

**Brother Device Conductor**  
**SOTI Connect Printer Management**  
**Direct Connection Setup Guide**

**Version 1.3**

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- iii) By any malfunctions or errors caused by or from the use of your computers, hardware devices, or software.

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# 1. Introduction

This User's Guide is intended for IT administrators who want to install and configure the software for connecting Brother printers to SOTI Connect. It is understood that these IT administrators know how to use Microsoft Internet Information Services (IIS).

SOTI Connect is an Internet of Things Framework (IOTF), a flexible, extensible system for managing devices in an Internet of Things (IoT) network. Device administrators can use the system to remotely query device status, update the software on devices, configure, reboot, and perform other actions permitted by the device manufacturer.

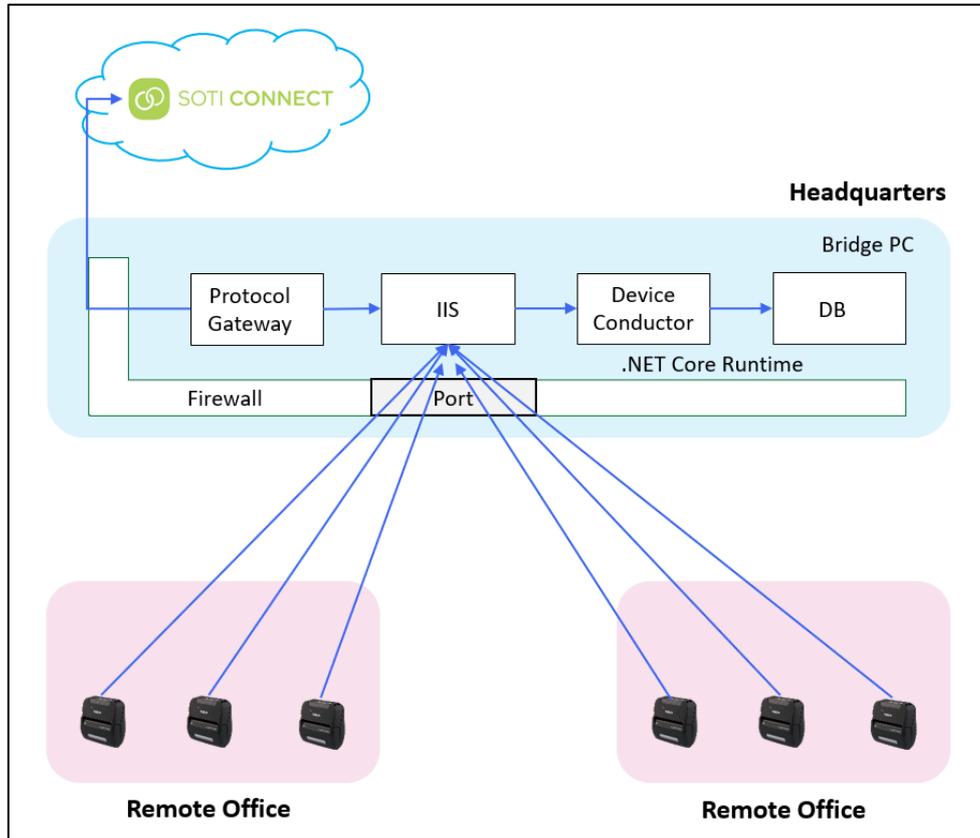
SOTI Connect does not require devices to support a specific management or communication protocol. If you need to use SOTI Connect to manage a new device with a different protocol, SOTI can create a Protocol Adapter and a Protocol Definition for the new device so you can manage the device without upgrading the core system.

## 2. SOTI Connect Configurations

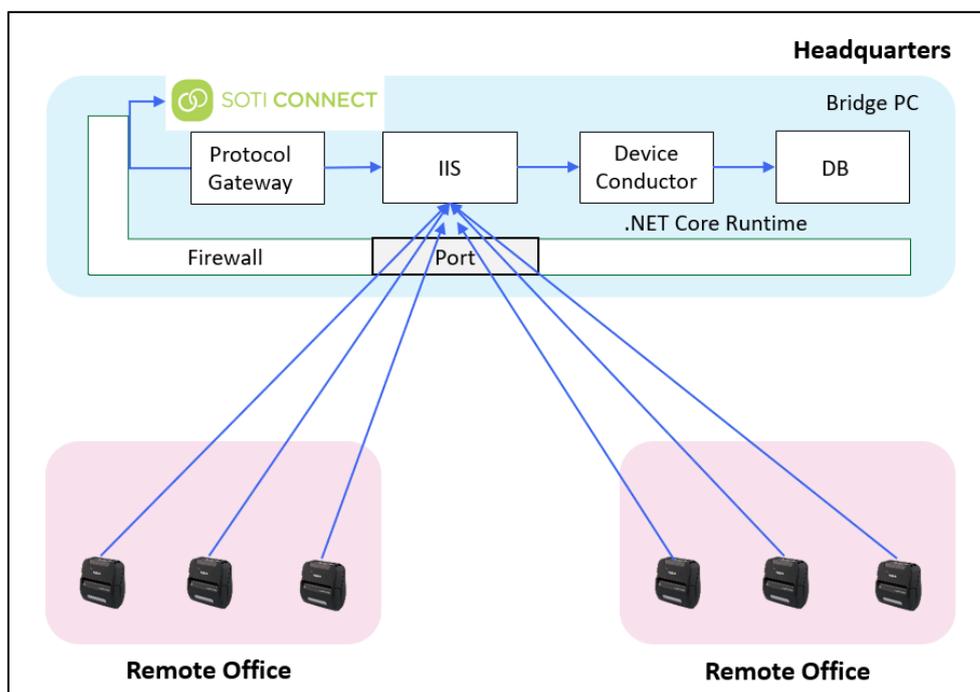
### 2.1 System Configuration

There are two types of SOTI Connect system configurations: Cloud and On-Premise

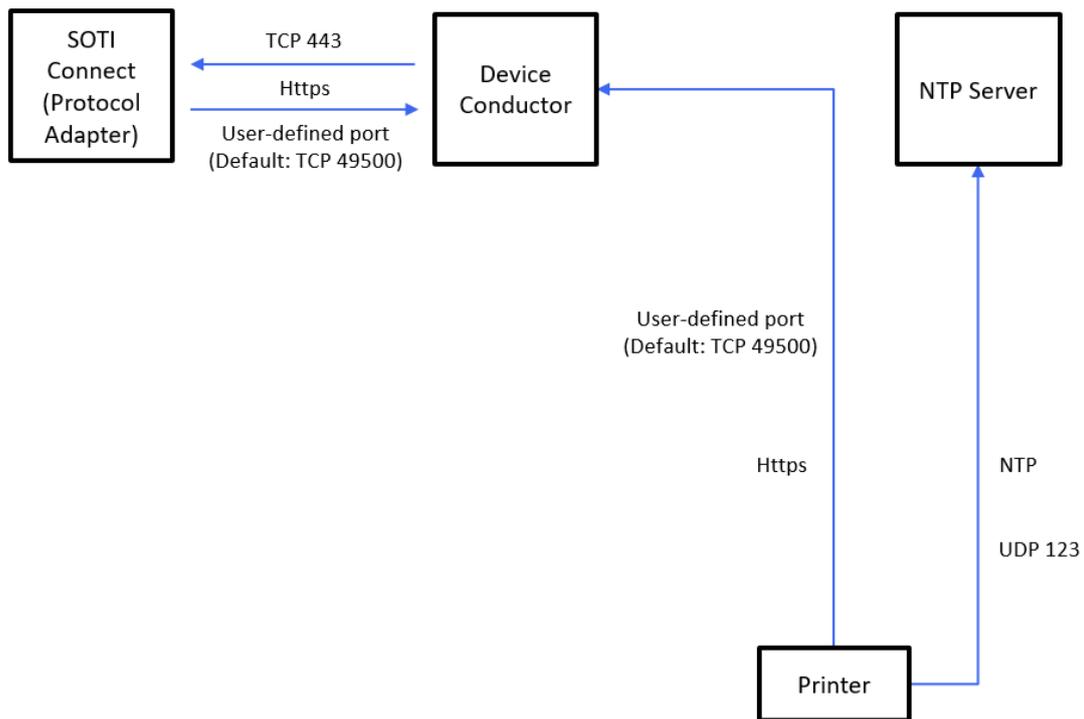
#### Cloud Configuration



#### On-Premise Configuration



## 2.2 Network Port Configuration



## 2.3 Definition of Terms

Term	Description
MDM	An acronym for Mobile Device Management. Refers to a management system for mobile devices (for example, smartphones and peripheral equipment).
SOTI Connect	SOTI Connect is an IoT solution that provides complete lifecycle management of IoT devices within an organization.
SOTI Protocol Adapter	Software provided by SOTI to connect between SOTI Connect and the printer via Brother Device Conductor.
IIS	An acronym for Microsoft Internet Information Services. A standard web server (application server) service on Windows.
.NET Core Runtime	An execution environment provided by Microsoft. Brother Device Conductor initially starts using this execution environment.
DB	An abbreviation for “database”. This software uses the Microsoft SQL Server. Brother Device Conductor uses this database for data management.
Brother Device Conductor	Brother Device Conductor is a web application. It includes the tools required for configuring various Brother Device Conductor settings. Brother Device Conductor connects the SOTI Protocol Adapter and the printer.

## 2.4 Supported Printers

Model	Supported Firmware Version	Supported Interface
RJ-3230B	1.00 or later	Wired LAN (with Cradle)
RJ-3250WB	1.00 or later	Wired LAN (with Cradle) Wireless LAN
RJ-4250WB	1.34 or later	Wireless LAN
TD-4550DNWB	1.10 or later	Wired LAN Wireless LAN
TD-4520DN	1.10 or later	Wired LAN
TD-4420DN	1.10 or later	Wired LAN
PJ-883	1.00 or later	Wireless LAN

## 2.5 Specifications

Software	
Brother Device Conductor	<p><b><u>Supported Operating System</u></b></p> <p>Windows 10 (64-bit) / Server 2016</p> <p><b>NOTE</b> Pursuant to the supported operating system of coexisting SOTI software (Protocol Adapter)</p>
	<p><b><u>System Requirements</u></b></p> <ul style="list-style-type: none"> <li>• Net Core Version 3.1 (Long Term Support)</li> <li>• Microsoft SQL Server 2017 or Microsoft SQL Server 2016</li> </ul> <p><b>NOTE</b> Supports Express Edition</p> <ul style="list-style-type: none"> <li>• IIS</li> </ul>
	<p><b><u>Supported Languages</u></b></p> <ul style="list-style-type: none"> <li>• English</li> <li>• French</li> <li>• German</li> <li>• Spanish</li> <li>• Portuguese</li> <li>• Italian</li> <li>• Polish</li> </ul>

## 2.6 What Brother Provides

No.	Item	Description
1	Software User's Guide	This document.
2	DeviceConductorInstaller.msi	Brother Device Conductor Installer.
3	DeviceConductor.mdf DeviceConductor_log.ldf	Files used to prepare a table for maintaining various types of data communicated with this IoT Framework system on the SQL Server.  <b>NOTE</b> Place these files in the same directory with DeviceConductorInstaller.msi. The installer references these files.
4	labelcc.exe <Components> • brosnmp.dll • Activate.bat • devicelist.csv • profile.csv  <b>NOTE</b> These files must be in the same directory with labelcc.exe.	This tool sends the SOTI Connect configuration to the printer.  To configure each printer in a specific order via USB or the network, use the labelcc.exe and brosnmp.dll files. See section <a href="#">3.6.4 "Install Connection Setting File on Printer"</a> .  To configure multiple printers via the network, use labelcc.exe and its components. See section <a href="#">6 "Troubleshooting: Tips"</a> (No.1).

### **NOTE**

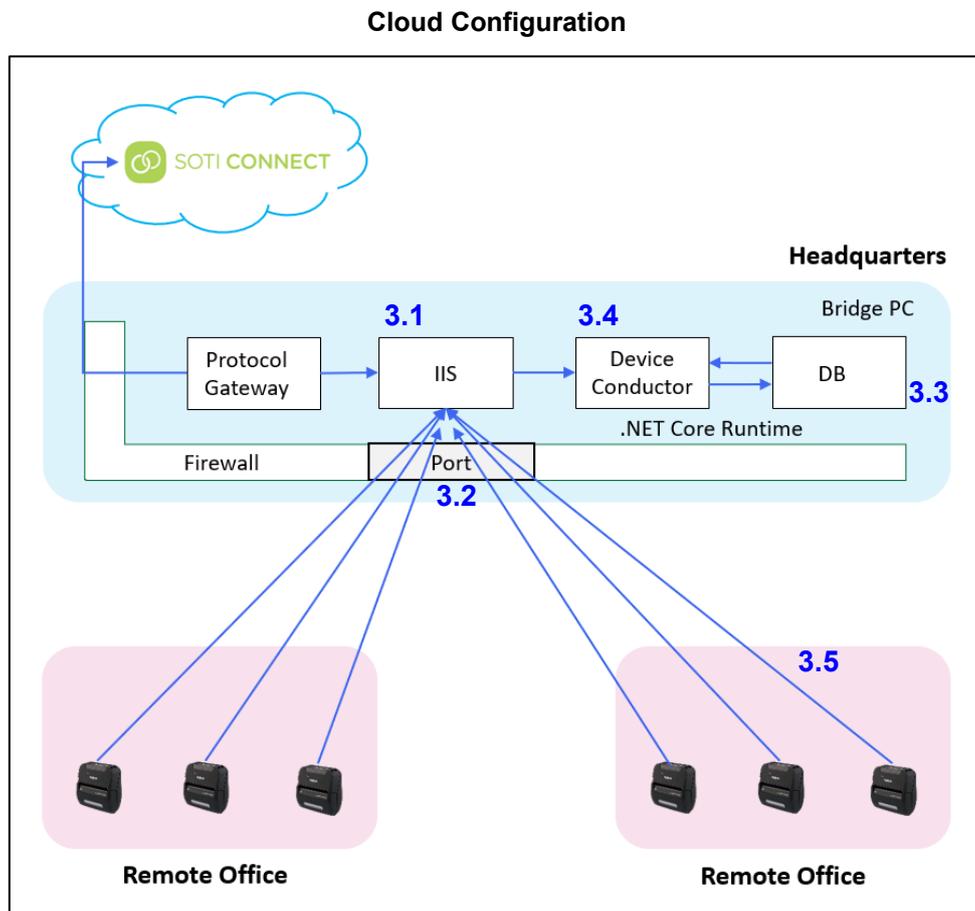
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For SOTI Connect and SOTI Protocol Adapter software, contact your local SOTI Connect sales office.

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### 3. Installation

This chapter describes the procedures for installing all software *except* SOTI Connect and SOTI Protocol Adapter. The numbers in the image correspond to sections in this chapter and the order of installation.

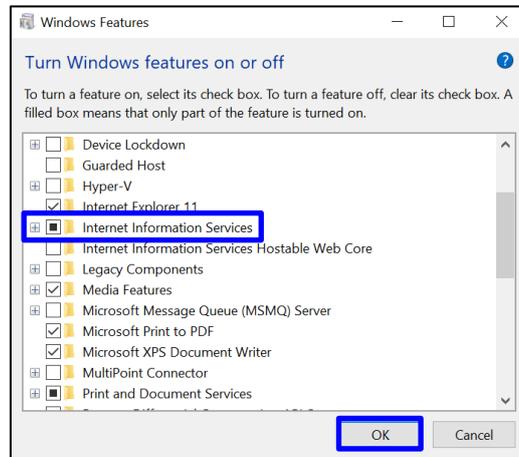


#### NOTES

- \* Installation and software configuration for Cloud and On-Premise are the same. Follow these instructions for both types of configurations.
- \* For SOTI Connect and SOTI Protocol Adapter installation and configuration information, contact your local SOTI Connect sales office.
- \* **To install SOTI and configure SOTI settings, you must log into the Windows Operating System (OS) as an Administrator.**

### 3.1 Configure Internet Information Services (IIS)

1. From your operating system main menu, click **Windows Settings > Apps > Programs and Features**.
2. Click **Turn Windows features on or off** and select the **Internet Information Services** checkbox.
3. Click **OK**.

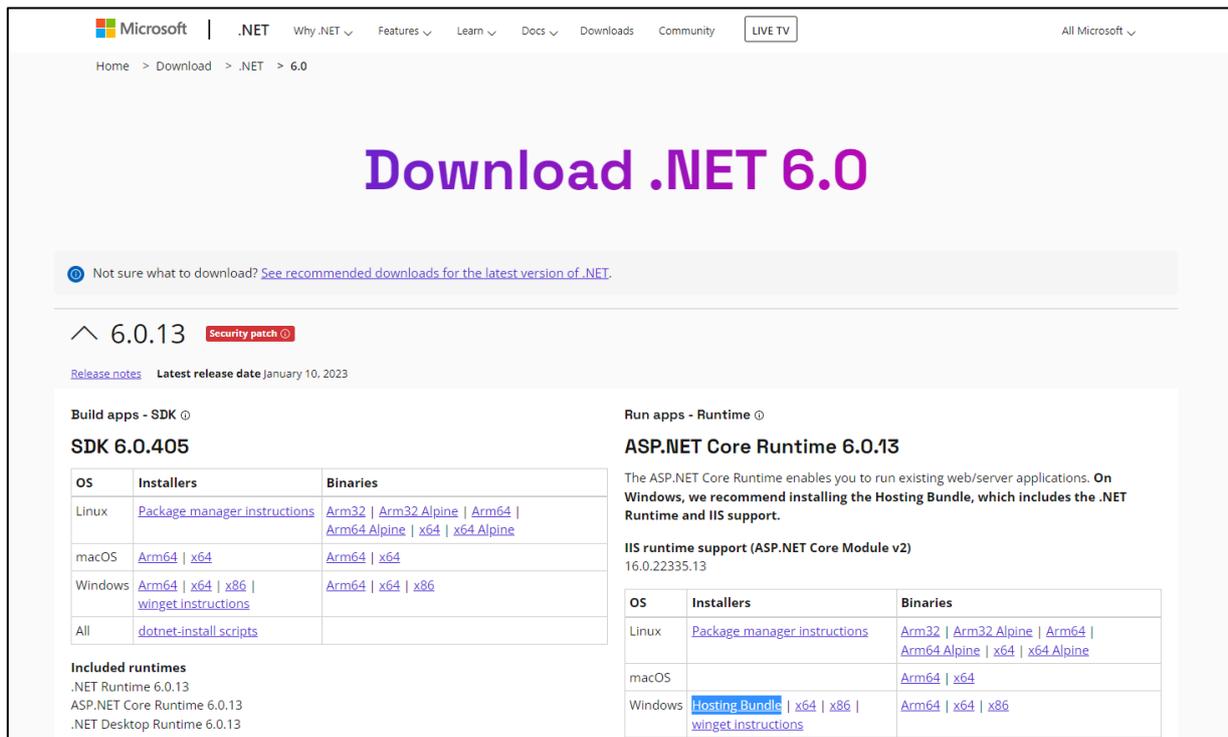


### 3.2 Install .NET Core Runtime

#### NOTE

If you installed .NET Core Runtime 6.0.x prior to configuring IIS, see section 6 “Troubleshooting: Tips” (No. 2).

1. Go to the [Microsoft website](#).
2. Click **Hosting Bundle** to download .NET Core Runtime.



Microsoft | .NET Why .NET Features Learn Docs Downloads Community LIVE TV All Microsoft

Home > Download > .NET > 6.0

# Download .NET 6.0

Not sure what to download? [See recommended downloads for the latest version of .NET.](#)

6.0.13 Security patch

[Release notes](#) Latest release date January 10, 2023

**Build apps - SDK**

**SDK 6.0.405**

OS	Installers	Binaries
Linux	<a href="#">Package manager instructions</a>	<a href="#">Arm32</a>   <a href="#">Arm32 Alpine</a>   <a href="#">Arm64</a>   <a href="#">Arm64 Alpine</a>   <a href="#">x64</a>   <a href="#">x64 Alpine</a>
macOS	<a href="#">Arm64</a>   <a href="#">x64</a>	<a href="#">Arm64</a>   <a href="#">x64</a>
Windows	<a href="#">Arm64</a>   <a href="#">x64</a>   <a href="#">x86</a>   <a href="#">winget instructions</a>	<a href="#">Arm64</a>   <a href="#">x64</a>   <a href="#">x86</a>
All	<a href="#">dotnet-install scripts</a>	

**Included runtimes**  
.NET Runtime 6.0.13  
ASP.NET Core Runtime 6.0.13  
.NET Desktop Runtime 6.0.13

**Run apps - Runtime**

**ASP.NET Core Runtime 6.0.13**

The ASP.NET Core Runtime enables you to run existing web/server applications. **On Windows, we recommend installing the Hosting Bundle, which includes the .NET Runtime and IIS support.**

**IIS runtime support (ASP.NET Core Module v2)**  
16.0.22335.13

OS	Installers	Binaries
Linux	<a href="#">Package manager instructions</a>	<a href="#">Arm32</a>   <a href="#">Arm32 Alpine</a>   <a href="#">Arm64</a>   <a href="#">Arm64 Alpine</a>   <a href="#">x64</a>   <a href="#">x64 Alpine</a>
macOS		<a href="#">Arm64</a>   <a href="#">x64</a>
Windows	<a href="#">Hosting Bundle</a>   <a href="#">x64</a>   <a href="#">x86</a>   <a href="#">winget instructions</a>	<a href="#">Arm64</a>   <a href="#">x64</a>   <a href="#">x86</a>

3. Install the latest version of .NET Core Runtime 6.0.x for your operating system.

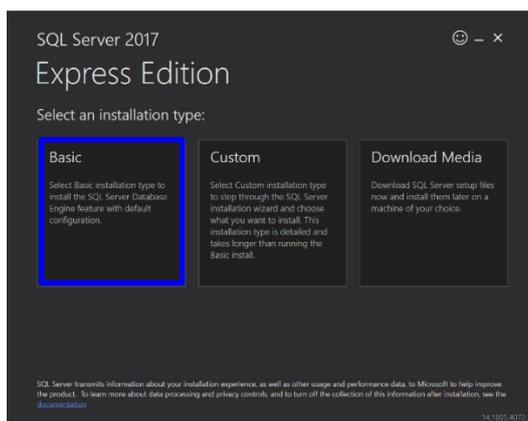
### 3.3 Install Microsoft SQL Server

1. Download SQL Server from the [Microsoft website](#).
2. Click the downloaded file to start the installer.

#### NOTE

Brother Device Conductor supports SQL Server 2016 or SQL Server 2017.

3. Click **Basic**.



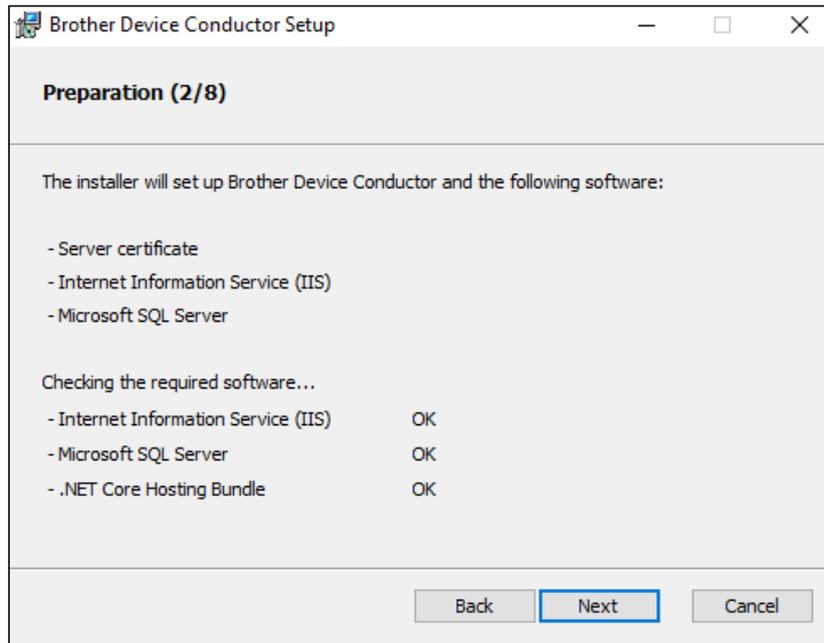
4. Follow the on-screen instructions to complete the installation.

### 3.4 Install the Device Conductor

1. Start "DeviceConductorInstaller.msi" and install the Device Conductor.
2. Review the End-User License Agreement and click **Accept**.

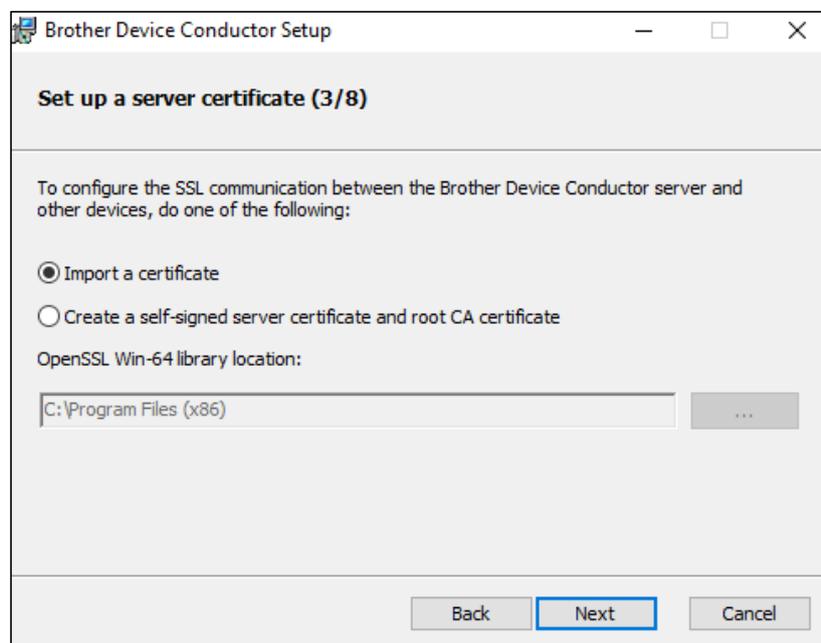


3. Confirm the installation preparation data and click **Next**.



4. Set up the server certificate by selecting one of the following radio buttons:

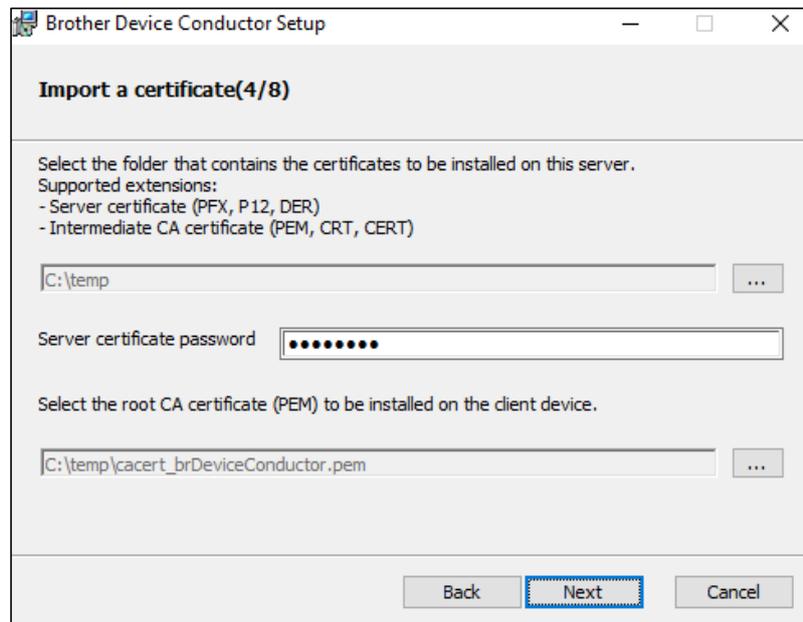
- If you select **Import a server certificate and CA certificate**, you must set up a server certificate and a CA certificate issued by a third party. For more information, see step 5.
- If you select **Create a self-signed certificate and self-signed CA**, you must install "OpenSSI-Win64". For more information, see section [6 "Troubleshooting: Tips"](#) (No.7).



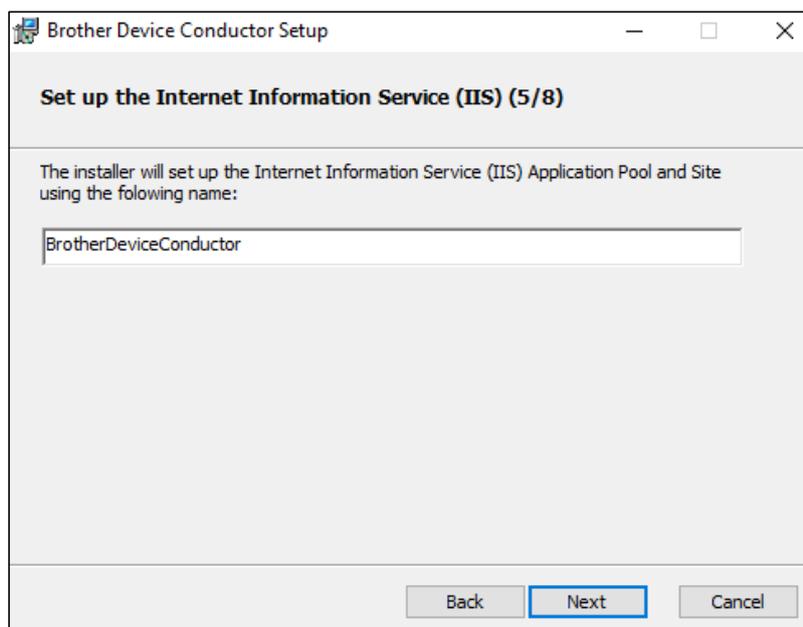
5. Import a server certificate by navigating to its folder, typing its password (if needed), and then navigating to a root CA certificate. When finished, click **Next**.

## NOTE

Do not include any files except the certificate in the folder. The certificate chain should be made up of a list of certificates that start from a server certificate and end with the root certificate in the same folder. If these are not supported, an error message appears when you click **Next**.



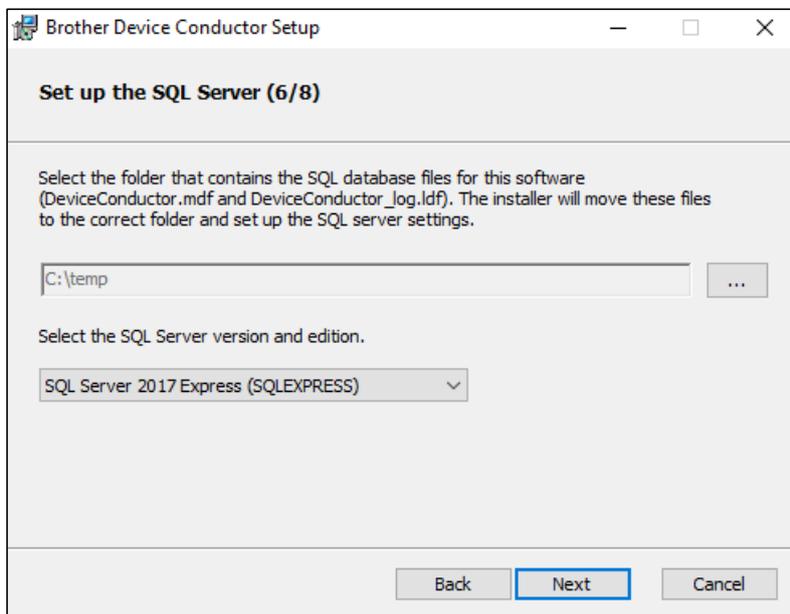
6. Type the IIS information, and then click **Next**.



7. Navigate to the SQL database files, select the SQL server version you want, and then click **Next**.

### NOTE

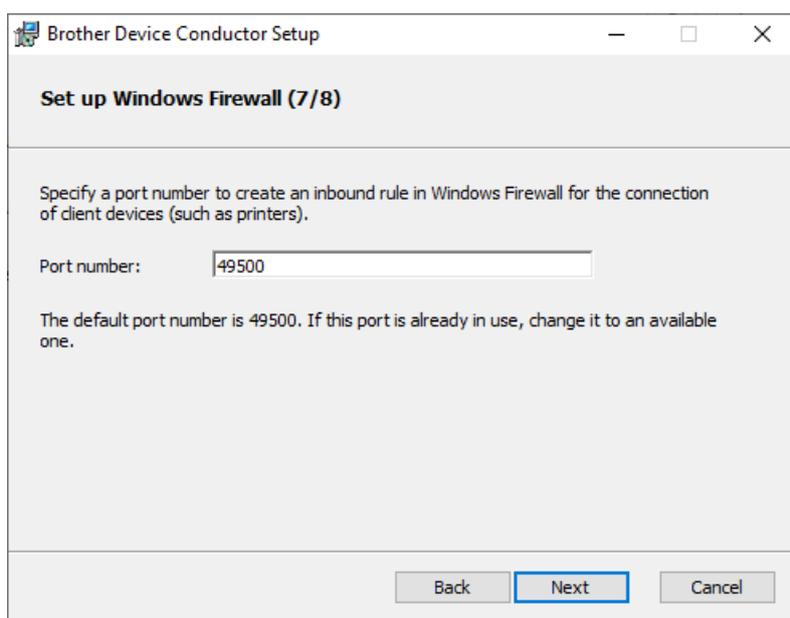
Place these MDF and LDF files in the same hierarchy as DeviceConductorInstaller.msi, as they are all referenced by the installer.



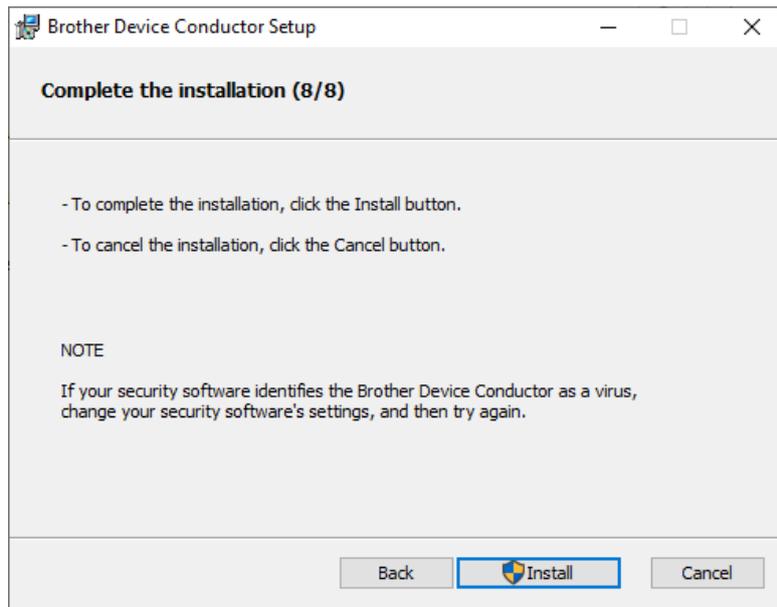
8. Type the port number in the **Port number** field, and then click **Next**.

### NOTES

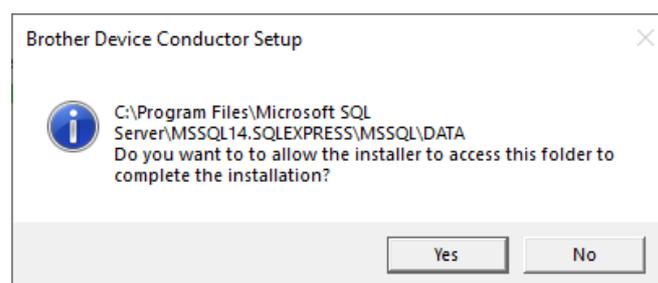
- \* The default port number is "49500" and can be changed if necessary.
- \* Make sure there is no site with the same port number in IIS, or the Device Conductor will not start after installation.



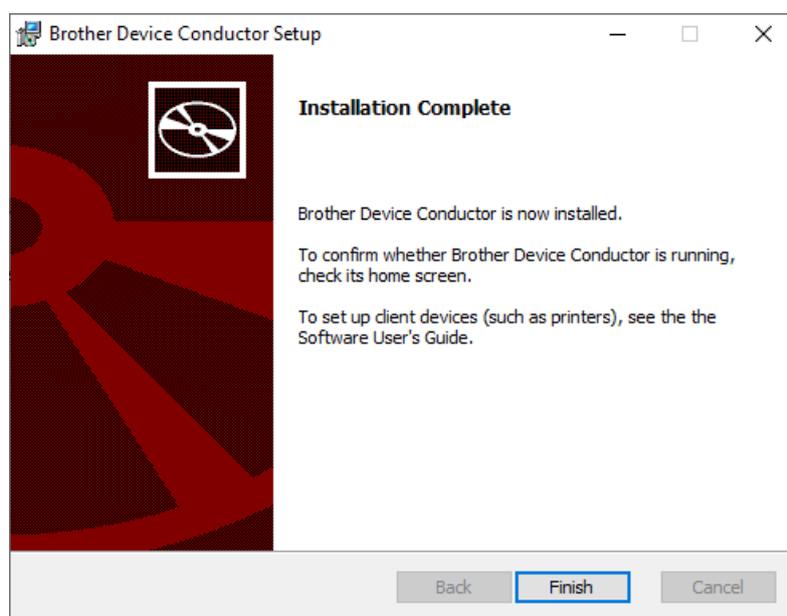
9. Click **Install**.



10. When the following message appears, click **Yes** to complete the installation.

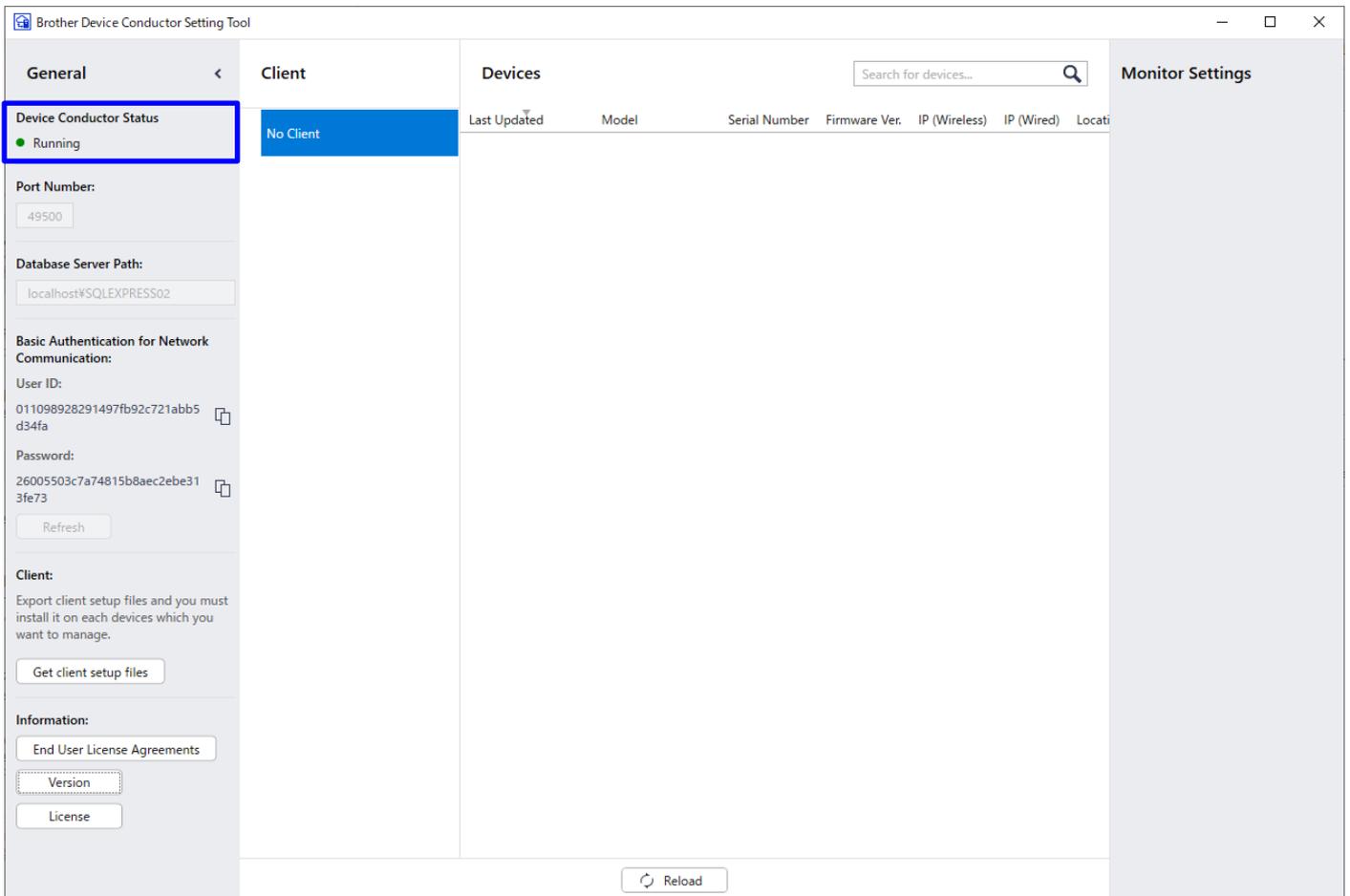


11. Click **Finish**.



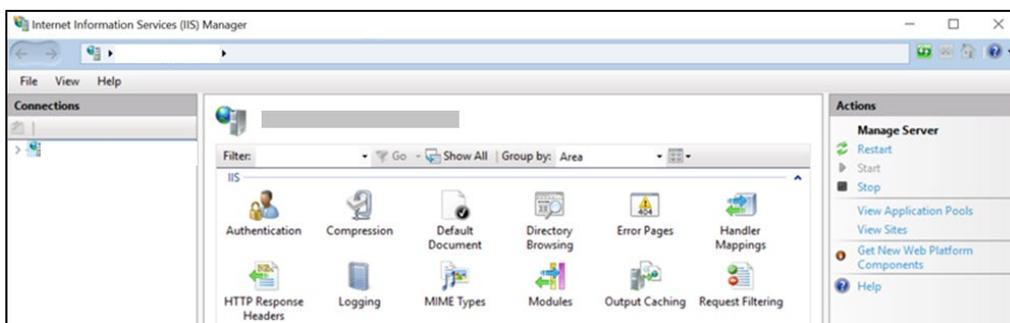
### 3.5 Confirm Device Conductor Connection with IIS and SQL Server

1. Click **Start > Brother > Device Conductor Setting Tool**.
2. Confirm that the “Device Conductor Status” displays **Running**.



### Confirm Validation

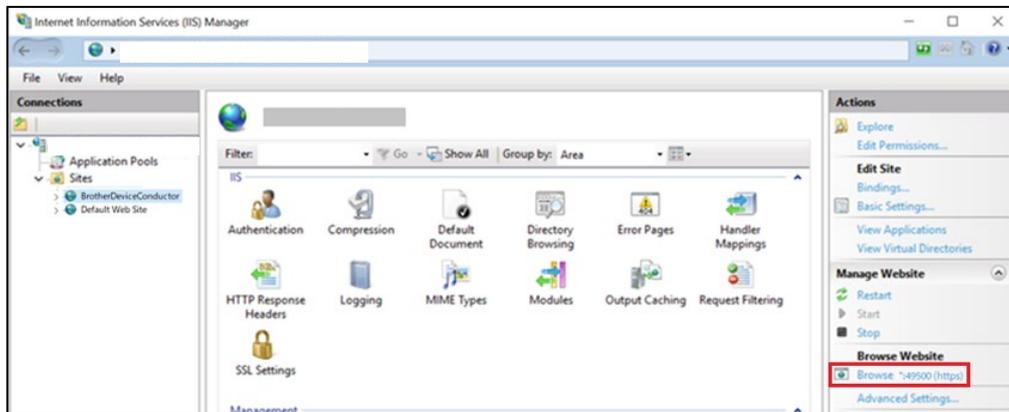
1. Start IIS Manager.



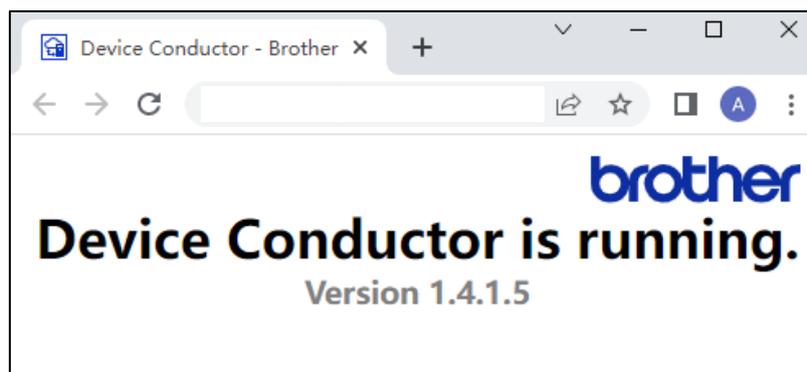
- In the "Browse Website" section in the right navigation pane, click **Browse** (default: \*:49500(https)) to confirm that this launches the Brother Device Conductor.

**NOTE**

If required by your operating environment, customize the Brother Device Conductor site settings on IIS Manager (for example, HTTP response header) after installation or repair installation.



- If the Device Conductor is installed successfully, the following message appears in your browser window.

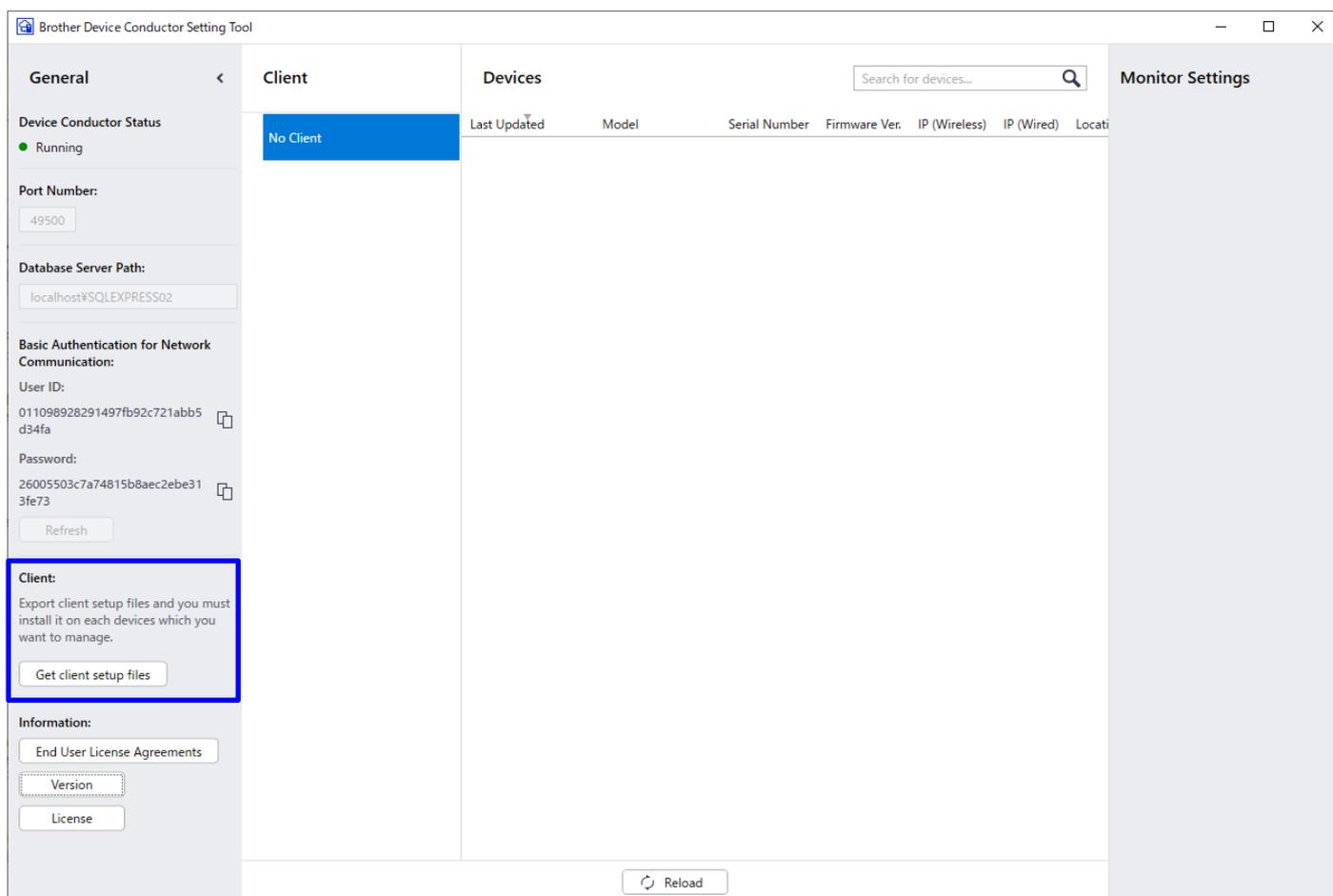


### 3.6 Configure Your Printer to Connect to the Server

#### 3.6.1 Create Direct Connection Files

1. Click **Start > Brother > Device Conductor Setting Tool**.
2. Click **Get client setup files** in the left navigation bar, and then save a ZIP file containing the following files:

File Name	Description
ActivateMDMConnection.bin	Used for direct connection; contains information for connecting to the Device Conductor.
cacert.pem or your imported CA certificate	Used for direct connection; this is the CA certificate for connecting to the Device Conductor.
InactivateMDMConnection.bin	Used when resetting the printer for direct connection.



### 3.6.2 Configure Your Printer's Device and Network Settings

You can configure device and network settings for your printer using the Printer Setting Tool.

To download the Printer Setting Tool, go to [support.brother.com](http://support.brother.com). Select your country or region > click **Downloads** > select your printer > select your operating system > scroll to **Utilities** > download the **Printer Setting Tool**.

The printer must be connected to the same network as the Device Conductor.

#### **NOTE**

When the printer enters Auto Sleep mode, it does not support SOTI Connect. We recommend setting the auto sleep delay to 0.

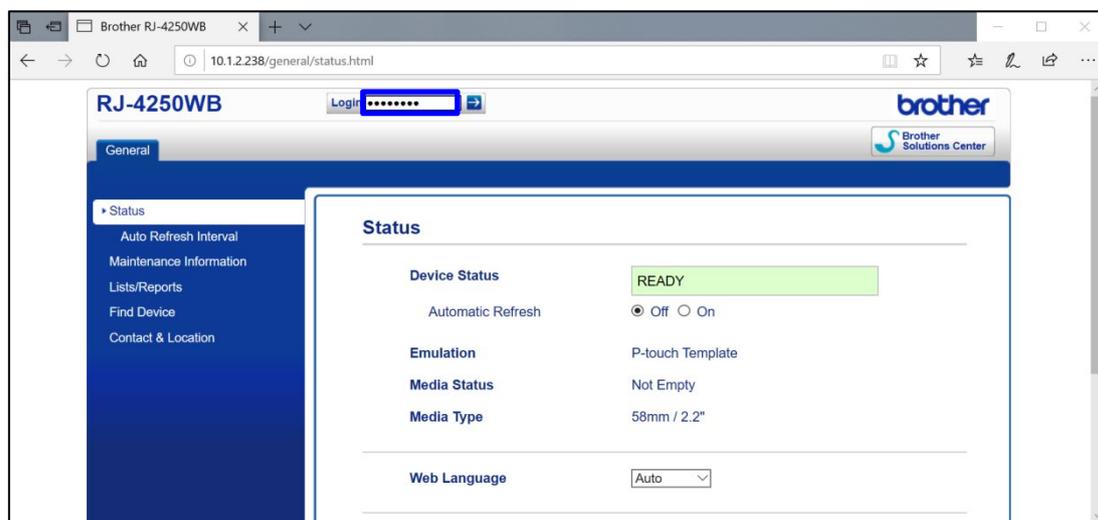
### 3.6.3 Install a CA Certificate on Your Printer

A CA certificate is required for the printer to access the Brother Device Conductor via HTTPS.

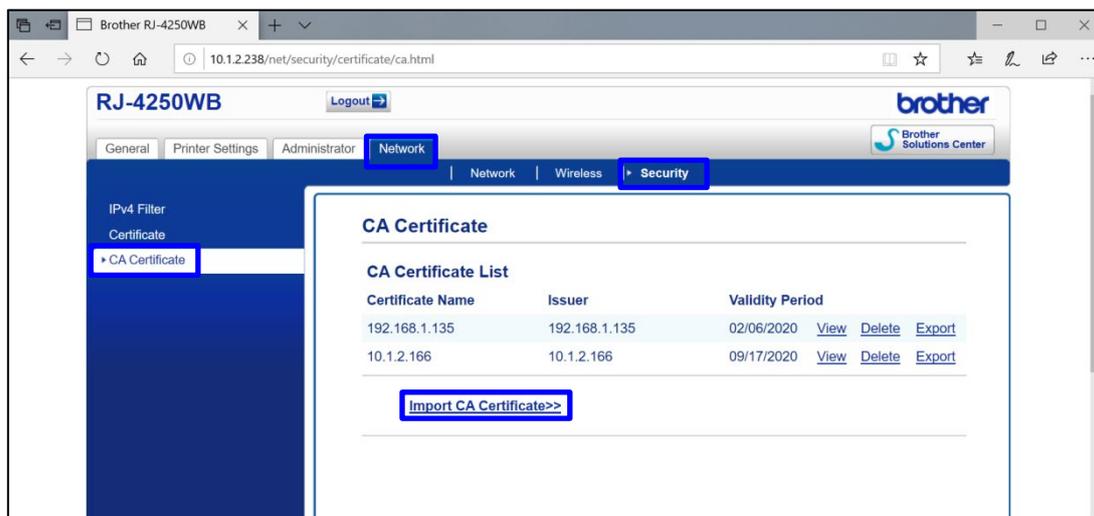
1. Connect your printer to the network, launch Web Based Management, and type your printer's password (if needed).

#### **NOTE**

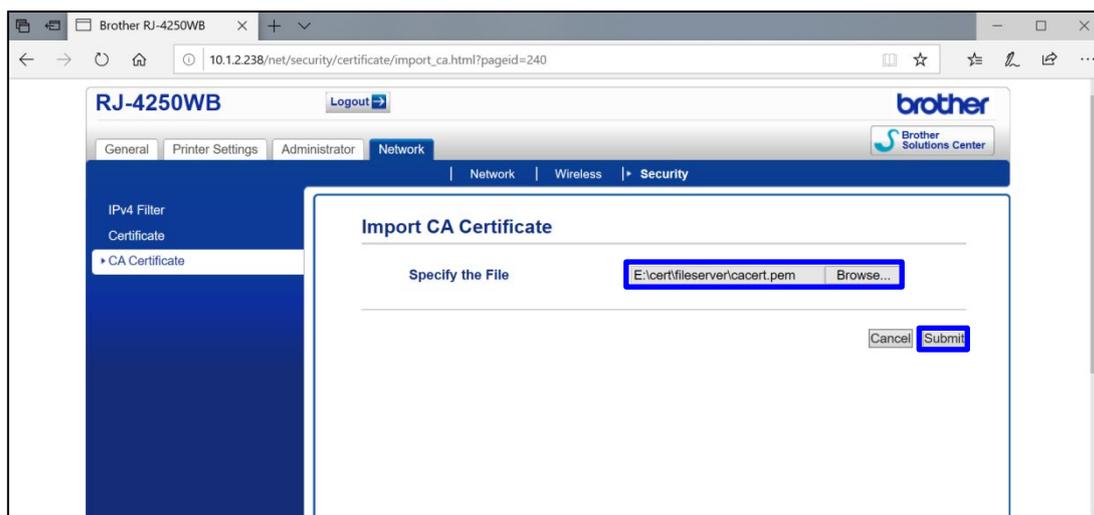
For more information about the default password, see section [6 "Troubleshooting: Tips"](#) (No.2).



2. Click **Network > Security > CA Certificate** and click **Import CA Certificate>>**.



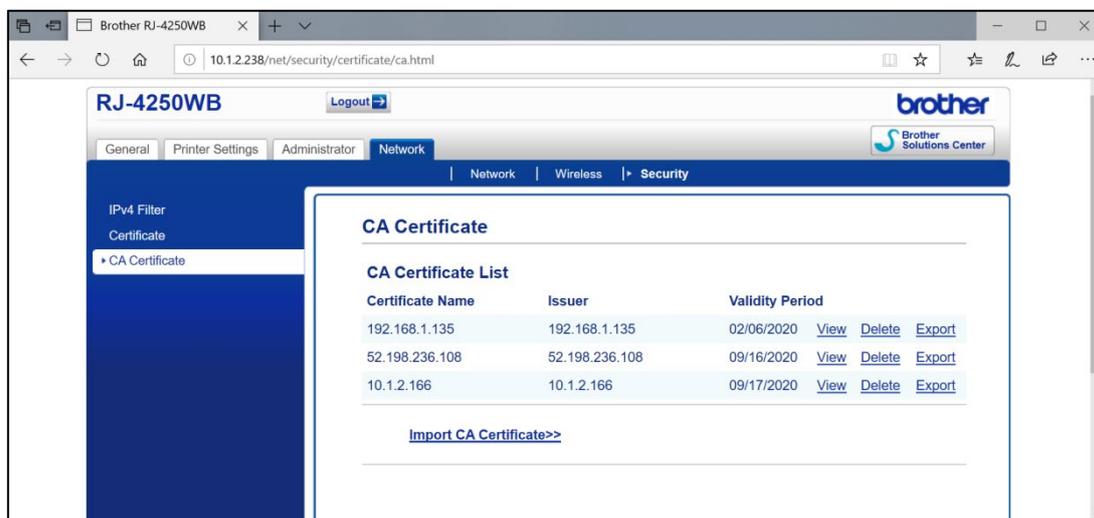
3. Select the CA certificate (\*.pem) and click **Submit** to import it to your device.



4. After the CA certificate is imported, it appears in the list.

## NOTE

If you use a public certificate, you must also import the root certificate.



5. Make sure the CA certificate is listed, and then reboot the printer.

### 3.6.4 Install the Connection Settings File on Your Printer

1. Save `labelcc.exe` in a folder on your computer.
2. Launch the command prompt and navigate to the folder where you saved `labelcc.exe`.
3. To send `ActivateMDMConnection.bin`, which the Device Conductor generates, to the printer, type and execute the following commands:

**`labelcc.exe /ip:"****. ****. ****. ****" /send_file:"full path for ActivateMDMConnection.bin"`**

Example:

`E:/work/LM/labelcc>labelcc.exe /ip:"192.168.11.1" /send_file:"E:/work/LM/labelcc/ActivateMDMConnection.bin"`

## NOTE

Before executing the commands, connect the printer and your computer using a network connection. No printer driver installation is required.

4. To get MDM configuration information, type and execute the following commands:

**`labelcc.exe /ip:"****. ***. ***. ****" /get_mdm_status`**

## NOTES

\* If Direct Mode is activated, "Server is `***. ***. ***. ***. {Port}`" appears in the command prompt.

\* This command checks the status via network only. USB connection is not supported.

\* Alternatively, you can check it by printing the printer information. See the printer's manual how to print the printer information.

## MDM Configuration Information

Item	Value	Description
Direct Mode	<ul style="list-style-type: none"> <li>• OFF</li> <li>• ON</li> </ul>	<ul style="list-style-type: none"> <li>• Direct Mode is not activated.</li> <li>• Direct Mode is activated.</li> </ul>
Server	xxx.xx.xx.xx:YYYY	
SNTP	<ul style="list-style-type: none"> <li>• Synchronized</li> <li>• Synchronizing</li> <li>• Sync failed</li> <li>• Not yet</li> </ul>	<ul style="list-style-type: none"> <li>• UTC clock was successfully obtained from SNTP server.</li> <li>• After changing settings, the time is being queried by the SNTP server.</li> <li>• The most recent query to the SNTP server failed.</li> <li>• The time has not been obtained from the SNTP server since startup.</li> </ul>
State <sup>1</sup>	<ul style="list-style-type: none"> <li>• Non-activated(-100)</li> <li>• Check connection(-100)</li> <li>• During setup(-100)</li> <li>• Running</li> <li>• Sleep</li> <li>• Term</li> </ul>	<ul style="list-style-type: none"> <li>• Not activated</li> <li>• Synchronizing with SNTP</li> <li>• Synchronization with SNTP is completed and connection with the Device Conductor is being checked.</li> <li>• Connection with the Device Conductor has been confirmed and the device is running normally.</li> <li>• Sleeping</li> <li>• Terminated</li> </ul>

<sup>1</sup>RJ-4250WB, TD-4550DNWB, TD-4520DN and TD-4420DN does not support some functions. If the message "This value is not supported for the printer" appears on the command prompt, your model does not support this function.

## Configuration Results

Results	Status
Success	DirectMode: ON Server: "xxx.xx.xx.xx:YYYY" SNTP: Synchronized State: "Running" or "Sleep"
During startup	SNTP: Synchronizing OR SNTP: Synchronized and State: During setup
Failure	SNTP: Sync failed OR SNTP: Synchronized and State: During setup (*) OR SNTP: Synchronized and State: Non-activated (*) (*) could be one of the following: -99: Connection error. Connection to the Device Conductor may have failed (for example, the Device Conductor has halted due to an error). -96: Authentication error. The basic authentication information may be wrong. -95: Certificate error. The certificate may have expired or be the wrong one.

## Printer Information (MDM Information only)

The following information is printed in the **MDM** column.

Item	Value	Description
Enable	True/False	True: MDM function is enabled False: MDM function is disabled
Hostname	IP address	IP address of Brother Device Conductor
Port	Port number	Port number of Brother Device Conductor
SNTP Sync Result	True/False	True: Synchronized with the SNTP server False: Failed to synchronize with the SNTP server
Status	Value A : Value B (Value C)	Value A: shows the current status (see "Status" below) Value B: shows the previous status (see "Status" below) Value C: shows the HTTP communication status (see "HTTP Communication Status" below)

## Printer Status

Value	Status	Description
0	STATUS_NONACTIVE	MDM deactivated state
1	STATUS_CONNECT	Connection check state
2	STATUS_SETUP	MDM setting processing state
3	STATUS_IDLE	Idle state
4	STATUS_SLEEP	Sleep state
5	STATUS_TERM	Termination state

## HTTP Communication Status

The descriptions listed here shows the most common causes of error, but there may be additional causes. We recommend contacting Brother Customer Support or your local Brother sales office for assistance, if needed.

Value	Status	Description
-100	UNKNOWN	Unknown result
-99	CONNECTIONERROR	Connection error
-98	INTERNAL_ERROR	Internal error
-97	BUFFERFULL_ERROR	Buffer full error
-96	AUTHENTICATION_ERROR	Authentication error
-95	CERTIFICATE_ERROR	Certificate error
-94	PARAM_ERROR	Invalid parameter
-93	PROXY_ERROR	Proxy error
-92	URL_ERROR	URL not found
-91	SCHEME_NOT_SUPPORTED	Scheme not supported
-90	TIMEOUT	Timeout error

## HTTP Communication Status (cont.)

Value	Status	Description
-89	WRONG_RESPONSE	Response with invalid syntax
-88	WRONG_JSON_FORMAT	Invalid JSON file format
-87	NO_CREDENTIAL	Token was not available when it was needed
-86	NOT_AUTHORIZED	Tokens were invalid
-85	DNS_ERROR	DNS name query error
-84	REDIRECTION_REFUSED	Redirect rejection stopped the redirect
-83	CLIENT_ERROR	HTTP status code of 400's (client error) was returned
-82	SERVER_ERROR	HTTP status code of 500's (server error) was returned
-81	NG	Processing failed
-80	ACTION_ERROR	Action failed
-0	OK	No error

## Examples of "Status" in MDM:

Value	Status	Normal/Error
1:0 (-100)	SNTP synchronization in progress	Normal
2:1 (0)	Processing registration to the Device Conductor	Normal
3:2	Polling state	Normal
0:2 (-95)	MDM function terminated due to a certificate error during the registration process to the Device Conductor	Error
2:1 (-95)	Retrying due to a certificate error during the registration process to the Device Conductor	Error
0:2 (-99)	MDM function terminated due to a communication error during the registration process to the Device Conductor	Error
2:1 (-99)	Retrying with communication error during registration to the Device Conductor	Error

## Using a USB Connection

1. Connect the printer and your computer using a USB cable.
2. Download and install your Windows printer driver from the Brother support website. Go to [support.brother.com](http://support.brother.com), select your country or region, click **Downloads**, select your model, scroll to the **Drivers** section, and then click the **Printer Driver**.
3. Use the following syntax:  
**labexcc.exe /p:"model name" /send\_file:"full path for ActivateMDMConnection.bin"**

### **3.6.5 SNTP (Simple Network Time Protocol) Server Setting**

To connect the printer to the Brother Device Conductor, first configure the Time Server (SNTP Server) settings. The default SNTP Server address is “sntp.brother.com”.

#### **NOTES**

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- \* It takes approximately one minute for the printer to start network communication after synchronization with the Time Server.
  - \* If you cannot connect due to your network security policy, set up the SNTP Server in the Server environment with the Device Conductor installed. See section [6 “Troubleshooting: Tips”](#) (No.10).
-

## 4. Brother Device Conductor Functions

The screenshot shows the 'Brother Device Conductor Setting Tool' window. It is divided into several sections:

- General:** Contains settings for Device Conductor Status (1), Port Number (2), Database Server Path (3), and Basic Authentication for Network Communication (4). The status is 'Running'.
- Client:** A section for managing clients, currently showing 'Printers' (5).
- Information:** Contains buttons for 'End User License Agreements', 'Version', and 'License' (6).
- Devices:** A table listing discovered devices with columns for Last Updated, Model, Serial Number, Firmware Ver., and IP (Wireless). A 'Reload' button (10) is located at the bottom of this section.
- Monitor Settings:** Contains settings for Monitor ID, Client Type (L&M Printer), Status (Ready), Result, Polling Interval (5 sec), and Check Action (5 - 60).

No.	Item	Description
1	Device Conductor Status	Displays the operation status of the Device Conductor.
2	Port Number	The port that the Device Conductor is using.
3	Database Server Path	The connection information to access the SQL Server.
4	Basic Authentication for Network Communication	This is authentication information. The User ID and Password are used to connect the Device Conductor, SOTI Connect and the printer.  <b>NOTE</b> See the SOTI Connect manual for information on how to set a User ID and Password on SOTI Connect.

No.	Item	Description
5	Client	<p>Generate files to install the Device Conductor Agent. The generated ZIP file contains the following files:</p> <ol style="list-style-type: none"> <li>1. DeviceConductorInfo.json <ul style="list-style-type: none"> <li>▪ This file is not necessary to make a direct connection.</li> <li>Used when installing a Device Conductor Agent.</li> </ul> </li> <li>2. cacert.pem <ul style="list-style-type: none"> <li>▪ CA certificate for connecting to the Device Conductor.</li> <li>You must install a CA certificate on the printer if you want to make a direct connection.</li> </ul> </li> </ol> <p><b>NOTE</b></p> <p>Regardless of which option you selected in section <a href="#">3.4 “Install the Device Conductor, 4. Set up the server certificate by selecting one of the following radio buttons”</a>, either cacert.pem or the imported CA certificate is stored in this ZIP file.</p> <ol style="list-style-type: none"> <li>3. ActivateMDMConnection.bin <ul style="list-style-type: none"> <li>▪ Used when setting the printer for a direct connection</li> <li>This file contains the information for connecting to the Device Conductor.</li> </ul> </li> <li>4. InactivateMDMConnection.bin <ul style="list-style-type: none"> <li>▪ Used to stop the communication between your printer and the Device Conductor</li> </ul> </li> </ol>
6	Information	<p>Click one of the buttons to view the information you want:</p> <ul style="list-style-type: none"> <li>▪ Click <b>End User License Agreements</b> to view the EULA</li> <li>▪ Click <b>Version</b> to view the software version</li> <li>▪ Click <b>Licence</b> to view the various OSS licences</li> </ul>
7	Client	Displays a list of accessed printers.
8	Devices	Select an item in the Client List 7 to view a list of devices linked to the client.
9	Monitor Settings	View settings for the client you selected in 7.
10	Reload	Click to refresh all data.

## 5. Managing Brother Printers with SOTI Connect

### 5.1 Printer Settings

#### NOTE

TD-4520DN and TD-4420DN support wired LAN only.

Group	Item	RJ-3230B RJ-3250WB RJ-4250WB	TD-4550DNWB TD-4520DN TD-4420DN	PJ-883
General	Manufacturer	-		
	Model	-		
	Firmware Version	-		
	Serial Number	-		
	Font Version	-		
	Memory Size (Byte)	-		
	Printing Method	-		
	Printing Resolution (dpi)	-		
	Contact	<b>Maximum: 255 characters</b>		
	Location	<b>Maximum: 255 characters</b>		
	Paper Size Name	-	n/a	
	Total Templates Count	-		
	Total Databases Count	-	n/a	
Device Status	Device Status	-		
	Total Number of Fonts	-		
	Total Print Length (m)	-		
	Total Print Count	-		
	Available Memory (Byte)	-		
	Battery Life	-	n/a	
	Battery Charge Cycle	-	n/a	-
	Battery Level (%)	-	n/a	-

Group	Item	RJ-3230B RJ-3250WB RJ-4250WB	TD-4550DNWB TD-4520DN TD-4420DN	PJ-883
System Settings	Command Mode	<b>Raster ESC/P P-touch Template CPCL Emulation CPCL LinePrint Emulation</b>		<b>Raster ESC/P Legacy ESC/P Brother P-touch Template</b>
	Auto Power ON	n/a		true / false
	Auto Power OFF (minutes)	0, 10, 30, 60, 180, 360, 540, 720		
	Print Speed (inch/sec / mm/sec)	<b>5 ips / 127 mm/s 4 ips / 101 mm/s 3 ips / 76 mm/s 2 ips / 50 mm/s* 1 ips / 25 mm/s*</b> (*RJ-3230B/3250WB only)	<b>8 ips / 203.2 mm/s* 7 ips / 177.8 mm/s* 6 ips / 152.4mm/s 5 ips / 127 mm/s 4 ips / 101.6 mm/s 3 ips / 76.2 mm/s 2 ips / 50.8 mm/s</b> (*TD-4420DN only)	<b>Fast (Line Conversion) Fast (Draft Quality) 3.5 ips / 90 mm/s 2.7 ips / 70 mm/s 1.9 ips / 48 mm/s 1.1 ips / 27 mm/s</b>
	Print Density (%)	0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100		
	Deep Sleep Delay (Minutes)	0, 1, 2, 3, 4, 5, 6, 7, 8, 9		
	Battery Charge Limit (%)	80, 100	n/a	
	Stencil Paper Mode	n/a		true / false
	Skip Perforation	n/a		true / false
	Dash Line Print	n/a		true / false

Group	Item	RJ-3230B RJ-3250WB RJ-4250WB	TD-4550DNWB TD-4520DN TD-4420DN	PJ-883
General Network	IPv6 Usage	true / false		
Wired LAN*	Status	-	-	n/a
	Node Type	-	-	n/a
	Node Name	-	-	n/a
	MAC Address	-	-	n/a
	IPv4: Boot Method	AUTO BOOTP DHCP RARP STATIC	AUTO BOOTP DHCP RARP STATIC	n/a
	IPv4: IP Address	free (**.***.***.***)	free (**.***.***.***)	n/a
	IPv4: Subnet Mask	free (**.***.***.***)	free (**.***.***.***)	n/a
	IPv4: Gateway	free (**.***.***.***)	free (**.***.***.***)	n/a
	IPv4: DNS Server Method	AUTO STATIC	AUTO STATIC	n/a
	IPv4: Primary DNS Server IP Address	free (**.***.***.***)	free (**.***.***.***)	n/a
	IPv4: Secondary DNS Server IP Address	free (**.***.***.***)	free (**.***.***.***)	n/a
	IPv6: Static Address	free(****.****:****.****:****.****:****.****)	free(****.****:****.****:****.****:****.****)	n/a
	IPv6: Enable Static Address	true / false	true / false	n/a
	IPv6: Primary DNS Server IP Address	free(****.****:****.****:****.****:****.****)	free(****.****:****.****:****.****:****.****)	n/a
	IPv6: Secondary DNS Server IP Address	free(****.****:****.****:****.****:****.****)	free(****.****:****.****:****.****:****.****)	n/a
IPv6: Address List	-	-	n/a	

\*RJ-3230B/RJ-3250WB with Ethernet Cradle only

“free” means that you can set any numbers.

Group	Item	RJ-3230B RJ-3250WB RJ-4250WB	TD-4550DNWB TD-4520DN TD-4420DN	PJ-883
Wireless LAN	Status	-		
	Signal Strength	-		
	Node Type	-		
	Node Name	-		
	MAC Address	-		
	Communication Mode	-		
	SSID	<b>Maximum: 32 characters</b>		
	Channel	-		
	Authentication Method	<b>Open System</b> <b>Shared Key</b> <b>WPA/WPA2-PSK (RJ-4250WB and TD-Series only)</b> <b>WPA/WPA2-PSK/WPA3-SAE (RJ-3250WB and PJ-883 only)</b> <b>WPA3-SAE (RJ-3250WB and PJ-883 only)</b>		
	Encryption Mode	<b>[Open System] None or WEP</b> <b>[Shared Key] WEP</b> <b>[WPA/WPA2-PSK] TKIP+AES or AES (RJ-4250WB and TD-series only)</b> <b>[WPA/WPA2-PSK/WPA3-SAE] TKIP+AES or AES (RJ-3250WB and PJ-883 only)</b> <b>[WPA3-SAE] or AES (RJ-3250WB and PJ-883 only)</b>		
	WEP Key	<b>Maximum: 13 characters</b>		
	Network Key	<b>Maximum: 63 characters</b>		
	IPv4: Boot Method	<b>AUTO</b> <b>BOOTP</b> <b>DHCP</b> <b>RARP</b> <b>STATIC</b>		
	IPv4: IP Address	<b>free (***.***.***.***)</b>		
	IPv4: Subnet Mask	<b>free (***.***.***.***)</b>		
	IPv4: Gateway	<b>free (***.***.***.***)</b>		
IPv4: DNS Server Method	<b>AUTO</b> <b>STATIC</b>			
IPv4: Primary DNS Server IP Address	<b>free (***.***.***.***)</b>			
IPv4: Secondary DNS Server IP Address	<b>free (***.***.***.***)</b>			

“free” means that you can set any numbers.

Group	Item	RJ-3230B RJ-3250WB RJ-4250WB	TD-4550DNWB TD-4520DN TD-4420DN	PJ-883
Wireless LAN	IPv6: Static Address	free (****.****.****.****.****.****.****.****)		
	IPv6: Enable Static Address	true / false		
	IPv6: Primary DNS Server IP Address	free (****.****.****.****.****.****.****.****)		
	IPv6: Secondary DNS Server IP Address	free (****.****.****.****.****.****.****.****)		
	IPv6: Address List	-		
Wireless Direct	Wireless Direct Usage	-		
	Wireless Direct Connection Info Generation	STATIC AUTO		
	Wireless Direct SSID	DIRECT-***** (Only "*****" can be changed, Maximum: 25 characters)		
	Network Key	Maximum: 63 characters		
	Wireless Direct Channel	-		
Bluetooth	Bluetooth Device Name	-		
	Bluetooth Address	-		
	Bluetooth Device Discoverable	true / false		
	Bluetooth Auto Pairing Enabled	true / false		
	Bluetooth Mode	Classic Classic&Low Energy Low Energy		
Remote Update	FTP Server Address	free (***.***.***.***)		n/a
	FTP Server Port	free		n/a
	Use Passive Mode	true / false		n/a
	Settings File Location	Maximum: 32 characters		n/a
	Settings File Name	Maximum: 32 characters		n/a
	Store Server Log	true / false		n/a
	FTP Server Log Location	Maximum: 32 characters		n/a
Media	Paper Type	None / Gap / Mark		n/a
	Width (mm)	-		n/a
	Length (mm)	-		n/a

“free” means that you can set any numbers.

Group	Item	RJ-3230B RJ-3250WB RJ-4250WB	TD-4550DNWB TD-4520DN TD-4420DN	PJ-883
Advanced Settings	Roll/Fanfold Option	n/a		-
	Tear Distance Adjust (inch / mm)	n/a		-0.20" to 0.20" (changeable by 0.02) -5.0mm to 5.0mm (changeable by 0.5)
	Feed Distance Adjust (inch / mm)	n/a		0.00" to 4.00" (changeable by 0.02) 0.0mm to 100mm (changeable by 0.5)
	Start Position Adjust (inch / mm)	n/a		-0.40" to 0.40" (changeable by 0.02) -10.0mm to 10.0mm (changeable by 0.5)
	Cut Pause Time	n/a		0, 3, 5, 10
	Print Length Scaling	n/a		95 to 105 (changeable by 0.5)
	Form Feed Mode	n/a		No Feed, Fixed Page, End of Page, End of Page Retract
	Paper Grip Time	n/a		0.5, 0.8, 1.2
	Pre-Feed	n/a		true / false
	Blackmark Threshold	n/a		0 to 255 (changeable by 1)
	Page Overrun	n/a		true / false
	Print Data after Printing	n/a		Erase All Print Data, Keep Print Data
	JPEG Printing Setting	n/a		Binary, Error Diffusion
	Simple Binary Threshold	n/a		0 to 255 (changeable by 1)
Scale JPEG images to fit media	n/a		true / false	
AirPrint	Halftoning	n/a		Binary, Dither, Error Diffusion
	Binary Threshold	n/a		0 to 255 (changeable by 1)

## Printer Functions

Action name	Description
Print Test Page	Print a test page.
Factory Reset	<ul style="list-style-type: none"><li>▪ <b>Reset All Settings</b> Resets all printer settings to the factory settings.</li><li>▪ <b>Memory Reset</b> Resets all templates, databases, and print log information stored in the printer.</li><li>▪ <b>Reset Printer Settings</b> Resets the device settings to the factory settings. The templates, databases, and print log information stored in the printer are not reset.</li><li>▪ <b>Network Reset</b> Resets the communication settings to the factory settings. The templates, databases, and print log information stored in the printer are not reset.</li></ul>
Reboot	Reboot your printer.
Shutdown	Turn your printer off.

## 5.2 Printer Status Notifications / Error Log

If any of these error notifications appear, check your settings, and try again.

Notification	Description	Error Type
Printer System Error	Internal error	Critical
InternalError	Internal system error	
Buffer Full Error	Data transfer error	Error
Communication Error	Data transmission error	
"File Install" Failed	File installation error	
"Install Certificate" Failed	Certificate installation error	
Apply Client Settings Failed	Client setting error	
Apply Device Settings Failed	Device setting error	
"Print Test Page" Failed	Test page could not be printed	
"Factory Reset" Failed	Could not reset to factory settings	
"Reboot" Failed	Reboot error	
"Shutdown" Failed	Shutdown error	
"Search" Failed	Search error	
"Check Status" Failed	Status could not be checked	
End of Media	No media in the tray. Load media to continue printing.	Alert
Battery Life Low	The battery is near the end of its life and needs to be replaced soon.	
New Device	New printer found	
Status Update	Printer status updated	
Cover Open	Media Cover open	
Recovery Printer System Error	Recovered from Printer System Error	
Recovery Buffer Full Error	Recovered from Buffer Full Error	
Recovery Communication Error	Recovered from Communication Error	
Recovery End Of Media	New media has been loaded.	
Recovery Battery Life Low	Battery has been replaced	
Recovery Cover Open	Cover has been closed	
"File Install" Accepted	Printer files updated	
"Install Certificate" Accepted	Printer starts to install certificates	
Apply Client Settings Accepted	Client settings applied	
Apply Device Settings Accepted	Printer settings applied	
"Print Test Page" Accepted	Test page printed	
"Factory Reset" Accepted	Printer settings reset to the factory settings	
"Reboot" Accepted	Printer rebooted	
"Shutdown" Accepted	Printer shut down	
"Search" Accepted	Search has started	
"Check Status" Accepted	Status check has started	
"Install Certificate" Success	CA certificate or Client Certificate is installed	

### 5.3 Configuration Using BLF Files

We recommend using the software provided with the printer to create BLF files.

#### NOTE

Create a BLF file for each model, even if the models belong to the same product series or type.

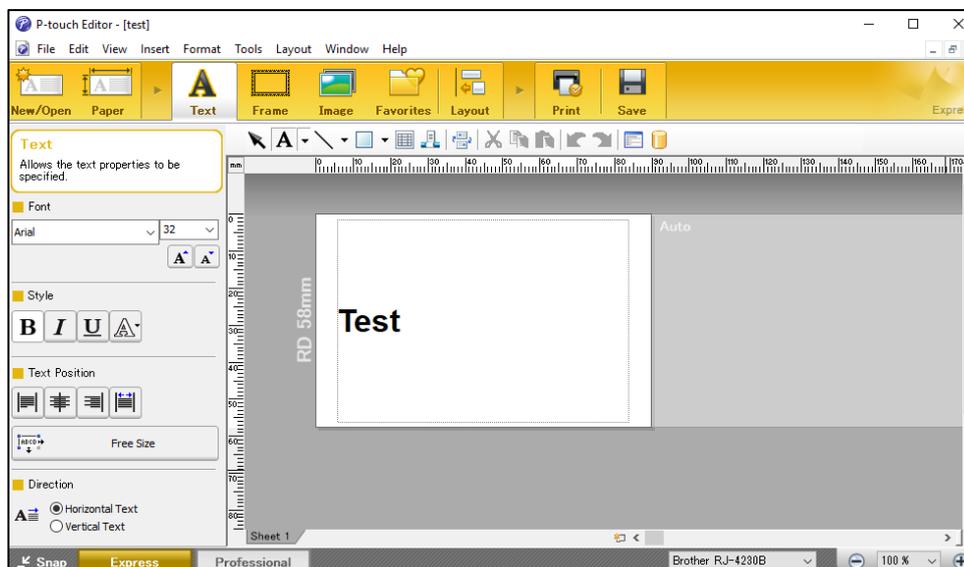
Item	File format	How to create a BLF file
Firmware	BLF	Contact your local Brother dealer.
P-touch Template		1. Create a template LBX file using P-touch Editor.
P-touch Template + Database		2. Open the new LBX file in P-touch Transfer Manager. 3. Save the file as a BLF file.
Communication settings		1. Save the command BIN file using the Communication Settings Tool. 2. Drag and drop the BIN file onto a new layout in P-touch Transfer Manager. 3. Save the layout as a BLF file.
Device settings		1. Save the command BIN file using the Device Settings Tool. 2. Drag and drop the BIN file onto a new layout in P-touch Transfer Manager. 3. Save the layout as a BLF file.
Custom Paper Size <sup>1</sup>		1. Save the command BIN file using the Paper Size Setup Tool. 2. Drag and drop the BIN file onto a new layout in P-touch Transfer Manager. 3. Save the layout as a BLF file.
Font		1. Save the command BIN file using the Font Manager Tool. 2. Drag and drop the BIN file onto a new layout in P-touch Transfer Manager. 3. Save the layout as a BLF file.

<sup>1</sup> TD and RJ series

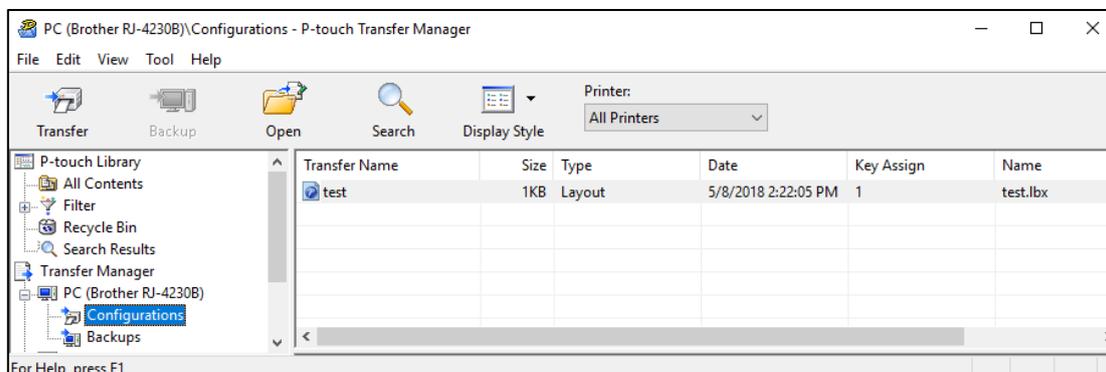
## Example 1

### How to create a BLF file for P-touch Template

1. Start P-touch Editor and create a layout.



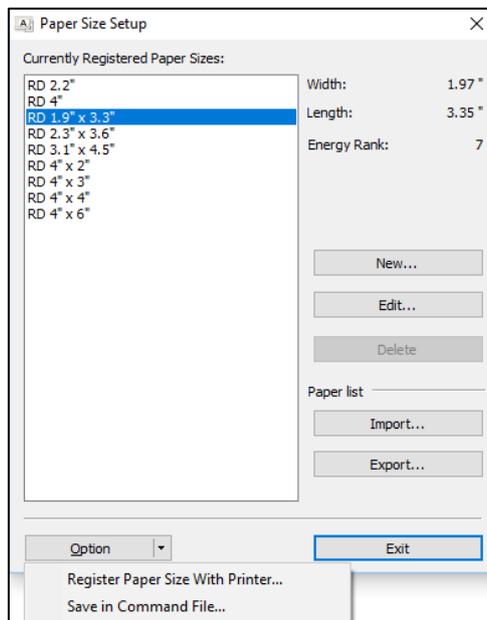
2. Click **File > Template transfer > Transfer...** to launch P-touch Transfer Manager.
3. Click **Save transfer file** and save the file in BLF format.



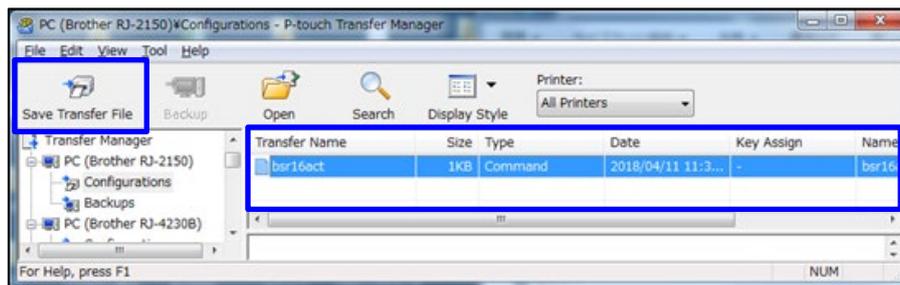
## Example 2

### How to create a BLF file for a custom paper size

1. Launch the Paper Size Setup tool.
2. Create a custom paper size.
3. Click the **Options** drop-down menu, select **Save in Command File...**, and save the command file in BIN format.



4. Launch P-touch Transfer Manager.
5. Drag and drop the BIN file onto the "Template list" area.
6. Click **Save Transfer File** and save the file in BLF format.

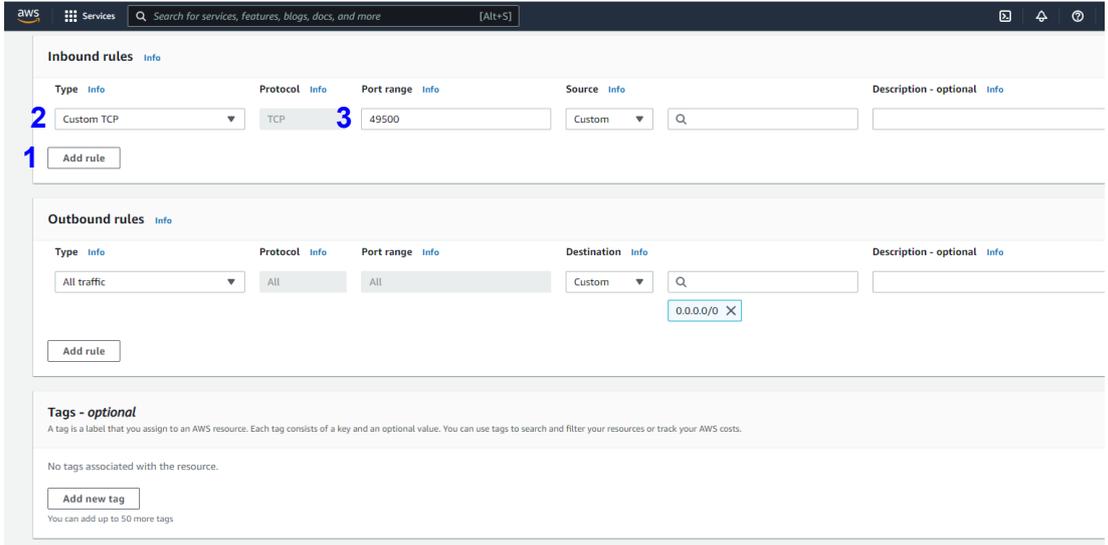


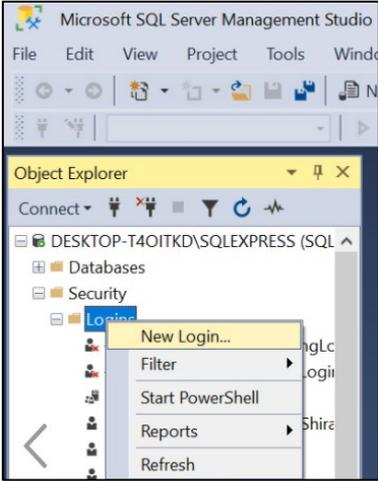
## 6. Troubleshooting

Use this section to resolve typical problems you may encounter when using SOTI Connect with your Brother printer. The list of error messages in this table may not be exhaustive and is subject to change.

No.	Problem	Solution
1	SOTI Protocol Adapter stops	<p>Do not set <b>Auto Sleep</b>.</p> <p>Make sure that the computer where the Brother Device Conductor and SOTI Protocol Adapter are installed is always turned on.</p> <p><b>NOTE</b></p> <p>When a Windows operating system goes to sleep, the SOTI Protocol Adapter stops. When it wakes up, the SOTI Protocol Adapter restarts automatically.</p>
2	<p>The following error message appears:</p> <p>“Cannot edit the Site settings of the Internet Information Service (IIS). Check your IIS settings.#3”</p>	<p>This error appears if you install the Device Conductor in the following incorrect order which .NET is installed before IIS.</p> <p>Follow the steps under A or B to clear the error message.</p> <p>A.</p> <ol style="list-style-type: none"> <li>1. Uninstall and re-install .Net core hosting and bundle.</li> <li>2. Install the Device Conductor.</li> </ol> <p>B.</p> <ol style="list-style-type: none"> <li>1. Repair .Net core hosting and bundle.</li> <li>2. Install the Device Conductor.</li> </ol> <p>For more information, see section <a href="#">3.4 “Install the Device Conductor”</a> in this guide.</p>
3	<p>Brother Device Conductor installer has stopped and displays the message “The installer cannot attach Device Conductor database file in SQL server. In detail, please look FAQ regarding as SQL server in the setup guide.”</p>	<p>Stop SSMS (SQL Server Management Studio) during the installation.</p> <p>For more information, see section <a href="#">3.4 “Install the Device Conductor”</a> in this guide.</p>

No.	Problem	Solution
4	When you execute a repair install and renew the CA certificate, there is no connection between the Device Conductor and printer.	<p>The following steps are required to renew the CA certificate:</p> <ol style="list-style-type: none"> <li>1. Open the Device Conductor Setting Tool, and then click <b>Get client setup files</b> in <b>The Client:</b> section.</li> <li>2. Select "cacert.pem" and send it to the printer.</li> </ol> <p>For more information, see the following section in this guide:</p> <ul style="list-style-type: none"> <li>- <a href="#">3.6.1 "Create Direct Connection Files"</a></li> <li>- <a href="#">3.6.3 "Install a CA Certificate on Your Printer"</a></li> </ul>
5	The following error message appears: "Cannot install certificate into this PC. #XX"	<p>Check the access privilege if there is no number or #4 shown in the message.</p> <p>Check the certificate and key if there is #1, #2, #3#1, #3#2 or #3#3 shown in the message.</p> <p>For more information, see section <a href="#">3.6.3 "Install a CA Certificate on Your Printer"</a></p>
6	The following error message appears: "OpenSSL failed to create certificates"	<p>Check your OpenSSL version and contact Brother Customer Support or your local Brother sales office.</p>
7	When you change the certificate on IIS Manager, the printer cannot communicate.	<p>The new IIS Manager certificate does not match the CA certificate output by the Device Conductor.</p> <p>To renew the certificate, use the repair function in the Device Conductor, and then reinstall the CA certificate to the printer again.</p> <p>For more information, see section <a href="#">3.6 "Configure Your Printer So It to Connects to the Server"</a> in this guide.</p>

No.	Problem	Solution
8	<p>When you set up the Device Conductor on a cloud service such as Amazon Web Services (AWS), the Device Conductor cannot communicate with the printer.</p>	<p>The port for accessing the Device Conductor on a cloud service such as AWS from the printer as the Client is restricted by a firewall or other security features.</p> <p>Configure the port used by the Device Conductor on the cloud service so that it can be accessed by an external device.</p> <ul style="list-style-type: none"> <li>- AWS (or other cloud service): security group</li> <li>- Microsoft Azure: network security group</li> <li>- Google Cloud Platform (GCP): firewall</li> </ul> <p>[Example] AWS: security group</p> <ol style="list-style-type: none"> <li>1. Click <b>Add rule</b>.</li> <li>2. Select <b>Custom TCP</b>.</li> <li>3. Enter the port number on the <b>Port range</b> field.</li> </ol> 
9	<p>Cannot start the Device Conductor from IIS Manager.</p>	<p>There is another site already using the same port.</p> <p>Stop using the other site or change the port.</p> <p>For more information, see section <a href="#">3.5 “Confirm Device Conductor Connection with IIS and SQL Server”</a> in this guide.</p>
10	<p>Cannot start the Device Conductor from IIS Manager. The following error message appears: “HTTP Error500.xx - Internal Server Error”</p>	<p>This error appears if you install .NET Core Runtime before installing IIS.</p> <p>Install in the following order:</p> <ol style="list-style-type: none"> <li>1. Configure the IIS.</li> <li>2. Install .NET Core Runtime.</li> </ol> <p>For more information, see section <a href="#">3.5 “Confirm Device Conductor Connection with IIS and SQL Server”</a> in this guide.</p>

No.	Problem	Solution
11	<p>When you press <b>Refresh on Basic Authentication for Network Communication:</b>, the Device Conductor cannot access SOTI Connect or the printer.</p>	<p>If you change the basic authentication information, follow these steps:</p> <ol style="list-style-type: none"> <li>1. Register the basic authentication for protocol adapter from SOTI Connect.</li> <li>2. Open the Device Conductor Setting Tool, select <b>The Client:</b>, and then click <b>Get client setup files</b>.</li> <li>3. Select "DeviceConductorConnectionInfo.bin" and send it to the printer.</li> </ol> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>- <a href="#">3.6.1 "Create Direct Connection Files"</a></li> <li>- <a href="#">3.6.4 "Install Connection Setting File on Printer"</a></li> </ul>
12	<p>If you try to install the Device Conductor as a different user than the one who installed the SQL server, the following error message appears: "Cannot attach the Brother Device Conductor database file in the SQL Server error."</p>	<p>The following procedure grants a permission to the user who wants to install the Device Conductor.</p> <ol style="list-style-type: none"> <li>1. Sign in with the credentials of the user who installed the SQL server.</li> <li>2. Start the SQL Server Management Studio.</li> <li>3. Right-click <b>Login</b> and select <b>New Login....</b></li> </ol>  <p>The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the server hierarchy: DESKTOP-T4OITKD\SQLEXPRESS (SQL Server) &gt; Security &gt; Login. The 'Login' folder is selected, and a context menu is open with 'New Login...' highlighted. Other menu items include Filter, Start PowerShell, Reports, and Refresh.</p> <ol style="list-style-type: none"> <li>4. Click <b>Search</b>.</li> <li>5. Type the name of the user who wants to install the Device Conductor and click <b>Confirm Name</b> to confirm the user name. Press <b>OK</b>.</li> <li>6. Select a server role.</li> <li>7. Check <b>sysadmin</b>, and then press <b>OK</b>.</li> </ol>

## Helpful Tips When Working With SOTI Connect

No.	Tips
1	<p>Use "labelcc.exe" to set up a fleet of printers via a network connection.</p> <ol style="list-style-type: none"> <li>1. Prepare a BIN file and certificate from the Device Conductor Setting tool.</li> <li>2. Type the IP address of the target device in "devicelist.csv".</li> <li>3. Type the path to the BIN file and certificate that you created in step 1 in "profile.csv".</li> <li>4. Click "Activate.bat". (Administrator rights are not required)</li> </ol> <p>About profile.csv:</p> <ul style="list-style-type: none"> <li>- BinFile: Specify the path to the bin generated in step 1. (Required)</li> <li>- Certification: Specify the path of the certificate generated in step 1. (Required)</li> <li>- LogFile: Specify the text file name where the log will be generated. (Optional)</li> <li>- Result: Specify the destination (text file name) to generate the execution result. (Optional)</li> </ul> <p>If left blank, result.txt will be generated automatically.</p> <p>For more information, see section <a href="#">3.6 "Configure Your Printer So It to Connects to the Server"</a> in this guide.</p>
2	<p>Your Brother printer's default password for configuring network settings, performing a firmware update, accessing BAdmin, Web Based Management, or Remote Setup, is one of the following:</p> <ul style="list-style-type: none"> <li>- <b>initpass</b></li> <li>- <b>access</b></li> <li>- The password listed next to the word "Pwd:" on the label attached to the back or bottom of the printer:</li> </ul> <div data-bbox="603 1184 1064 1377" data-label="Image"> </div> <p><b>NOTE</b></p> <p>For printers with a password label, the default password is <b>8 characters long</b> and may contain special characters. If the password begins with a colon, as in the example above, or other special character, be sure to include it as part of the password.</p> <p>For more information, see section <a href="#">3.6.3 "Install a CA Certificate on Your Printer"</a> in this guide.</p>
3	<p>When you connect in Wireless Direct mode, the SSID must start from "DIRECT-".</p> <p>DO NOT delete "DIRECT-" when setting up or changing the SSID in Wireless Direct mode.</p> <p>For more information, see section <a href="#">5.2 "Printer Status Notifications / Error Log"</a> in this guide.</p>

No.	Tips															
4	<p>When changing settings via SOTI Connect, set a value within the parameter range defined for each item. If you set a value outside of the parameter range, the item will not be assigned to the printer.</p> <p><b>NOTE</b></p> <p>When setting multiple items at the same time, make sure all values are correct. A single incorrect value will result in the entire item not being set.</p> <p>For more information, see section <a href="#">5.2 "Printer Status Notifications / Error Log"</a> in this guide.</p>															
5	<p>For more information about the software provided with your printer, see its User's Guide on <a href="#">the Brother Support Site</a>.</p> <p>For more information, see section <a href="#">5.3 "Configuration Using BLF Files"</a> in this guide.</p>															
6	<p>The printer automatically reboots if any of the following items is set or reconfigured on the printer:</p> <ul style="list-style-type: none"> <li>- Firmware</li> <li>- Communication settings</li> </ul> <p>For more information, see section <a href="#">5.3 "Configuration Using BLF Files"</a> in this guide.</p>															
7	<p>Self-signed certificate and self-signed CA created using OpenSSL can also be used.</p> <p><b>NOTE</b></p> <p>Use self-signed certificates at your own risk.</p> <p><b>[How to install "OpenSSL-Win64"]</b></p> <ol style="list-style-type: none"> <li>Open the website of OpenSSL to download MSI for Win64 OpenSSL-1.1.1a or later.</li> </ol> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>* The following versions are confirmed to be compatible: OpenSSL-1.1.1a, OpenSSL-1.1.1i, OpenSSL-1.1.1i Light</li> <li>* If you use a later version and it does not allow you to complete the setup, contact your Brother sales office. Example: <a href="https://slproweb.com/products/Win32OpenSSL.html">https://slproweb.com/products/Win32OpenSSL.html</a></li> </ul> <div data-bbox="301 1610 1362 1912" data-label="Table"> <table border="1"> <thead> <tr> <th colspan="3" style="background-color: #808000; color: white;">Download Win32/Win64 OpenSSL</th> </tr> <tr> <th colspan="3">Download Win32/Win64 OpenSSL today using the links below!</th> </tr> <tr> <th>File</th> <th>Type</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Win64 OpenSSL v3.0.3 Light <a href="#">EXE</a>   <a href="#">MSI</a></td> <td>5MB Installer</td> <td>Installs the most commonly used essentials of Win64 OpenSSL on 64-bit versions of Windows. Note that this is a default build of OpenSSL and legal agreement of the installation.</td> </tr> <tr> <td>Win64 OpenSSL v3.0.3 <a href="#">EXE</a>   <a href="#">MSI</a></td> <td>140MB Installer</td> <td>Installs Win64 OpenSSL v3.0.3 (Recommended for software of Windows. Note that this is a default build of OpenSSL and legal agreement of the installation).</td> </tr> </tbody> </table> </div> <ol style="list-style-type: none"> <li>Click the downloaded MSI for Win64 OpenSSL and install it with the default settings.</li> <li>Type the path where OpenSSL is installed.</li> </ol>	Download Win32/Win64 OpenSSL			Download Win32/Win64 OpenSSL today using the links below!			File	Type	Description	Win64 OpenSSL v3.0.3 Light <a href="#">EXE</a>   <a href="#">MSI</a>	5MB Installer	Installs the most commonly used essentials of Win64 OpenSSL on 64-bit versions of Windows. Note that this is a default build of OpenSSL and legal agreement of the installation.	Win64 OpenSSL v3.0.3 <a href="#">EXE</a>   <a href="#">MSI</a>	140MB Installer	Installs Win64 OpenSSL v3.0.3 (Recommended for software of Windows. Note that this is a default build of OpenSSL and legal agreement of the installation).
Download Win32/Win64 OpenSSL																
Download Win32/Win64 OpenSSL today using the links below!																
File	Type	Description														
Win64 OpenSSL v3.0.3 Light <a href="#">EXE</a>   <a href="#">MSI</a>	5MB Installer	Installs the most commonly used essentials of Win64 OpenSSL on 64-bit versions of Windows. Note that this is a default build of OpenSSL and legal agreement of the installation.														
Win64 OpenSSL v3.0.3 <a href="#">EXE</a>   <a href="#">MSI</a>	140MB Installer	Installs Win64 OpenSSL v3.0.3 (Recommended for software of Windows. Note that this is a default build of OpenSSL and legal agreement of the installation).														

No.	Tips
	<p>OpenSSL is normally installed in the following folder: C:\Program Files\OpenSSL-Win64</p> <p><b>[How to create a self-signed certificate and self-signed CA]</b></p> <div data-bbox="453 383 1217 969" data-label="Image"> </div> <p><b>NOTE</b> The “Common Name” is the IP address of your PC or server FQDN.</p> <p><b>[How to check the IP address]</b> Start “C:\Windows\System32\cmd.exe” and execute “ipconfig” to check your IP Address.</p> <p><b>NOTE</b> There are input restrictions:  <b>[Password]</b> Minimum character limit is 3, maximum character limit is 255.  <b>[Country Name]</b> Two-letter country code.  For more information, see <a href="https://www.ssl.com/country-codes/">https://www.ssl.com/country-codes/</a>  Example: Japan → JP, United Kingdom (UK) → GB  <b>[Effective Days]</b> Maximum: 2000  <b>[Other items]</b> Up to 255 characters</p> <p>For more information, see section <a href="#">3.4 “Install the Device Conductor”</a> in this guide.</p>

No.	Tips
8	<p><b>[Settings on EWS]</b></p> <p>SNTP Server Method: AUTO (Default) / STATIC</p> <p>Primary SNTP Server Address: <a href="http://sntp.brother.com">sntp.brother.com</a> (Default)</p> <p><b>NOTE</b></p> <p>When accessing <a href="http://sntp.brother.com">sntp.brother.com</a>, it is redirected to <a href="http://ntp.nict.jp">ntp.nict.jp</a> automatically.</p> <p><b>[Printer SNTP behavior]</b></p> <p><u>When selecting <b>Auto</b> as “SNTP Server Method”:</u></p> <p>Access the SNTP server assigned by the router.</p> <p>If the router does not assign the SNTP server, “Primary SNTP Server Address” is used.</p> <p><u>When selecting <b>STATIC</b> as “SNTP Server Method”:</u></p> <p>“Primary SNTP Server Address” is used.</p> <div data-bbox="501 813 1166 1373" data-label="Image"> <p>The screenshot shows the EWS interface for an RJ-4250WB printer. At the top, there's a 'Logout' button. Below that are tabs for 'General', 'Printer Settings', 'Administrator', and 'Network'. Under 'Network', there are sub-tabs for 'Network' and 'Wireless'. The main content area is titled 'SNTP' and contains several configuration options: 'Status', 'Synchronization Status', 'SNTP Server Method', 'Primary SNTP Server Address', 'Primary SNTP Server Port', 'Secondary SNTP Server Address', 'Secondary SNTP Server Port', and 'Synchronization Interval'. On the left side, there's a 'Network Status' section with a 'Protocol' dropdown and a 'Service' section.</p> </div> <p><b>NOTE</b></p> <p>The printer must be in an infrastructure mode connection to synchronize with the SNTP server.</p> <p>For more information, see section <a href="#">3.6.5 “SNTP (Simple Network Time Protocol) Server Setting”</a> in this guide.</p>
9	<p>If the printer cannot access the SNTP server because of a firewall, try one of the following:</p> <ul style="list-style-type: none"> <li>- Set up an independent SNTP server.</li> <li>or</li> <li>- Configure the firewall to allow access to <a href="http://ntp.nict.jp">ntp.nict.jp</a>.</li> <li>- The firewall must be able to allow SNTP packets.</li> </ul> <p><b>NOTE</b></p> <p>The printer must be in an infrastructure mode connection to synchronize with an independent SNTP server.</p> <p>For more information, see section <a href="#">3.6.5 “SNTP (Simple Network Time Protocol) Server Setting”</a> in this guide.</p>

No.	Tips
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10 To set up your own SNTP server in the Windows Server environment with the Brother Device Conductor installed, follow these steps:

1. As an Administrator, start the Registry Editor from the Windows Server that has the Brother Device Conductor installed.

**NOTES**

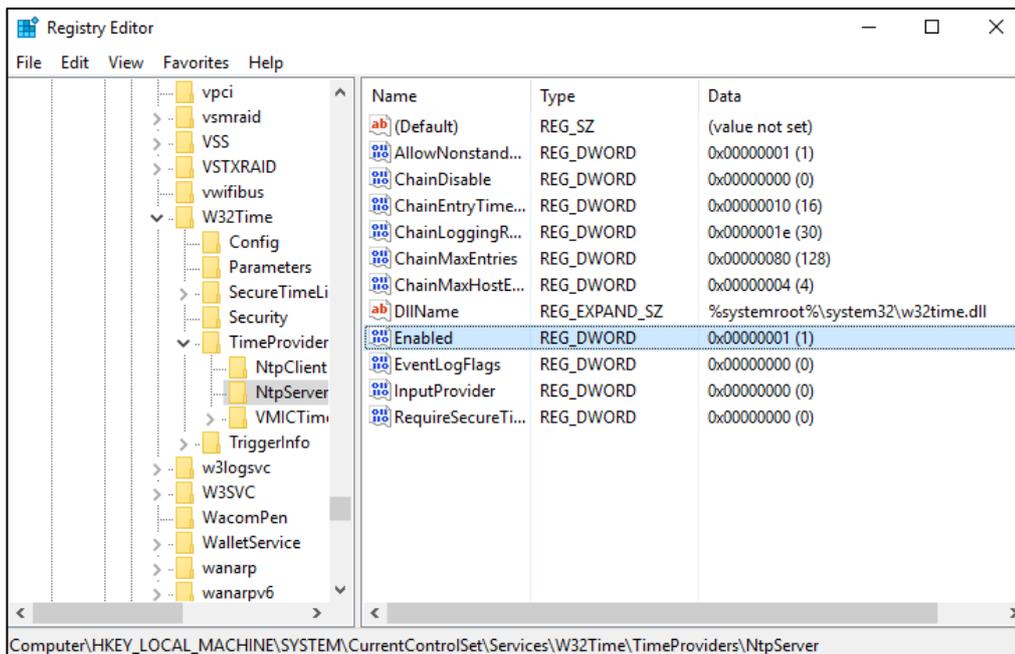
- \* The printer must be in an infrastructure mode to synchronize with the SNTP server.
- \* In the search window of the Start menu, type "regedit" and press **Enter**.
- \* Any changes to the Registry can affect your Windows system.

2. Go to

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\TimeProviders\NtpServer

3. Right-click **Enabled** and select **Modify**.

4. Set the number to 1.



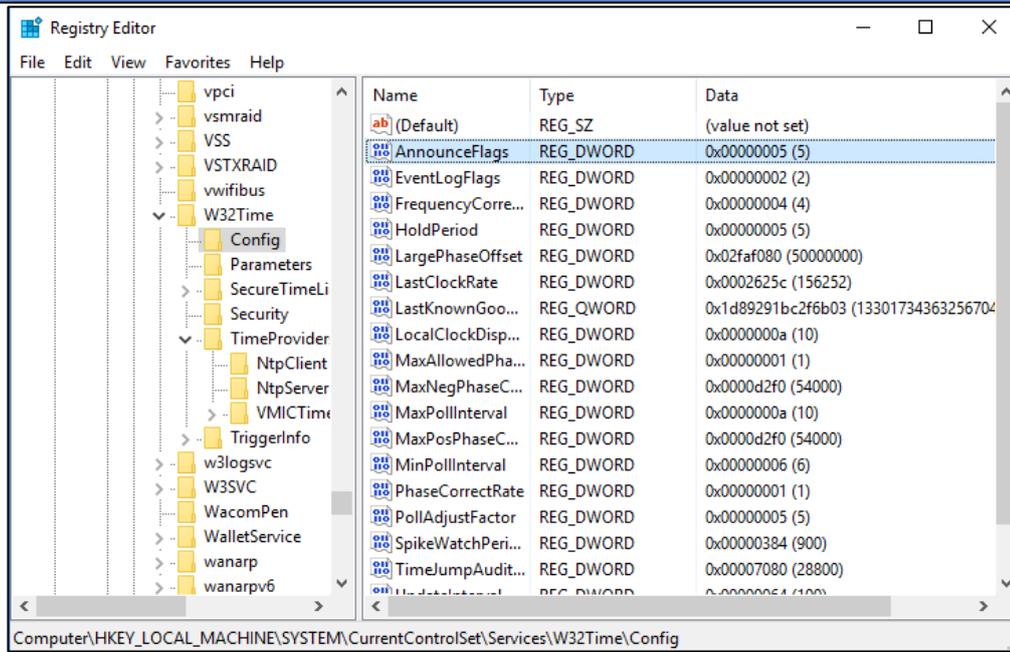
5. Go to

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\Config

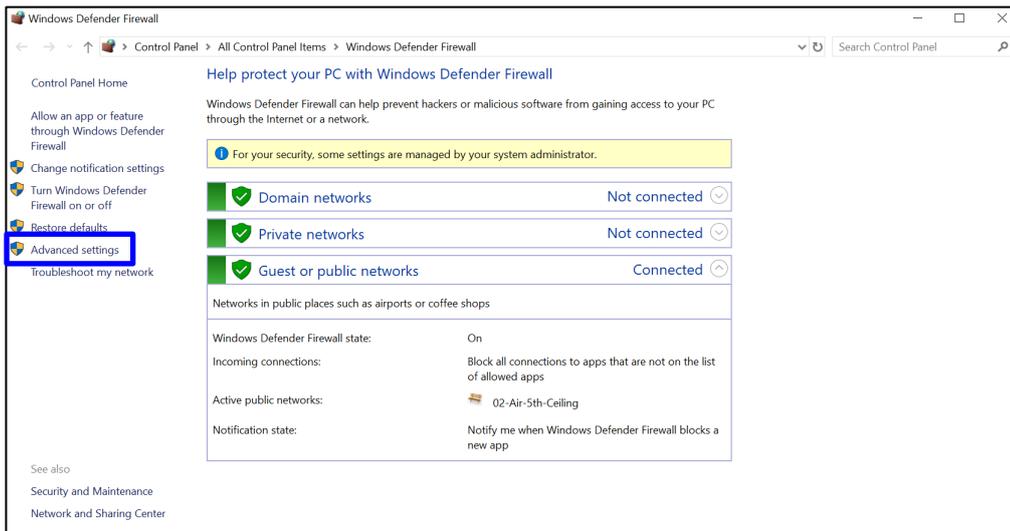
6. Right-click **AnnouceFlags** and select **Modify**.

7. Set the number to 5.

**No. Tips**

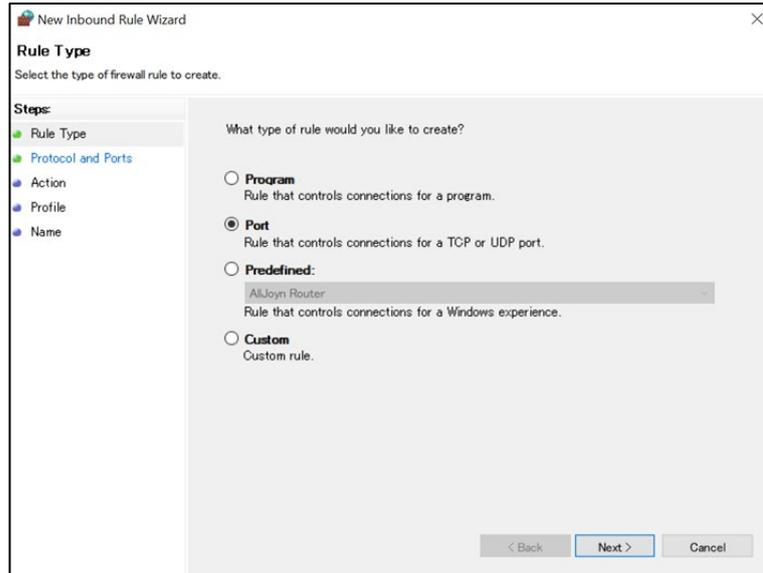


8. Launch Windows Firewall and click **Advanced settings**.

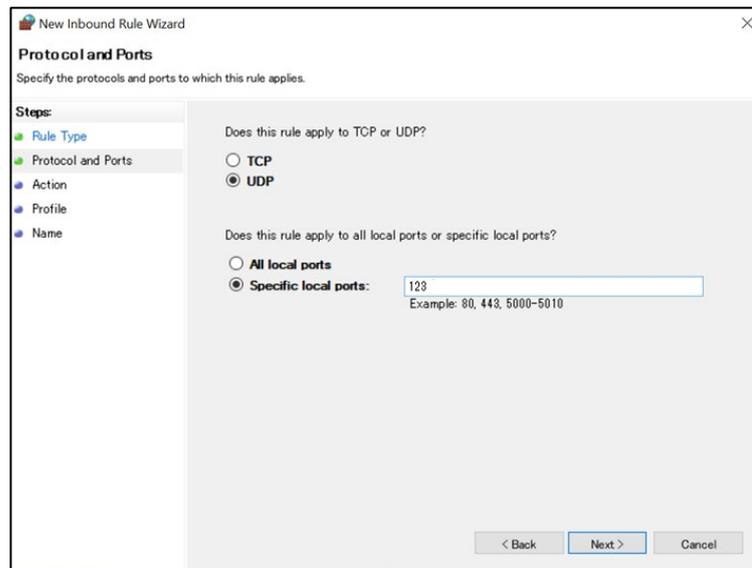


9. Select **Inbound Rules > New Rule... > Port**, and then click **Next**.

No. Tips

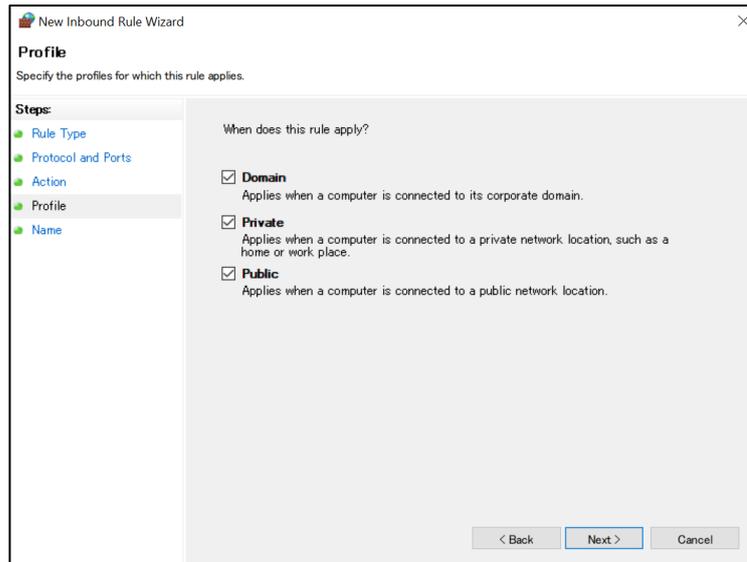


10. Select **UDP > Specific local ports**, type port number “123”, and then click **Next**.

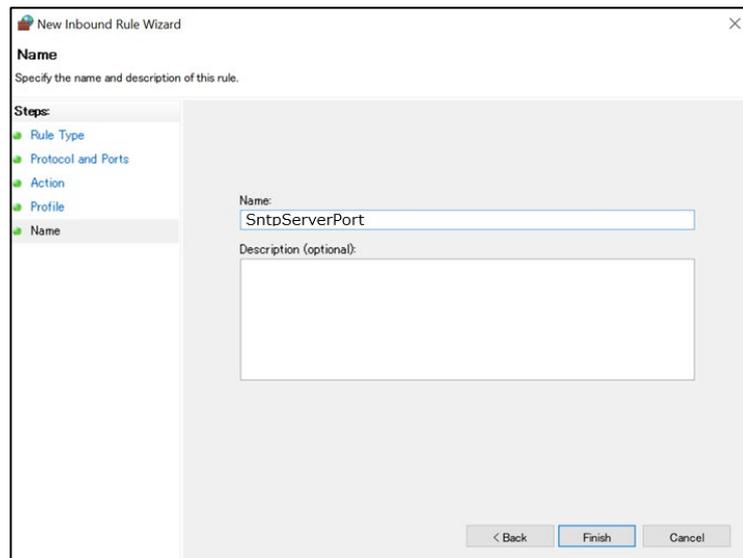


11. Select **Allow the connection**, and then click **Next**.

12. Select all networks, and then click **Next**.

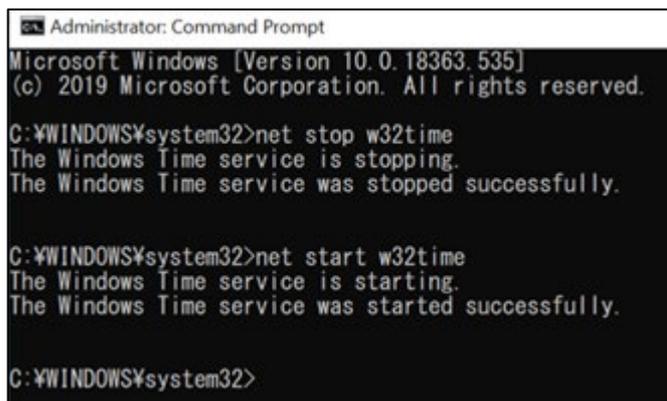


13. Type a name, and then click **Finish**.



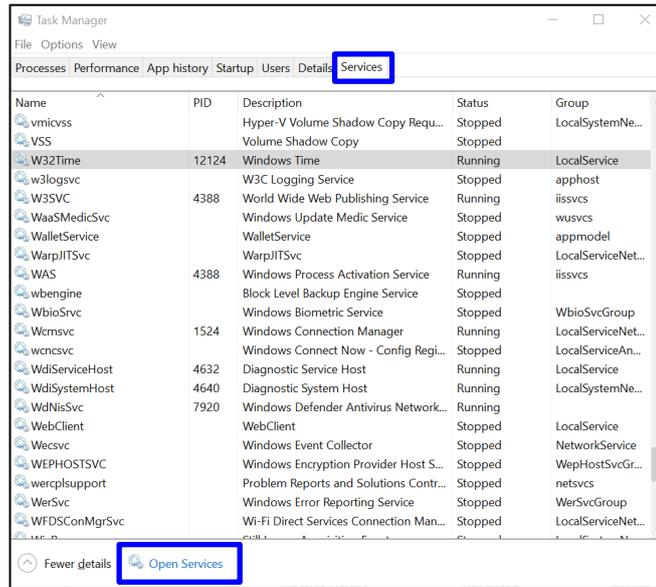
14. Open the Command Prompt as an Administrator, and then type the following commands:

```
net stop w32time  
net start w32time
```

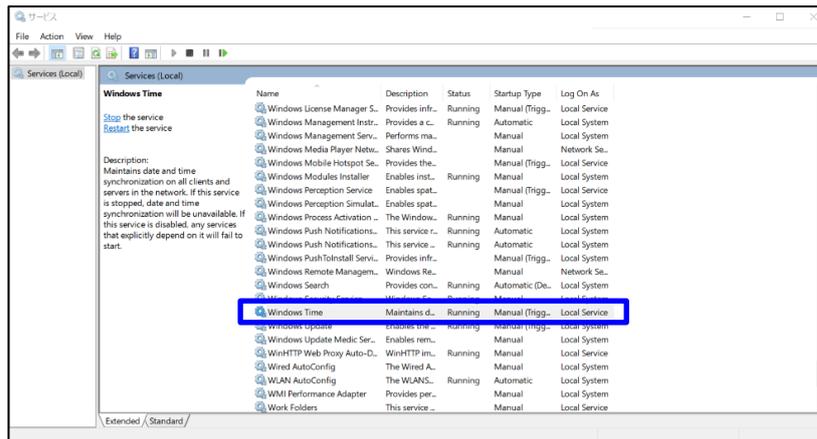


**No. Tips**

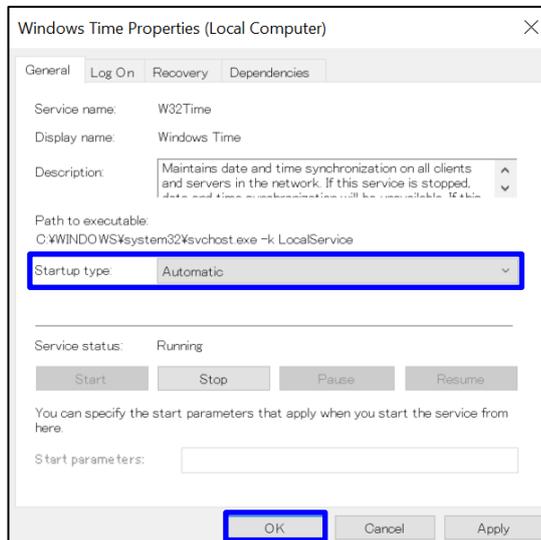
15. Open the Task Manager, select the **Services** tab, and then click **Open Services**.



16. Click **Windows Time**.



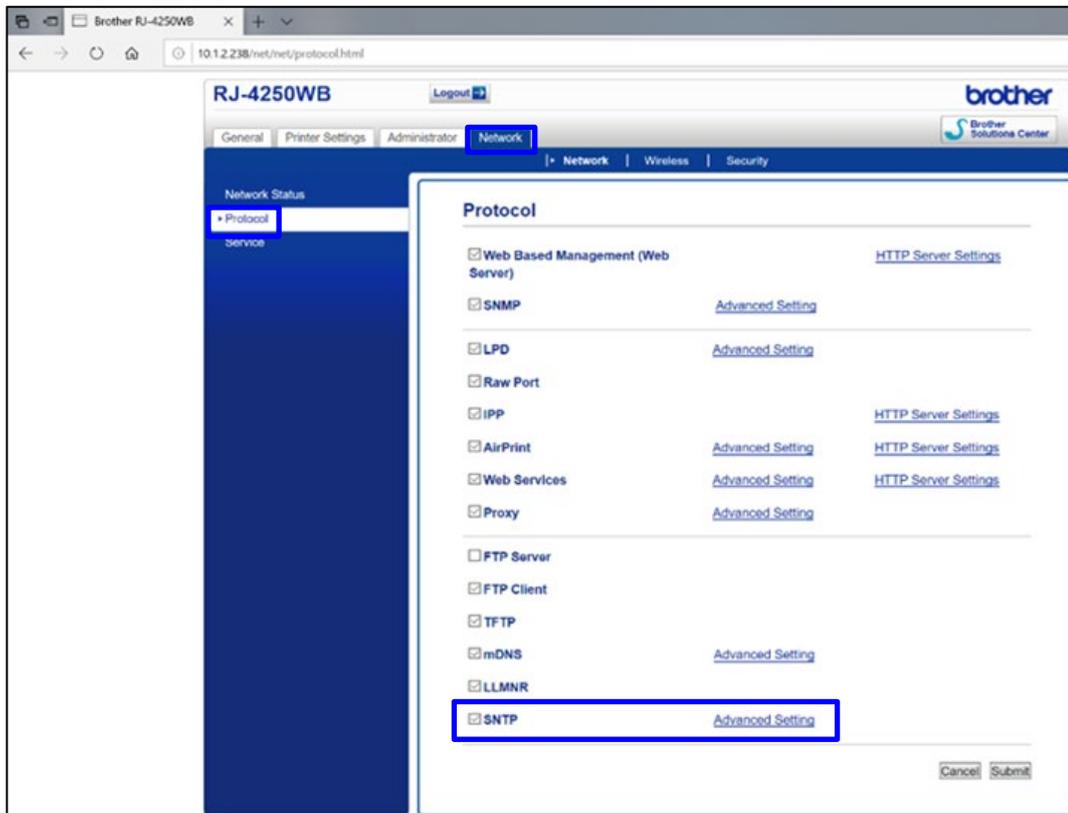
17. Select "Automatic" from the **Startup Type** drop-down list, and then click **OK**.



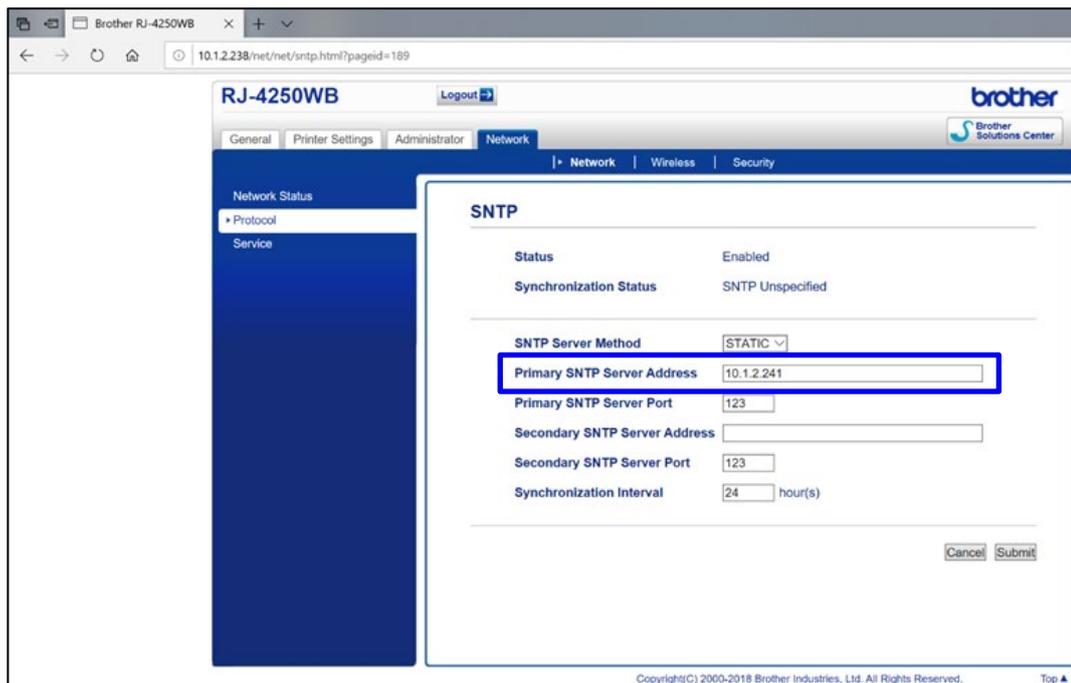
No. Tips

[Setting the SNMP server address on the printer]

- 18. Start EWS for the connected printer, click **Log in**, and type the password.
- 19. Select **Network > Protocol**, and then click **Advanced Setting** for **SNMP**.



- 20. Change the SNMP server method to **STATIC**, type the IP address of the PC with the SNMP server setting in the **Primary SNMP Server Address** field, and then click **Submit**.



No.	Tips
	For more information, see section <a href="#">3.6.5 "SNTP (Simple Network Time Protocol) Server Setting"</a> in this guide.