.
Pre-Shared Key	If you select Pre-Shared Key for Authentication Method , enter a pre-shared key between 1 and 127 characters.
Confirm Pre-Shared Key	Enter the key you configured for confirmation.

☐ IKEv2

The following items are displayed when you select IKEv2 for IKE Version.

Items		Settings and Explanation
Local	Authentication Method	To select Certificate , you need to obtain and import a CA-signed certificate in advance.
	ID Type	If you select Pre-Shared Key for Authentication Method , select the type of ID for the printer.
	ID	Enter the printer's ID that matches the type of ID.
		You cannot use "@", "#", and "=" for the first character.
		Distinguished Name : Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters. You need to include "=".
		IP Address : Enter IPv4 or IPv6 format.
		FQDN : Enter a combination of between 1 and 255 characters using A-Z, a-z, 0-9, "-", and period (.).
		Key ID : Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters.
	Pre-Shared Key	If you select Pre-Shared Key for Authentication Method , enter a pre-shared key between 1 and 127 characters.
	Confirm Pre-Shared Key	Enter the key you configured for confirmation.

Items		Settings and Explanation
Remote	Authentication Method	To select Certificate , you need to obtain and import a CA-signed certificate in advance.
	ID Type	If you select Pre-Shared Key for Authentication Method , select the type of ID for the device that you want to authenticate.
	ID	Enter the printer's ID that matches to the type of ID.
		You cannot use "@", "#", and "=" for the first character.
		Distinguished Name : Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters. You need to include "=".
		IP Address : Enter IPv4 or IPv6 format.
		FQDN : Enter a combination of between 1 and 255 characters using A-Z, a-z, 0-9, "-", and period (.).
		Key ID : Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters.
	Pre-Shared Key	If you select Pre-Shared Key for Authentication Method , enter a pre-shared key between 1 and 127 characters.
	Confirm Pre-Shared Key	Enter the key you configured for confirmation.

☐ Encapsulation

If you select **IPsec** for **Access Control**, you need to configure an encapsulation mode.

Items	Settings and Explanation
Transport Mode	If you only use the printer on the same LAN, select this. IP packets of layer 4 or later are encrypted.
Tunnel Mode	If you use the printer on the Internet-capable network such as IPsec-VPN, select this option. The header and data of the IP packets are encrypted.
	Remote Gateway(Tunnel Mode) : If you select Tunnel Mode for Encapsulation , enter a gateway address between 1 and 39 characters.

☐ Security Protocol

If you select **IPsec** for **Access Control**, select an option.

Items	Settings and Explanation
ESP	Select this to ensure the integrity of an authentication and data, and encrypt data.
АН	Select this to ensure the integrity of an authentication and data. Even if encrypting data is prohibited, you can use IPsec.

☐ Algorithm Settings

It is recommended that you select **Any** for all settings or select an item other than **Any** for each setting. If you select **Any** for some of the settings and select an item other than **Any** for the other settings, the device may not communicate depending on the other device that you want to authenticate.

Items		Settings and Explanation
IKE	Encryption	Select the encryption algorithm for IKE.
		The items vary depending on the version of IKE.
	Authentication	Select the authentication algorithm for IKE.
	Key Exchange	Select the key exchange algorithm for IKE.
		The items vary depending on the version of IKE.
ESP	Encryption	Select the encryption algorithm for ESP.
		This is available when ESP is selected for Security Protocol .
	Authentication	Select the authentication algorithm for ESP.
		This is available when ESP is selected for Security Protocol .
АН	Authentication	Select the encryption algorithm for AH.
		This is available when AH is selected for Security Protocol .

Related Information

→ "Configuring Default Policy" on page 73

Configuring Group Policy

A group policy is one or more rules applied to a user or user group. The printer controls IP packets that match with configured policies. IP packets are authenticated in the order of a group policy 1 to 10 then a default policy.

- 1. Access Web Config and then select the **Network Security** tab > **IPsec/IP Filtering** > **Basic**.
- 2. Click a numbered tab you want to configure.
- 3. Enter a value for each item.
- 4. Click Next.

A confirmation message is displayed.

5. Click OK.

The printer is updated.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "Group Policy Setting Items" on page 78

Group Policy Setting Items

Items	Settings and Explanation
Enable this Group Policy	You can enable or disable a group policy.

Access Control

Configure a control method for traffic of IP packets.

Items	Settings and Explanation	
Permit Access	Select this to permit configured IP packets to pass through.	
Refuse Access	Select this to refuse configured IP packets to pass through.	
IPsec	Select this to permit configured IPsec packets to pass through.	

Local Address(Printer)

Select an IPv4 address or IPv6 address that matches your network environment. If an IP address is assigned automatically, you can select **Use auto-obtained IPv4 address**.

Note:

If an IPv6 address is assigned automatically, the connection may be unavailable. Configure a static IPv6 address.

Remote Address(Host)

Enter a device's IP address to control access. The IP address must be 43 characters or less. If you do not enter an IP address, all addresses are controlled.

Note

If an IP address is assigned automatically (e.g. assigned by DHCP), the connection may be unavailable. Configure a static IP address.

Method of Choosing Port

Select a method to specify ports.

☐ Service Name

If you select **Service Name** for **Method of Choosing Port**, select an option.

☐ Transport Protocol

If you select **Port Number** for **Method of Choosing Port**, you need to configure an encapsulation mode.

Items	Settings and Explanation	
Any Protocol	Select this to control all protocol types.	
ТСР	Select this to control data for unicast.	
UDP	Select this to control data for broadcast and multicast.	
ICMPv4	Select this to control ping command.	

Local	Port

If you select **Port Number** for **Method of Choosing Port** and if you select **TCP** or **UDP** for **Transport Protocol**, enter port numbers to control receiving packets, separating them with commas. You can enter 10 port numbers at the maximum.

Example: 20,80,119,5220

If you do not enter a port number, all ports are controlled.

☐ Remote Port

If you select **Port Number** for **Method of Choosing Port** and if you select **TCP** or **UDP** for **Transport Protocol**, enter port numbers to control sending packets, separating them with commas. You can enter 10 port numbers at the maximum.

Example: 25,80,143,5220

If you do not enter a port number, all ports are controlled.

IKE Version

Select IKEv1 or IKEv2 for IKE Version. Select one of them according to the device that the printer is connected to.

☐ IKEv1

The following items are displayed when you select IKEv1 for IKE Version.

Items	Settings and Explanation
Authentication Method	If you select IPsec for Access Control , select an option. Used certificate is common with a default policy.
Pre-Shared Key	If you select Pre-Shared Key for Authentication Method , enter a pre-shared key between 1 and 127 characters.
Confirm Pre-Shared Key	Enter the key you configured for confirmation.

☐ IKEv2

The following items are displayed when you select **IKEv2** for **IKE Version**.

Items		Settings and Explanation
Local	Authentication Method	If you select IPsec for Access Control , select an option. Used certificate is common with a default policy.
	ID Type	If you select Pre-Shared Key for Authentication Method , select the type of ID for the printer.
	ID	Enter the printer's ID that matches the type of ID.
		You cannot use "@", "#", and "=" for the first character.
		Distinguished Name : Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters. You need to include "=".
		IP Address: Enter IPv4 or IPv6 format.
		FQDN : Enter a combination of between 1 and 255 characters using A-Z, a-z, 0-9, "-", and period (.).
		Key ID: Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters.
	Pre-Shared Key	If you select Pre-Shared Key for Authentication Method , enter a pre-shared key between 1 and 127 characters.
	Confirm Pre-Shared Key	Enter the key you configured for confirmation.
Remote	Authentication Method	If you select IPsec for Access Control , select an option. Used certificate is common with a default policy.
	ID Type	If you select Pre-Shared Key for Authentication Method , select the type of ID for the device that you want to authenticate.
	ID	Enter the printer's ID that matches to the type of ID.
		You cannot use "@", "#", and "=" for the first character.
		Distinguished Name : Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters. You need to include "=".
		IP Address: Enter IPv4 or IPv6 format.
		FQDN : Enter a combination of between 1 and 255 characters using A-Z, a-z, 0-9, "-", and period (.).
		Key ID : Enter 1 to 255 1-byte ASCII (0x20 to 0x7E) characters.
	Pre-Shared Key	If you select Pre-Shared Key for Authentication Method , enter a pre-shared key between 1 and 127 characters.
	Confirm Pre-Shared Key	Enter the key you configured for confirmation.

Encapsulation

If you select **IPsec** for **Access Control**, you need to configure an encapsulation mode.

Items	Settings and Explanation
Transport Mode	If you only use the printer on the same LAN, select this. IP packets of layer 4 or later are encrypted.

Items	Settings and Explanation
Tunnel Mode	If you use the printer on the Internet-capable network such as IPsec-VPN, select this option. The header and data of the IP packets are encrypted.
	Remote Gateway(Tunnel Mode) : If you select Tunnel Mode for Encapsulation , enter a gateway address between 1 and 39 characters.

Security Protocol

If you select **IPsec** for **Access Control**, select an option.

Items	Settings and Explanation
ESP	Select this to ensure the integrity of an authentication and data, and encrypt data.
АН	Select this to ensure the integrity of an authentication and data. Even if encrypting data is prohibited, you can use IPsec.

Algorithm Settings

It is recommended that you select **Any** for all settings or select an item other than **Any** for each setting. If you select **Any** for some of the settings and select an item other than **Any** for the other settings, the device may not communicate depending on the other device that you want to authenticate.

Items		Settings and Explanation
IKE	Encryption	Select the encryption algorithm for IKE.
		The items vary depending on the version of IKE.
	Authentication	Select the authentication algorithm for IKE.
	Key Exchange	Select the key exchange algorithm for IKE.
		The items vary depending on the version of IKE.
ESP	Encryption	Select the encryption algorithm for ESP.
		This is available when ESP is selected for Security Protocol .
	Authentication	Select the authentication algorithm for ESP.
		This is available when ESP is selected for Security Protocol .
AH	Authentication	Select the encryption algorithm for AH.
		This is available when AH is selected for Security Protocol .

Related Information

- → "Configuring Group Policy" on page 77
- → "Combination of Local Address(Printer) and Remote Address(Host) on Group Policy" on page 82
- → "References of Service Name on Group Policy" on page 82

Combination of Local Address(Printer) and Remote Address(Host) on Group Policy

		Setting of Local Address(Printer)			
		IPv4	IPv6 ^{*2}	Any addresses*3	
Setting of Remote Address(Host)	IPv4*1	1	_	1	
Address(Host)	IPv6*1*2	-	1	1	
	Blank	✓	✓	1	

^{*1 :} If **IPsec** is selected for **Access Control**, you cannot specify in a prefix length.

References of Service Name on Group Policy

Note

Unavailable services are displayed but cannot be selected.

Service Name	Protocol type	Local port number	Remote port number	Features controlled	
Any	-	-	-	All services	
ENPC	UDP	3289	Any port	Searching for a printer from applications such as Epson Device Admin, and the printer driver	
SNMP	UDP	161	Any port	Acquiring and configuring of MIB from applications such as Epson Device Admin, and the printer driver	
LPR	TCP	515	Any port	Forwarding LPR data	
RAW (Port9100)	TCP	9100	Any port	Forwarding RAW data	
IPP/IPPS	TCP	631	Any port	Forwarding data of IPP/IPPS printing	
WSD	TCP	Any port	5357	Controlling WSD	
WS-Discovery	UDP	3702	Any port	Searching for a printer from WSD	
FTP Data (Local)	ТСР	20	Any port	FTP server (forwarding data of FTP printing)	
FTP Control (Local)	ТСР	21	Any port	FTP server (controlling FTP printing)	
HTTP (Local)	ТСР	80	Any port	HTTP(S) server (forwarding data of	
HTTPS (Local)	ТСР	443	Any port	Web Config and WSD)	

^{*2 :} If IPsec is selected for Access Control, you can select a link-local address (fe80::) but group policy will be disabled.

^{*3 :} Except IPv6 link local addresses.

Service Name	Protocol type	Local port number	Remote port number	Features controlled	
HTTP (Remote)	ТСР	Any port	80	HTTP(S) client (firmware updating and	
HTTPS (Remote)	ТСР	Any port	443	root certificate updating)	

Configuration Examples of IPsec/IP Filtering
Receiving IPsec packets only
This example is to configure a default policy only.
Default Policy:
☐ IPsec/IP Filtering: Enable
☐ Access Control: IPsec
☐ Authentication Method: Pre-Shared Key
☐ Pre-Shared Key : Enter up to 127 characters.
Group Policy: Do not configure.
Receiving printing data and printer settings
This example allows communications of printing data and printer configuration from specified services.
Default Policy:
☐ IPsec/IP Filtering: Enable
☐ Access Control: Refuse Access
Group Policy:
☐ Enable this Group Policy: Check the box.
☐ Access Control: Permit Access
☐ Remote Address(Host): IP address of a client
☐ Method of Choosing Port: Service Name
☐ Service Name: Check the box of ENPC, SNMP, HTTP (Local), HTTPS (Local) and RAW (Port9100).
Receiving access from a specified IP address only
This example allows a specified IP address to access the printer.
Default Policy:
☐ IPsec/IP Filtering: Enable
☐ Access Control:Refuse Access
Group Policy:
☐ Enable this Group Policy: Check the box.
☐ Access Control: Permit Access
☐ Remote Address(Host): IP address of an administrator's client

Note:

Regardless of policy configuration, the client will be able to access and configure the printer.

Configuring a Certificate for IPsec/IP Filtering

Configure the Client Certificate for IPsec/IP Filtering. When you set it, you can use the certificate as an authentication method for IPsec/IP Filtering. If you want to configure the certification authority, go to **CA Certificate**.

- 1. Access Web Config and then select the **Network Security** tab > **IPsec/IP Filtering** > **Client Certificate**.
- 2. Import the certificate in **Client Certificate**.

If you have already imported a certificate published by a Certification Authority, you can copy the certificate and use it in IPsec/IP Filtering. To copy, select the certificate from **Copy From**, and then click **Copy**.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "Obtaining a CA-signed Certificate" on page 64

Connecting the Printer to an IEEE802.1X Network

Configuring an IEEE802.1X Network

When you set IEEE802.1X to the printer, you can use it on the network connected to a RADIUS server, a LAN switch with authentication function, or an access point.

- 1. Access Web Config and then select the **Network Security** tab > **IEEE802.1X** > **Basic**.
- 2. Enter a value for each item.

If you want to use the printer on a Wi-Fi network, click Wi-Fi Setup and select or enter an SSID.

Note

You can share settings between Ethernet and Wi-Fi.

3. Click Next.

A confirmation message is displayed.

4. Click OK.

The printer is updated.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "IEEE802.1X Network Setting Items" on page 85

→ "Cannot Access the Printer or Scanner after Configuring IEEE802.1X" on page 89

IEEE802.1X Network Setting Items

Items		Settings and Explanation	
IEEE802.1X (Wired LAN)	You can enable or disable settings of the page (IEEE802.1X > Basic) for IEEE802.1X (Wired LAN).		
IEEE802.1X (Wi-Fi)	The connection status of IEEE	The connection status of IEEE802.1X (Wi-Fi) is displayed.	
Connection Method	The connection method of a	The connection method of a current network is displayed.	
EAP Type	Select an option for an authentication method between the printer and a RADIUS server.		
	EAP-TLS	You need to obtain and import a CA-signed certificate.	
	PEAP-TLS		
	EAP-TTLS	You need to configure a password.	
	PEAP/MSCHAPv2		
User ID	Configure an ID to use for an authentication of a RADIUS server.		
	Enter 1 to 128 1-byte ASCII (0x20 to 0x7E) characters.		
Password	Configure a password to authenticate the printer.		
	Enter 1 to 128 1-byte ASCII (0: RADIUS server, you can enter	x20 to 0x7E) characters. If you are using a Windows server as a up to 127 characters.	
Confirm Password	Enter the password you confi	Enter the password you configured for confirmation.	
Server ID	You can configure a server ID to authenticate with a specified RADIUS server. Authenticator verifies whether a server ID is contained in the subject/subjectAltName field of a server certificate that is sent from a RADIUS server or not.		
	Enter 0 to 128 1-byte ASCII (0x20 to 0x7E) characters.		
Certificate Validation	You can set certificate validation regardless of the authentication method. Import the certificate in CA Certificate .		
Anonymous Name	If you select PEAP-TLS , EAP-TTLS or PEAP/MSCHAPv2 for EAP Type , you can configure an anonymous name instead of a user ID for a phase 1 of a PEAP authentication.		
	Enter 0 to 128 1-byte ASCII (0x20 to 0x7E) characters.		
Encryption Strength	You can select one of the followings.		
	High	AES256/3DES	
	Middle	AES256/3DES/AES128/RC4	

Related Information

→ "Configuring an IEEE802.1X Network" on page 84

Configuring a Certificate for IEEE802.1X

Configure the Client Certificate for IEEE802.1X. When you set it, you can use **EAP-TLS** and **PEAP-TLS** as an authentication method of IEEE802.1x. If you want to configure the certification authority certificate, go to **CA Certificate**.

- 1. Access Web Config and then select the **Network Security** tab > **IEEE802.1X** > **Client Certificate**.
- 2. Enter a certificate in the **Client Certificate**.

If you have already imported a certificate published by a Certification Authority, you can copy the certificate and use it in IEEE802.1X. To copy, select the certificate from **Copy From**, and then click **Copy**.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "Obtaining and Importing a CA-signed Certificate" on page 64

Checking IEEE802.1X Network Status

You can check the IEEE802.1X status by printing a network status sheet. For more information on printing a network status sheet, see the printer's documentation.

Status ID	IEEE802.1X Status
Disable	IEEE802.1X feature is disable.
EAP Success	IEEE802.1X authentication has succeeded and network connection is available.
Authenticating	IEEE802.1X authentication has not been completed.
Config Error	Authentication has failed since the user ID has not been set.
Client Certificate Error	Authentication has failed since the client certificate is out of date.
Timeout Error	Authentication has failed since there is no answer from the RADIUS server and/or authenticator.
User ID Error	Authentication has failed since the printer's user ID and/or certificate protocol is incorrect.
Server ID Error	Authentication has failed since the server ID of the server certificate and the server's ID do not match.
Server Certificate Error	Authentication has failed since there are the following errors in the server certificate.
	☐ The server certificate is out of date.
	☐ The chain of the server certificate is incorrect.
CA Certificate Error	Authentication has failed since there are the following errors in a CA certificate.
	☐ Specified CA certificate is incorrect.
	☐ The correct CA certificate is not imported.
	☐ CA certificate is out of date.

Status ID	IEEE802.1X Status
EAP Failure	Authentication has failed since there are the following errors in the printer settings.
	If EAP Type is EAP-TLS or PEAP-TLS, client certificate is incorrect or has certain problems.
	If EAP Type is EAP-TTLS or PEAP/MSCHAPv2, user ID or password is not correct.

Solving Problems for Advanced Security

Restoring the Security Settings

When you establish a highly secure environment such as IPsec/IP Filtering or IEEE802.1X, you may not be able to communicate with devices because of incorrect settings or trouble with the device or server. In this case, restore the security settings in order to make settings for the device again or to allow you temporary use.

Disabling the Security Function Using the Control Panel

You can disable IPsec/IP Filtering or IEEE802.1X using the printer's control panel.

- 1. Select Menu > General Settings > Network Settings.
- 2. Select Advanced.
- 3. Select from the following items that you want to disable.
 - ☐ Disable IPsec/IP Filtering
 - ☐ Disable IEEE802.1X
- 4. Select **Start Setup** on the confirmation screen.
- 5. When a completion message is displayed, select **Close**.

The screen automatically closes after a specific length of time if you do not select **Close**.

Problems Using Network Security Features

Forgot a Pre-shared Key

Re-configure a pre-shared key.

To change the key, access Web Config and select the **Network Security** tab > **IPsec/IP Filtering** > **Basic** > **Default Policy** or **Group Policy**.

When you change the pre-shared key, configure the pre-shared key for computers.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35

Cannot Communicate with IPsec Communication

Specify the algorithm that the printer or the computer does not support.

The printer supports the following algorithms. Check the settings of the computer.

Security Methods	Algorithms
IKE encryption algorithm	AES-CBC-128, AES-CBC-192, AES-CBC-256, AES-GCM-128*, AES-GCM-192*, AES-GCM-256*, 3DES
IKE authentication algorithm	SHA-1, SHA-256, SHA-384, SHA-512, MD5
IKE key exchange algorithm	DH Group1, DH Group2, DH Group5, DH Group14, DH Group15, DH Group16, DH Group17, DH Group18, DH Group19, DH Group20, DH Group21, DH Group22, DH Group23, DH Group24, DH Group25, DH Group26, DH Group27*, DH Group28*, DH Group29*, DH Group30*
ESP encryption algorithm	AES-CBC-128, AES-CBC-192, AES-CBC-256, AES-GCM-128, AES-GCM-192, AES-GCM-256, 3DES
ESP authentication algorithm	SHA-1, SHA-256, SHA-384, SHA-512, MD5
AH authentication algorithm	SHA-1, SHA-256, SHA-384, SHA-512, MD5

^{*}available for IKEv2 only

Related Information

→ "Encrypted Communication Using IPsec/IP Filtering" on page 73

Cannot Communicate Suddenly

The IP address of the printer has been changed or cannot be used.

When the IP address registered to the local address on Group Policy has been changed or cannot be used, IPsec communication cannot be performed. Disable IPsec using the printer's control panel.

If the DHCP is out of date, rebooting or the IPv6 address is out of date or has not been obtained, then the IP address registered for the printer's Web Config (**Network Security** tab > **IPsec/IP Filtering** > **Basic** > **Group Policy** > **Local Address(Printer)**) may not be found.

Use a static IP address.

The IP address of the computer has been changed or cannot be used.

When the IP address registered to the remote address on Group Policy has been changed or cannot be used, IPsec communication cannot be performed.

Disable IPsec using the printer's control panel.

If the DHCP is out of date, rebooting or the IPv6 address is out of date or has not been obtained, then the IP address registered for the printer's Web Config (Network Security tab > IPsec/IP Filtering > Basic > Group Policy > Remote Address(Host)) may not be found.

Use a static IP address.

Related Information

- → "Accessing Web Config" on page 23
- → "Logging on to the Printer Using Web Config" on page 35
- → "Encrypted Communication Using IPsec/IP Filtering" on page 73

Cannot Create the Secure IPP Printing Port

The correct certificate is not specified as the server certificate for SSL/TLS communication.

If the specified certificate is not correct, creating a port may fail. Make sure you are using the correct certificate.

The CA certificate is not imported to the computer accessing the printer.

If a CA certificate is not imported to the computer, creating a port may fail. Make sure a CA certificate is imported.

Related Information

→ "Encrypted Communication Using IPsec/IP Filtering" on page 73

Cannot Connect After Configuring IPsec/IP Filtering

The settings of IPsec/IP Filtering are incorrect.

Disable IPsec/IP filtering from the printer's control panel. Connect the printer and computer and make the IPsec/IP Filtering settings again.

Related Information

→ "Encrypted Communication Using IPsec/IP Filtering" on page 73

Cannot Access the Printer or Scanner after Configuring IEEE802.1X

The settings of IEEE802.1X are incorrect.

Disable IEEE802.1X and Wi-Fi from the printer's control panel. Connect the printer and a computer, and then configure IEEE802.1X again.

Related Information

→ "Configuring an IEEE802.1X Network" on page 84

Problems on Using a Digital Certificate

Cannot Import a CA-signed Certificate

CA-signed Certificate and the information on the CSR do not match.

If the CA-signed Certificate and CSR do not have the same information, the CSR cannot be imported. Check the following:

☐ Are you trying to import the certificate to a device that does not have the same information?

Check the information of the CSR and then import the certificate to a device that has the same information.

☐ Did you overwrite the CSR saved into the printer after sending the CSR to a certificate authority? Obtain the CA-signed certificate again with the CSR.

CA-signed Certificate is more than 5KB.

You cannot import a CA-signed Certificate that is more than 5KB.

The password for importing the certificate is incorrect.

Enter the correct password. If you forget the password, you cannot import the certificate. Re-obtain the CA-signed Certificate.

Related Information

→ "Importing a CA-signed Certificate" on page 66

Cannot Update a Self-Signed Certificate

The Common Name has not been entered.

Common Name must be entered.

Unsupported characters have been entered to Common Name.

Enter between 1 and 128 characters of either IPv4, IPv6, host name, or FQDN format in ASCII (0x20-0x7E).

A comma or space is included in the common name.

If a comma is entered, the **Common Name** is divided at that point. If only a space is entered before or after a comma, an error occurs.

Related Information

→ "Updating a Self-signed Certificate" on page 68

Cannot Create a CSR

The Common Name has not been entered.

The **Common Name** must be entered.

Unsupported characters have been entered to Common Name, Organization, Organizational Unit, Locality, and State/Province.

Enter characters of either IPv4, IPv6, host name, or FQDN format in ASCII (0x20-0x7E).

A comma or space is included in the Common Name.

If a comma is entered, the **Common Name** is divided at that point. If only a space is entered before or after a comma, an error occurs.

Related Information

→ "Obtaining a CA-signed Certificate" on page 64

Warning Relating to a Digital Certificate Appears

Messages	Cause/What to do
Enter a Server Certificate.	Cause:
	You have not selected a file to import.
	What to do:
	Select a file and click Import .
CA Certificate 1 is not entered.	Cause:
	CA certificate 1 is not entered and only CA certificate 2 is entered.
	What to do:
	Import CA certificate 1 first.
Invalid value below.	Cause:
	Unsupported characters are contained in the file path and/or password.
	What to do:
	Make sure that the characters are entered correctly for the item.
Invalid date and time.	Cause:
	Date and time for the printer have not been set.
	What to do:
	Set date and time using Web Config, EpsonNet Config or the printer's control panel.
Invalid password.	Cause:
	The password set for CA certificate and entered password do not match.
	What to do:
	Enter the correct password.

Messages	Cause/What to do
Invalid file.	Cause:
	You are not importing a certificate file in X509 format.
	What to do:
	Make sure that you are selecting the correct certificate sent by a trusted certificate authority.
	Cause:
	The file you have imported is too large. The maximum file size is 5KB.
	What to do:
	If you select the correct file, the certificate might be corrupted or fabricated.
	Cause:
	The chain contained in the certificate is invalid.
	What to do:
	For more information on the certificate, see the website of the certificate authority.
Cannot use the Server Certificates that	Cause:
include more than three CA certificates.	The certificate file in PKCS#12 format contains more than 3 CA certificates.
	What to do:
	Import each certificate as converting from PKCS#12 format to PEM format, or import the certificate file in PKCS#12 format that contains up to 2 CA certificates.
The certificate has expired. Check if the	Cause:
certificate is valid, or check the date and time on your printer.	The certificate is out of date.
, .	What to do:
	If the certificate is out of date, obtain and import the new certificate.
	☐ If the certificate is not out of date, make sure the printer's date and time are set correctly.
Private key is required.	Cause:
	There is no paired private key with the certificate.
	What to do:
	If the certificate is the PEM/DER format and it is obtained from a CSR using a computer, specify the private key file.
	If the certificate is the PKCS#12 format and it is obtained from a CSR using a computer, create a file that contains the private key.
	Cause:
	You have re-imported the PEM/DER certificate obtained from a CSR using Web Config.
	What to do:
	If the certificate is the PEM/DER format and it is obtained from a CSR using Web Config, you can only import it once.

Messages	Cause/What to do
Setup failed.	Cause:
	Cannot finish the configuration because the communication between the printer and computer failed or the file cannot be read by some errors.
	What to do:
	After checking the specified file and communication, import the file again.

Related Information

→ "About Digital Certification" on page 64

Delete a CA-signed Certificate by Mistake

There is no backup file for the CA-signed certificate.

If you have the backup file, import the certificate again.

If you obtain a certificate using a CSR created from Web Config, you cannot import a deleted certificate again. Create a CSR and obtain a new certificate.

Related Information

- → "Deleting a CA-signed Certificate" on page 67
- → "Importing a CA-signed Certificate" on page 66