Regarding the measure against vulnerability measure of RSA Key generation

USRM3-1246-00 2022-03 en

Contents

Preface

Preface

You must update the firmware and perform additional procedures described in this document, in order to upgrade an RSA key that is created with a vulnerable encryption library.

First, check the model and version of your machine.
If you find the model and version of your machine on this page, update the firmware, then perform the additional procedures described in this document. **Checking whether You Must Perform the Additional Procedures(P. 5)**
For information on updating the firmware, see the website where you obtained this document.

Checking the Version of Your Machine

Follow the procedure below to check the version of your machine.

1 Start the Remote UI.

2 Click [Status Monitor/Cancel] on the portal page.

3 Click [Device Information] ▶ check [Controller] in [Version Information].

Models and Versions Requiring the Additional Procedures

Models	Versions
- iR-ADV 4545 / 4535 / 4525 - iR-ADV 715 / 615 / 525 - iR-ADV 6575 / 6565 / 6560 / 6555 - iR-ADV 8505 / 8595 / 8585 - iR-ADV C3530 / C3520 - iR-ADV C7580 / C7570 / C7565 - iR-ADV C5560 / C5550 / C5540 / C5535 - iR-ADV C355 / C255 - iR-ADV C356 / C256	Ver 59.39 to Ver 67.30
- iR-ADV 4545 III / 4535 III / 4525 III - iR-ADV 715 III / 615 III / 525 III - iR-ADV 6575 III / 6565 III / 6560 III - iR-ADV 8505 III / 8595 III / 8585 III / 8505B III / 8595B III / 8585B III - iR-ADV C3530 III / C3520 III - iR-ADV C7580 III / C7570 III / C7565 III - iR-ADV C5560 III / C5550 III / C5540 III / C5535 III - iR-ADV C356 III - iR-ADV C475 III - iPR C165 / C170	Ver 29.39 to Ver 37.30
- iR-ADV 4725 / 4735 / 4745 - iR-ADV 8705 / 8705B / 8795 / 8795B / 8786 / 8786B - iR-ADV C3730 / C3720	Ver 17.44 to Ver 27.30

Models	Versions
- iR-ADV C7780 / C7770 / C7765	
- iR-ADV C357 - iR-ADV C477	Ver 19.34 to Ver 27.30
- iR-ADV C5760 / C5750 / C5740 / C5735	Ver 19.40 to Ver 27.30
- iR-ADV 6765 / 6780	Ver 17.44 to Ver 27.33
- iR-ADV C5870 / C5860 / C5850 / C5840	Ver 03.11 to Ver 17.32
- iR-ADV 6860 / 6870	Ver 05.25 to Ver 17.32
- iR-ADV C3830 / C3826 / C3835	Ver 06.28 to Ver 17.32
- iR-ADV C568	Ver 04.13 to Ver 17.08
- iR C3226 / C3222	Ver 01.12 to Ver 02.13
- iR2425	Ver 02.06 to Ver 05.00
- iR2635 / iR2645 / iR2630 / iR2625	Ver 130.0.117 to Ver 707.0.701

NOTE

- The screenshots used in this document may differ from the ones you actually see, depending on the model of your machine. For details on the screenshots, see the manual for your machine on the online manual website.

  https://oip.manual.canon/

Checking whether You Must Perform the Additional Procedures

Checking whether You Must Perform the Additional Procedures

Carry out the following three operations to check the additional procedures you must perform.
You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

Checking the RSA Key(P. 5)
Checking the Bluetooth Settings(P. 8)
Checking the Access Management System Settings(P. 8)
Checking for an RSA key is not required if "Default Key" or "AMS" appears for a key registered in your machine. Check the Bluetooth settings and Access Management System settings, and perform the additional procedures if required.

NOTE

- The screenshots used in this document are only an example. They may differ from the ones you actually see, depending on the model of your machine.

Checking the RSA Key

Check whether there is an RSA key. If there is an RSA key generated with the machine, check the key usage.

Using the Control Panel(P. 5)
Using the Remote UI(P. 6)

■Using the Control Panel

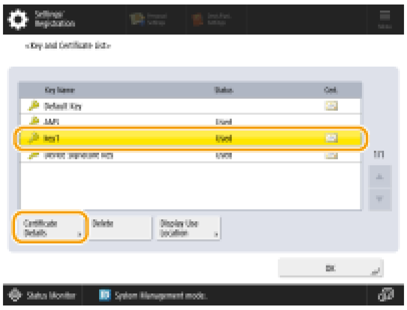
1 **Press ⚙ (Settings/Registration).**

2 **Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Key and Certificate List>.**

3 **Press <Key and Certificate List for This Device>.**

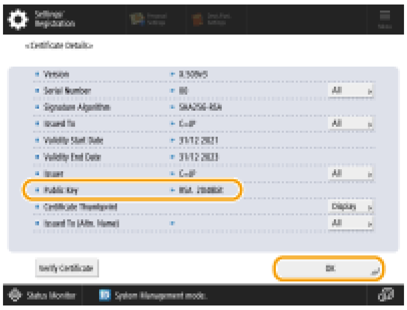
- <Key and Certificate List for This Device> does not appear unless the user signature function is enabled on the machine. In this case, proceed to the next step.

4 **Select a key other than <Default Key> and <AMS> that has <Used> displayed for <Status> ▶ press <Certificate Details>.**
Example screen:



5 **Check <Public Key>.**

Example screen:



Version	X.509v3	
Serial Number	00	All
Signature Algorithm	SHA256-RSA	
Issued To	C=JP	All
Validity Start Date	31/12 2021	
Validity End Date	31/12 2023	
Issuer	C=JP	All
Public Key	RSA, 2048bit	
Certificate Thumbprint		Display
Issued To (Alt. Name)		All

For a Certificate Other than RSA

You do not need to perform the additional procedures. Press <OK> to close the screen.

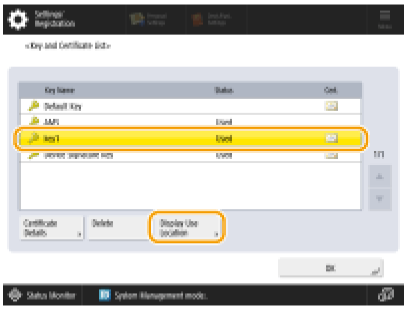
For an RSA Certificate

Proceed to step 6.

- You do not need to perform the additional procedures for the following keys. Press <OK> to close the screen.
  - An RSA key that has been generated externally and registered to the machine
- If you must perform the additional procedures, you may need certificate information for disabling the certificate. Make a note of the required information before deleting the key/certificate. Ask the certificate authority that has issued the certificate about the required information.

6 **Press <Display Use Location> ▶ check the key usage.**

Example screen:

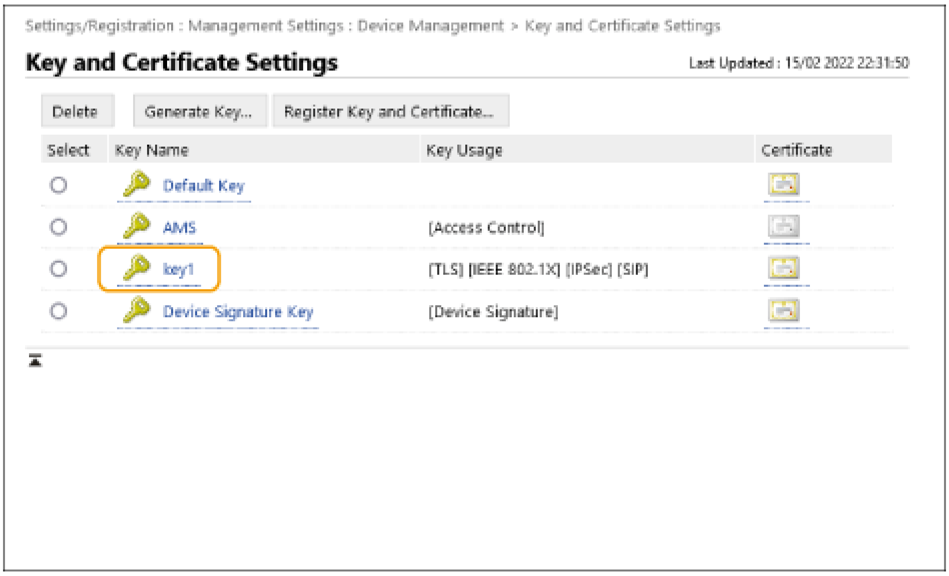


Perform the additional procedures according to what appears here. **RSA Key Usage and Additional Procedure(P. 12)**

■Using the Remote UI

1 **Start the Remote UI ▶ click [Settings/Registration] ▶ [Device Management] ▶ [Key and Certificate Settings].**

2 Click a key other than [Default Key] and [AMS].



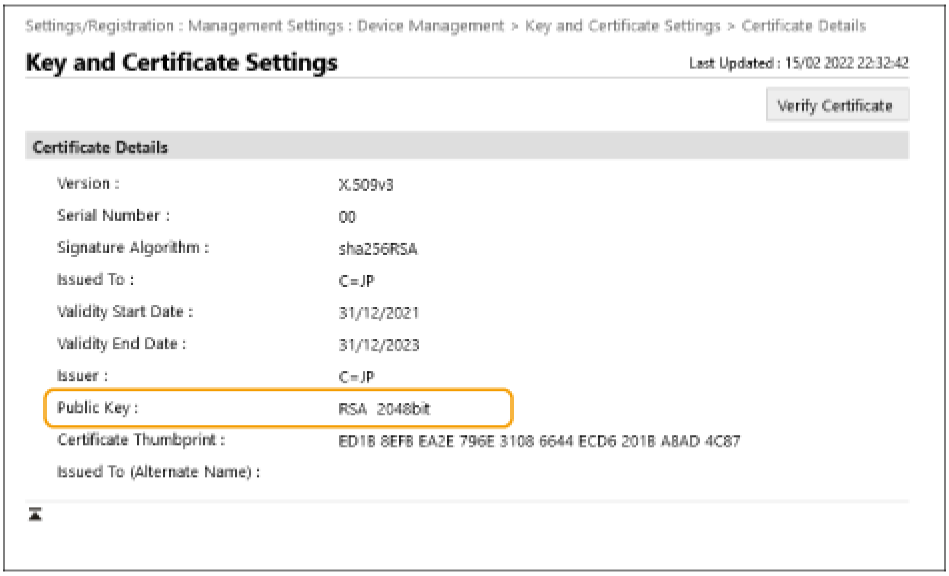
Settings/Registration : Management Settings : Device Management > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 15/02 2022 22:31:50

Select	Key Name	Key Usage	Certificate
○	Default Key		
○	AMS	[Access Control]	
○	key1	[TLS] [IEEE 802.1X] [IPSec] [SIP]	
○	Device Signature Key	[Device Signature]	

3 Check [Public Key].



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Certificate Details

Key and Certificate Settings

Last Updated : 15/02 2022 22:32:42

Certificate Details

Version : X.509v3

Serial Number : 00

Signature Algorithm : sha256RSA

Issued To : C=JP

Validity Start Date : 31/12/2021

Validity End Date : 31/12/2023

Issuer : C=JP

Public Key : RSA 2048bit

Certificate Thumbprint : ED1B 8EFB EA2E 796E 3108 6644 ECD6 201B A8AD 4C87

Issued To (Alternate Name) :

For a Certificate Other than RSA

You do not need to perform the additional procedures.

For an RSA Certificate

Click [Key and Certificate Settings] on the top of the screen ▶ check the key usage.

- Perform the additional procedures according to what appears here. **RSA Key Usage and Additional Procedure(P. 12)**
- You do not need to perform the additional procedures for the following keys.
  - An RSA key that has been generated externally and registered to the machine
- If you must perform the additional procedures, you may need certificate information for disabling the certificate. Make a note of the required information before deleting the key/certificate. Ask the certificate authority that has issued the certificate about the required information.

Checking the Bluetooth Settings

Check whether Bluetooth is set to <On>. You must perform the additional procedures if it is set to <On>.

Using the Control Panel(P. 8)
Using the Remote UI(P. 8)

Using the Control Panel

1 Press ⚙ (Settings/Registration).

2 Press <Preferences> ▶ <Network> ▶ <Bluetooth Settings>.

3 Check <Use Bluetooth>.

- If <Use Bluetooth> is set to <On>, perform the subsequent procedures. **Additional Procedures for Bluetooth Settings(P. 86)**
- If <Use Bluetooth> is set to <Off>, you do not need to perform the subsequent procedures.

Using the Remote UI

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Network] ▶ [Bluetooth Settings].

4 Check [Use Bluetooth].

- If [Use Bluetooth] is selected, perform the subsequent procedures. **Additional Procedures for Bluetooth Settings(P. 86)**
- If [Use Bluetooth] is deselected, you do not need to perform the subsequent procedures.

Checking the Access Management System Settings

Check whether the Access Management System is set to <On>. You must perform the additional procedures if it is set to <On>.

This setting may not appear, depending on your machine. You do not need to perform the additional procedures in that case.

Using the Control Panel(P. 9)
Using the Remote UI(P. 9)

■Using the Control Panel

1 Press ⚙ (Settings/Registration).

2 Press <Management Settings> ▶ <License/Other> ▶ <Use ACCESS MANAGEMENT SYSTEM>.

3 Check <Use ACCESS MANAGEMENT SYSTEM>.

- If <Use ACCESS MANAGEMENT SYSTEM> is set to <On>, perform the subsequent procedures. **Additional Procedures for Access Management System Settings(P. 91)**
- If <Use ACCESS MANAGEMENT SYSTEM> is set to <Off>, you do not need to perform the subsequent procedures.

■Using the Remote UI

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [License/Other] ▶ [ACCESS MANAGEMENT SYSTEM Settings].

4 Check [Use ACCESS MANAGEMENT SYSTEM].

- If [Use ACCESS MANAGEMENT SYSTEM] is selected, perform the subsequent procedures. **Additional Procedures for Access Management System Settings(P. 91)**
- If [Use ACCESS MANAGEMENT SYSTEM] is deselected, you do not need to perform the subsequent procedures.

RSA Key Usage and Additional Procedure

RSA Key Usage and Additional Procedure

Refer to "Additional Procedures" and perform them according to the key usage.

RSA Key Usage	Conditions	Additional Procedures
TLS	You must perform the additional procedures in any conditions.	**Procedure for TLS(P. 13)**
IEEE 802.1X	You must perform the additional procedures if the IEEE 802.1X authentication method is set to EAP-TLS.	**Procedure for IEEE 802.1X(P. 27)**
IPSec	You must perform the additional procedures if the IKE authentication method is set to the digital signature method.	**Procedure for IPSec(P. 44)**
SIP	You must perform the additional procedures if TLS is used.	**Procedure for SIP(P. 61)**
Device Signature	You must perform the additional procedures in the following cases: ● When a digital signature is added to sent files using a key for device signatures ● When encryption is enabled in the S/MIME encryption settings	**Procedure for Device Signatures(P. 78)**

NOTE

- The screenshots used in this document are only an example. They may differ from the ones you actually see, depending on the model of your machine.

Procedure for TLS

Step 1: Regenerating the Key and Certificate (for TLS)

You can generate three types of certificates for a key generated with the machine: a self-signed certificate, CSR certificate, and SCEP certificate. The procedure differs according to the type of certificate.
You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

For a Self-Signed Certificate(P. 14)
For a CSR Certificate(P. 17)
For an SCEP Certificate(P. 19)

For a Self-Signed Certificate

Using the Control Panel(P. 14)
Using the Remote UI(P. 15)

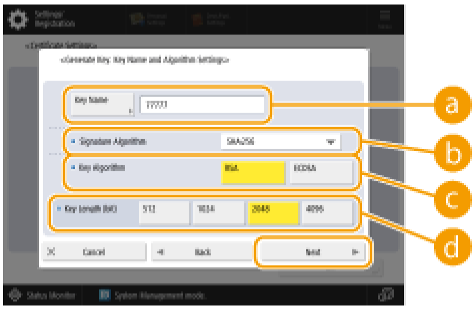
■Using the Control Panel

1 **Press ⚙ (Settings/Registration).**

2 **Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Generate Key> ▶ <Generate Network Communication Key>.**

3 **Configure the required settings and proceed to the next screen.**

Example screen:



<Certificate Settings>
<Generate Key: Key Name and Algorithm Settings>
Key Name: 77771
Signature Algorithm: SHA256
Key Algorithm: RSA / ECDSA
Key Length (bit): 512 / 1024 / 2048 / 4096

a <Key Name>

Enter a name for the key. Enter a name that will be easy to find in a list.

b <Signature Algorithm>

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms. If you select <RSA> for c, and set <Key Length (bit)> to <1024> or more for d, you can select the SHA384 and SHA512 hash algorithms.

c <Key Algorithm>

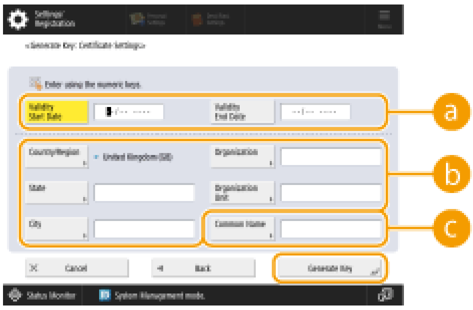
Select the key algorithm. If you select <RSA>, <Key Length (bit)> appears as a setting item for d. If you select <ECDSA>, <Key Type> appears instead.

d <Key Length (bit)>/<Key Type>

Specify the key length if you select <RSA> for c, or specify the key type if you select <ECDSA>. In both cases, a higher value provides greater security but reduces the communication processing speed.

4 Configure the necessary items for the certificate ▶ press <Generate Key>.

Example screen:



a <Validity Start Date>/<Validity End Date>

Enter the start date and end data of the validity period for the certificate.

b <Country/Region>/<State>/<City>/<Organization>/<Organization Unit>

Select the country code from the list, and enter the location and the organization name.

c <Common Name>

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

■ Using the Remote UI

1 Start the Remote UI.

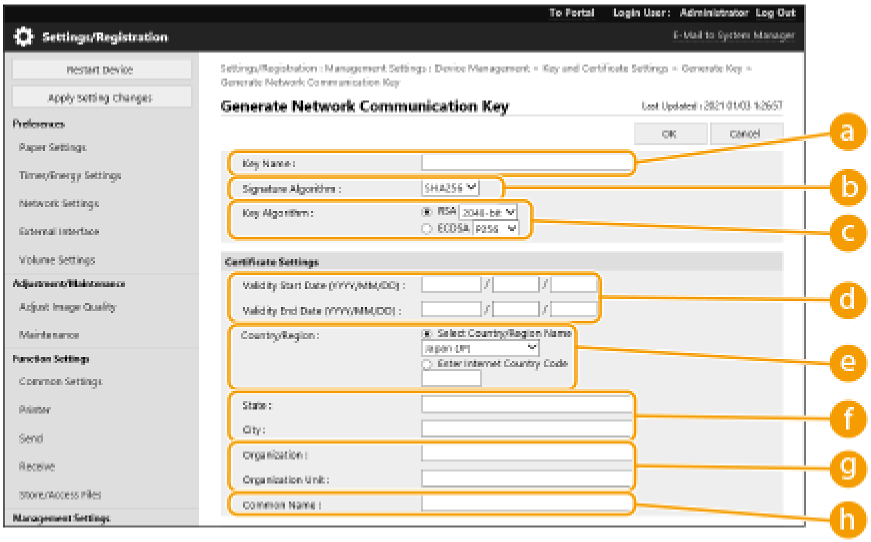
2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 Click [Generate Key].

5 Click [Network Communication].

6 Configure the key and certificate settings.



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Generate Key > Generate Network Communication Key

Generate Network Communication Key

Last Updated : 2021 01/03 1:26:57

Key Name :

Signature Algorithm : SHA256

Key Algorithm : ● RSA 2048-bit ○ ECDSA P256

Certificate Settings

Validity Start Date (YYYY/MM/DD) : / /

Validity End Date (YYYY/MM/DD) : / /

Country/Region : ● Select Country/Region Name Japan (JP) ○ Enter Internet Country Code

State :

City :

Organization :

Organization Unit :

Common Name :

a [Key Name]

Enter a name for the key using alphanumeric characters. Enter a name that will be easy to find in a list.

b [Signature Algorithm]

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms.

c [Key Algorithm]

Select [RSA] or [ECDSA] as the key generation algorithm. Specify the key length if you select [RSA], or specify the key type if you select [ECDSA]. In both cases, a higher value provides greater security but reduces the communication processing speed.

NOTE:

- If you select [SHA384] or [SHA512] for [Signature Algorithm], you cannot set the key length to [512-bit] when you select [RSA] for [Key Algorithm].

d [Validity Start Date (YYYY/MM/DD)]/[Validity End Date (YYYY/MM/DD)]

Enter the start date and end data of the validity period for the certificate. You cannot set [Validity End Date (YYYY/MM/DD)] to a date before the date in [Validity Start Date (YYYY/MM/DD)].

e [Country/Region]

Click [Select Country/Region Name] and select the country/region from the drop-down list. Alternatively, click [Enter Internet Country Code] and enter a country code, such as "US" for the United States.

f [State]/[City]

Enter the location using alphanumeric characters as necessary.

g [Organization]/[Organization Unit]

Enter the organization name using alphanumeric characters as necessary.

h [Common Name]

Enter the common name of the certificate using alphanumeric characters as necessary. "Common Name" is often abbreviated as "CN".

7 Click [OK].

- Generating a key and certificate may take some time.
- Generated keys and certificates are automatically registered to the machine.

For a CSR Certificate

Generate a key and CSR on the machine. Use the CSR data displayed on the screen or output to a file to request the certificate authority to issue a certificate. Then, register the issued certificate for the key.
You can configure this setting only from the Remote UI.

■1. Generating a Key and CSR

1 **Start the Remote UI.**

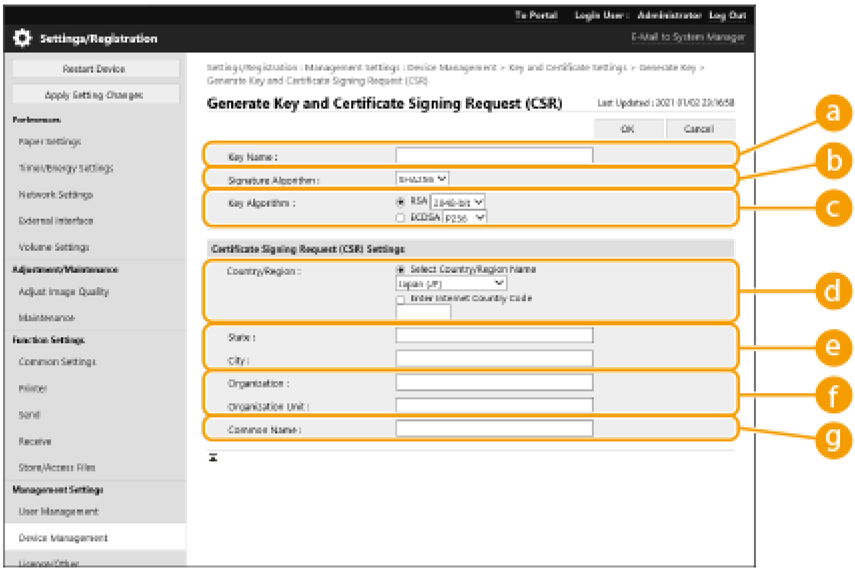
2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Click [Generate Key].**

5 **Click [Key and Certificate Signing Request (CSR)].**

6 **Configure the key and certificate settings.**


To Portal
Login User : Administrator
Log Out
Settings/Registration
E-Mail to System Manager
Restart Device
Apply Setting Changes
Preferences
Paper Settings
Timer/Energy Settings
Network Settings
External Interface
Volume Settings
Adjustment/Maintenance
Adjust Image Quality
Maintenance
Function Settings
Common Settings
Printer
Send
Receive
Store/Access Files
Management Settings
User Management
Device Management
License/Other
Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Generate Key > Generate Key and Certificate Signing Request (CSR)
Generate Key and Certificate Signing Request (CSR)
Last Updated : 2021 01/02 23:16:58
OK
Cancel
Key Name :
Signature Algorithm : SHA256
Key Algorithm : ● RSA 2048-bit ○ ECDSA P256
Certificate Signing Request (CSR) Settings
Country/Region : ● Select Country/Region Name Japan (JP) □ Enter Internet Country Code
State :
City :
Organization :
Organization Unit :
Common Name :
a
b
c
d
e
f
g

a [Key Name]

Enter a name for the key. Enter a name that will be easy to find in a list.

b [Signature Algorithm]

Select the hash algorithm to use for the signature.

c [Key Algorithm]

Select the key algorithm, and specify the key length if you select [RSA], or specify the key type if you select [ECDSA].

ⓓ **[Country/Region]**

Select the country code from the list, or enter it directly.

ⓔ **[State]/[City]**

Enter the location.

ⓕ **[Organization]/[Organization Unit]**

Enter the organization name.

ⓖ **[Common Name]**

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

7 Click [OK].

➠ The CSR data appears.

- If you want to save the CSR data to a file, click [Store in File] and specify the save location.

NOTE:

- The key that has generated the CSR appears on the key and certificate list screen, but you cannot use the key by itself. To use this key, you need to register the certificate that is later issued based on the CSR.

8 Request the certificate authority to issue a certificate based on the CSR data.

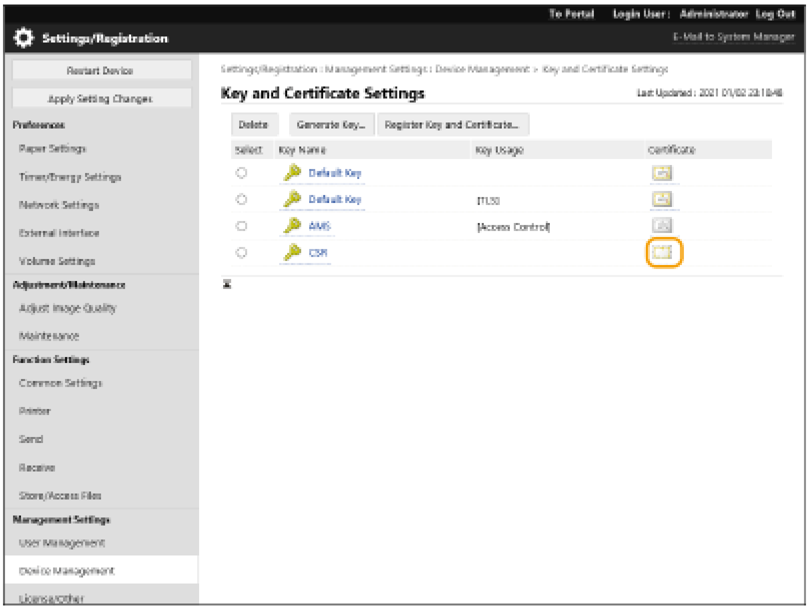
■2. Registering the Issued Certificate to the Key

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 In the [Certificate] list, click for the certificate that you want to register.



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 2021 01/02 23:18:48

Select	Key Name	Key Usage	Certificate
○	Default Key		
○	Default Key	[TLS]	
○	AMS	[Access Control]	
○	CSR		

5 **Click [Register Certificate...].**

6 **Register the certificate.**

- Click [Browse...] ▶ specify the file (certificate) to register ▶ click [Register].

For an SCEP Certificate

Manually request the SCEP server to issue a certificate.
You can configure this setting only from the Remote UI.

NOTE

- You cannot send a manual request for issuing a certificate if [Enable Timer for Certificate Issuance Auto Request] is selected. Deselect it if it is selected.

Start the Remote UI ▶ click [Settings/Registration] ▶ [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)] ▶ [Settings for Certificate Issuance Auto Request] ▶ deselect [Enable Timer for Certificate Issuance Auto Request] ▶ click [Update].

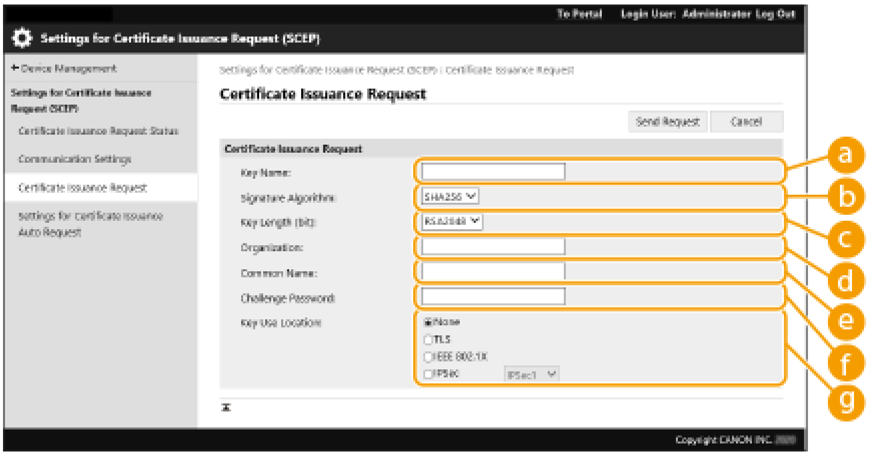
1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)].**

4 **Click [Certificate Issuance Request].**

5 Configure the settings required for requesting a certificate.



To Portal Login User: Administrator Log Out

Settings for Certificate Issuance Request (SCEP)

← Device Management

Settings for Certificate Issuance Request (SCEP)

Certificate Issuance Request Status

Communication Settings

Certificate Issuance Request

Settings for Certificate Issuance Auto Request

Settings for Certificate Issuance Request (SCEP) : Certificate Issuance Request

Certificate Issuance Request

Send Request Cancel

Certificate Issuance Request

Key Name:

Signature Algorithm: SHA256

Key Length (bit): RSA2048

Organization:

Common Name:

Challenge Password:

Key Use Location: ● None ○ TLS ○ IEEE 802.1X ○ IPSec IPSec1

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ⓐ [Key Name:]

Enter a name for the key. Enter a name that will be easy to find in a list.

ⓑ [Signature Algorithm:]

Select the hash algorithm to use for the signature.

ⓒ [Key Length (bit):]

Select the key length.

ⓓ [Organization:]

Enter the organization name.

ⓔ [Common Name:]

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

ⓕ [Challenge Password:]

When a password is set on the SCEP server side, enter the challenge password included in the request data (PKCS#9) for requesting a certificate to be issued.

ⓖ [Key Use Location:]

Select [TLS].

NOTE:

- When selecting something other than [None], enable each function in advance. If a certificate is successfully obtained with each function disabled, the certificate is assigned to the key use location, but each function is not automatically enabled.

6 Click [Send Request].

7 Click [Restart].

Step 2: Resetting the Key and Certificate (for TLS)

You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.
This procedure is not required for an SCEP certificate.

For a Self-Signed Certificate/CSR Certificate

Using the Control Panel(P. 21)
Using the Remote UI(P. 22)

■Using the Control Panel

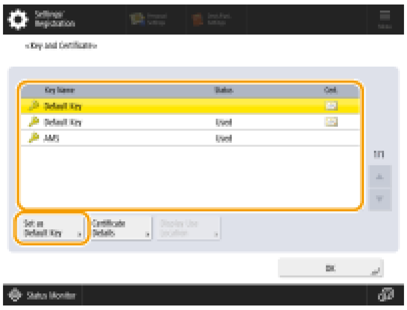
1 Press ⚙ (Settings/Registration).

2 Press <Preferences> ▶ <Network> ▶ <TCP/IP Settings> ▶ <TLS Settings>.

3 Press <Key and Certificate>.

4 Select the key and certificate to use for TLS encrypted communication ▶ press <Set as Default Key> ▶ <Yes>.

Example screen:



Key Name	Status	Cert.
Default Key		✉
Default Key	Used	✉
AMS	Used	

- If you want to use the preinstalled key and certificate, select <Default Key>.

NOTE:

- TLS encrypted communication cannot use <Device Signature Key>, which is used for device signatures, or <AMS>, which is used for access restrictions.

5 Press <OK>.

6 Press ⚙ (Settings/Registration) ▶ <Apply Setting Changes> ▶ <Yes>.

➠ The machine restarts, and the settings are applied.

■Using the Remote UI

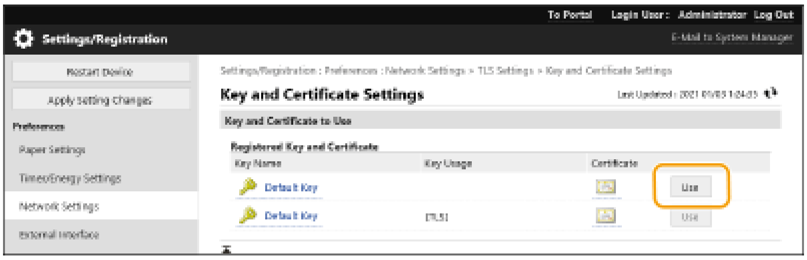
1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Network] ▶ [TLS Settings].**

4 **Click [Key and Certificate].**

5 **Click [Use] for the key and certificate to use for TLS encrypted communication.**



Settings/Registration : Preferences : Network Settings > TLS Settings > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 2021 01/03 1:24:03

Key and Certificate to Use

Registered Key and Certificate

Key Name	Key Usage	Certificate	
Default Key			Use
Default Key	[TLS]		Use

- If you want to use the preinstalled key and certificate, select [Default Key].

6 **Click [Apply Set. Changes] to restart the machine.**

➠The machine restarts, and the settings are applied.

Step 3: Deleting a Key/Certificate Generated in the Past (for TLS)

You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

NOTE

- You may need to convey information to the certificate authority when disabling the certificate. See **Checking whether You Must Perform the Additional Procedures(P. 5)** , and make a note of the required information before deleting the key/certificate.

Using the Control Panel(P. 23)
Using the Remote UI(P. 24)

■Using the Control Panel

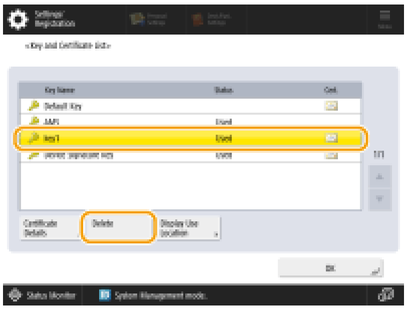
1 **Press ⚙ (Settings/Registration).**

2 **Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Key and Certificate List> ▶ <Key and Certificate List for This Device>.**

- <Key and Certificate List for This Device> does not appear unless the user signature function is enabled on the machine. In this case, proceed to the next step.

3 **Select the key and certificate ▶ press <Delete> ▶ <Yes>.**

Example screen:



NOTE:

- If ✗ appears, the key is corrupt or invalid.
- If ✉ does not appear, the certificate for the key does not exist.
- If you select a key and certificate and press <Certificate Details>, detailed information about the certificate appears. You can also press <Verify Certificate> on this screen to check whether the certificate is valid.

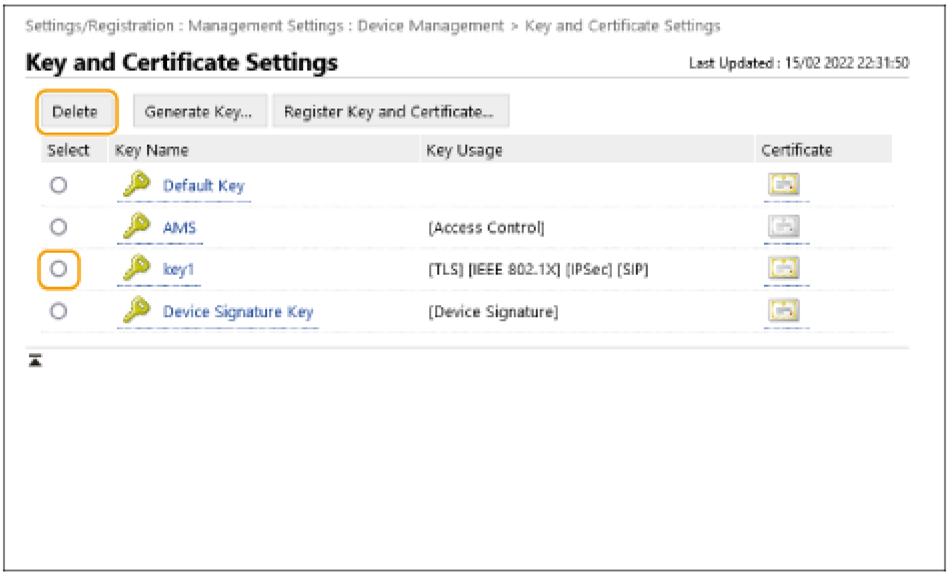
■Using the Remote UI

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Select the key and certificate ▶ click [Delete] ▶ [OK].**


Settings/Registration : Management Settings : Device Management > Key and Certificate Settings
Key and Certificate Settings
Last Updated : 15/02 2022 22:31:50
Delete
Generate Key...
Register Key and Certificate...

Select	Key Name	Key Usage	Certificate
○	🔑 Default Key		▤
○	🔑 AMS	[Access Control]	▤
○	🔑 key1	[TLS] [IEEE 802.1X] [IPSec] [SIP]	▤
○	🔑 Device Signature Key	[Device Signature]	▤

NOTE

- If 🔑 appears, the key is corrupt or invalid.
- If ▤ appears, the certificate for the key does not exist.
- Click a key name to display detailed information about the certificate. You can also click [Verify Certificate] on this screen to check whether the certificate is valid.

Step 4: Disabling the Certificate (for TLS)

Disable a certificate generated in the past. The procedure differs according to the type of certificate.

■For a Self-Signed Certificate

If a certificate including a key that requires the additional procedures is registered in a computer or Web browser as a trusted certificate, delete the registered certificate.

■For a CSR/SCEP Certificate

Request the certificate authority that has issued the certificate to revoke the certificate. Refer to [Issuer] in the certificate for the certificate authority to request.

NOTE

- If you are checking certificate revocation using a CRL in a computer or Web browser that communicates with the machine, register the updated CRL to the computer or Web browser after the certificate is revoked.
- If you are using a method other than a CRL (for example, OCSP) to check certificate revocation, perform the procedure for that method.

Step 5: Enabling the New Certificate (for TLS)

Enable the certificate that is newly generated on the machine.

■ For a Self-Signed Certificate

Register the new certificate to the computer or Web browser as a trusted certificate.

■ For a CSR/SCEP Certificate

You do not need to perform the additional procedures.

Procedure for IEEE 802.1X

Step 1: Checking the Authentication Method (for IEEE 802.1X)

You must perform the subsequent procedures if the IEEE 802.1X authentication method is set to EAP-TLS.
Follow the procedure below to check the authentication method.
You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

Using the Control Panel(P. 28)
Using the Remote UI(P. 28)

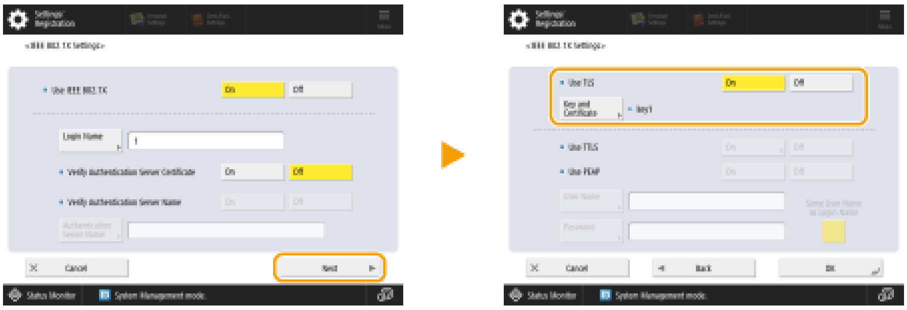
■Using the Control Panel

1 **Press ⚙ (Settings/Registration).**

2 **Press <Preferences> ▶ <Network> ▶ <IEEE 802.1X Settings>.**

3 **Press <Next> ▶ check <Use TLS>.**

Example screen:



<IEEE 802.1X Settings>
- Use IEEE 802.1X: On
- Login Name: 1
- Verify Authentication Server Certificate: Off
- Verify Authentication Server Name
- Authentication Server Name

<IEEE 802.1X Settings>
- Use TLS: On
- Key and Certificate: key1
- Use TTLS
- Use PEAP
- User Name
- Password
- Same User Name as Login Name

- If <Use TLS> is set to <On> and a key name appears for <Key and Certificate>, perform the subsequent procedures.
- If <Use TLS> is set to <Off>, you do not need to perform the subsequent procedures.

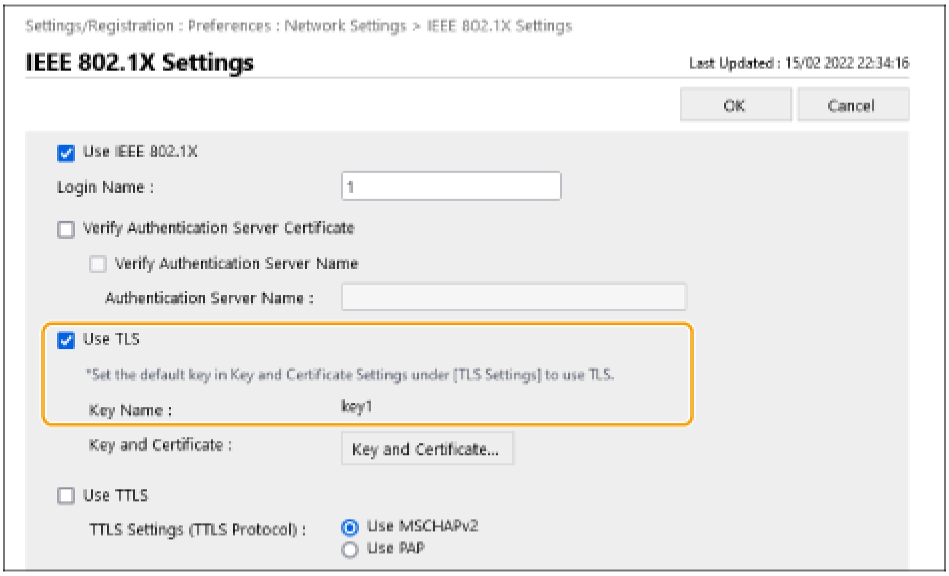
■Using the Remote UI

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Network] ▶ [IEEE 802.1X Settings].**

4 Check [Use TLS].



Settings/Registration : Preferences : Network Settings > IEEE 802.1X Settings

IEEE 802.1X Settings

Last Updated : 15/02 2022 22:34:16

☑ Use IEEE 802.1X

Login Name : 1

□ Verify Authentication Server Certificate

□ Verify Authentication Server Name

Authentication Server Name :

☑ Use TLS

*Set the default key in Key and Certificate Settings under [TLS Settings] to use TLS.

Key Name : key1

Key and Certificate :

□ Use TTLS

TTLS Settings (TTLS Protocol) : ● Use MSCHAPv2 ○ Use PAP

- If [Use TLS] is selected and a key name appears, perform the subsequent procedures.
- If [Use TLS] is deselected, you do not need to perform the subsequent procedures.

Step 2: Regenerating the Key and Certificate (for IEEE 802.1X)

You can generate three types of certificates for a key generated with the machine: a self-signed certificate, CSR certificate, and SCEP certificate. The procedure differs according to the type of certificate.
You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

For a Self-Signed Certificate(P. 30)
For a CSR Certificate(P. 33)
For an SCEP Certificate(P. 35)

For a Self-Signed Certificate

Using the Control Panel(P. 30)
Using the Remote UI(P. 31)

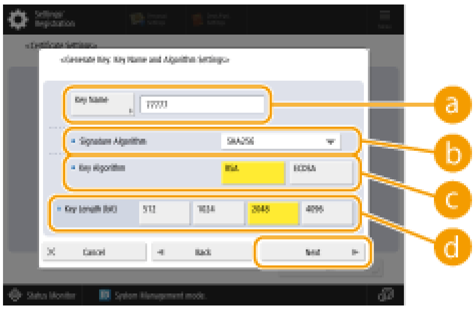
■Using the Control Panel

1 Press ⚙ (Settings/Registration).

2 Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Generate Key> ▶ <Generate Network Communication Key>.

3 Configure the required settings and proceed to the next screen.

Example screen:



Settings/Registration

<Certificate Settings>

<Generate Key: Key Name and Algorithm Settings>

Key Name: 77777

Signature Algorithm: SHA256

Key Algorithm: RSA | ECDSA

Key Length (bit): 512 | 1024 | 2048 | 4096

Cancel | Back | Next

Status Monitor | System Management mode

a <Key Name>

Enter a name for the key. Enter a name that will be easy to find in a list.

b <Signature Algorithm>

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms. If you select <RSA> for c, and set <Key Length (bit)> to <1024> or more for d, you can select the SHA384 and SHA512 hash algorithms.

c <Key Algorithm>

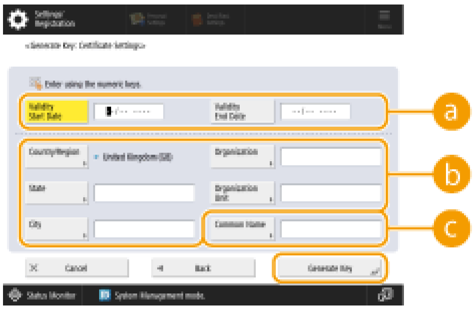
Select the key algorithm. If you select <RSA>, <Key Length (bit)> appears as a setting item for d. If you select <ECDSA>, <Key Type> appears instead.

d <Key Length (bit)>/<Key Type>

Specify the key length if you select <RSA> for c, or specify the key type if you select <ECDSA>. In both cases, a higher value provides greater security but reduces the communication processing speed.

4 Configure the necessary items for the certificate ▶ press <Generate Key>.

Example screen:



a <Validity Start Date>/<Validity End Date>

Enter the start date and end data of the validity period for the certificate.

b <Country/Region>/<State>/<City>/<Organization>/<Organization Unit>

Select the country code from the list, and enter the location and the organization name.

c <Common Name>

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

■ Using the Remote UI

1 Start the Remote UI.

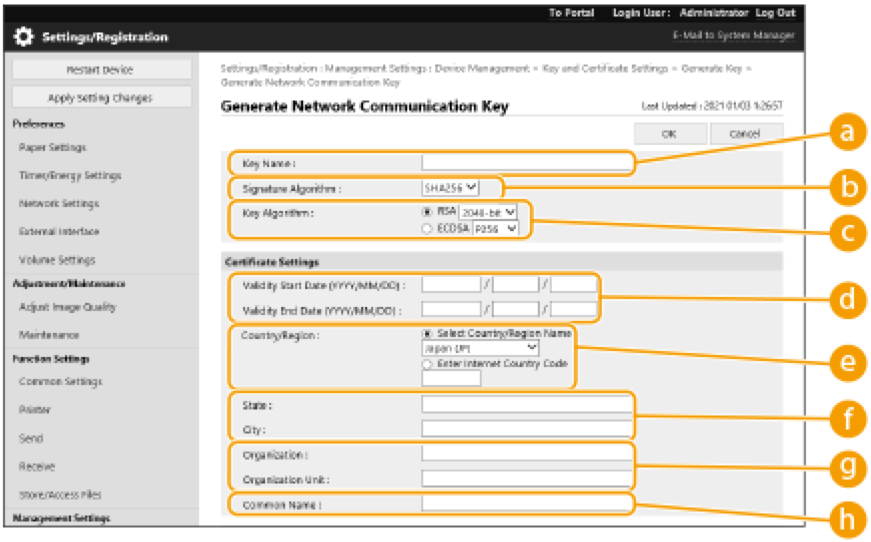
2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 Click [Generate Key].

5 Click [Network Communication].

6 Configure the key and certificate settings.



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Generate Key > Generate Network Communication Key

Generate Network Communication Key

Last Updated : 2021 01/03 1:26:57

Key Name :

Signature Algorithm : SHA256

Key Algorithm : ● RSA 2048-bit ○ ECDSA P256

Certificate Settings

Validity Start Date (YYYY/MM/DD) : / /

Validity End Date (YYYY/MM/DD) : / /

Country/Region : ● Select Country/Region Name Japan (JP) ○ Enter Internet Country Code

State :

City :

Organization :

Organization Unit :

Common Name :

a [Key Name]

Enter a name for the key using alphanumeric characters. Enter a name that will be easy to find in a list.

b [Signature Algorithm]

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms.

c [Key Algorithm]

Select [RSA] or [ECDSA] as the key generation algorithm. Specify the key length if you select [RSA], or specify the key type if you select [ECDSA]. In both cases, a higher value provides greater security but reduces the communication processing speed.

NOTE:

- If you select [SHA384] or [SHA512] for [Signature Algorithm], you cannot set the key length to [512-bit] when you select [RSA] for [Key Algorithm].

d [Validity Start Date (YYYY/MM/DD)]/[Validity End Date (YYYY/MM/DD)]

Enter the start date and end data of the validity period for the certificate. You cannot set [Validity End Date (YYYY/MM/DD)] to a date before the date in [Validity Start Date (YYYY/MM/DD)].

e [Country/Region]

Click [Select Country/Region Name] and select the country/region from the drop-down list. Alternatively, click [Enter Internet Country Code] and enter a country code, such as "US" for the United States.

f [State]/[City]

Enter the location using alphanumeric characters as necessary.

g [Organization]/[Organization Unit]

Enter the organization name using alphanumeric characters as necessary.

h [Common Name]

Enter the common name of the certificate using alphanumeric characters as necessary. "Common Name" is often abbreviated as "CN".

7 Click [OK].

- Generating a key and certificate may take some time.
- Generated keys and certificates are automatically registered to the machine.

For a CSR Certificate

Generate a key and CSR on the machine. Use the CSR data displayed on the screen or output to a file to request the certificate authority to issue a certificate. Then, register the issued certificate for the key.
You can configure this setting only from the Remote UI.

■1. Generating a Key and CSR

1 **Start the Remote UI.**

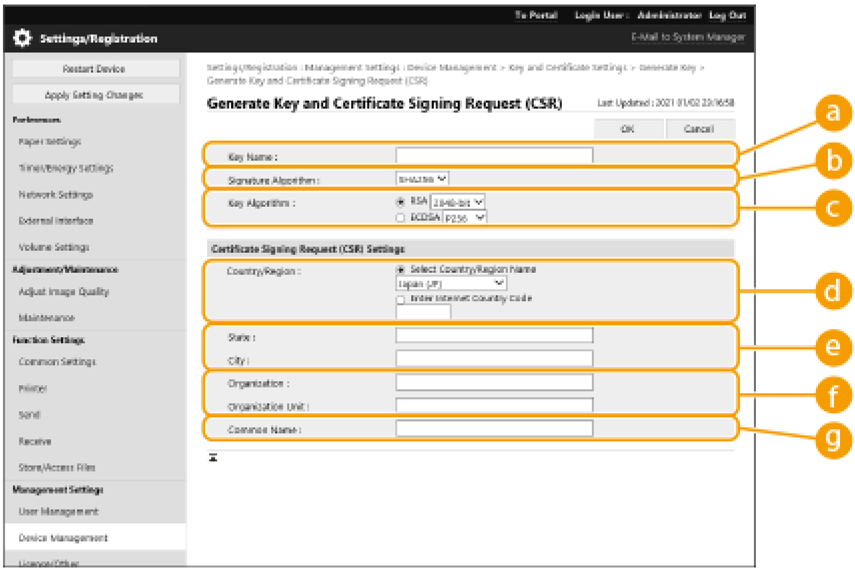
2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Click [Generate Key].**

5 **Click [Key and Certificate Signing Request (CSR)].**

6 **Configure the key and certificate settings.**



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Generate Key > Generate Key and Certificate Signing Request (CSR)

Generate Key and Certificate Signing Request (CSR)

Last Updated : 2021 01/02 23:16:58

Key Name :

Signature Algorithm : SHA256

Key Algorithm : ● RSA 2048-bit ○ ECDSA P256

Certificate Signing Request (CSR) Settings

Country/Region : ● Select Country/Region Name Japan (JP) □ Enter Internet Country Code

State :

City :

Organization :

Organization Unit :

Common Name :

a [Key Name]

Enter a name for the key. Enter a name that will be easy to find in a list.

b [Signature Algorithm]

Select the hash algorithm to use for the signature.

c [Key Algorithm]

Select the key algorithm, and specify the key length if you select [RSA], or specify the key type if you select [ECDSA].

ⓓ **[Country/Region]**

Select the country code from the list, or enter it directly.

ⓔ **[State]/[City]**

Enter the location.

ⓕ **[Organization]/[Organization Unit]**

Enter the organization name.

ⓖ **[Common Name]**

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

7 Click [OK].

➠ The CSR data appears.

- If you want to save the CSR data to a file, click [Store in File] and specify the save location.

NOTE:

- The key that has generated the CSR appears on the key and certificate list screen, but you cannot use the key by itself. To use this key, you need to register the certificate that is later issued based on the CSR.

8 Request the certificate authority to issue a certificate based on the CSR data.

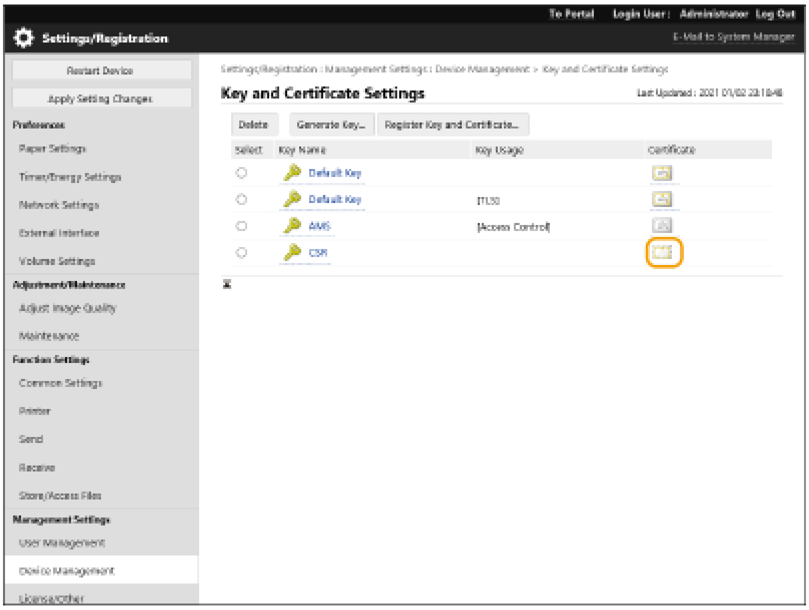
■2. Registering the Issued Certificate to the Key

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 In the [Certificate] list, click 📜 for the certificate that you want to register.



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 2021 01/02 23:18:48

Select	Key Name	Key Usage	Certificate
○	Default Key		
○	Default Key	[TLS]	
○	AMS	[Access Control]	
○	CSR		

5 Click [Register Certificate...].

6 Register the certificate.

- Click [Browse...] ▶ specify the file (certificate) to register ▶ click [Register].

For an SCEP Certificate

Manually request the SCEP server to issue a certificate.
You can configure this setting only from the Remote UI.

NOTE

- You cannot send a manual request for issuing a certificate if [Enable Timer for Certificate Issuance Auto Request] is selected. Deselect it if it is selected.

Start the Remote UI ▶ click [Settings/Registration] ▶ [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)] ▶ [Settings for Certificate Issuance Auto Request] ▶ deselect [Enable Timer for Certificate Issuance Auto Request] ▶ click [Update].

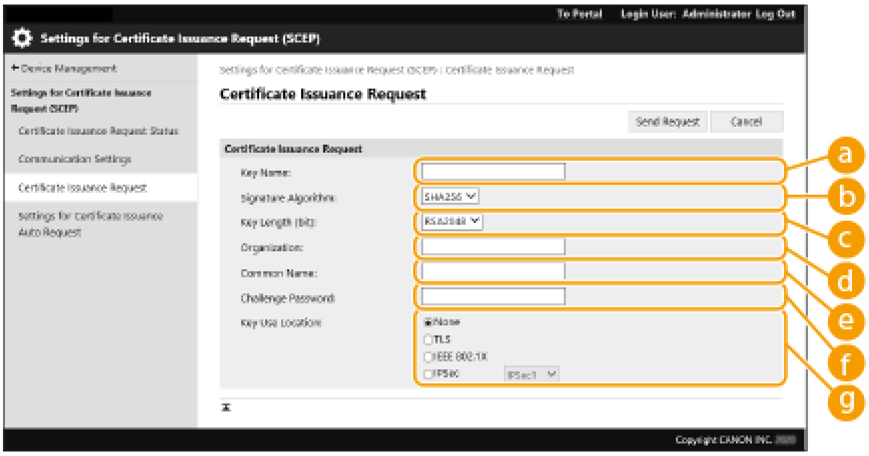
1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)].

4 Click [Certificate Issuance Request].

5 Configure the settings required for requesting a certificate.


To Portal
Login User: Administrator Log Out
Settings for Certificate Issuance Request (SCEP)
Device Management
Settings for Certificate Issuance Request (SCEP)
Certificate Issuance Request Status
Communication Settings
Certificate Issuance Request
Settings for Certificate Issuance Auto Request
Settings for Certificate Issuance Request (SCEP) : Certificate Issuance Request
Certificate Issuance Request
Send Request
Cancel
a
b
c
d
e
f
g
Copyright CANON INC.

Certificate Issuance Request

Key Name:

Signature Algorithm: SHA256

Key Length (bit): RSA2048

Organization:

Common Name:

Challenge Password:

Key Use Location:
● None
○ TLS
○ IEEE 802.1X
○ IPSec IPSec1

a [Key Name:]

Enter a name for the key. Enter a name that will be easy to find in a list.

b [Signature Algorithm:]

Select the hash algorithm to use for the signature.

c [Key Length (bit):]

Select the key length.

d [Organization:]

Enter the organization name.

e [Common Name:]

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

f [Challenge Password:]

When a password is set on the SCEP server side, enter the challenge password included in the request data (PKCS#9) for requesting a certificate to be issued.

g [Key Use Location:]

Select [IEEE 802.1X].

NOTE:

- When selecting something other than [None], enable each function in advance. If a certificate is successfully obtained with each function disabled, the certificate is assigned to the key use location, but each function is not automatically enabled.

6 Click [Send Request].

7 Click [Restart].

Step 3: Resetting the Key and Certificate (for IEEE 802.1X)

You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.
This procedure is not required for an SCEP certificate.

For a Self-Signed Certificate/CSR Certificate

Using the Control Panel(P. 37)
Using the Remote UI(P. 38)

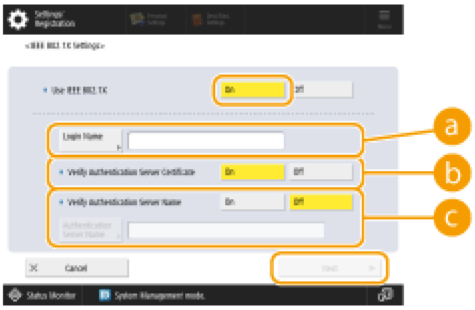
■Using the Control Panel

1 **Press ⚙ (Settings/Registration).**

2 **Press <Preferences> ▶ <Network> ▶ <IEEE 802.1X Settings>.**

3 **Press <On> for <Use IEEE 802.1X> ▶ configure the required settings ▶ press <Next>.**

Example screen:



a <Login Name>

Enter the name (EAP Identity) of the login user to receive IEEE 802.1X authentication.

b <Verify Authentication Server Certificate>

Set this setting to <On> when verifying server certificates sent from an authentication server.

c <Verify Authentication Server Name>

To verify a common name in the server certificate, select <On>. Then enter the name of the authentication server where the login user is registered in <Authentication Server Name>.

4 **Press <On> for <Use TLS> ▶ press <Key and Certificate>.**

5 **Select the key and certificate to use in the list ▶ press <Set as Default Key> ▶ <Yes>.**

6 **Press <OK>.**

7 **Press ⚙ (Settings/Registration) ▶ ⚙ (Settings/Registration) ▶ <Apply Set. Changes> ▶ <Yes>.**

➠ The machine restarts, and the settings are applied.

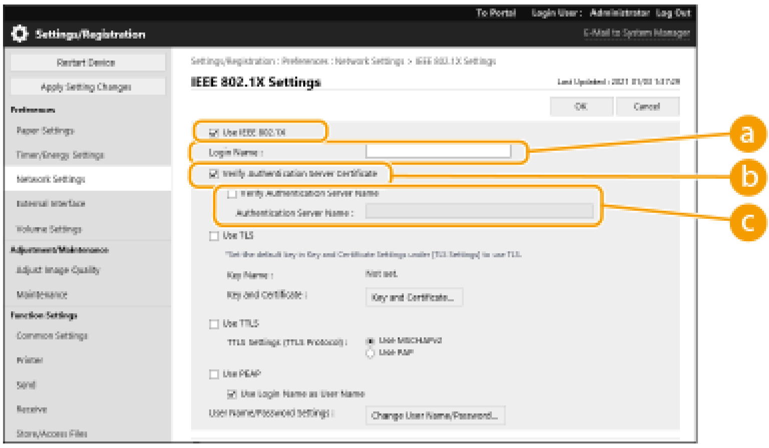
■ Using the Remote UI

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Network Settings] ▶ [IEEE 802.1X Settings].**

4 **Select [Use IEEE 802.1X] ▶ configure the required settings.**



IEEE 802.1X Settings

Last Updated : 2021 01/03 13:17:29

☑ Use IEEE 802.1X

Login Name :

☑ Verify Authentication Server Certificate

□ Verify Authentication Server Name

Authentication Server Name :

□ Use TLS

*Set the default key in Key and Certificate Settings under [TLS Settings] to use TLS.

Key Name : Not set.

Key and Certificate : Key and Certificate...

□ Use TTLS

TTLS Settings (TTLS Protocol) : ● Use MSCHAPv2 ○ Use PAP

□ Use PEAP

☑ Use Login Name as User Name

User Name/Password Settings : Change User Name/Password...

a **[Login Name]**

Enter the name (EAP Identity) of the login user to receive IEEE 802.1X authentication.

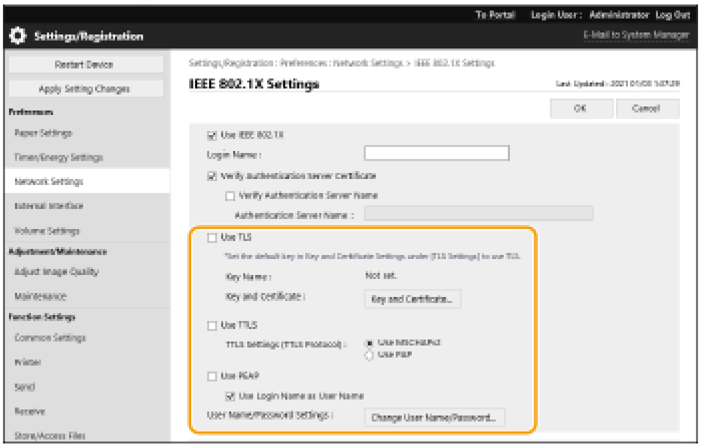
b **[Verify Authentication Server Certificate]**

Select this check box when verifying server certificates sent from an authentication server.

c **[Verify Authentication Server Name]**

To verify the common name in the server certificate, select this check box. Then enter the name of the authentication server where the login user is registered in [Authentication Server Name].

5 **Select [Use TLS] ▶ click [Key and Certificate].**



Settings/Registration : Preferences : Network Settings > IEEE 802.1X Settings

IEEE 802.1X Settings

Last Updated : 2021 01/08 14:7:29

☑ Use IEEE 802.1X

Login Name :

☑ Verify Authentication Server Certificate

□ Verify Authentication Server Name

Authentication Server Name :

□ Use TLS

*Set the default key in Key and Certificate Settings under [TLS Settings] to use TLS.

Key Name : Not set.

Key and Certificate :

□ Use TTLS

TTLS Settings (TTLS Protocol) : ● Use MSCHAPv2 ○ Use PAP

□ Use PEAP

☑ Use Login Name as User Name

User Name/Password Settings :

6 Click [Use] for the key to use in the list.

7 Click [OK].

8 Click [Apply Setting Changes] to restart the machine.

➠ The machine restarts, and the settings are applied.

Step 4: Deleting a Key/Certificate Generated in the Past (for IEEE 802.1X)

You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

NOTE

- You may need to convey information to the certificate authority when disabling the certificate. See **Checking whether You Must Perform the Additional Procedures(P. 5)** , and make a note of the required information before deleting the key/certificate.

Using the Control Panel(P. 40)
Using the Remote UI(P. 41)

■Using the Control Panel

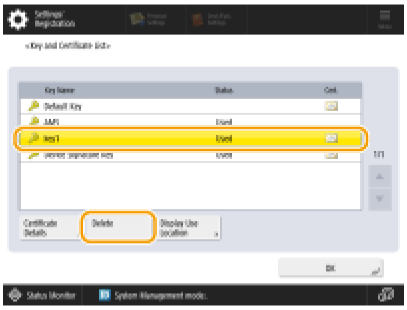
1 Press (Settings/Registration).

2 Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Key and Certificate List> ▶ <Key and Certificate List for This Device>.

- <Key and Certificate List for This Device> does not appear unless the user signature function is enabled on the machine. In this case, proceed to the next step.

3 Select the key and certificate ▶ press <Delete> ▶ <Yes>.

Example screen:



<Key and Certificate List>

Key Name	Status	Cert.
Default Key		✉
AMS	Used	
key1	Used	✉
Device Signature Key	Used	✉

NOTE:

- If appears, the key is corrupt or invalid.
- If does not appear, the certificate for the key does not exist.
- If you select a key and certificate and press <Certificate Details>, detailed information about the certificate appears. You can also press <Verify Certificate> on this screen to check whether the certificate is valid.

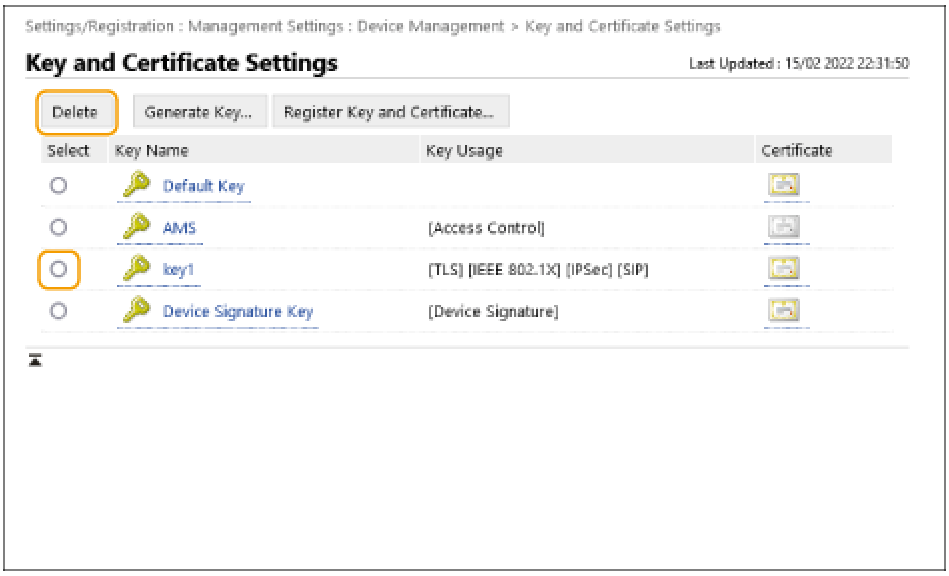
■Using the Remote UI

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Select the key and certificate ▶ click [Delete] ▶ [OK].**



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 15/02 2022 22:31:50

Select	Key Name	Key Usage	Certificate
○	Default Key		▭
○	AMS	[Access Control]	▭
○	key1	[TLS] [IEEE 802.1X] [IPSec] [SIP]	▭
○	Device Signature Key	[Device Signature]	▭

NOTE

- If ✗ appears, the key is corrupt or invalid.
- If ▭ appears, the certificate for the key does not exist.
- Click a key name to display detailed information about the certificate. You can also click [Verify Certificate] on this screen to check whether the certificate is valid.

Step 5: Disabling the Certificate (for IEEE 802.1X)

Disable a certificate generated in the past. The procedure differs according to the type of certificate.

■For a Self-Signed Certificate

If a certificate including a key that requires the additional procedures is registered to the IEEE 802.1X authentication server as a trusted certificate, delete the registered certificate.

■For a CSR/SCEP Certificate

Request the certificate authority that has issued the certificate to revoke the certificate. Refer to [Issuer] in the certificate for the certificate authority to request.

NOTE

- If you are checking certificate revocation using a CRL in an IEEE 802.1X authentication server, register the updated CRL to the computer or Web browser after the certificate is revoked.
- If you are using a method other than a CRL (for example, OCSP) to check certificate revocation, perform the procedure for that method.

Step 6: Enabling the New Certificate (for IEEE 802.1X)

Enable the certificate.

■For a Self-Signed Certificate

Register the new certificate to the IEEE 802.1X authentication server as a trusted certificate.

■For a CSR/SCEP Certificate

You do not need to perform the additional procedures.

Procedure for IPSec

Step 1: Checking the Authentication Method (for IPSec)

You must perform the subsequent procedures if the authentication method for IKE setting in IPSec is set to <Digital Sig. Method>.
Follow the procedure below to check the authentication method.
You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

Using the Control Panel(P. 45)
Using the Remote UI(P. 46)

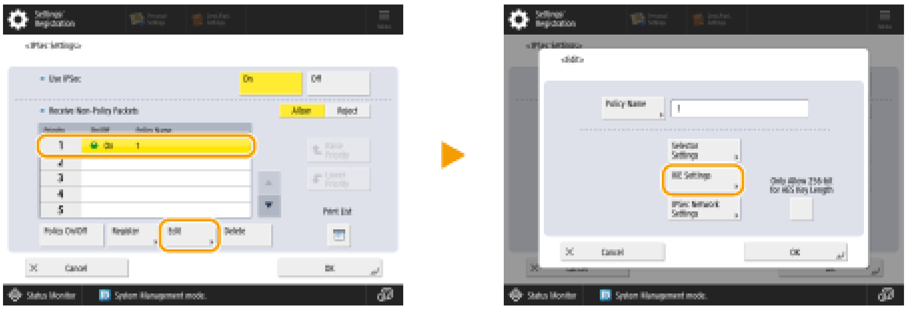
■Using the Control Panel

1 **Press ⚙ (Settings/Registration).**

2 **Press <Preferences> ▶ <Network> ▶ <TCP/IP Settings> ▶ <IPSec Settings>.**

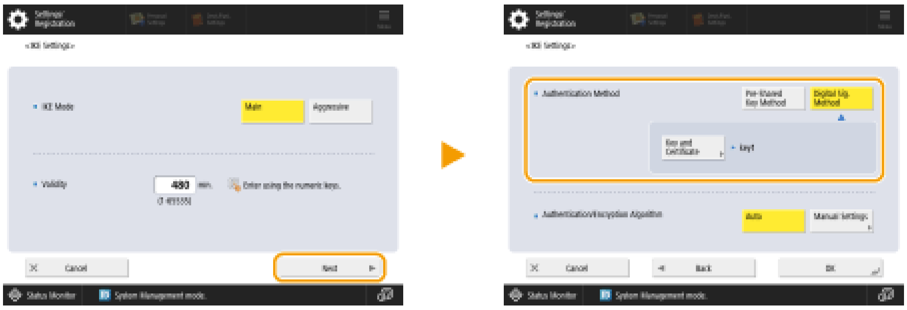
3 **Select the registered policy ▶ press <Edit> ▶ <IKE Settings>.**

Example screen:



4 **Press <Next> ▶ check <Authentication Method>.**

Example screen:



- If <Authentication Method> is set to <Digital Sig. Method> and a key name appears for <Key and Certificate>, perform the subsequent procedures.
- If <Authentication Method> is set to <Pre-Shared Key Method>, you do not need to perform the subsequent procedures.

■Using the Remote UI

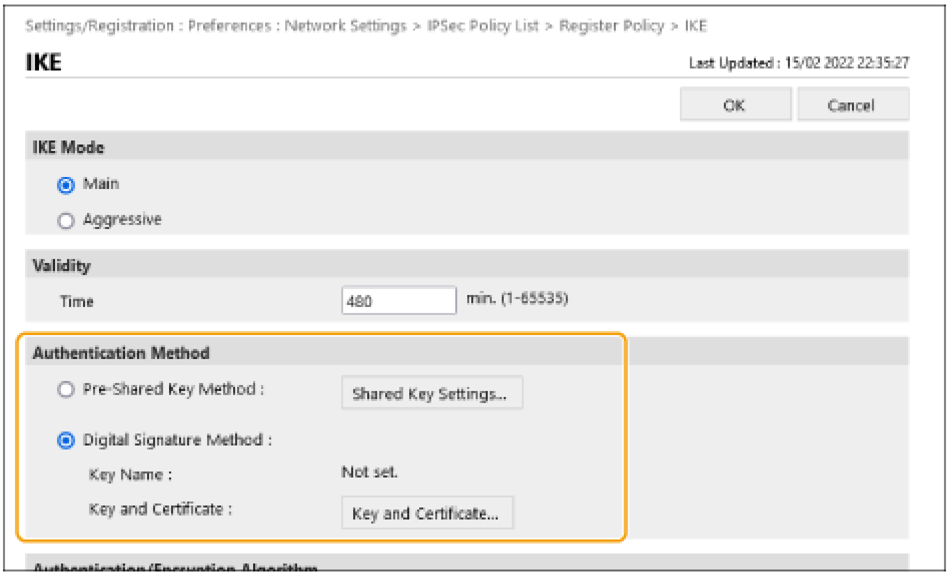
1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Network Settings] ▶ [IPSec Policy List].**

4 **Click the policy in the list ▶ click [IKE Settings].**

5 **Check [Authentication Method].**



Settings/Registration : Preferences : Network Settings > IPSec Policy List > Register Policy > IKE

IKE

Last Updated : 15/02 2022 22:35:27

OK Cancel

IKE Mode

● Main

○ Aggressive

Validity

Time 480 min. (1-65535)

Authentication Method

○ Pre-Shared Key Method : Shared Key Settings...

● Digital Signature Method :

Key Name : Not set.

Key and Certificate : Key and Certificate...

Authentication/Encryption Algorithm

- If [Authentication Method] is set to [Digital Signature Method] and a key name appears, perform the subsequent procedures.
- If <Authentication Method> is set to <Pre-Shared Key Method>, you do not need to perform the subsequent procedures.

Step 2: Regenerating the Key and Certificate (for IPSec)

You can generate three types of certificates for a key generated with the machine: a self-signed certificate, CSR certificate, and SCEP certificate. The procedure differs according to the type of certificate.
You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

For a Self-Signed Certificate(P. 47)
For a CSR Certificate(P. 50)
For an SCEP Certificate(P. 52)

For a Self-Signed Certificate

Using the Control Panel(P. 47)
Using the Remote UI(P. 48)

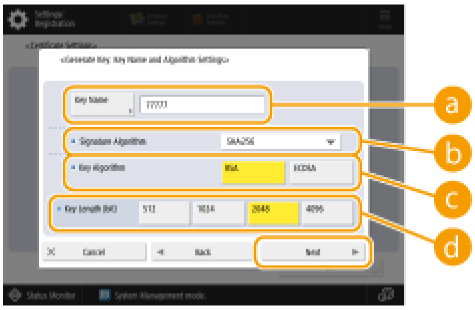
■Using the Control Panel

1 Press ⚙ (Settings/Registration).

2 Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Generate Key> ▶ <Generate Network Communication Key>.

3 Configure the required settings and proceed to the next screen.

Example screen:



<Generate Key: Key Name and Algorithm Settings>
Key Name: ?????
Signature Algorithm: SHA256
Key Algorithm: RSA | ECDSA
Key Length (bit): 512 | 1024 | 2048 | 4096

a <Key Name>

Enter a name for the key. Enter a name that will be easy to find in a list.

b <Signature Algorithm>

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms. If you select <RSA> for c, and set <Key Length (bit)> to <1024> or more for d, you can select the SHA384 and SHA512 hash algorithms.

c <Key Algorithm>

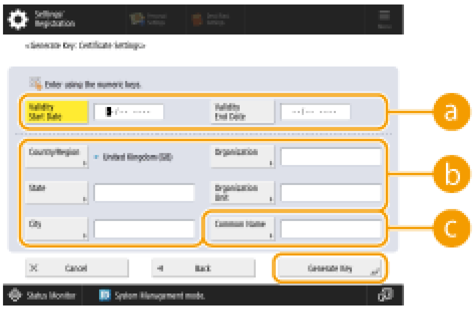
Select the key algorithm. If you select <RSA>, <Key Length (bit)> appears as a setting item for d. If you select <ECDSA>, <Key Type> appears instead.

d <Key Length (bit)>/<Key Type>

Specify the key length if you select <RSA> for c, or specify the key type if you select <ECDSA>. In both cases, a higher value provides greater security but reduces the communication processing speed.

4 Configure the necessary items for the certificate ▶ press <Generate Key>.

Example screen:



a <Validity Start Date>/<Validity End Date>

Enter the start date and end data of the validity period for the certificate.

b <Country/Region>/<State>/<City>/<Organization>/<Organization Unit>

Select the country code from the list, and enter the location and the organization name.

c <Common Name>

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

■ Using the Remote UI

1 Start the Remote UI.

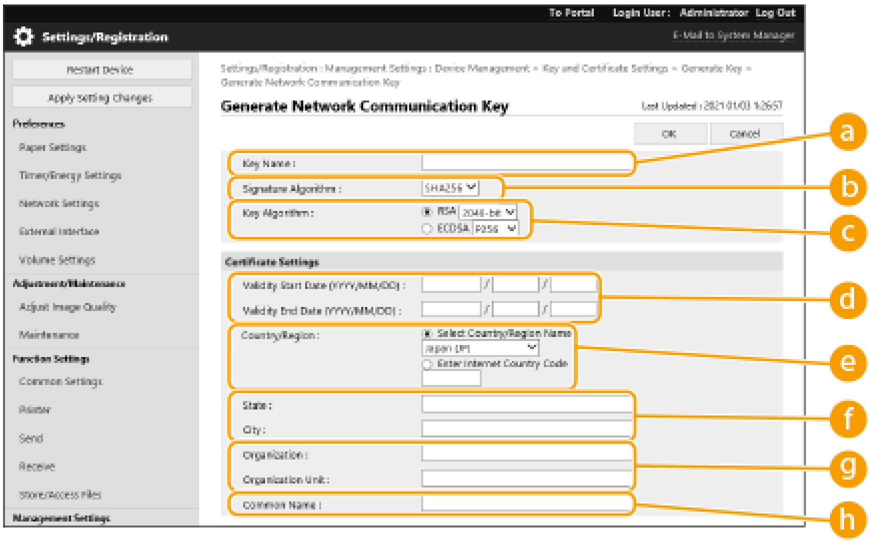
2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 Click [Generate Key].

5 Click [Network Communication].

6 Configure the key and certificate settings.



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Generate Key > Generate Network Communication Key

Generate Network Communication Key

Last Updated : 2021 01/03 1:26:57

Key Name :

Signature Algorithm : SHA256

Key Algorithm : ● RSA 2048-bit ○ ECDSA P256

Certificate Settings

Validity Start Date (YYYY/MM/DD) : / /

Validity End Date (YYYY/MM/DD) : / /

Country/Region : ● Select Country/Region Name Japan (JP) ○ Enter Internet Country Code

State :

City :

Organization :

Organization Unit :

Common Name :

a [Key Name]

Enter a name for the key using alphanumeric characters. Enter a name that will be easy to find in a list.

b [Signature Algorithm]

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms.

c [Key Algorithm]

Select [RSA] or [ECDSA] as the key generation algorithm. Specify the key length if you select [RSA], or specify the key type if you select [ECDSA]. In both cases, a higher value provides greater security but reduces the communication processing speed.

NOTE:

- If you select [SHA384] or [SHA512] for [Signature Algorithm], you cannot set the key length to [512-bit] when you select [RSA] for [Key Algorithm].

d [Validity Start Date (YYYY/MM/DD)]/[Validity End Date (YYYY/MM/DD)]

Enter the start date and end data of the validity period for the certificate. You cannot set [Validity End Date (YYYY/MM/DD)] to a date before the date in [Validity Start Date (YYYY/MM/DD)].

e [Country/Region]

Click [Select Country/Region Name] and select the country/region from the drop-down list. Alternatively, click [Enter Internet Country Code] and enter a country code, such as "US" for the United States.

f [State]/[City]

Enter the location using alphanumeric characters as necessary.

g [Organization]/[Organization Unit]

Enter the organization name using alphanumeric characters as necessary.

h [Common Name]

Enter the common name of the certificate using alphanumeric characters as necessary. "Common Name" is often abbreviated as "CN".

7 Click [OK].

- Generating a key and certificate may take some time.
- Generated keys and certificates are automatically registered to the machine.

For a CSR Certificate

Generate a key and CSR on the machine. Use the CSR data displayed on the screen or output to a file to request the certificate authority to issue a certificate. Then, register the issued certificate for the key.
You can configure this setting only from the Remote UI.

■1. Generating a Key and CSR

1 **Start the Remote UI.**

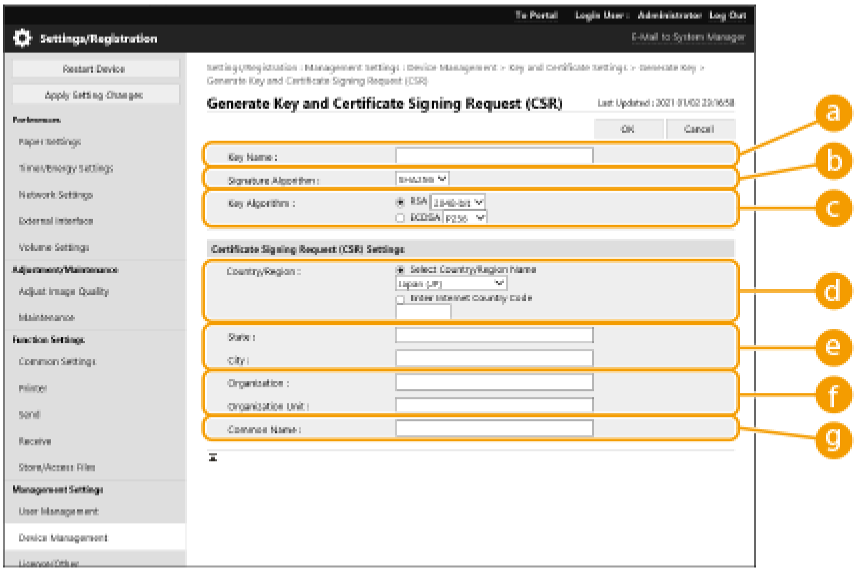
2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Click [Generate Key].**

5 **Click [Key and Certificate Signing Request (CSR)].**

6 **Configure the key and certificate settings.**



Generate Key and Certificate Signing Request (CSR)

Last Updated : 2021 01/02 23:16:58

Key Name :

Signature Algorithm : SHA256

Key Algorithm : ● RSA 2048-bit ○ ECDSA P256

Certificate Signing Request (CSR) Settings

Country/Region : ● Select Country/Region Name Japan (JP) ○ Enter Internet Country Code

State :

City :

Organization :

Organization Unit :

Common Name :

a **[Key Name]**

Enter a name for the key. Enter a name that will be easy to find in a list.

b **[Signature Algorithm]**

Select the hash algorithm to use for the signature.

c **[Key Algorithm]**

Select the key algorithm, and specify the key length if you select [RSA], or specify the key type if you select [ECDSA].

d [Country/Region]

Select the country code from the list, or enter it directly.

e [State]/[City]

Enter the location.

f [Organization]/[Organization Unit]

Enter the organization name.

g [Common Name]

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

7 Click [OK].

➠ The CSR data appears.

- If you want to save the CSR data to a file, click [Store in File] and specify the save location.

NOTE:

- The key that has generated the CSR appears on the key and certificate list screen, but you cannot use the key by itself. To use this key, you need to register the certificate that is later issued based on the CSR.

8 Request the certificate authority to issue a certificate based on the CSR data.

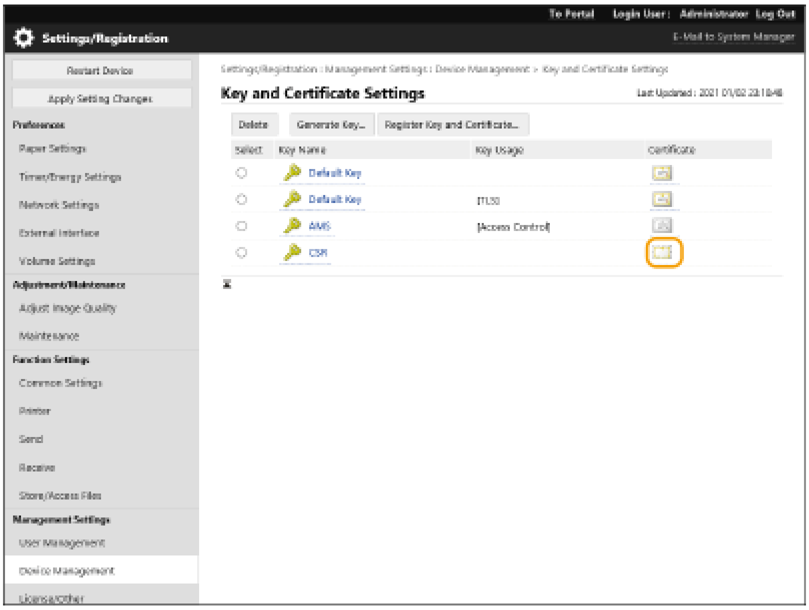
■2. Registering the Issued Certificate to the Key

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 In the [Certificate] list, click 📜 for the certificate that you want to register.



Key and Certificate Settings

Last Updated : 2021 01/02 23:18:48

Select	Key Name	Key Usage	Certificate
○	Default Key		
○	Default Key	[TLS]	
○	AMS	[Access Control]	
○	CSR		

5 Click [Register Certificate...].

6 Register the certificate.

- Click [Browse...] ▶ specify the file (certificate) to register ▶ click [Register].

For an SCEP Certificate

Manually request the SCEP server to issue a certificate.
You can configure this setting only from the Remote UI.

NOTE

- You cannot send a manual request for issuing a certificate if [Enable Timer for Certificate Issuance Auto Request] is selected. Deselect it if it is selected.

Start the Remote UI ▶ click [Settings/Registration] ▶ [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)] ▶ [Settings for Certificate Issuance Auto Request] ▶ deselect [Enable Timer for Certificate Issuance Auto Request] ▶ click [Update].

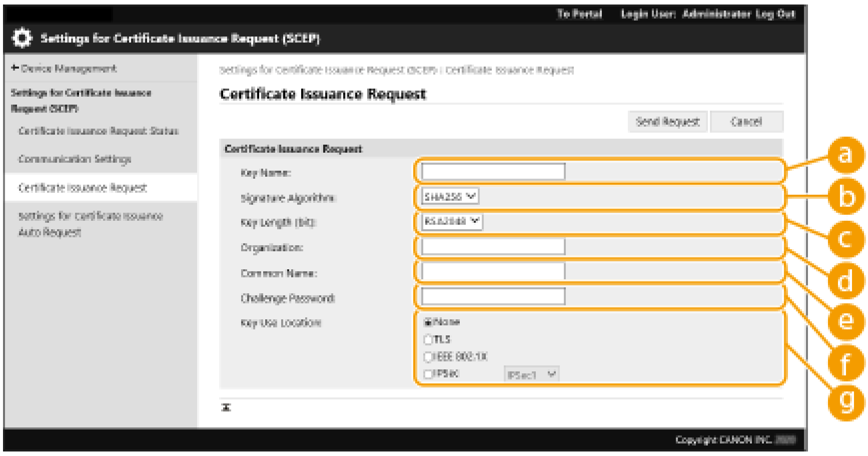
1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Settings for Certificate Issuance Request (SCEP)].

4 Click [Certificate Issuance Request].

5 Configure the settings required for requesting a certificate.


To Portal
Login User: Administrator Log Out
Settings for Certificate Issuance Request (SCEP)
Device Management
Settings for Certificate Issuance Request (SCEP)
Certificate Issuance Request Status
Communication Settings
Certificate Issuance Request
Settings for Certificate Issuance Auto Request
Settings for Certificate Issuance Request (SCEP) : Certificate Issuance Request
Send Request
Cancel
Copyright CANON INC.
a
b
c
d
e
f
g

Certificate Issuance Request

Certificate Issuance Request

Key Name:

Signature Algorithm: SHA256

Key Length (bit): RSA2048

Organization:

Common Name:

Challenge Password:

Key Use Location: ● None ○ TLS ○ IEEE 802.1X ○ IPSec IPSec1

a [Key Name:]

Enter a name for the key. Enter a name that will be easy to find in a list.

b [Signature Algorithm:]

Select the hash algorithm to use for the signature.

c [Key Length (bit):]

Select the key length.

d [Organization:]

Enter the organization name.

e [Common Name:]

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

f [Challenge Password:]

When a password is set on the SCEP server side, enter the challenge password included in the request data (PKCS#9) for requesting a certificate to be issued.

g [Key Use Location:]

Select [IPSec].

NOTE:

- When selecting something other than [None], enable each function in advance. If a certificate is successfully obtained with each function disabled, the certificate is assigned to the key use location, but each function is not automatically enabled.

6 Click [Send Request].

7 Click [Restart].

Step 3: Resetting the Key and Certificate (for IPSec)

You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.
This procedure is not required for an SCEP certificate.

For a Self-Signed Certificate/CSR Certificate

Using the Control Panel(P. 54)
Using the Remote UI(P. 55)

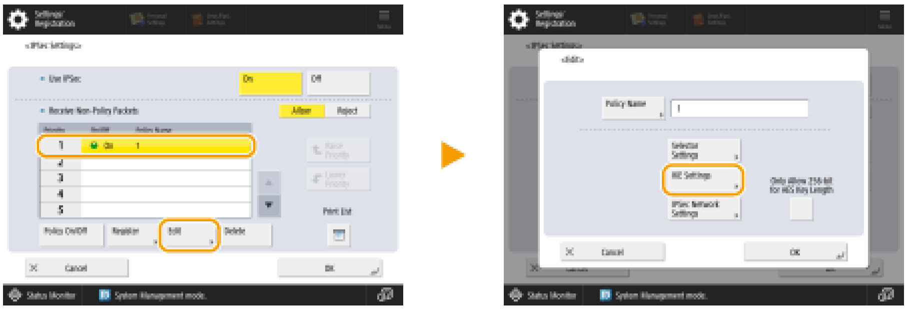
■Using the Control Panel

1 **Press ⚙ (Settings/Registration).**

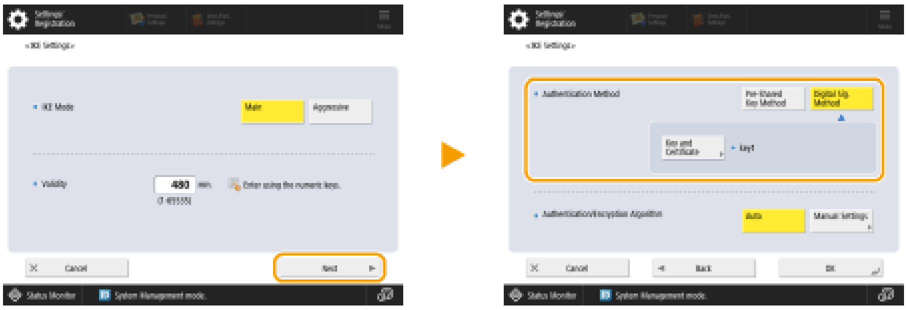
2 **Press <Preferences> ▶ <Network> ▶ <TCP/IP Settings> ▶ <IPSec Settings>.**

3 **Select the policy to reset the key and certificate for ▶ press <Edit> ▶ <IKE Settings>.**

Example screen:



4 **Press <Next> ▶ select <Digital Sig. Method> in <Authentication Method> ▶ press <Key and Certificate>.**
Example screen:



5 **Select the key and certificate to use in the list ▶ press <Set as Default Key> ▶ <Yes>.**

6 **Press <OK>.**

7 **Press ⚙ (Settings/Registration) ▶ ⚙ (Settings/Registration) ▶ <Apply Set. Changes> ▶ <Yes>.**

➠ The machine restarts, and the settings are applied.

■Using the Remote UI

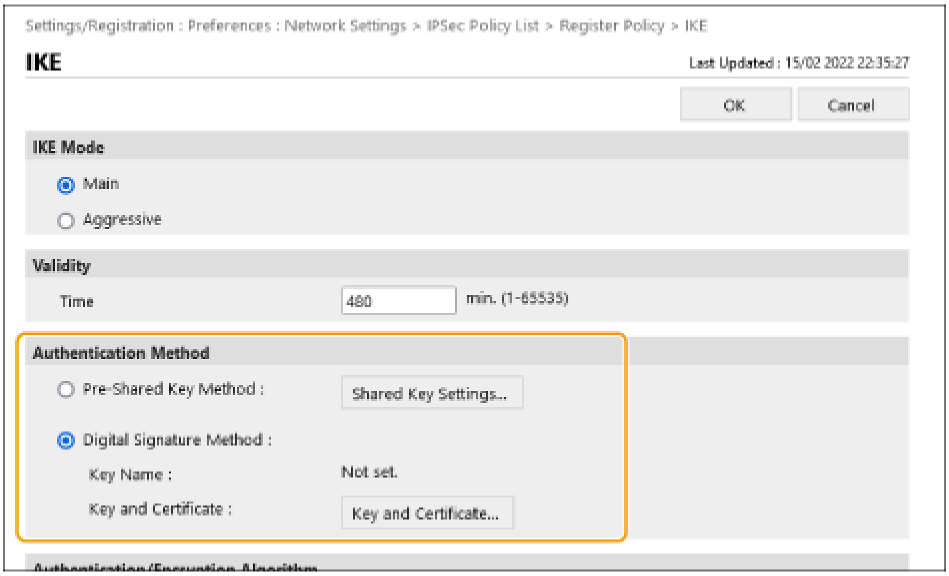
1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Network Settings] ▶ [IPSec Policy List].**

4 **Click the policy to reset the key and certificate for in the list ▶ click [IKE Settings].**

5 **Select [Digital Signature Method] in [Authentication Method] ▶ click [Key and Certificate].**



Settings/Registration : Preferences : Network Settings > IPSec Policy List > Register Policy > IKE

IKE

Last Updated : 15/02 2022 22:35:27

IKE Mode

● Main

○ Aggressive

Validity

Time 480 min. (1-65535)

Authentication Method

○ Pre-Shared Key Method :

● Digital Signature Method :

Key Name : Not set.

Key and Certificate :

6 **Click [Use] for the key to use in the list.**

7 **Click [OK].**

8 **Click [Apply Setting Changes] to restart the machine.**

➠ The machine restarts, and the settings are applied.

Step 4: Deleting a Key/Certificate Generated in the Past (for IPSec)

You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

NOTE

- You may need to convey information to the certificate authority when disabling the certificate. See **Checking whether You Must Perform the Additional Procedures(P. 5)** , and make a note of the required information before deleting the key/certificate.

Using the Control Panel(P. 57)
Using the Remote UI(P. 58)

■Using the Control Panel

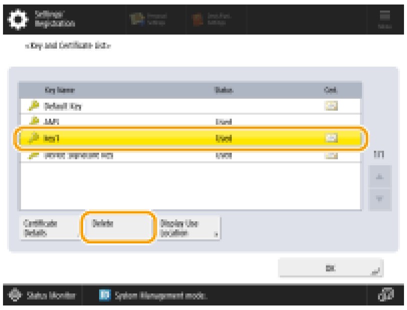
1 Press ⚙ (Settings/Registration).

2 Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Key and Certificate List> ▶ <Key and Certificate List for This Device>.

- <Key and Certificate List for This Device> does not appear unless the user signature function is enabled on the machine. In this case, proceed to the next step.

3 Select the key and certificate ▶ press <Delete> ▶ <Yes>.

Example screen:



NOTE:

- If 🔑 appears, the key is corrupt or invalid.
- If 📄 does not appear, the certificate for the key does not exist.
- If you select a key and certificate and press <Certificate Details>, detailed information about the certificate appears. You can also press <Verify Certificate> on this screen to check whether the certificate is valid.

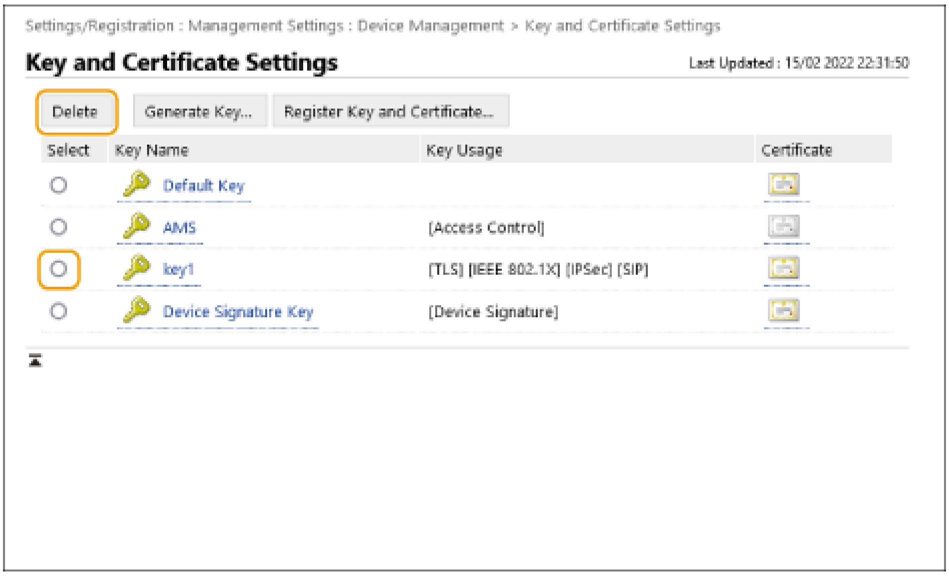
■Using the Remote UI

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Select the key and certificate ▶ click [Delete] ▶ [OK].**



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 15/02 2022 22:31:50

Select	Key Name	Key Usage	Certificate
○	Default Key		
○	AMS	[Access Control]	
○	key1	[TLS] [IEEE 802.1X] [IPSec] [SIP]	
○	Device Signature Key	[Device Signature]	

NOTE

- If ✗ appears, the key is corrupt or invalid.
- If ▭ appears, the certificate for the key does not exist.
- Click a key name to display detailed information about the certificate. You can also click [Verify Certificate] on this screen to check whether the certificate is valid.

Step 5: Disabling the Certificate (for IPSec)

Disable a certificate generated in the past. The procedure differs according to the type of certificate.

■For a Self-Signed Certificate

If a certificate including a key that requires the additional procedures is registered in the device that communicates with IPSec as a trusted certificate, delete the registered certificate. After deleting the registered certificate, register the certificate of the regenerated key.

■For a CSR/SCEP Certificate

Request the certificate authority that has issued the certificate to revoke the certificate. Refer to [Issuer] in the certificate for the certificate authority to request.

NOTE

- If you are checking certificate revocation using a CRL in the device that communicates with IPSec, register the updated CRL to the computer or Web browser after the certificate is revoked.
- If you are using a method other than a CRL (for example, OCSP) to check certificate revocation, perform the procedure for that method.

Step 6: Enabling the New Certificate (for IPSec)

Enable the certificate.

■For a Self-Signed Certificate

Register the new certificate to the device that communicates with IPSec as a trusted certificate.

■For a CSR/SCEP Certificate

You do not need to perform the additional procedures.

Procedure for SIP

Step 1: Checking the Settings (for SIP)

You must perform the additional procedures when both of the following conditions are met:

- <Use TLS> is enabled in <Intranet Settings> in <SIP Settings>
- The key name appears for <Key and Certificate> in <TLS Settings> in <SIP Settings>

Follow the procedure below to check the settings.

Using the Control Panel(P. 62)
Using the Remote UI(P. 63)

Using the Control Panel

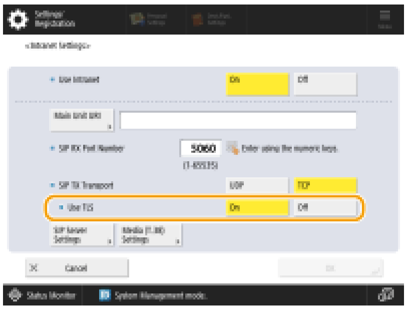
■Checking <Use TLS>

1 Press ⚙ (Settings/Registration).

2 Press <Preferences> ▶ <Network> ▶ <TCP/IP Settings> ▶ <SIP Settings> ▶ <Intranet Settings>.

3 Check <Use TLS>.

Example screen:



<Intranet Settings>

Use Intranet: On | Off

Main Unit URI

SIP RX Port Number: 5060 Enter using the numeric keys. (1-65535)

SIP TX Transport: UDP | TCP

Use TLS: On | Off

SIP Server Settings

Media (T.38) Settings

- If <Use TLS> is set to <On>, proceed to check <Key and Certificate>.
- If <Use TLS> is set to <Off>, you do not need to perform the subsequent procedures.

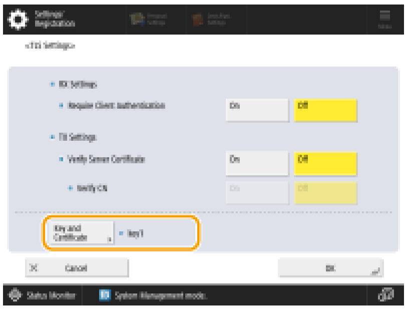
■Checking <Key and Certificate>

1 Press ⚙ (Settings/Registration).

2 Press <Preferences> ▶ <Network> ▶ <TCP/IP Settings> ▶ <SIP Settings> ▶ <TLS Settings>.

3 **Check whether the key name appears for <Key and Certificate>.**

Example screen:



<TLS Settings>

- RX Settings
  - Require Client Authentication: On / Off
- TX Settings
  - Verify Server Certificate: On / Off
    - Verify CN: On / Off

Key and Certificate: key1

Cancel | OK

- If a key name appears for <Key and Certificate>, perform the subsequent procedures.
- If the key name does not appear for <Key and Certificate>, you do not need to perform the subsequent procedures.

Using the Remote UI

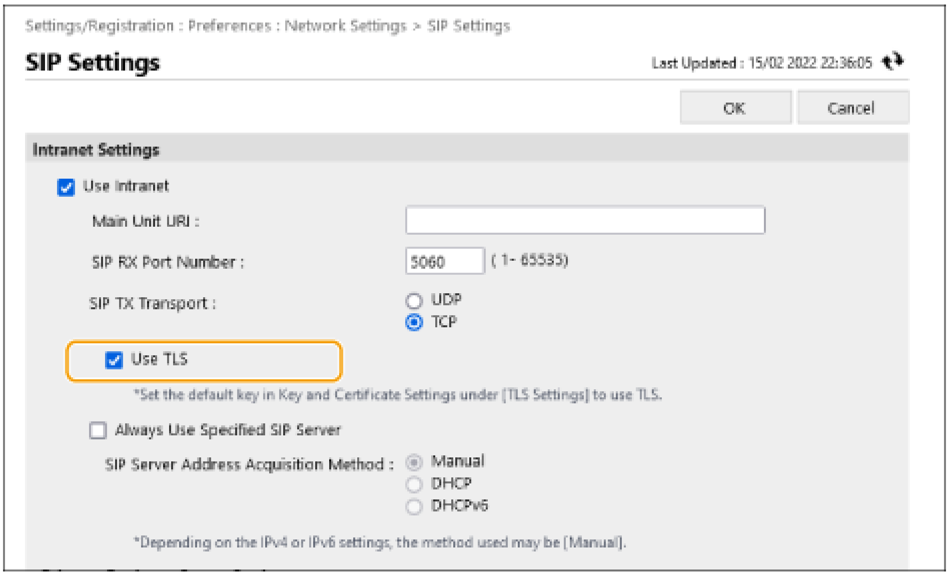
■Checking [Use TLS] and [Key and Certificate]

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Network Settings] ▶ [SIP Settings].**

4 **Check [Use TLS] in [Intranet Settings].**



Settings/Registration : Preferences : Network Settings > SIP Settings

SIP Settings

Last Updated : 15/02 2022 22:36:05

OK | Cancel

Intranet Settings

☑ Use Intranet

Main Unit URI :

SIP RX Port Number : 5060 (1- 65535)

SIP TX Transport : ○ UDP ● TCP

☑ Use TLS

*Set the default key in Key and Certificate Settings under [TLS Settings] to use TLS.

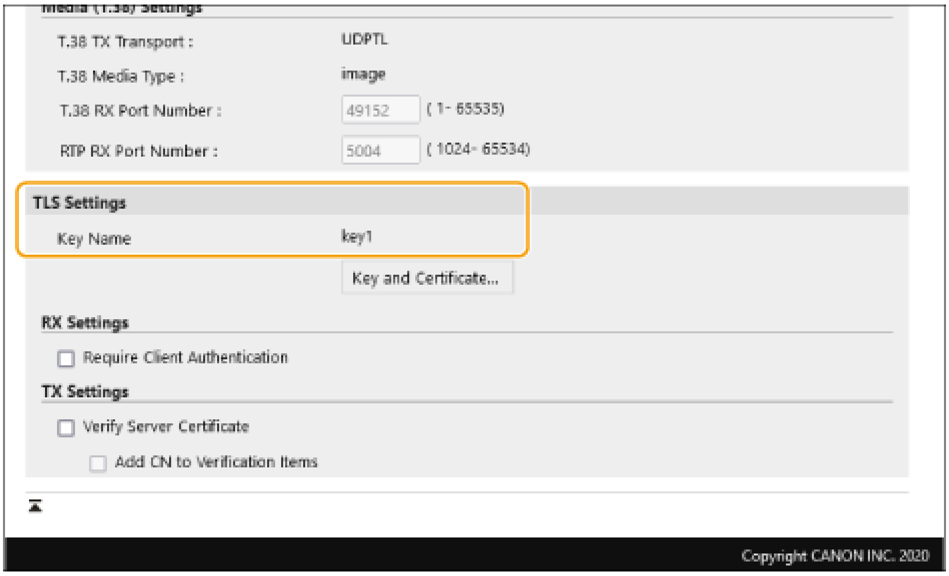
□ Always Use Specified SIP Server

SIP Server Address Acquisition Method : ● Manual ○ DHCP ○ DHCPv6

*Depending on the IPv4 or IPv6 settings, the method used may be [Manual].

- If [Use TLS] is selected, proceed to check [Key and Certificate].
- If [Use TLS] is deselected, you do not need to perform the subsequent procedures.

5 Check [Key Name] in [TLS Settings].



Media (T.38) Settings

T.38 TX Transport : UDPTL

T.38 Media Type : image

T.38 RX Port Number : 49152 (1- 65535)

RTP RX Port Number : 5004 (1024- 65534)

TLS Settings

Key Name key1

RX Settings

□ Require Client Authentication

TX Settings

□ Verify Server Certificate

□ Add CN to Verification Items

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- If a key name appears, perform the subsequent procedures.
- If the key name does not appear, you do not need to perform the subsequent procedures.

Step 2: Regenerating the Key and Certificate (for SIP)

You can generate two types of certificates for a key generated with the machine: a self-signed certificate and CSR certificate. The procedure differs according to the type of certificate.
You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

For a Self-Signed Certificate(P. 65)
For a CSR Certificate(P. 68)

For a Self-Signed Certificate

Using the Control Panel(P. 65)
Using the Remote UI(P. 66)

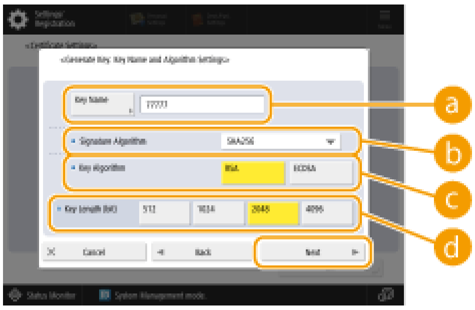
■Using the Control Panel

1 **Press ⚙ (Settings/Registration).**

2 **Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Generate Key> ▶ <Generate Network Communication Key>.**

3 **Configure the required settings and proceed to the next screen.**

Example screen:



a **<Key Name>**

Enter a name for the key. Enter a name that will be easy to find in a list.

b **<Signature Algorithm>**

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms. If you select <RSA> for c, and set <Key Length (bit)> to <1024> or more for d, you can select the SHA384 and SHA512 hash algorithms.

c **<Key Algorithm>**

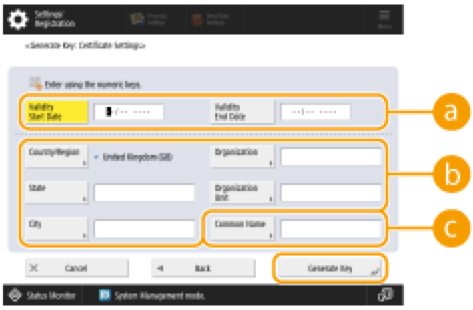
Select the key algorithm. If you select <RSA>, <Key Length (bit)> appears as a setting item for d. If you select <ECDSA>, <Key Type> appears instead.

d **<Key Length (bit)>/<Key Type>**

Specify the key length if you select <RSA> for c, or specify the key type if you select <ECDSA>. In both cases, a higher value provides greater security but reduces the communication processing speed.

4 Configure the necessary items for the certificate ▶ press <Generate Key>.

Example screen:



a <Validity Start Date>/<Validity End Date>

Enter the start date and end data of the validity period for the certificate.

b <Country/Region>/<State>/<City>/<Organization>/<Organization Unit>

Select the country code from the list, and enter the location and the organization name.

c <Common Name>

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

■Using the Remote UI

1 Start the Remote UI.

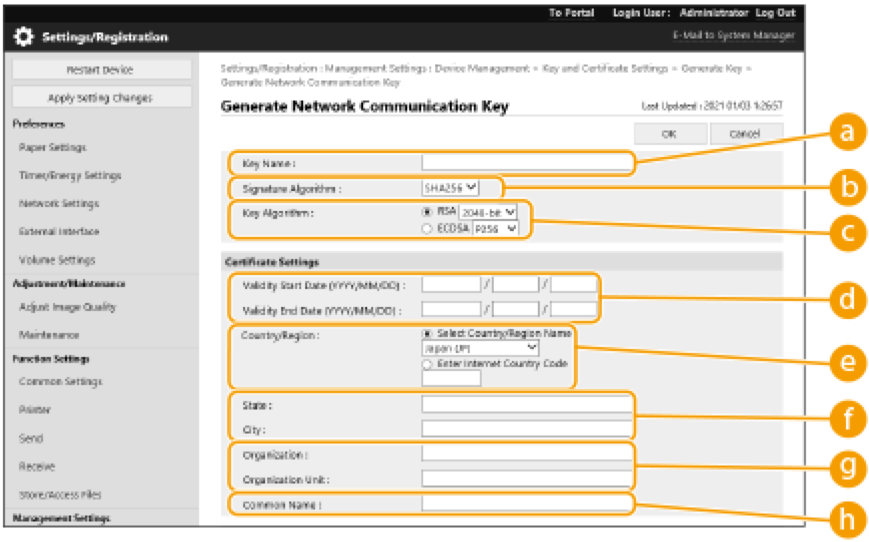
2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 Click [Generate Key].

5 Click [Network Communication].

6 Configure the key and certificate settings.



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Generate Key > Generate Network Communication Key

Generate Network Communication Key

Last Updated : 2021 01/03 1:26:57

Key Name :

Signature Algorithm : SHA256

Key Algorithm : ● RSA 2048-bit ○ ECDSA P256

Certificate Settings

Validity Start Date (YYYY/MM/DD) : / /

Validity End Date (YYYY/MM/DD) : / /

Country/Region : ● Select Country/Region Name Japan (JP) ○ Enter Internet Country Code

State :

City :

Organization :

Organization Unit :

Common Name :

a [Key Name]

Enter a name for the key using alphanumeric characters. Enter a name that will be easy to find in a list.

b [Signature Algorithm]

Select the hash algorithm to use for the signature. The available hash algorithms vary depending on the key length. A key length of 1024 bits or more can support SHA384 and SHA512 hash algorithms.

c [Key Algorithm]

Select [RSA] or [ECDSA] as the key generation algorithm. Specify the key length if you select [RSA], or specify the key type if you select [ECDSA]. In both cases, a higher value provides greater security but reduces the communication processing speed.

NOTE:

- If you select [SHA384] or [SHA512] for [Signature Algorithm], you cannot set the key length to [512-bit] when you select [RSA] for [Key Algorithm].

d [Validity Start Date (YYYY/MM/DD)]/[Validity End Date (YYYY/MM/DD)]

Enter the start date and end data of the validity period for the certificate. You cannot set [Validity End Date (YYYY/MM/DD)] to a date before the date in [Validity Start Date (YYYY/MM/DD)].

e [Country/Region]

Click [Select Country/Region Name] and select the country/region from the drop-down list. Alternatively, click [Enter Internet Country Code] and enter a country code, such as "US" for the United States.

f [State]/[City]

Enter the location using alphanumeric characters as necessary.

g [Organization]/[Organization Unit]

Enter the organization name using alphanumeric characters as necessary.

h [Common Name]

Enter the common name of the certificate using alphanumeric characters as necessary. "Common Name" is often abbreviated as "CN".

7 Click [OK].

- Generating a key and certificate may take some time.
- Generated keys and certificates are automatically registered to the machine.

For a CSR Certificate

Generate a key and CSR on the machine. Use the CSR data displayed on the screen or output to a file to request the certificate authority to issue a certificate. Then, register the issued certificate for the key.
You can configure this setting only from the Remote UI.

■1. Generating a Key and CSR

1 **Start the Remote UI.**

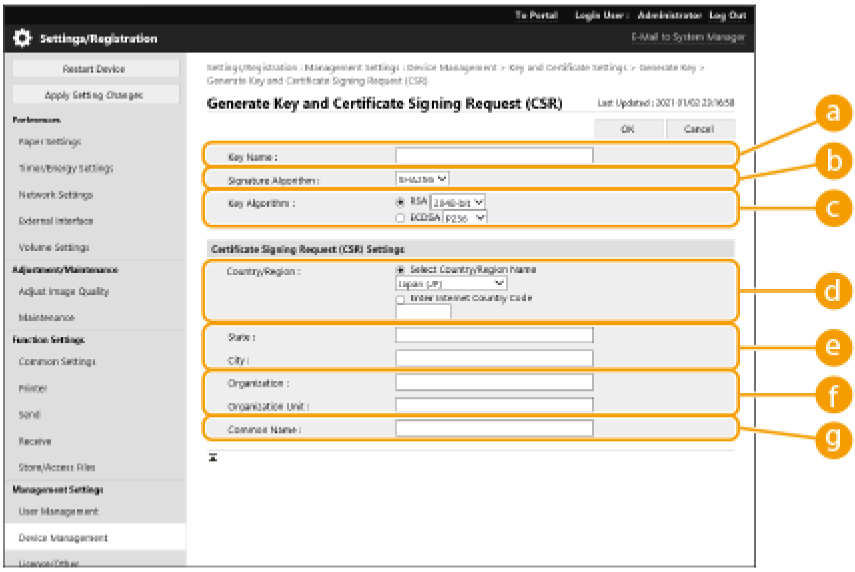
2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Click [Generate Key].**

5 **Click [Key and Certificate Signing Request (CSR)].**

6 **Configure the key and certificate settings.**


To Portal
Login User : Administrator
Log Out
Settings/Registration
E-Mail to System Manager
Restart Device
Apply Setting Changes
Preferences
Paper Settings
Timer/Energy Settings
Network Settings
External Interface
Volume Settings
Adjustment/Maintenance
Adjust Image Quality
Maintenance
Function Settings
Common Settings
Printer
Send
Receive
Store/Access Files
Management Settings
User Management
Device Management
License/Other
Settings/Registration : Management Settings : Device Management > Key and Certificate Settings > Generate Key > Generate Key and Certificate Signing Request (CSR)
Generate Key and Certificate Signing Request (CSR)
Last Updated : 2021 01/02 23:16:58
OK
Cancel
Key Name :
Signature Algorithm : SHA256
Key Algorithm : ● RSA 2048-bit ○ ECDSA P256
Certificate Signing Request (CSR) Settings
Country/Region : ● Select Country/Region Name Japan (JP) □ Enter Internet Country Code
State :
City :
Organization :
Organization Unit :
Common Name :
a
b
c
d
e
f
g

a [Key Name]

Enter a name for the key. Enter a name that will be easy to find in a list.

b [Signature Algorithm]

Select the hash algorithm to use for the signature.

c [Key Algorithm]

Select the key algorithm, and specify the key length if you select [RSA], or specify the key type if you select [ECDSA].

d [Country/Region]

Select the country code from the list, or enter it directly.

e [State]/[City]

Enter the location.

f [Organization]/[Organization Unit]

Enter the organization name.

g [Common Name]

Enter the IP address or FQDN.

- When performing IPPS printing in a Windows environment, make sure to enter the IP address of the machine.
- A DNS server is required to enter the FQDN of the machine. Enter the IP address of the machine if you are not using a DNS server.

7 Click [OK].

➠ The CSR data appears.

- If you want to save the CSR data to a file, click [Store in File] and specify the save location.

NOTE:

- The key that has generated the CSR appears on the key and certificate list screen, but you cannot use the key by itself. To use this key, you need to register the certificate that is later issued based on the CSR.

8 Request the certificate authority to issue a certificate based on the CSR data.

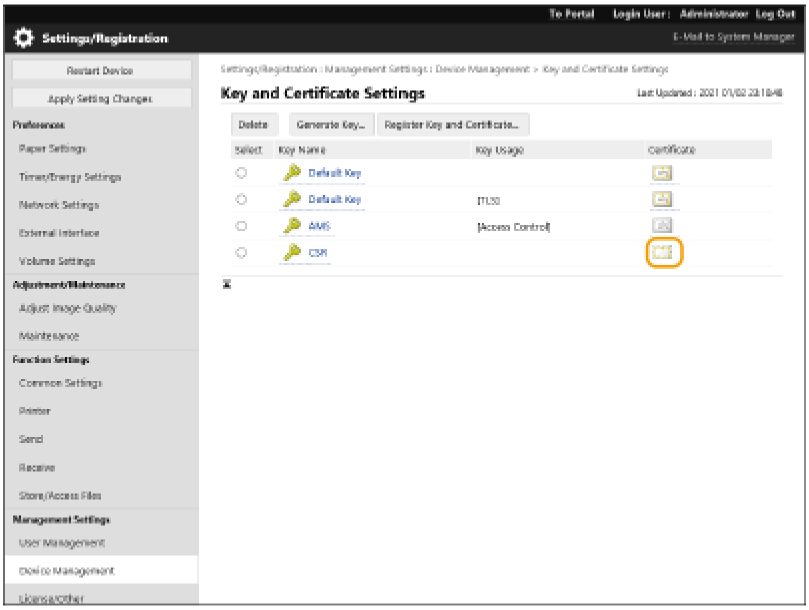
■2. Registering the Issued Certificate to the Key

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 In the [Certificate] list, click 📄 for the certificate that you want to register.



To Portal Login User : Administrator Log Out

Settings/Registration

E-Mail to System Manager

Restart Device

Apply Setting Changes

Preferences

Paper Settings

Timer/Energy Settings

Network Settings

External Interface

Volume Settings

Adjustment/Maintenance

Adjust Image Quality

Maintenance

Function Settings

Common Settings

Printer

Send

Receive

Store/Access Files

Management Settings

User Management

Device Management

License/Other

Settings/Registration : Management Settings : Device Management > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 2021 01/02 23:18:48

Delete | Generate Key... | Register Key and Certificate...

Select	Key Name	Key Usage	Certificate
○	Default Key		
○	Default Key	[TLS]	
○	AMS	[Access Control]	
○	CSR		

5 Click [Register Certificate...].

6 Register the certificate.

- Click [Browse...] ▶ specify the file (certificate) to register ▶ click [Register].

Step 3: Resetting the Key and Certificate (for SIP)

Set the generated key and certificate as the key and certificate to use in the TLS encrypted communication of SIP.

Using the Control Panel(P. 71)
Using the Remote UI(P. 72)

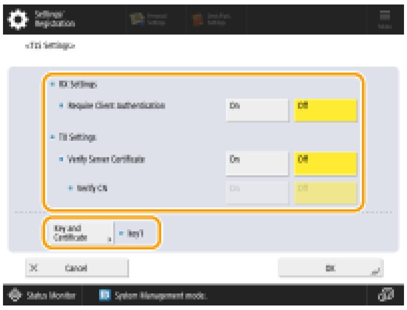
Using the Control Panel

1 Press ⚙ (Settings/Registration).

2 Press <Preferences> ▶ <Network> ▶ <TCP/IP Settings> ▶ <SIP Settings> ▶ <TLS Settings>.

3 Configure the various settings in <RX Settings> and <TX Settings> ▶ press <Key and Certificate>.

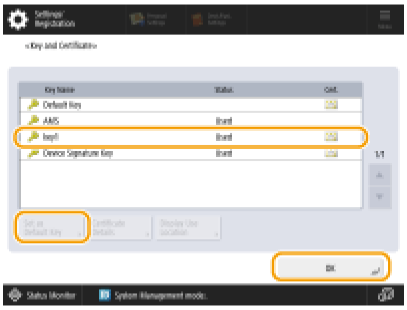
Example screen:



<RX Settings>	
<Require Client Authentication>	Select <On> or <Off>. If you select <On>, the machine requests client authentication when the machine receives an IP fax.
<TX Settings>	
<Verify Server Certificate>	Select <On> or <Off>. If you select <On>, the machine checks whether the TLS server certificate is valid when the machine receives an IP fax.
<Verify CN>	Select <On> or <Off>. If you select <On>, the machine checks the CN (Common Name) when the machine receives an IP fax.

4 Select the key and certificate to use for the TLS encrypted communication of SIP ▶ press <Set as Default Key> ▶ <OK>.

Example screen:



Key Name	Status	Cert.
Default Key		🖂
AMS	Used	
key1	Used	🖂
Device Signature Key	Used	🖂

NOTE

- You cannot select the key and certificate if their status is "Used".
- You can press <Certificate Details> to check detailed information about the certificate.
- You can press <Display Use Location> to check the key/certificate usage.

5 **Press <OK>.**

6 **Press ⚙ (Settings/Registration) ▶ ⚙ (Settings/Registration) ▶ <Apply Setting Changes> ▶ <Yes>.**

➠ The machine restarts, and the settings are applied.

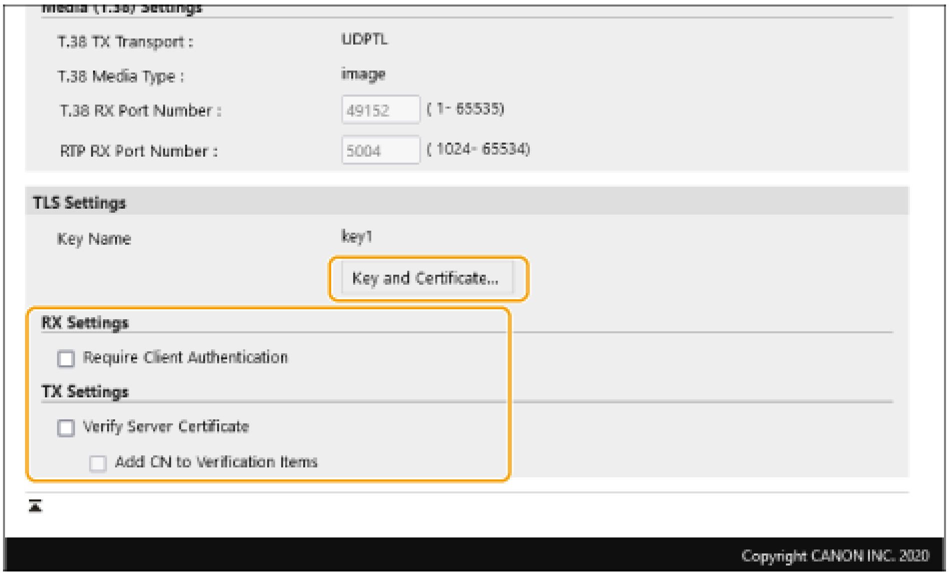
■Using the Remote UI

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Network Settings] ▶ [SIP Settings].**

4 **Configure the various settings in [TLS Settings] ▶ click [Key and Certificate].**



Media (T.38) Settings

T.38 TX Transport : UDPTL

T.38 Media Type : image

T.38 RX Port Number : 49152 (1- 65535)

RTP RX Port Number : 5004 (1024- 65534)

TLS Settings

Key Name key1

RX Settings

□ Require Client Authentication

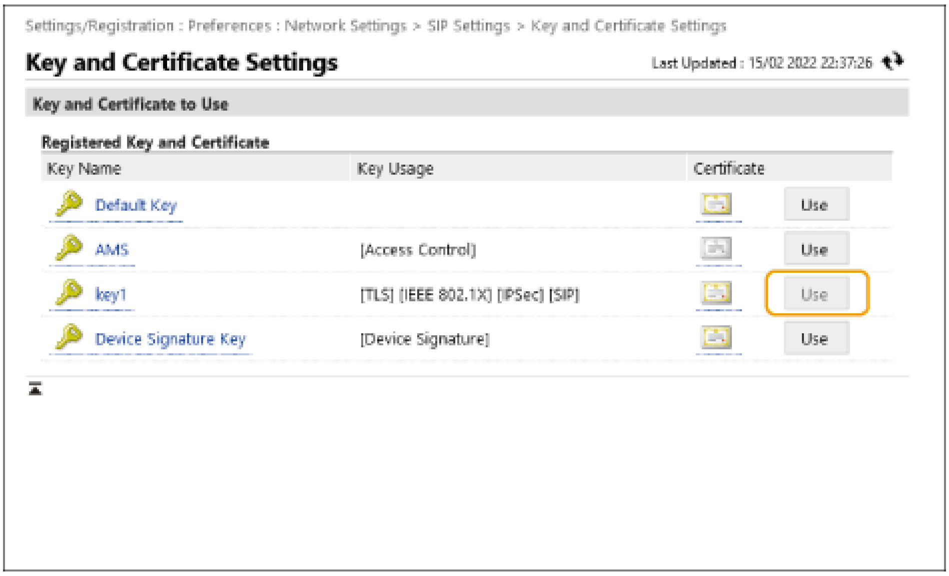
TX Settings

□ Verify Server Certificate

□ Add CN to Verification Items

[RX Settings]	
[Require Client Authentication]	If you select this check box, the machine requests client authentication when the machine receives an IP fax.
[TX Settings]	
[Verify Server Certificate]	If you select this check box, the machine checks whether the TLS server certificate is valid when the machine receives an IP fax.
[Add CN to Verification Items]	Select [On] or [Off]. If you select this check box, the machine checks the CN (Common Name) when the machine receives an IP fax.

5 Click [Use] for the key to use in the list.



Settings/Registration : Preferences : Network Settings > SIP Settings > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 15/02 2022 22:37:26

Key and Certificate to Use

Registered Key and Certificate

Key Name	Key Usage	Certificate	
Default Key			Use
AMS	[Access Control]		Use
key1	[TLS] [IEEE 802.1X] [IPSec] [SIP]		Use
Device Signature Key	[Device Signature]		Use

6 Click [OK].

7 Click [Apply Setting Changes] to restart the machine.

➠ The machine restarts, and the settings are applied.

Step 4: Deleting a Key/Certificate Generated in the Past (for SIP)

You may not be able to perform operations from the control panel, depending on the model of your machine. In this case, perform operations from the Remote UI.

NOTE

- You may need to convey information to the certificate authority when disabling the certificate. See **Checking whether You Must Perform the Additional Procedures(P. 5)** , and make a note of the required information before deleting the key/certificate.

Using the Control Panel(P. 74)
Using the Remote UI(P. 75)

■Using the Control Panel

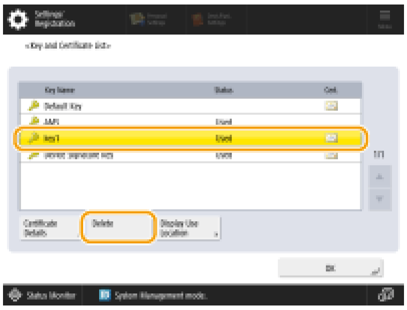
1 Press (Settings/Registration).

2 Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Key and Certificate List> ▶ <Key and Certificate List for This Device>.

- <Key and Certificate List for This Device> does not appear unless the user signature function is enabled on the machine. In this case, proceed to the next step.

3 Select the key and certificate ▶ press <Delete> ▶ <Yes>.

Example screen:



<Key and Certificate List>

Key Name	Status	Cert.
Default Key		✉
AAA1	Used	
Key1	Used	✉
Device Signature Key	Used	✉

NOTE:

- If appears, the key is corrupt or invalid.
- If does not appear, the certificate for the key does not exist.
- If you select a key and certificate and press <Certificate Details>, detailed information about the certificate appears. You can also press <Verify Certificate> on this screen to check whether the certificate is valid.

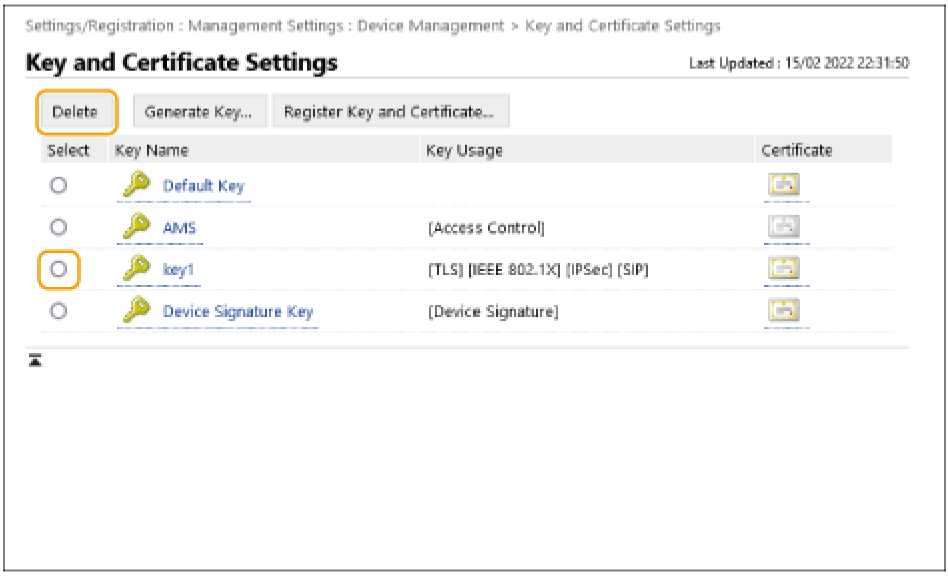
■Using the Remote UI

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Device Management] ▶ [Key and Certificate Settings].

4 Select the key and certificate ▶ click [Delete] ▶ [OK].



Settings/Registration : Management Settings : Device Management > Key and Certificate Settings

Key and Certificate Settings

Last Updated : 15/02 2022 22:31:50

Select	Key Name	Key Usage	Certificate
○	Default Key		
○	AMS	[Access Control]	
○	key1	[TLS] [IEEE 802.1X] [IPSec] [SIP]	
○	Device Signature Key	[Device Signature]	

NOTE

- If ☒ appears, the key is corrupt or invalid.
- If ▭ appears, the certificate for the key does not exist.
- Click a key name to display detailed information about the certificate. You can also click [Verify Certificate] on this screen to check whether the certificate is valid.

Step 5: Disabling the Certificate (for SIP)

Disable a certificate generated in the past. The procedure differs according to the type of certificate.

■For a Self-Signed Certificate

If a certificate including a key that requires the additional procedures is registered to another IP fax machine as a trusted certificate, delete the registered certificate. After deleting the registered certificate, register the certificate of the regenerated key.

■For a CSR Certificate

Request the certificate authority that has issued the certificate to revoke the certificate. Refer to [Issuer] in the certificate for the certificate authority to request.

NOTE

- If you are checking certificate revocation using the other IP fax machine, register the updated CRL to the computer or Web browser after the certificate is revoked.
- If you are using a method other than a CRL (for example, OCSP) to check certificate revocation, perform the procedure for that method.

Step 6: Enabling the New Certificate (for SIP)

Enable the certificate.

■For a Self-Signed Certificate

Register the new certificate to the other IP fax machine as a trusted certificate.

■For a CSR Certificate

You do not need to perform the additional procedures.

Procedure for Device Signatures

Step 1: Checking the S/MIME Settings (for Device Signatures)

Check whether you need to perform the additional procedures for S/MIME and the device signatures.

Follow the procedure below to check the S/MIME settings.

Using the Control Panel(P. 79)
Using the Remote UI(P. 79)

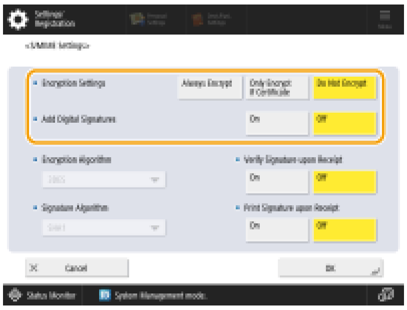
Using the Control Panel

1 Press ⚙ (Settings/Registration).

2 Press <Function Settings> ▶ <Send> ▶ <E-Mail/I-Fax Settings> ▶ <S/MIME Settings>.

3 Check <Encryption Settings> and <Add Digital Signatures>.

Example screen:



Encryption Settings: Always Encrypt / Only Encrypt If Certificate / Do Not Encrypt

Add Digital Signatures: On / Off

Encryption Algorithm

Verify Signature upon Receipt: On / Off

Signature Algorithm

Print Signature upon Receipt: On / Off

- If <Encryption Settings> is set to <Do Not Encrypt> and <Add Digital Signatures> is set to <Off>, perform the subsequent procedures for the device signatures only.
- If other settings are specified, perform the subsequent procedures for both S/MIME and the device signatures.

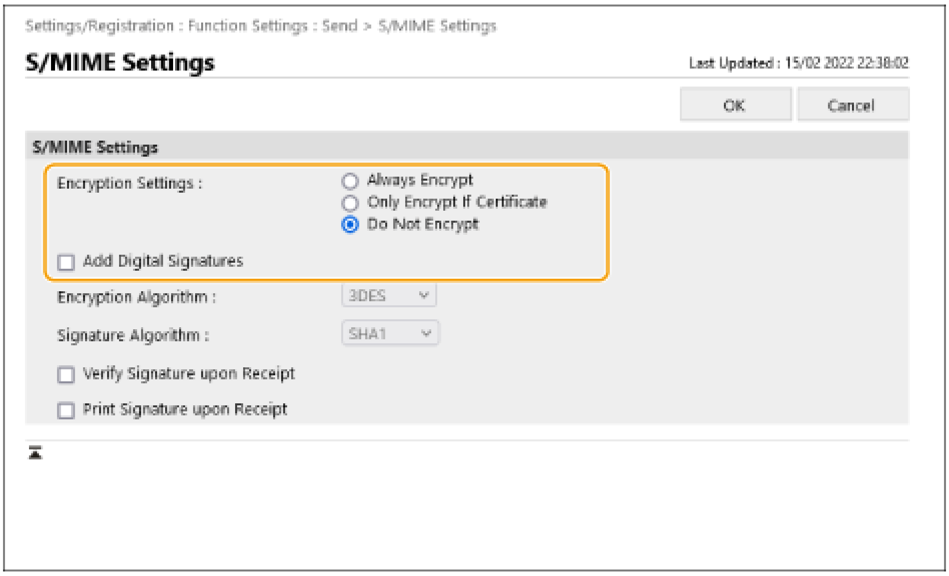
Using the Remote UI

1 Start the Remote UI.

2 Click [Settings/Registration] on the portal page.

3 Click [Send] ▶ [S/MIME Settings].

4 Check [Encryption Settings] and [Add Digital Signatures].



Settings/Registration : Function Settings : Send > S/MIME Settings

S/MIME Settings

Last Updated : 15/02 2022 22:38:02

S/MIME Settings

Encryption Settings : ○ Always Encrypt ○ Only Encrypt If Certificate ● Do Not Encrypt

□ Add Digital Signatures

Encryption Algorithm : 3DES

Signature Algorithm : SHA1

□ Verify Signature upon Receipt

□ Print Signature upon Receipt

- If [Do Not Encrypt] is selected for [Encryption Settings] and [Add Digital Signatures] is deselected, perform the subsequent procedures for the device signatures only.
- If other settings are specified, perform the subsequent procedures for both S/MIME and the device signatures.

Step 2: Regenerating the Key and Certificate (for Device Signatures)

▶Using the Control Panel(P. 81)
▶Using the Remote UI(P. 81)

■Using the Control Panel

1 **Press ⚙ (Settings/Registration).**

2 **Press <Management Settings> ▶ <Device Management> ▶ <Certificate Settings> ▶ <Generate Key>.**

3 **Press <Generate/Update Device Signature Key> ▶ <Yes> ▶ <OK>.**

■Using the Remote UI

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Key and Certificate Settings].**

4 **Click [Generate Key] ▶ [Device Signature].**

5 **Click [Generate/Update] ▶ [OK].**

Step 3: Disabling the Certificate (for Device Signatures)

Disable a certificate generated in the past.

■If a Certificate for Device Signatures Is Registered to Acrobat

If a certificate for device signatures is registered in Acrobat, delete the registered certificate.

■If an S/MIME Certificate Exported from this Machine Has Been Imported to Another Machine

If you have exported the public key certificate (S/MIME certificate) used for encrypting e-mail/I-faxes via S/MIME from this machine and imported the certificate to another machine, follow the procedure below to delete the certificate from the machine where the certificate has been imported.

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [S/MIME Certificate Settings].**

4 **Select the corresponding certificate ▶ click [Delete] ▶ [OK].**

Step 4: Enabling the New Certificate (for Device Signatures)

Enable the certificate.

■If a Certificate for Device Signatures Is Registered to Acrobat

If a certificate for device signatures is registered in Acrobat, export the regenerated certificate for device signatures and register the new certificate to Acrobat.

▶Exporting the Certificate from the Machine(P. 83)

■If an S/MIME Certificate Exported from this Machine Has Been Imported to Another Machine

If you have exported the public key certificate (S/MIME certificate) used for encrypting e-mail/I-faxes via S/MIME from this machine and imported the certificate to another machine, export the regenerated certificate and register it to the other machine.

▶Exporting the Certificate from the Machine(P. 83)
▶Registering the Certificate to the Other Machine(P. 83)

■Exporting the Certificate from the Machine

Perform the following procedure to export the certificate.

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 **Click [Device Management] ▶ [Export Device Signature].**

4 **Click [Start Exporting] ▶ save the file to a location of your choice.**

■Registering the Certificate to the Other Machine

Perform the following procedure to register the certificate to the other machine.

1 **Start the Remote UI.**

2 **Click [Settings/Registration] on the portal page.**

3 Click [Device Management] ▶ [S/MIME Certificate Settings].

4 Click [Register S/MIME Certificate].

5 Register the S/MIME certificate.

- Click [Browse...] ▶ specify the file (S/MIME certificate) to register ▶ click [Register].

Additional Procedures for Bluetooth Settings

Additional Procedures for Bluetooth Settings

The key for Bluetooth is automatically updated after updating the firmware of the machine. If you are using the Canon PRINT Business app for mobile devices, you must register the device again.

Procedure for Bluetooth(P. 87)

Procedure for Bluetooth

Step 1: Deleting the Device Registered in Canon PRINT Business (for Bluetooth)

If Bluetooth is set to <On>, follow the procedure below.

▶Operation for iOS(P. 88)
▶Operation for Android(P. 88)

■Operation for iOS

1 Tap [🖨] on the top left of the home screen of Canon PRINT Business.

The [Select Printer] screen appears.

2 Delete a device from the list by tapping [⛔] ▶ [Delete].

■Operation for Android

1 Tap [🖨] on the top left of the home screen of Canon PRINT Business.

The [Select Printer] screen appears.

2 Press and hold the device name ▶ tap [Delete] in the displayed dialog box.

Step 2: Registering the Device to Canon PRINT Business Again (for Bluetooth)

If Bluetooth is set to <On>, follow the procedure below.

Operation for iOS(P. 89)
Operation for Android(P. 89)

■Operation for iOS

1 Tap [ ] on the top left of the home screen of Canon PRINT Business.

The [Select Printer] screen appears.

2 Tap [Nearby Printers].

The detected devices appear.

■If devices are not detected

Get closer to the machine, and tap [Search]. Bluetooth can detect devices at a distance of up to 2 meters or 80 inches.

3 Select the device ▶ tap [Add].

■Operation for Android

1 Tap [ ] on the top left of the home screen of Canon PRINT Business.

The [Select Printer] screen appears.

2 Tap [Nearby Printers].

The detected devices appear.

■If devices are not detected

Get closer to the machine, and tap [Search]. Bluetooth can detect devices at a distance of up to 2 meters or 80 inches.

3 Select the device.

4 Check the device information in the displayed dialog box ▶ tap [Add].

If the Wi-Fi network settings screen appears, follow the instructions on the screen.

Additional Procedures for Access Management System Settings

Additional Procedures for Access Management System Settings

The key for the Access Management System is automatically updated after updating the firmware of the machine.

Restriction information is automatically retrieved again approximately 30 minutes after the key is automatically updated. Printing can then be performed normally with the Access Management System function.

If you want to print with the Access Management System function of the printer driver immediately after the firmware is updated, it is necessary to manually retrieve the restriction information of the Access Management System again.

▶**Procedure for Access Management System(P. 92)**

An error occurs if you try to print without retrieving the restriction information again.

Procedure for Access Management System

If you want to print with the Access Management System function of the printer driver immediately after the firmware is updated, you must manually retrieve the restriction information of the Access Management System.

Follow the procedure below to do so.

The procedure below is not required approximately 30 minutes after the firmware is updated because the restriction information will have been automatically retrieved by that time.

1 Log on to the computer.

2 Display the properties of the printer to use with the printer driver that has the Access Management System function enabled.

■For Windows Vista

- Click [Start] ▶ [Control Panel] ▶ [Hardware and Sound] ▶ select [Printers].
- Right-click the printer icon ▶ select [Properties].

■For Windows Server 2008

- Click [Start] ▶ [Control Panel] ▶ [Hardware and Sound] ▶ select [Printers].
- Right-click the printer icon ▶ select [Properties].

■For Windows Server 2008 R2

- Click [Start] ▶ [Control Panel] ▶ [Hardware] ▶ select [Devices and Printers].
- Right-click the printer icon ▶ select [Printer properties].

■For Windows 7

- Click [Start] ▶ [Control Panel] ▶ [Hardware and Sound] ▶ select [Devices and Printers].
- Right-click the printer icon ▶ select [Printer properties].

■For Windows 8.1/Windows Server 2012

- Navigate to the desktop and display the charms on the right of the screen.
- Click [Settings] ▶ [Control Panel] ▶ select [View devices and printers].
- Right-click the printer icon ▶ select [Printer properties].

■For Windows 10/Windows Server 2016

- Right-click [Start] ▶ select [Control Panel] ▶ [View devices and printers].
- Right-click the printer icon ▶ select [Printer properties].

3 Click the [AMS] tab.

4 Click [Get Restriction Information].

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