KONICA MINOLTA

Authentication Unit AU-211P

User's Guide

Ver. 1.0

Contents

1 Introduction

Thank you for choosing this device.

This User’s Guide provides descriptions of the operating procedures and precautions for using Authentication Unit (IC Card Type) AU-211P. Carefully read this User’s Guide before using this device.

The actual screens that appear may be slightly different from the screen images used in this User’s Guide.

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1.1 Safety Information

Carefully read this information, and then store it in a safe place.

- Before using this device, carefully read this information and follow it to operate the device correctly.
- After reading this information, store it in the designated holder with the warranty.

Important information

- The reprinting or reproduction of the content of this publication, either in part or in full, is prohibited without prior permission.
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- Our company assumes no responsibility for any damage (including lost profits or other related damages) caused by this product or its use as a result of operations not described in this information. For disclaimers and warranty and liability details, refer to the User’s Guide Authentication Unit (IC Card Type AU-211P).
- This product is designed, manufactured and intended for general business use. Do not use it for applications requiring high reliability and which may have an extreme impact on lives and property. (Applications requiring high reliability: Chemical plant management, medical equipment management and emergency communications management)
- Use with other authentication devices is not guaranteed.
- In order to incorporate improvements in the product, the specifications concerning this product are subject to change without notice.

For safe use

🛇	• Do not this product near water, otherwise it may be damaged. • Do not cut, damage, modify or forcefully bend the USB cable. A malfunction may occur as a result of a damaged or cut USB cable. • Do not disassembly this device, otherwise it may be damaged.

Regulation notices

USER INSTRUCTIONS FCC PART 15 - RADIO FREQUENCY DEVICES (For U.S.A. Users)

FCC: Declaration of Conformity	
Product Type	Authentication Unit (IC Card Type)
Product Name	AU-211P
(This device complies with Part 15 of the FCC Rules.) Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.	

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

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

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

WARNING:

The design and production of this unit conform to FCC regulations, and any changes or modifications must be registered with the FCC and are subject to FCC control. Any changes made by the purchaser or user without first contacting the manufacturer will be subject to penalty under FCC regulations.

INTERFERENCE-CAUSING EQUIPMENT STANDARD (ICES-003 ISSUE 4) (For Canada Users)

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

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

2 Getting Started

2.1 Product Overview

This product is a PKI card authentication unit that scans a PKI card (CAC or PIV card) to perform personal authentication.

Connecting this unit enables you to run a PKI card authentication system (hereinafter referred to as "this system") that uses the PKI card authentication unit on the MFP.

Using this system will enable you to carry out operations without making a password public on the network, and to configure the system environment with a higher level of security. You can also implement the unique functions using this system on the MFP.

Use conditions

The following conditions are required to use this system.

- PKI card authentication unit (This unit)
- MFP compatible with a PKI card authentication system
- PKI card available for PIV and CAC
- User management using Active Directory (Kerberos authentication + PKINIT)

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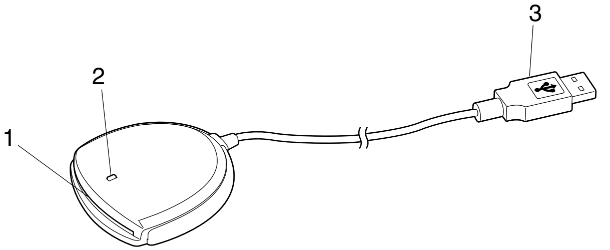
Reminder

Do not disconnect the USB cable while using this unit. Doing so may cause this system to become unstable.

2.2 Part names and their functions



No.	Part name	Description
1	Card inlet	Used to insert the PKI card.
2	LED lamp	Turns green when you insert a PKI card into this unit. Blinks green while authentication.
3	USB cable	Used for connecting this device to the multifunctional product.

2.3 Pre-Setting

To use this system, pre-configure the following settings on the MFP.

- Configuring network settings (page 9)
- Registering Active Directory for Authentication (page 11)
- Correcting the MFP time (page 13)
- Registering the DNS server associated with Active Directory (page 14)
- Specifying the PIV transitional mode (page 15)
- Configuring settings for verifying the Active Directory certificate (page 16)

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Note

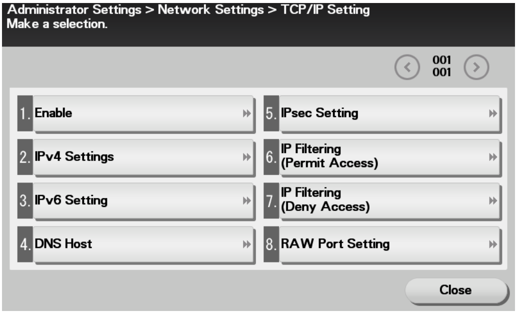
To configure some of the settings, PageScope Web Connection must be used. For details on how to use PageScope Web Connection, refer to the User's Guide [Applied Functions] supplied together with the MFP.

2.3.1 Configuring Network Settings

Configure the basic settings required to use the MFP in a network environment.

TCP/IP Settings

On the MFP control panel, tap [Utility] - [Administrator Settings] - [Network Settings] - [TCP/IP Setting].



Administrator Settings > Network Settings > TCP/IP Setting
Make a selection.

Item	Description
Enable	Select [ON].

IPv4 Settings

Item	Description
IP Address	When directly specifying the IP address, enter the IP address of the MFP.
Subnet Mask	When directly entering the IP address, specify the subnet mask for the connected network.
Default Gateway	When directly entering the IP address, specify the default gateway for the connected network.
IP Application Method Auto Setting	When automatically retrieving the IP address, select the automatic retrieval method.

IPv6 Setting

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Note

These settings are required when using the MFP in an IPv6 environment.

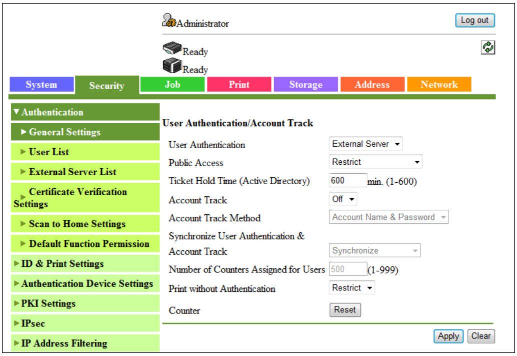
Item	Description
Enable	Select [ON] when using the MFP in an IPv6 environment.
Auto IPv6 Settings	Select [ON] when automatically retrieving the IPv6 address.
Global Address	Specify the IPv6 global address when not automatically retrieving the IPv6 address.
Gateway Address	Specify the IPv6 gateway address when not automatically retrieving the IPv6 address.
Link-Local Address	Displays the link-local address generated from the MAC address.

2.3.2 Registering Active Directory for Authentication

Register Active Directory for authentication in the MFP.

General Settings

In the PageScope Web Connection administrator mode, select [Security], and then [Authentication] - [General Settings].



User Authentication/Account Track

User Authentication	External Server
Public Access	Restrict
Ticket Hold Time (Active Directory)	600 min. (1-600)
Account Track	Off
Account Track Method	Account Name & Password
Synchronize User Authentication & Account Track	Synchronize
Number of Counters Assigned for Users	500 (1-999)
Print without Authentication	Restrict
Counter	Reset

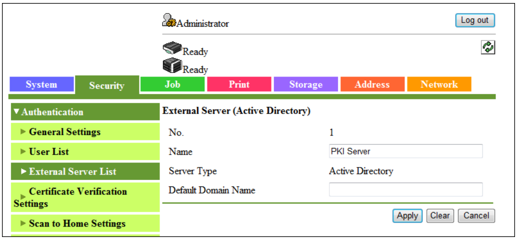
Item	Description
User Authentication	Select [External Server].
Ticket Hold Time (Active Directory)	Change the time to hold the Kerberos authentication ticket if necessary.
Account Track	Select [On].
Synchronize User Authentication & Account Track	Select [Synchronize].

External Server List

1 In the PageScope Web Connection administrator mode, select [Security], and then [Authentication] - [External Server List] - [Edit].

2 Select [Active Directory], and click [Next].

3 Register the Active Directory information.



External Server (Active Directory)

No.	1
Name	PKI Server
Server Type	Active Directory
Default Domain Name	

Item	Description
Name	Enter the name of your authentication server (using ASCII characters of up to 32 bytes).
Default Domain Name	Enter the default domain name of your authentication server (using ASCII characters of up to 64 bytes).

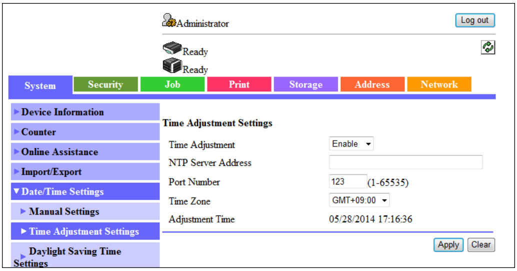
4 In the [External Server List] screen, select the Active Directory that will be selected by default, and click [Apply].

2.3.3 Correcting the MFP Time

You cannot log into Active Directory if the MFP system time is extremely different between the MFP and Active Directory. Correct the MFP time so it matches the Active Directory time with the system time.

Time Adjustment Settings

In the PageScope Web Connection administrator mode, select [System], and then [Date/Time Settings] - [Time Adjustment Settings].



Time Adjustment Settings

Time Adjustment: Enable
NTP Server Address:
Port Number: 123 (1-65535)
Time Zone: GMT+09:00
Adjustment Time: 05/28/2014 17:16:36

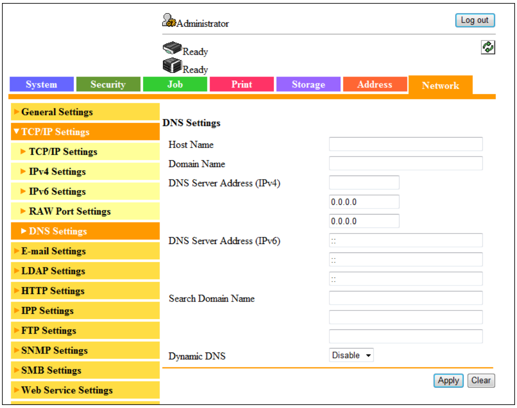
Item	Description
Time Adjustment	Select [Enable].
NTP Server Address	Specify the host address of the NTP server associated with Active Directory.
Port Number	Specify the port number.
Time Zone	Select a time zone (time difference from world standard time) to suit your environment.
Adjustment Time	Displays the latest date and time at which time correction was performed by connecting to the NTP server.

2.3.4 Registering the DNS Server Associated with Active Directory

Register the DNS server associated with Active Directory in the MFP.

DNS Settings

In the PageScope Web Connection administrator mode, select [Network], and then [TCP/IP Settings] - [DNS Settings].



DNS Settings

Host Name

Domain Name

DNS Server Address (IPv4) 0.0.0.0 0.0.0.0

DNS Server Address (IPv6) :: :: ::

Search Domain Name

Dynamic DNS: Disable

Item	Description
Host Name	Enter the host name of this machine (using ASCII characters of up to 63 bytes, including only - for symbol marks). If your DNS server does not support the Dynamic DNS function, register the host name of this machine on the DNS server.
Domain Name	When not automatically retrieving the default domain name, enter the default domain name of this machine (using ASCII characters of up to 63 bytes, including only hyphens (-) and periods (.) for symbol marks).
DNS Server Address (IPv4)	Enter the address (IPv4) of your DNS server. You can register up to three addresses.
DNS Server Address (IPv6)	Enter the address (IPv6) of your DNS server. You can register up to three addresses.
Search Domain Name	If the search domain name is not automatically retrieved, enter the search domain name of this machine (using ASCII characters of up to 251 bytes, including only hyphens (-) and periods (.) for symbol marks).

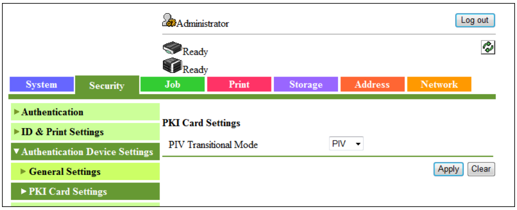
Item	Description
Dynamic DNS	Select whether or not to enable the Dynamic DNS function. When your DNS server supports the Dynamic DNS function, the specified host name can be automatically registered on the DNS server or changes can be automatically updated as long as [Enable] is selected.

2.3.5 Specifying the PIV Transitional Mode

Specify the PIV transitional mode in the PIV transitional specifications.

PKI Card Settings

In the PageScope Web Connection administrator mode, select [Security], and then [Authentication Device Settings] - [PKI Card Settings].



PKI Card Settings

PIV Transitional Mode PIV

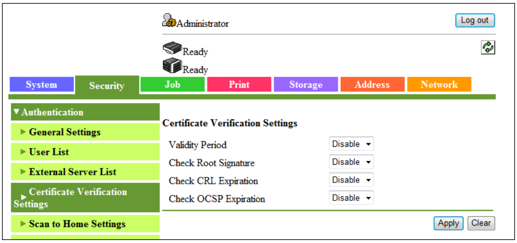
Item	Description
PIV Transitional Mode	Select PIV or CAC as the PIV transitional mode.

2.3.6 Configuring Settings for Verifying the Active Directory Certificate

Configure the certificate verification settings to verify the Active Directory certificate when communicating with Active Directory.

Certificate Verification Setting

In the PageScope Web Connection administrator mode, select [Security], and then [Authentication] - [Certificate Verification Settings].



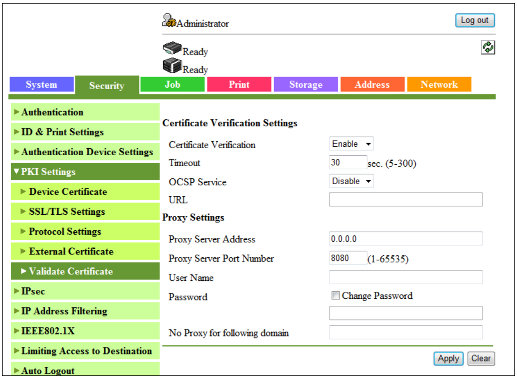
Certificate Verification Settings

Validity Period: Disable
Check Root Signature: Disable
Check CRL Expiration: Disable
Check OCSP Expiration: Disable

Item	Description
Validity Period	Select whether to verify that the certificate is within the validity period.
Check Root Signature	Select whether to check the root signature. To check the root signature, view the external certificates managed on the MFP. For details on how to register an external certificate on the MFP, refer to "External Certificate" (page 19).
Check CRL Expiration	Select whether to check that the certificate is not expired in the CRL (Certificate Revocation List).
Check OCSP Expiration	Select whether to check that the certificate is not expired in the OCSP service. For details on how to configure the OCSP service setting, refer to "Validate Certificate" (page 17).

Validate Certificate

In the PageScope Web Connection administrator mode, select [Security], and then [PKI Settings] - [Validate Certificate].



Certificate Verification Settings

Certificate Verification	Enable
Timeout	30 sec. (5-300)
OCSP Service	Disable
URL	

Proxy Settings

Proxy Server Address	0.0.0.0
Proxy Server Port Number	8080 (1-65535)
User Name	
Password	□ Change Password
No Proxy for following domain	

Item	Description
Certificate Verification	Select [Enable] to enable certificate verification.
Timeout	Enter the timeout period to check the expiration date.
OCSP Service	Select [Enable] to use an OCSP service.
URL	Enter the URL of the OCSP service (up to 511 characters). If this item is left blank, the system accesses the URL of the OCSP service embedded in the certificate.
Proxy Server Address	To check the expiration date via a proxy server, enter the proxy server address. If the DNS server is specified, you can enter the host name instead. If [IPv6] is set to [ON], you can also specify the IPv6 address.
Proxy Server Port Number	Enter the port number for the proxy server.
User Name	Enter the user name to log in to the proxy server (up to 63 characters).
Password	Enter the password to log in to the proxy server (up to 63 characters). When changing the registered password, select [Change Password], and enter a new password.

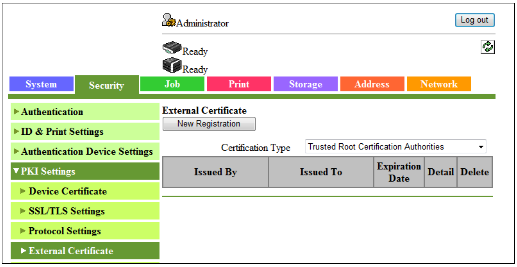
Item	Description
No Proxy for following domain	Specify an address with no proxy server used depending on your environment when checking the expiration date. If the DNS server is specified, you can enter the host name instead. If [IPv6] is set to [ON], you can also specify the IPv6 addresses.

External Certificate

In the PageScope Web Connection administrator mode, select [Security], and then [PKI Settings] - [External Certificate].

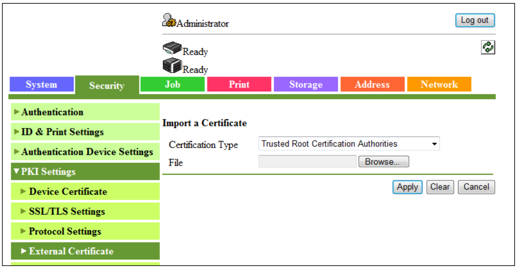
Detail

To check the root signature in Certificate Verification, register the external certificate you want to view when checking the root signature as necessary.



Item	Description
New Registration	Click this button to register a new external certificate.
Certification Type	Select the type of the external certificate you want to display. You will see a list of the selected types of external certificates.
Issued By	Displays the issuer of the external certificate.
Issued To	Displays the destination to issue the external certificate.
Expiration Date	Displays the validity period of the external certificate.
Detail	View the detailed information about the external certificate.
Delete	Displays the deletion confirmation dialog box. If necessary, you can delete the external certificate.

<New Registration>



Import a Certificate

Certification Type: Trusted Root Certification Authorities

File

Item	Description
Certification Type	Select the type of certificate that will be registered. • If [Trusted Root Certification Authorities] is selected, register the root certificate from the CA (Certificate Authority). • If [Trusted Intermediate Certification Authorities] is selected, register the intermediate certificate from the CA (Certificate Authority). • If [Trusted Certificate] is selected, register the certificates individually. • If [Untrusted Certificate] is selected, register the non-trusted certificates individually.
File	Click [Browse] in the Import Certificates (PEM/DER) screen, and specify a new external certificate to be registered.

2.4 Operation Settings

To operate this system, disable the TCP Socket, FTP server, WebDAV server, SNMP v1/v2c write setting, and SNMP v3 in the disable state.

Detail

On the MFP that supports this system, the TCP Socket, FTP server, WebDAV server, SNMP v1/v2c write setting, and SNMPv3 functions are disable by default. For details on each setting, refer to the User's Guide [Applied Functions] supplied together with the MFP.

3 How to Use the Authentication Unit

This chapter explains how to log in and log out using this unit and also describes the functions for use with this system.

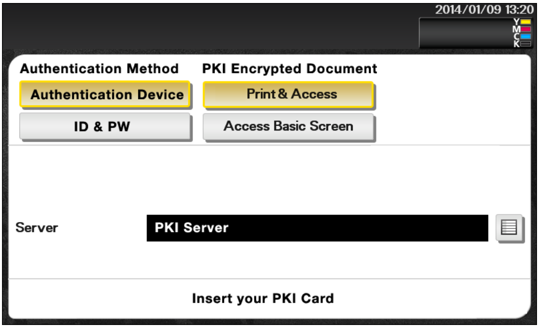
3.1 Login and Logout

3.1.1 Login

Use the following steps to insert a PKI card into this unit and log into the MFP.

1 Insert a PKI card in the unit.

- To change the server for authentication, tap the list icon of [Server] to select a desired server before inserting a PKI card into this unit, and tap [OK].
- You can log in as a public user if Public User Access is enabled.
- If logging into the MFP as an administrator, tap [ID & PW], and enter the password.



Server PKI Server

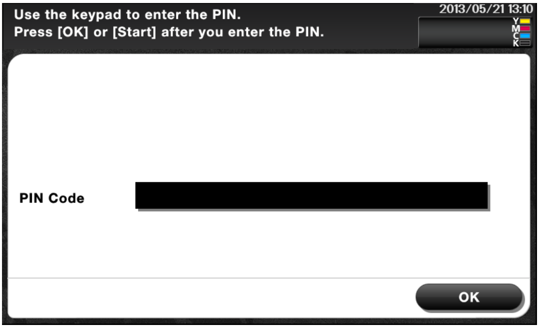
Insert your PKI Card

Detail

- *If you insert a PKI card into the unit while logged in as a public user, you will be logged out as a public user and the PIN code entry screen appears. However, even if logged in as a public user, you will not be logged out by inserting a PKI card during operations, when warnings occur, or when a screen that you cannot log out by pressing the [Access] key on the control panel is displayed.*
- *If you log into the MFP as an administrator, you can check or delete the desired job.*

2 Enter the PIN code.

- Tap the [PIN Code] entry field to display the keyboard screen.



Use the keypad to enter the PIN.
Press [OK] or [Start] after you enter the PIN.

2013/05/21 13:10

PIN Code [redacted]

Detail

If an incorrect PIN code is entered, "No. of Auth. Failure Allowed" appears on the screen. If the number of authentication failures reaches an upper limit, the PKI card will be locked to prevent the authentication. For details on the allowable number of PKI card authentication failures and how to unlock the PKI card, contact your PKI card administrator.

3 Tap [OK].

This starts authentication and logs into the MFP.

Detail

When Account Track is enabled, use the PKI card to perform user authentication before account authentication. When Account Track is enabled on the MFP that supports this system, user authentication is forcibly associated with account authentication.

3.1.2 Logout

To log out the MFP, pull the PKI card out of this unit.

Detail

- *If a PKI card is used to log in to the MFP, you cannot log out by pressing the [Access] key on the control panel.*
- *If the MFP sub power is turned off while logging in using the PKI card, you will be logged out of the MFP.*

3.2 Functions Using the PKI Card Authentication System

This section explains the functions using the PKI card authentication system.

Function	Description	See
Address Search (LDAP) Using PKI Card	Logs into the LDAP server using the Kerberos authentication ticket that is obtained by Active Directory authentication with the PKI card when searching for the destination via the LDAP server. The user can perform authentication only once to obtain access privileges, and configure the single sign-on environment to be convenient.	p. 26
SMB TX Using PKI Card	Logs into the destination computer using the Kerberos authentication ticket that is obtained by Active Directory authentication with the PKI card when sending scanned data via SMB. The user can perform authentication only once to obtain access privileges, and configure the single sign-on environment to be convenient.	p. 31
Scan to E-mail (S/MIME) Using PKI Card	Adds a digital signature using the PKI card when sending an e-mail. This function prevents fabrication or spoofing of an e-mail.	p. 35
Signature Addition Using PKI Card	Adds a signature using the digital certificate registered in the PKI card when distributing scanned data as a PDF document. This function prevents fabrication of a PDF document.	p. 38
PKI Card Print	The user can encrypt print data using the PKI card before sending the data to the MFP. The print data is saved temporarily in the MFP. Once the same user performs authentication at the MFP with the PKI card, the data is decrypted and printed. The print data is encrypted when it is sent from the printer driver and can only be printed when authentication at the MFP using the PKI card is successful; therefore, you can ensure the confidentiality of documents.	p. 39
Scan To Me	Sends scanned data to the user's e-mail address. The user can obtain the user's e-mail address using the LDAP protocol, and easily send data to the obtained address. This function is effective when frequently sending scanned data to a user's address.	p. 48

Function	Description	See
Scan To Home	Sends scanned data to the user's computer. The user can obtain the position of the user's Home folder from Active Directory, and easily send data to the Home folder of the user's computer. This function is effective when frequently sending scanned directly to their Home folder.	p. 52

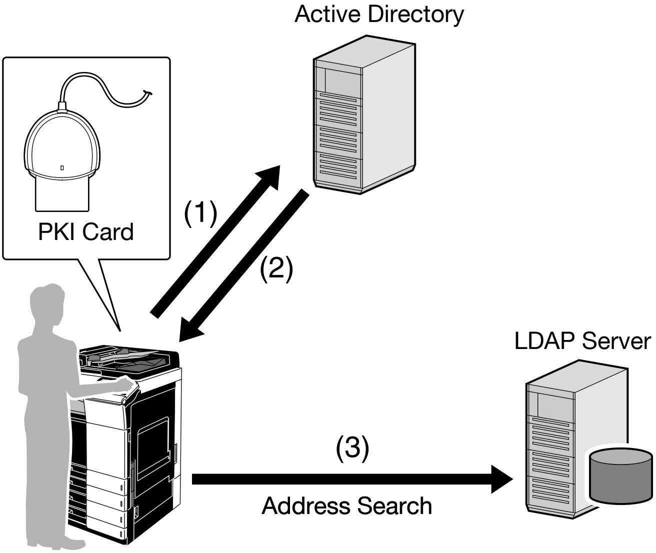
3.3 Address Search (LDAP) Using PKI Card

3.3.1 Overview

This function logs in to the LDAP server using the Kerberos authentication ticket that is obtained by Active Directory authentication with the PKI card when searching for the destination via the LDAP server.

If a Kerberos authentication ticket is used to authenticate the LDAP server, the user can use the LDAP server securely without making the password public on the network.

The user can also perform the Active Directory authentication only once to obtain access privileges, and configure the single sign-on environment to be convenient.



(1) Insert the PKI card into the MFP to perform Active Directory authentication.

(2) Obtain the Kerberos authentication ticket.

(3) Use the Kerberos authentication ticket to log in to the LDAP server and search for the destination.

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Note

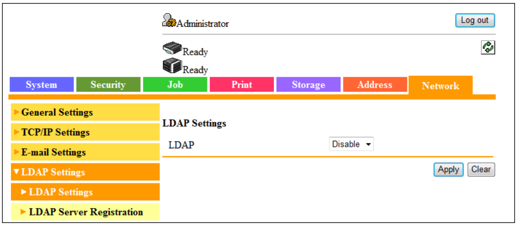
This function is not available when you log in to the MFP as a public user.

3.3.2 Related Settings

This section explains how to configure the address search (LDAP) settings on the MFP that supports this system.

LDAP Settings

In the PageScope Web Connection administrator mode, select [Network], and then [LDAP Settings] - [LDAP Settings].



LDAP Settings

LDAP Disable

Item	Description
LDAP	Select [Enable].

LDAP Server Registration

In the PageScope Web Connection administrator mode, select [Network], and then [LDAP Settings] - [LDAP Server Registration].

Item	Description
Server Address	Enter the LDAP server address. Use one of the following formats. • Example of host name entry: "host.example.com" • Example of IP address (IPv4) entry: "192.168.1.1" • Example of IP address (IPv6) entry: "fe80::220:6bff:fe10:2f16"
Port Number	Specify the LDAP port number.
SSL/TLS	Select [Enable] to encrypt communication between the MFP and LDAP server with SSL.
Port Number (SSL)	Enter the desired port number for SSL communication.
Search Base	Specify the search starting point in the directory structure under the LDAP server (up to 255 characters). This search function also covers subdirectories under the specified starting point.
Timeout	Specify the timeout period for address search (LDAP).
Max. Search Result	Enter the maximum number of items that can be received as address search (LDAP) results.
Authentication Method	Select the authentication method to connect to the LDAP server. • When connecting to the LDAP server using the Kerberos authentication method, select [GSS-SPNEGO]. • When specifying the LDAP server with an anonymous user enabled, you can select [anonymous].
Login Name	Log in to the LDAP server, and enter the login name to search for a destination (using up to 255 bytes).
Password	Enter the password (using up to 128 bytes). To enter (change) the password, select the [Change Password] check box, then enter a new password.
Domain Name	Enter the domain name to log in to the LDAP server (using ASCII characters of up to 64 bytes).
Select Server Authentication Method	Select [User Authentication].

Item	Description
Use Referral	Select whether or not to use the referral function, if necessary. Make an appropriate choice to fit the LDAP server environment.
Search Condition Attributes	Select the attribute of the name used for LDAP searching. You can toggle this attribute between [Name] (cn) and [Nickname] (displayName).
Initial Setting for Search Details	Specify LDAP search conditions.

3.3.3 Handling Address Search (LDAP)

Use the Scan to E-mail screen or the Fax screen on the MFP control panel, and tap [Addr. Book] - [LDAP] - [Address Search (LDAP)] or [Adv. Search (LDAP)]. This section explains examples of procedures when [Address Search (LDAP)] is selected.

Enter a search keyword, then tap [Search].

Authentication is performed for the selected LDAP server using the Kerberos authentication ticket before searching starts.

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Note

- *If address search (LDAP) setting incorrectly configured properly, [Address Search (LDAP)] and [Adv. Search (LDAP)] will not appear. Check that the address search (LDAP) setting is configured correctly.*
- *For details on the address search (LDAP) function, refer to the User's Guide [Scan Functions] supplied together with the MFP.*

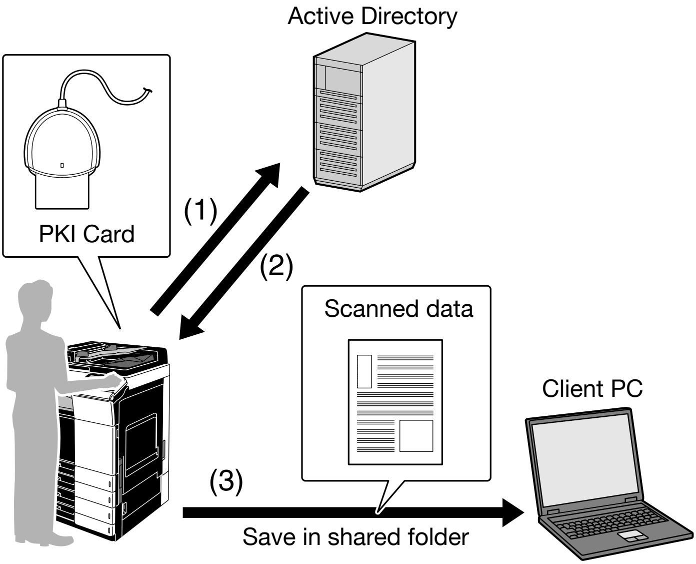
3.4 SMB TX Using PKI Card

3.4.1 Overview

This function logs into the destination computer using the Kerberos authentication ticket that is obtained by Active Directory authentication with the PKI card when sending scanned data via SMB.

If the Kerberos authentication ticket is used for authentication in the destination computer, the user can carry out SMB TX securely without making the password public on the network.

The user can also perform the Active Directory authentication only once to obtain access privileges, and configure the single sign-on environment to be convenient.



(1) Insert the PKI card into the MFP to perform Active Directory authentication.

(2) Obtain the Kerberos authentication ticket.

(3) Use the Kerberos authentication ticket to log in to the destination computer and save scanned data.

✎...

Note

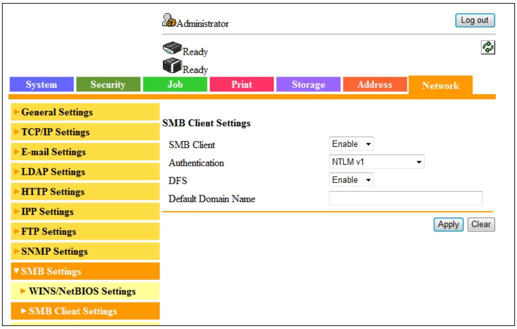
This function is not available while logged into the MFP as a public user.

3.4.2 Related Settings

This section explains how to configure the SMB TX settings on the MFP that supports this system.

SMB Client Settings

In the PageScope Web Connection administrator mode, select [Network], and then [SMB Settings] - [SMB Client Settings].



SMB Client Settings

SMB Client	Enable
Authentication	NTLM v1
DFS	Enable
Default Domain Name	

Item	Description
SMB Client	Select [Enable].
Authentication	Select [Kerberos] or [Kerberos, NTLMv1/v2] according to your environment. • [Kerberos]: Performs Kerberos authentication. This option is available in the Active Directory domain environment. • [Kerberos, NTLMv1/v2]: NTLMv2 authentication is performed when Kerberos authentication fails, and NTLMv1 authentication is performed when NTLMv2 authentication fails. This option is available when both the Active Directory and NT domains are specified.
DFS	To perform SMB TX in a DFS (Distributed File System) environment, select [Enable].
Default Domain Name	This item is not required when Active Directory is used as an authentication server.

Note

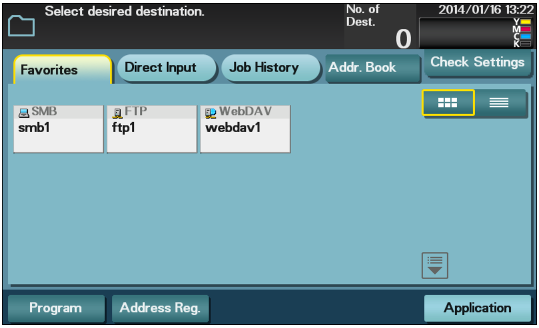
Specify the WINS server or direct hosting service to fit your environment. For details, refer to the User's Guide [Applied Functions] supplied together with the MFP.

3.4.3 Using SMB TX

SMB TX

Use the Scan to Folder screen on the MFP control panel to specify the target SMB address.

When SMB TX starts, you can use the Kerberos authentication ticket to log into the destination computer and save scanned data in a shared holder.



Select desired destination.

No. of Dest. 0

2014/01/16 13:22

✎ . . .

Note

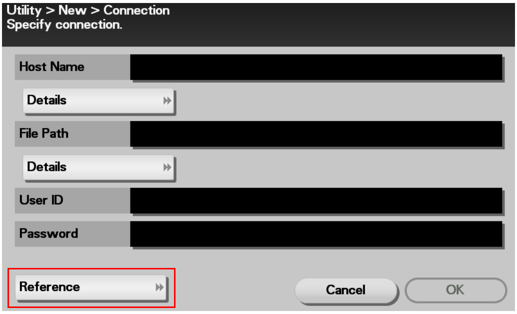
For details on how to register the SMB address or use SMB TX, refer to the User's Guide [Scan Functions] supplied together with the MFP.

Searching for SMB address

If [Reference] is tapped to register or specify the SMB address, the system searches for computers on the Windows network to enable you to register or specify the desired one as a destination.

If a PKI card is used to log in to the MFP, log in to the searched computer using the Kerberos authentication ticket to register or specify it as a destination.

<SMB address registration screen>



Utility > New > Connection
Specify connection.

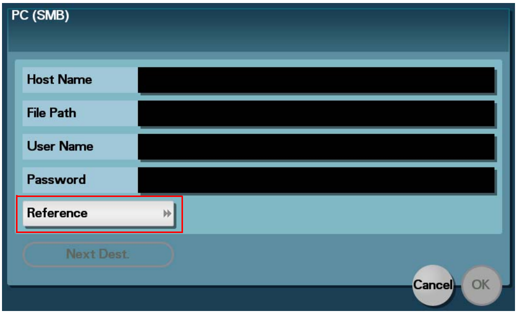
Host Name [redacted]

File Path [redacted]

User ID [redacted]

Password [redacted]

<SMB address specification screen (Direct Input)>



PC (SMB)

Host Name [redacted]

File Path [redacted]

User Name [redacted]

Password [redacted]

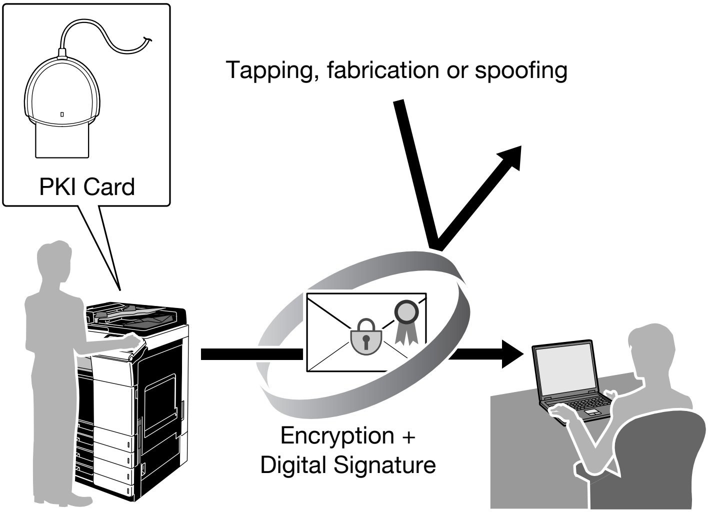
3.5 Scan to E-mail (S/MIME) Using PKI Card

3.5.1 Overview

This function uses the PKI card to add a digital signature when sending an e-mail. Sending an e-mail with a digital signature enables you to prove you are the e-mail sender.

If a certificate is registered in the target address, you can combine this function with e-mail encryption when sending an e-mail. Sending an encrypted e-mail prevents information from being leaked to a third party on the transmission route.

The certificate obtained from the PKI card is used to encrypt an e-mail to the user's address using the Scan to Me function. For details on the Scan to Me function, refer to "Scan to Me" (page 48).



✎...

Note

This function is not available when you log into the MFP as a public user.

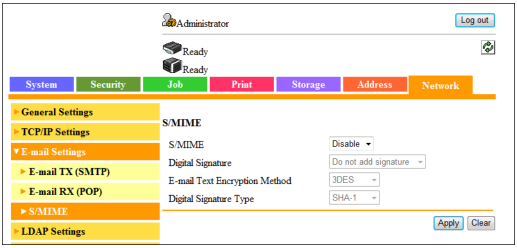
3.5.2 Related Settings

This section explains how to configure settings to encrypt an e-mail or add a digital signature on the MFP that supports this system.

S/MIME

Configure settings to encrypt an e-mail and add a digital signature.

In the PageScope Web Connection administrator mode, select [Network], and then [E-mail Settings] - [S/MIME].



S/MIME

S/MIME: Disable

Digital Signature: Do not add signature

E-mail Text Encryption Method: 3DES

Digital Signature Type: SHA-1

Item	Description
S/MIME	Select [Enable].
Digital Signature	To add a digital signature, select [Always add signature] or [Select when sending]. If [Select when sending] is selected, specify whether to add a digital signature before sending an e-mail. If [Always add signature] is selected, a digital signature is automatically added using the PKI card when sending an e-mail.
E-mail Text Encryption Method	Select the e-mail text encryption method.
Digital Signature Type	Select the digital signature type.

...

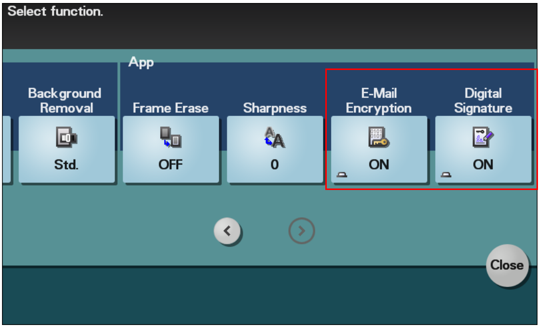
Note

For details on how to configure the settings required to send an e-mail, refer to the User's Guide [Applied Functions] supplied together with the MFP.

3.5.3 Encrypting an E-Mail and Adding a Digital Signature

Display the Scan to E-mail screen on the MFP control panel, and tap [Application].

- To encrypt an e-mail, set [E-Mail Encryption] to [ON].
- If [Select when sending] is selected to add a digital signature, set [Digital Signature] to [ON]. If [Always add signature] is selected, a digital signature will be automatically added.



Detail

- *When setting to enable encryption or to add a digital signature, you can specify up to 10 E-mail addresses to be broadcasted.*
- *When the encryption is set after specifying the E-mail addresses (up to 10 E-mail addresses), specified E-mail addresses that do not have a registered certificate will be canceled.*
- *For details on how to send an e-mail, refer to the User's Guide [Scan Functions] supplied together with the MFP.*
- *For details on how to register the certificate in the e-mail address, refer to the User's Guide [Applied Functions] supplied together with the MFP.*

3.6 Signature Addition Using PKI Card

3.6.1 Overview

This function adds a signature using the digital certificate registered in the PKI card when distributing scanned data as a PDF document.

Adding a signature identifies the author of a PDF document and guarantees that the file has not been fabricated.

✎...

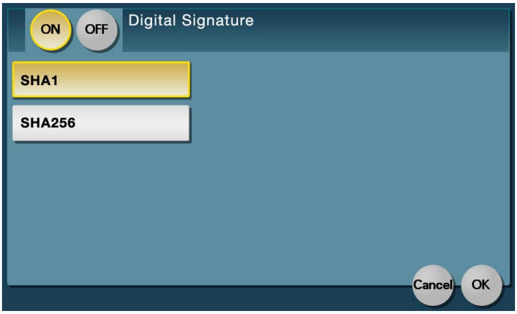
Note

This function is not available when you log in to the MFP as a public user.

3.6.2 Adding a Signature to a PDF Document

To add a signature to a PDF document, use the digital certificate registered in the PKI card.

First, select [PDF] or [Compact PDF] as the file type, and set [Digital Signature] to [ON]. Then, select [SHA1] or [SHA256] as the signature encryption level.

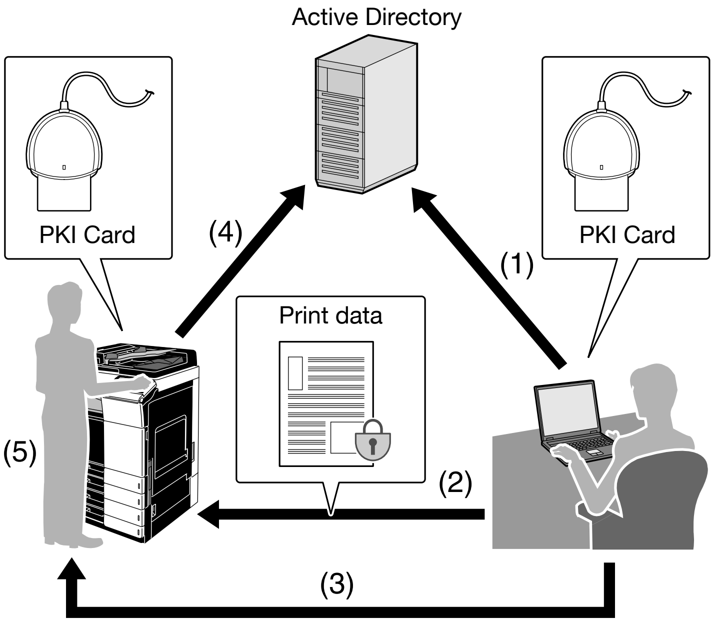


3.7 PKI Card Print

3.7.1 Overview

This function encrypts print data using the PKI card before sending the data from the printer driver to the MFP. The print data is saved in the PKI Encrypted Document User Box of the MFP, and the same user can perform authentication at the MFP with the PKI card to decrypt and print the data.

The print data is encrypted when it is sent from the printer driver and can only be printed when authentication at the MFP using the PKI card is successful; therefore, you can ensure the confidentiality of documents.



(1) Insert the PKI card into the computer to perform Active Directory authentication.

(2) Encrypt print data using the PKI card to send it from the printer driver to the MFP.

(3) Take the PKI card to the MFP.

(4) Insert the PKI card into the MFP to perform Active Directory authentication.

(5) Decrypt print data using the PKI card, and print it.

3.7.2 Installing the Printer Driver

To use PKI Card Print, install a printer driver compatible with this system in the computer.

Required System Environment

The printer drivers are available in the following environment.

Type	Page description language	Supported Operating System
PCL driver	PCL6	Windows Vista Home Basic * Windows Vista Home Premium * Windows Vista Business * Windows Vista Enterprise * Windows Vista Ultimate * Windows 7 Home Basic Windows 7 Home Premium * Windows 7 Professional * Windows 7 Enterprise * Windows 7 Ultimate * Windows 8 * /Windows 8.1 * Windows 8 Pro */Windows 8.1 Pro * Windows 8 Enterprise */Windows 8.1 Enterprise * Windows Server 2003, Standard Edition Windows Server 2003, Enterprise Edition Windows Server 2003 R2, Standard Edition Windows Server 2003 R2, Enterprise Edition Windows Server 2003, Standard x64 Edition Windows Server 2003, Enterprise x64 Edition Windows Server 2003 R2, Standard x64 Edition Windows Server 2003 R2, Enterprise x64 Edition Windows Server 2008 Standard * Windows Server 2008 Enterprise * Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows Server 2012 Datacenter Windows Server 2012 Standard Windows Server 2012 R2 Datacenter Windows Server 2012 R2 Standard * Available in 32-bit (x86) or 64-bit (x64) environment.

Type	Page description language	Supported Operating System
PS driver	PostScript 3 Emulation	Windows Vista Home Basic * Windows Vista Home Premium * Windows Vista Business * Windows Vista Enterprise * Windows Vista Ultimate * Windows 7 Home Basic Windows 7 Home Premium * Windows 7 Professional * Windows 7 Enterprise * Windows 7 Ultimate * Windows 8 * /Windows 8.1 * Windows 8 Pro */Windows 8.1 Pro * Windows 8 Enterprise */Windows 8.1 Enterprise * Windows Server 2003, Standard Edition Windows Server 2003, Enterprise Edition Windows Server 2003 R2, Standard Edition Windows Server 2003 R2, Enterprise Edition Windows Server 2003, Standard x64 Edition Windows Server 2003, Enterprise x64 Edition Windows Server 2003 R2, Standard x64 Edition Windows Server 2003 R2, Enterprise x64 Edition Windows Server 2008 Standard * Windows Server 2008 Enterprise * Windows Server 2008 R2 Standard Windows Server 2008 R2 Enterprise Windows Server 2012 Datacenter Windows Server 2012 Standard Windows Server 2012 R2 Datacenter Windows Server 2012 R2 Standard * Available in 32-bit (x86) or 64-bit (x64) environment.

Installing the printer driver

The installer enables you to easily install the printer driver by following the instructions displayed on the pages.

✎...

Note

Administrator authority is required to install the printer driver on your computer.

1 Start the installer.

2 Check the contents of the license agreement, and click [AGREE].

– If you disagree, you will not be able to install the driver.

3 Install the printer driver by following the instructions displayed on the pages.

✎...

Note

- *The printer driver installation method varies depending on how the printer driver is connected to the MFP or which protocol is used. For details, refer to the User's Guide [Print Functions] supplied together with the MFP.*
- *For details on how to uninstall the printer driver, refer to the User's Guide [Print Functions] supplied together with the MFP.*

3.7.3 Handling PKI Card Print

The following explains how to handle PKI Card Print.

✎...

Note

The PKI Encrypted Document User Box can contain up to 200 documents.

Sending print data (Printer driver setting)

Use the following steps to configure the printer driver setting when encrypting print data using the PKI card and sending it to the MFP.

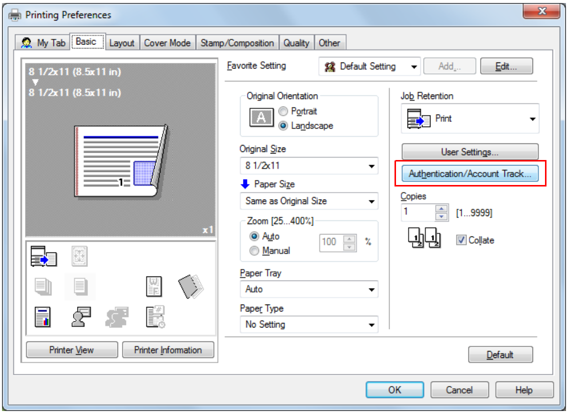
1 Click [Print] in the menu of the application software.

2 Select the desired printer.

3 Click [Properties] or [Preferences].

4 Click the [Basic] tab.

5 Click [Authentication/Account Track].



Favorite Setting: Default Setting

Original Orientation: ○ Portrait ● Landscape

Original Size: 8 1/2x11

Paper Size: Same as Original Size

Zoom [25...400%]: ● Auto ○ Manual 100 %

Paper Tray: Auto

Paper Type: No Setting

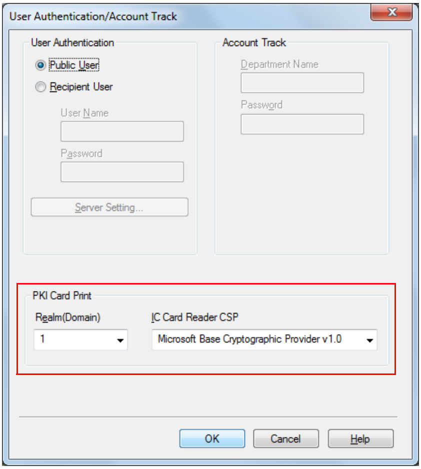
Job Retention: Print

Copies: 1 [1...9999]

☑ Collate

6 Select the [Realm(Domain)] and [IC Card Reader CSP], and click [OK].

- The value of [Realm(Domain)] corresponds to the registration number of the Active Directory. When using the Active Directory that was registered to No. 02 for authentication, set the value of [Realm(Domain)] to [2].
- PKI Card Print uses authentication information of the PKI card; therefore, it disables the authentication information specified in [User Authentication].



User Authentication/Account Track

User Authentication

● Public User

○ Recipient User

User Name

Password

Account Track

Department Name

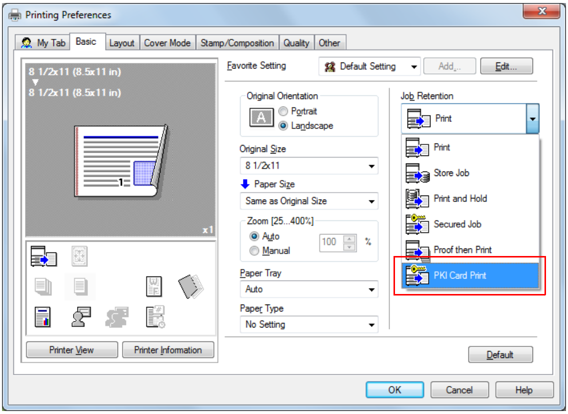
Password

PKI Card Print

Realm(Domain): 1

IC Card Reader CSP: Microsoft Base Cryptographic Provider v1.0

7 Under [Job Retention], select [PKI Card Print], and click [OK].



Printing Preferences

Favorite Setting: Default Setting

Original Orientation: ○ Portrait ● Landscape

Original Size: 8 1/2x11

Paper Size: Same as Original Size

Zoom [25...400%]: ● Auto ○ Manual 100 %

Paper Tray: Auto

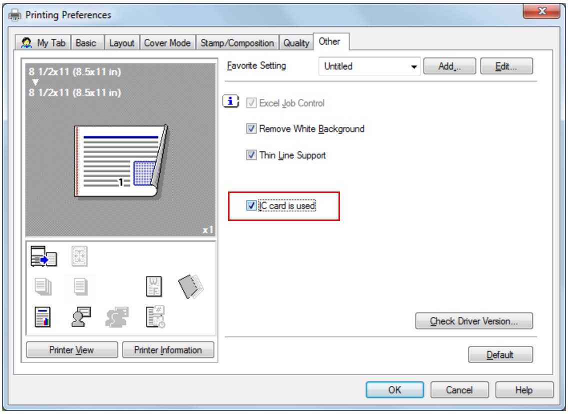
Paper Type: No Setting

Job Retention: Print

8 Send print data.

Detail

- *If the MFP is associated with PageScope Authentication Manager, and the user is not registered in PageScope Authentication Manager or the user has no print privileges, an authentication failure will occur, and the print job will be discarded.*
- *To print without using a PKI card, select the [Other] tab, and then clear the [IC card is used] check box. In this case, perform authentication according to the [User Authentication] setting in step 6. The [IC card is used] check box is selected by default. If the check box is cleared, [PKI Card Print] cannot be selected in step 7.*



Favorite Setting: Untitled (Add... / Edit...)

☑ Excel Job Control

☑ Remove White Background

☑ Thin Line Support

☑ IC card is used

MFP printing

The following explains how to print data on the MFP.

The MFP provides two printing methods: (1) printing data simultaneously with authentication and (2) selecting and printing data in the PKI Encrypted Document User Box after authentication.

- Using method (1), you can insert the PKI card into the MFP and perform authentication to easily print the relevant user's data.
- Using method (2), you can select only the required data from the PKI Encrypted Document User Box to print it. You can also delete unnecessary data.

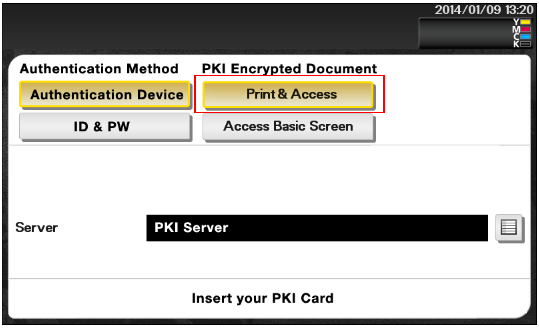
Note

- *Selecting method (1) prints all print documents stored in the user's PKI Encrypted Document User Box.*
- *The documents stored in the PKI Encrypted Document User Box are deleted automatically after 24 hours has lapsed.*
- *The printed data is deleted from the PKI Encrypted Document User Box after printing.*

<Printing data simultaneously with authentication>

When the PKI Encrypted Document User Box contains print data, [Print & Access] appears on the login screen.

➔ Tap [Print & Access], and insert the PKI card into the authentication unit attached to the MFP.



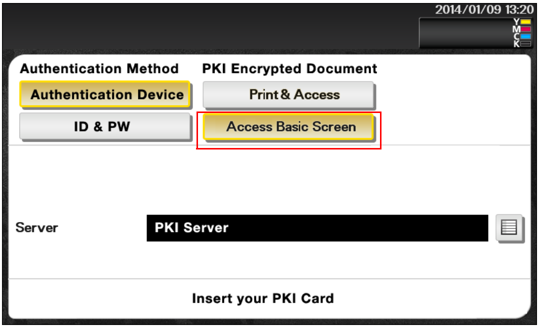
Server PKI Server

Insert your PKI Card

– If the PKI card is inserted, the PIN code entry screen appears. When authentication succeeds after entering the PIN code, the system prints all the relevant user's data and logs into the MFP.

<Selecting and printing data in the PKI Encrypted Document User Box >

1 Tap [Access Basic Screen], and insert the PKI card into the authentication unit attached to the MFP.



Server PKI Server

Insert your PKI Card

2 Enter the PIN code and to log into the MFP.

3 Tap [Document Print/Delete] - [PKI Encrypted Document].

A login user's print data list is displayed.

4 Select the desired data, and tap [Print].

– To delete data, select the data to be deleted, and tap [Delete].

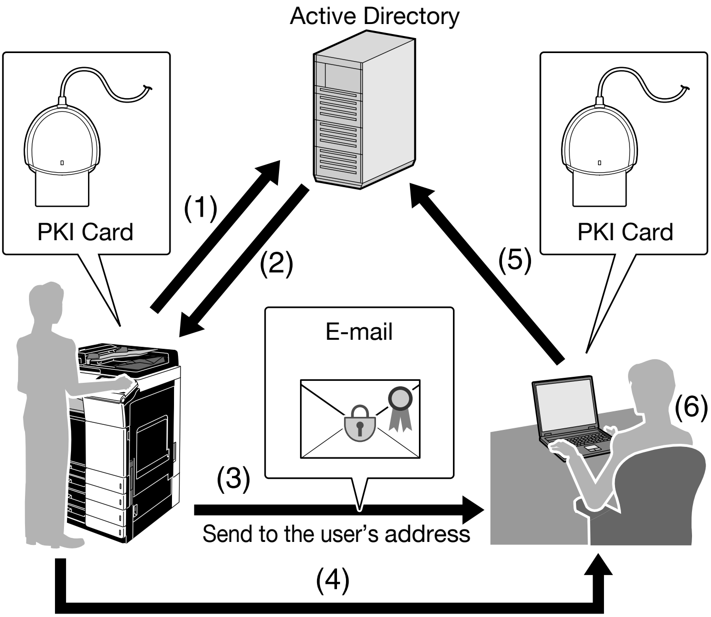
3.8 Scan To Me

3.8.1 Overview

Scan To Me is a function that sends scanned data to the user's e-mail address.

This function is useful when frequently sending scanned data to the user's address.

Using this function, the user can obtain the authenticated user's e-mail address using the LDAP protocol to easily send data to the obtained address. The user can also encrypt an e-mail using the PKI card or add a digital signature when sending an e-mail, ensuring a higher level of security.



(1) Insert the PKI card into the MFP to perform Active Directory authentication.

(2) Obtain the user's e-mail address.

(3) Send the e-mail to the user's e-mail address. If necessary, the user can use the PKI card to encrypt an e-mail or add a digital signature.

(4) Take the PKI card to the computer.

(5) Insert the PKI card into the computer to perform Active Directory authentication.

(6) Receive the e-mail. If the user encrypts an e-mail or adds a digital signature when sending, check the e-mail decoding or digital signature using the PKI card.

✎...

Note

This function is not available when you log in to the MFP as a public user.

3.8.2 Related Settings

The following explains the settings required to use the Scan To Me function.

Obtaining the E-mail address

In your environment, configure the settings required to obtain the user's e-mail address using the LDAP protocol.

E-mail TX (SMTP) setting

Configure the setting to send an e-mail from the MFP.

For details on settings, refer to the User's Guide [Applied Functions] supplied together with the MFP.

S/MIME

This function enables you to encrypt an e-mail using the PKI card or add a digital signature as required when sending an e-mail.

For details on how to handle e-mail TX using the PKI card and configure its settings, refer to "Scan to E-mail (S/MIME) Using the PKI Card" (page 35).

3.8.3 Handling Scan To Me

The following explains how to handle Scan To Me on the MFP.

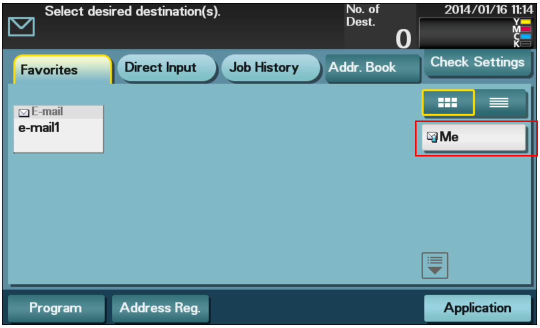
Detail

- *If the correct settings are configured to use Scan To Me, [Me] appears on the Scan to E-mail screen to send data to the user's e-mail address.*
- *If the system fails to obtain the certificate in the PKI card when encrypting the e-mail to the user's address using the PKI card, [Me] will not appear. For details on the e-mail encryption setting, refer to "Scan to E-mail (S/MIME) Using the PKI Card" (page 35).*

1 Tap [Scan to E-mail].

2 Configure Scan option settings as necessary.

3 Tap [Me].



Select desired destination(s).

4 Load the original and press the [Start] key on the control panel.

This scans the original and sends data to the user's e-mail address.

Note

For details on scan conditions, refer to the User's Guide [Scan Functions] supplied together with the MFP.

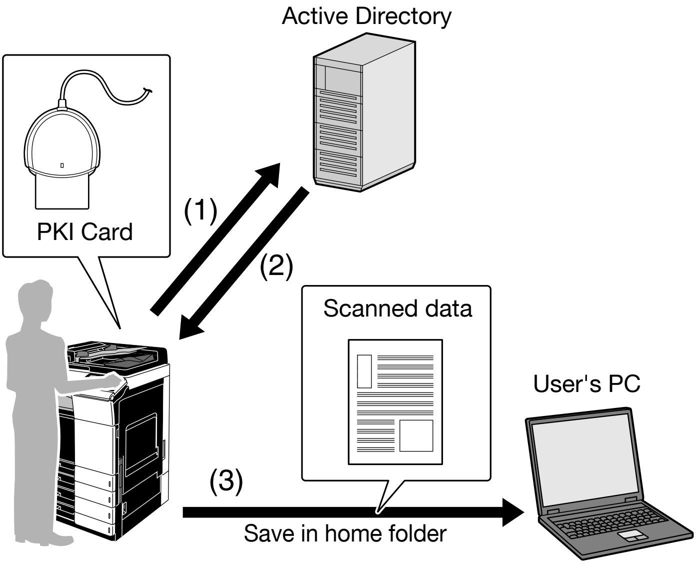
3.9 Scan To Home

3.9.1 Overview

Scan To Home is a function that sends scanned data to the user's computer.

This function is effective when frequently sending scanned data to the user's address.

The user can obtain the position of the user's Home folder from Active Directory, and easily send data to the user's Home folder. To perform authentication in the user's computer, this function uses the Kerberos authentication ticket obtained when logging into the MFP, preventing the password from being made public on the network.



(1) Insert the PKI card into the MFP to perform Active Directory authentication.

(2) Obtain the Kerberos authentication ticket and the position of the user's Home folder.

(3) Use the Kerberos authentication ticket to log into the user's computer and save scanned data in the Home folder.

✎...

Note

This function is not available when you log in to the MFP as a public user.

3.9.2 Related Settings

The following explains the settings required to use the Scan To Home function.

Obtaining the Home folder position

Configure the setting to enable the user to obtain the position of the user's Home folder from Active Directory.

SMB Client Settings

Configure the setting to perform SMB TX.

For details on how to handle SMB TX using the PKI card and configure its settings, refer to "SMB TX Using the PKI Card" (page 31).

✎...

Note

Specify the WINS server or direct hosting service to fit your environment. For details, refer to the User's Guide [Applied Functions] supplied together with the MFP.

Scan to Home Settings

Enable the Scan to Home function.

On the MFP control panel, tap [Utility] - [Administrator Settings] - [User Authentication/Account Track] - [Scan to Home Settings].

Item	Description
Scan to Home Settings	Select [ON].

3.9.3 Using Scan To Home

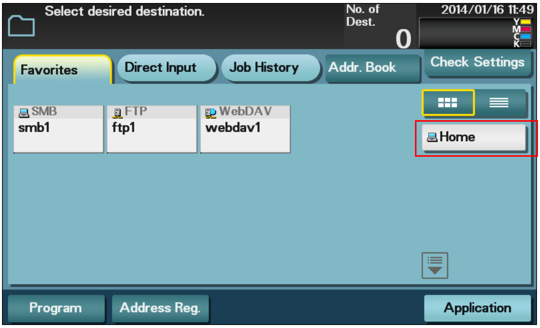
The following explains how to use Scan To Home on the MFP.

Detail

If the correct settings are configured to use Scan To Home, [Home] appears on the Scan to Folder screen to send data to the user's Home folder.

1 Tap [Scan to Folder].

2 Tap [Home].


Select desired destination.
No. of Dest. 0
2014/01/16 11:49

3 Configure Scan option settings as necessary.

4 Load the original and press the [Start] key on the control panel.

This scans the original and sends data to the user's Home folder.

Note

For details on scan conditions, refer to the User's Guide [Scan Functions] supplied together with the MFP.

4 Appendix

4.1 Product Specifications

Product name	Authentication unit (PKI-IC card type) AU-211P
Dimensions	70 mm (L) × 70 mm (W) × 10 mm (H)
Weight	60 g
Power supply	USB bus power
Range of operating temperature	0 to 50°C
Interface	Full speed USB (12 Mbps)
Connector shape	USB A type connector
Compatible card	PKI-IC card (PIV, CAC)

4.2 Cleaning the Authentication Unit

Wipe the surface using a soft, dry cloth. If the surface is still dirty, moisten a cloth with mild detergent and thoroughly wring it out before cleaning. Once the dirt has been removed, moisten a cloth with water, thoroughly wring it out, and wipe off the detergent.

✎...

Reminder

- *Remove this unit from the MFP before cleaning. Loading the USB port will result in a malfunction.*
- *Take care so that no water gets into this unit when cleaning. If water gets into this unit, it will result in a malfunction.*
- *Do not clean this unit using organic solvent such as benzene or alcohol. Doing so will result in a malfunction.*
- *Before disconnecting or connecting this unit, turn the MFP Main Power off. After 10 seconds or more have lapsed, turn the MFP Main Power on. Failing to do so may result in a malfunction.*
- *When connecting or disconnecting the USB cable, hold the plug. Failing to do so will result in a malfunction.*

4.3 Troubleshooting

If an error occurs during running, refer to the following.

Status	Point to be checked	Action
Failed to login.	Did you enter the correct PIN code?	Check the PIN code, and enter the correct one.
Cannot login.	Is the PKI card locked?	If the number of authentication failures reaches a specific limit, the PKI card will be locked to prevent the authentication. For details on how to unlock the PKI card, contact the PKI card administrator.
Scanning does not start.	Did you restart the MFP after connecting this unit to the MFP?	Turn the MFP Main Power off, disconnect the USB cable from either the MFP or this unit once, and connect it again. Wait at least 10 seconds, and turn the MFP Main Power on.

If any of the above errors recur after taking the specified action, or if other errors occur, contact your service representative.

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