



KONICA MINOLTA

# Additional Information



Giving Shape to Ideas





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## **Various Additional Functions**



# 1 Various Additional Functions

## About this guide

This guide describes the newly added or changed functions of this machine.

## 1.1 Windows Server 2016 Printer Driver

The Windows Server 2016 printer driver provides the installation method, print functions, and print methods that are the same as those for Windows Server 2012 R2. To use the Windows Server 2016 printer driver, refer to the Windows Server 2012 R2 information described in the User's guide.

## 1.2 Mac OS 10.12 Printer Driver

The Mac OS 10.12 printer driver provides the installation method, print functions, and print methods that are the same as those for Mac OS 10.11. To use the Mac OS 10.12 printer driver, refer to the Mac OS 10.11 information described in the User's guide.

## 1.3 Default Settings for Saving Original Data in a User Box

This machine allows you to configure default option settings when saving original data scanned on this machine in a User Box or on a USB flash drive.

- 1 Follow either one of the following procedures to open the document save screen.
  - [User Box] - Select a User Box. - [Save]
  - [User Box] - [System] - [External Memory] - [Save]
- 2 Set file save options if necessary.
  - For details on the option settings, refer to the User's Guide.
- 3 Tap [Check Setting].
- 4 In [Default setting when saving documents], tap [Use current settings].
  - When using the factory settings as the defaults, tap [Use factory default settings].
- 5 Tap [Yes].

### Tips

- The default option settings are common between a case to save a document in a User Box and a case to save it on a USB flash drive.

## 1.4 Restricting the Certificate to be Used on the Web Browser

When establishing SSL communications via the Web browser of this machine, you can restrict the use of the certificate signed in the SHA-1 algorithm to enhance communication safety.

A confirmation message is displayed to check whether to allow use of the certificate when establishing SSL communications with the SHA-1 certificate.

## 1.5 SMB Authentication Protocol Setting (for the administrator)

This machine supports SMB 3.0 as an authentication protocol for SMB communication.

To configure the SMB authentication protocol setting, select [Network] - [SMB Setting] - [SMB Server Settings] in the administrator mode of **Web Connection**.

Settings	Description
[SMB Authentication Protocol]	Select the SMB authentication protocol to be used in the machine. When using SMB 1.0 in the network environment, select [SMB1.0/SMB2.0/SMB3.0]. [SMB1.0/SMB2.0/SMB3.0] is specified by default.



### Tips

- The SMB authentication protocol setting can also be configured by opening **Control Panel** on the [Utility] and selecting [Administrator Settings] - [Network Settings] - [SMB Settings] - [SMB Server Settings] - [SMB Server Common Settings] - [SMB Authentication Protocol].

## 1.6 Encrypting SMB Communications

### 1.6.1 Encrypting SMB communications in the User Box

When using Auto Save Document to MFP Shared Folder as the User Box function, you can encrypt SMB communications between this machine and client machine.

To configure the setting for encrypting SMB communications in a User Box, select [Box] - [User Box List] - [New Registration] - [User Box Expansion Function] in **Web Connection**.

To configure a setting for an existing User Box, select [Box] - [User Box List] - [Edit] - [User Box Expansion Function is changed].

Settings	Description
[SMB Communication Encryption]	Select whether to encrypt SMB communications with a client machine, which are saved in the Public User Box. When SMB communications are encrypted, this machine can only be accessed from client machines based on SMB 3.0 or later. [Do not Encrypt.] is specified by default.



### Tips

- [SMB Communication Encryption] is available when the following conditions are satisfied.  
[Network] - [SMB Setting] - [SMB Server Settings] is selected in the administrator mode, and [Share SMB File] is enabled.  
In [User Box Expansion Function], [Auto Save Document to MFP Shared Folder] is set to [ON].
- To encrypt SMB communications, specify the User Box password.
- The setting for encrypting SMB communications in a User Box can also be configured by opening **Control Panel** on the [Utility] and selecting [One-Touch/User Box Registration] - [Create User Box]-[Public/Personal User Box] - [Auto Save Document to MFP Shared Folder] - [SMB Communication Encryption].



## 1.6.2 Encrypting SMB communications for Machine Auto Update (for the administrator)

When using this machine as a relay server with the machine auto update function, you can encrypt SMB communications between this machine and client machine.

To configure the setting for encrypting SMB communications of the relay server, select [Network] - [Machine Update Settings] - [Machine Auto Update Settings] - [Relay Server Function Settings] - [SMB Settings] in the administrator mode of **Web Connection**.

Settings	Description
[SMB Communication Encryption]	Select whether to encrypt SMB communications with a client machine, which are saved in the shared folder of this machine. When SMB communications are encrypted, this machine can only be accessed from client machines based on SMB 3.0 or later. [Do not Encrypt.] is specified by default.

### Tips

- The SMB communication encryption settings for machine auto update processing can also be configured by selecting [Utility] - [Administrator Settings] - [Network Settings] - [Machine Update Settings] - [Machine Auto Update setting] - [Relay Server Function Setting] - [SMB Setting] - [SMB Communication Encryption] on the **Control Panel**.

## 1.7 Filtering Setting (for the administrator)

You can restrict accesses from the network connected to this machine. There are the following methods to restrict accesses.

Method to restrict access	Description
IP Address Filtering	Restricts the devices that can access this machine in accordance with the range of IP addresses. For details, refer to page 1-6.
Quick IP Filtering	Restricts the devices that can access this machine using the IP address (IPv4/IPv6). The range of IP addresses for which access is to be restricted is specified automatically. For details, refer to page 1-8.
Packet Filtering	Restricts the reception of packets sent to this machine depending on the sender address. This method is also used to restrict a transmission depending on the destination address. For details, refer to page 1-9.
No Filtering	Carries out no filtering.

## 1.8 Restricting Accesses to this Machine using the IP Address (for the administrator)

### IPv4 address filtering

The computers' access to this machine can be controlled via IP address. This is called "IP address filtering".

You can specify both IPv4 addresses that are allowed to access this machine and those refused to access the machine.

- 1 In the administrator mode of **Web Connection**, select [Network] - [TCP/IP Setting] - [IP Address Filtering], then configure the following settings.

Settings	Description
[IPv4 Filtering (Permit Access)]	Select [Enable] to specify IPv4 addresses that allow access. Also enter the range of IPv4 addresses that allow access. To allow access from a single IPv4 address, you can only enter the address in one side of the range. <ul style="list-style-type: none"> <li>• Example of entry: "192.168.1.1"</li> </ul> [Disable] is specified by default.
[IPv4 Filtering (Deny Access)]	Select [Enable] to specify IPv4 addresses refused to access. Also enter the range of IPv4 addresses. To refuse access from a single IPv4 address, you can only enter the address in one side of the range. <ul style="list-style-type: none"> <li>• Example of entry: "192.168.1.1"</li> </ul> [Disable] is specified by default.

- 2 Select [Network] - [TCP/IP Setting] - [Filtering Type] - [IP Address Filtering], then click [OK].

#### Tips

- The IP address filtering setting can also be configured by opening [Utility] on the **Control Panel** and selecting [Administrator Settings] - [Network Settings] - [TCP/IP Settings] - [Filtering Settings] - [IP Address Filtering].

## IPv6 address filtering

The computers' access to this machine can be controlled via IP address. This is called "IP address filtering". You can specify both IPv6 addresses that are allowed to access this machine and those refused to access the machine.

- 1 In the administrator mode of **Web Connection**, select [Network] - [TCP/IP Setting] - [IP Address Filtering], then configure the following settings.

Settings	Description
[IPv6 Filtering (Permit Access)]	Select [Enable] to specify IPv6 addresses that allow access. Also enter the range of IPv6 addresses that allow access. Prefix-specified format: ****.****.****.****.****.****.****.****/@ Available range for entering asterisk "*": Hexadecimal characters Available range for entering symbol "@": 3 to 128 [Disable] is specified by default.
[IPv6 Filtering (Deny Access)]	Select [Enable] to specify IPv6 addresses refused to access. Also enter the range of IPv6 addresses. Prefix-specified format: ****.****.****.****.****.****.****.****/@ Available range for entering asterisk "*": Hexadecimal characters Available range for entering symbol "@": 3 to 128 [Disable] is specified by default.

- 2 Select [Network] - [TCP/IP Setting] - [Filtering Type] - [IP Address Filtering], then click [OK].

### Tips

- The IP address filtering setting can also be configured by opening [Utility] on the **Control Panel** and selecting [Administrator Settings] - [Network Settings] - [TCP/IP Settings] - [Filtering Settings] - [IP Address Filtering].

## 1.9 Automatically Setting the IP Address for Restricting Accesses to this Machine (for the administrator)

If the quick IP filtering function is employed, the range of the IP addresses accessible to this machine is set automatically, enabling you to quickly specify access restrictions.

- 1 In the administrator mode of **Web Connection**, select [Network] - [TCP/IP Setting] - [Quick IP Filtering], then configure the following settings.

Settings	Description
[Quick IP Filtering]	Select a method to determine the address range in which accesses are to be restricted. For details on setting items, refer to the explanation of the quick IP filtering in the User's Guide.

- 2 Select [Network] - [TCP/IP Setting] - [Filtering Type] - [Quick IP Filtering], then click [OK].

### Tips

- If the quick IP filtering function is used, the range of IP addresses for which access is to be restricted is specified automatically. To manually specify the range of IP addresses for which access is to be restricted, set [Network] - [TCP/IP Setting]-[IP Address Filtering] or [Packet Filtering] instead of using [Quick IP Filtering].
- The quick IP filtering setting can also be configured by opening [Utility] on the **Control Panel** and selecting [Administrator Settings] - [Network Settings] - [TCP/IP Settings] - [Filtering Settings] - [Quick IP Filtering].

## 1.10 Restricting Packet Transfer (for the administrator)

### 1.10.1 Configuring the packet filtering setting

#### Registering a filter

Restricts the reception of packets sent to this machine depending on the sender address. This method is also used to restrict a transmission depending on the destination address.

- 1 In the administrator mode of **Web Connection**, select [Network] - [TCP/IP Setting] - [Packet Filtering] - [Create], then configure the following settings.

Settings	Description
[Address Type]	Select an address type of the target packet.
[Start Address]	<p>Specify the address range to apply filtering to.</p> <ul style="list-style-type: none"> <li>• If [IPv4] is selected in [Address Type], specify the start address of the IPv4 address range. You can also specify the broadcast address or multi-cast address. Format: ".*.*.*" <ul style="list-style-type: none"> <li>For "*", specify a value between 0 and 255.</li> </ul> <p>The address range can also be specified using the IPv4 address and prefix length. In this case, the address range that matches bits in the prefix part is targeted for filtering. Format: ".*.*.*/*@" <ul style="list-style-type: none"> <li>For "*", specify a value between 0 and 255. For "@", specify a value between 1 and 31.</li> </ul> </p> </li> <li>• If [IPv6] is selected in [Address Type], specify the address range based on the IPv6 address and prefix length. You can also specify the multi-cast address. Format: "*****.*****.*****.*****.*****.*****.*****.*****/*@" <ul style="list-style-type: none"> <li>For "*", specify a hexadecimal number. For "@", specify a value between 1 and 127.</li> </ul> </li> <li>• If [MAC Address] is selected in [Address Type], specify the MAC address. In this case, only a single address is targeted for filtering. You cannot specify the address range. Format: "**.*.*.*.*.*.*.*.*" <ul style="list-style-type: none"> <li>For "*", specify a hexadecimal number.</li> </ul> </li> </ul>
[Finish Address]	<p>If [IPv4] is selected in [Address Type], specify the end address of the IPv4 address range for filtering. When not specifying [Finish Address], only the address specified in [Start Address] is targeted for filtering. Format: ".*.*.*" <ul style="list-style-type: none"> <li>For "*", specify a value between 0 and 255.</li> </ul> <p>When the prefix length of the IPv4 address is specified in [Start Address], the end address cannot be specified.</p> </p>
[Receive/Send]	<p>Select a communication direction of the target packet.</p> <ul style="list-style-type: none"> <li>• [Receive]: Restricts packets to be received by this machine depending on the sender address.</li> <li>• [Send]: Restricts packets to be sent by this machine depending on the destination address.</li> </ul> <p>If [MAC Address] is selected in [Address Type], you cannot set to [Send].</p>
[Allow/Denied]	Select whether to allow or deny communications of the target packet.

- 2 In the administrator mode, select [Network] - [TCP/IP Setting] - [Packet Filtering], then configure the following settings.

Settings	Description
[TX/RX address out of range]	Select whether to allow a transfer of packets to which the registered filter is not applied. [Allow] is specified by default.

- 3 Select [Network] - [TCP/IP Setting] - [Filtering Type] - [Packet Filtering], then click [OK].

**NOTICE**

*Note that you cannot connect from your computer to this machine using **Web Connection** if your computer's address is set to the target for which a reception or transmission is not allowed.*

## Exporting a filter

Export the packet filtering setting to a file.

This function is available when editing the filter setting using a computer.

**1** In the administrator mode of **Web Connection**, select [Network] - [TCP/IP Setting] - [Packet Filtering] - [Export], then click [OK].

**2** Click [Download].

This starts downloading the configuration file.



### Tips

- Filter export processing can also be performed by opening [Utility] on the **Control Panel** and selecting [Administrator Settings] - [Network Settings] - [TCP/IP Settings] - [Filtering Settings] - [Packet Filtering] - [Export].

## Importing a filter

Import the packet filtering setting from a file.

This function is available when editing the filter setting exported from this machine using a computer before importing it.

**1** In the administrator mode of **Web Connection**, select [Network] - [TCP/IP Setting] - [Packet Filtering] - [Import] - [Browse], then select a configuration file for the filter.

**2** Click [OK] on the [Import] screen.

The import result is displayed.



### Tips

- Filter import processing can also be performed by opening [Utility] on the **Control Panel** and selecting [Administrator Settings] - [Network Settings] - [TCP/IP Settings] - [Filtering Settings] - [Packet Filtering] - [Import].

## 1.10.2 Obtaining packet filtering logs

### Recording logs

You can obtain logs of the packet for which reception or transmission is denied by filtering.

To record logs, select [Network] - [TCP/IP Setting] - [Packet Filtering] - [Log settings] in the administrator mode, then set [Log settings] to [Enable] (default: [Disable]).

If you click [Log details], the latest 50 logs are displayed.

#### Tips

- The packet filtering log setting can also be configured by opening [Utility] on the **Control Panel** and selecting [Administrator Settings] - [Network Settings] - [TCP/IP Settings] - [Filtering Settings] - [Packet Filtering Settings] - [Log settings].

### Downloading logs

Download the packet filtering log file to the computer.

- 1 In the administrator mode of **Web Connection**, select [Network] - [TCP/IP Setting] - [Packet Filtering] - [Log settings], then enter the number of logs to be downloaded in [Number of Lines].
- 2 Click [Save Log].
- 3 Click [OK].
- 4 Click [Download].

This starts downloading the log file.



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## **Serverless Pull Printing Function**



## 2 Serverless Pull Printing Function

### 2.1 Introduction

This chapter describes changed or added functions of the Serverless Pull Printing functions.

For details on functions omitted in this chapter, refer to the User's Guide.

### 2.2 Serverless Pull Printing

Serverless pull printing is a function that executes print jobs stored from the user computer to the MFP through any MFP in a serverless pull printing group composed of multiple MFPs.

A single serverless pull printing group can include 10 MFPs.

Up to 10 groups can be associated via the topology machine for each serverless pull printing group. This allows you to print jobs spooled in an MFP under another serverless pull printing group that this machine does not join.

Assign one of the following roles to each of the MFPs composing a serverless pull printing group as needed.

Role	Description
Topology machine	Used to associate multiple serverless pull printing groups with each other. The topology machine sends information of the serverless pull printing group this machine joins to another serverless pull printing group and receives information from another serverless pull printing group while sharing information between serverless pull printing groups. One serverless pull printing group must be assigned to one topology machine.
Storage machine	Used to save print jobs executed by the user, and to process the saved print jobs upon request from a client machine. Up to 100 documents can be stored as print jobs on one storage machine for each user. In total, the HDD capacity is 5 GB, and up to 10,000 documents can be stored on one storage machine. Up to 30 storage machines can be registered in total for all serverless pull printing groups.
Client machine	Used to perform operations (display, printing, or deletion of a file list) for print jobs saved in the storage machine.

To assign roles to an MFP in a serverless pull printing group, be sure to note the following points.

- A single MFP can be assigned to both roles of storage machine and client machine.
- A single MFP can be assigned to both roles of topology machine and client machine.
- A single MFP cannot be assigned to both roles of topology machine and storage machine.



#### Reference

For the options required to use the Serverless Pull Printing function, refer to the User's Guide.

## 2.3 Preparation for Serverless Pull Printing

### 2.3.1 Preparation workflow

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#### MFP settings

- **Registering the i-Option LK-114 license**
  - Register the **i-Option LK-114** license on the MFP to enable the serverless pull printing function. For details, refer to the User's Guide.
- **Enabling the OpenAPI function**
  - You can use this function with the default settings unless requested otherwise. For details, refer to the User's Guide.
- **Permitting the quick authentication**
  - When composing a serverless pull printing group involving different models, permit quick authentication. For details, refer to the User's Guide.



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#### Setting the topology, storage, and client functions on each MFP composing a serverless pull printing group

- **Configuring the topology function**
  - Enable the topology function on the MFP to be set to a topology machine. Also, specify the name of the serverless pull printing group that the MFP set to a topology machine joins. For details, refer to page 2-10.
- **Configuring the storage function**
  - Enable the storage function on the MFP to be set to a storage machine. For details, refer to page 2-11.
  - Specify the serverless pull printing group that the MFP set to a storage machine joins. For details, refer to page 2-12.
- **Configuring client function**
  - Enable the client function on the MFP to be set to a client machine. For details, refer to page 2-11.
  - Specify the serverless pull printing group that the MFP set to a client machine joins. For details, refer to page 2-12.
- **Associating with another serverless pull printing group**
  - To associate multiple serverless pull printing groups, set the target serverless pull printing groups using **Web Connection**. For details, refer to page 2-13.



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#### Installing LK-114\_ManagerPort and printer driver

- **Installing LK-114\_ManagerPort**
  - For details, refer to the User's Guide.
- **Installing the printer driver**
  - For details, refer to the User's Guide.
- **Setting up LK-114\_ManagerPort**
  - Configure printer port settings. For details, refer to page 2-14.



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**Preparation finished.**

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## 2.4 LK-114\_SetupTool (for the administrator)

### 2.4.1 LK-114\_SetupTool



**LK-114\_SetupTool** allows you to set only the configuration of the topology machine in a serverless pull printing group.

After setting the configuration of the topology machine in the serverless pull printing group using **LK-114\_SetupTool**, when you want to add a storage or client machine to the serverless pull printing group or change the configuration of storage and client machines in the serverless pull printing group, use the Control Panel of the MFP. To associate multiple serverless pull printing groups, set the target serverless pull printing groups using **Web Connection**.

### 2.4.2 LK-114\_SetupTool screen layout







#### Screen layout

The **LK-114\_SetupTool** page is comprised of the following components.

Item	Description
	Updates the contents of the MFP list.
	Click this to enter the IP address or host name to add an MFP.
MFP list	Displays MFPs that support serverless pull printing.
[Create a Group]	Creates a serverless pull printing group. This item is only available for the configuration of the topology machine in a serverless pull printing group.
[The structure of the selected group will be changed]	To change the configuration of a serverless pull printing group, use the Control Panel of the MFP or <b>Web Connection</b> .
[The selected group will be deleted]	Deletes a serverless pull printing group.
[Synchronize Group Settings]	Synchronizes a serverless pull printing group that is not registered in <b>LK-114_SetupTool</b> .
[bizhub Settings]	Displays the serverless pull printing settings (storage setting, client setting, and topology setting) of the MFP you selected from the MFP list.
[Group Settings]	Displays the serverless pull printing group settings of the MFP you selected from the MFP list.
[Login]	Available when an MFP displaying the lock icon is selected. This function individually authenticates MFPs that do not match the administrator password specified in <b>LK-114_SetupTool</b> and MFPs for which serverless pull printing settings are not acquired by authentication, and retrieves serverless pull printing settings.
[Change the setting for serverless pull printing]	Changes serverless pull printing settings of the MFP you selected from the MFP list.
[Setting values will be synchronized]	Synchronizes setting values when the serverless pull printing settings configured with <b>LK-114_SetupTool</b> do not match the settings of the MFP.
[Batch registration]	Register the MFPs imported from the serverless pull printing group configuration file. For details on how to create a serverless pull printing group configuration file, refer to page 2-9.

## Icon types

The following types of icons are displayed in the MFP list.

Item	Description
	Indicates that the storage function is enabled.
	Indicates that the client function is enabled.
	Indicates that the topology function is enabled.
	Indicates that both the topology and client functions are enabled.
	Indicates that both the storage and client functions are enabled.
No icon displayed	Indicates that all functions are disabled.
	Indicates that the current serverless pull printing settings cannot be viewed due to administrator passwords that do not match or other reasons. This icon is referred to as a "lock icon" in the manual.

## Administrator Settings

The **LK-114\_SetupTool** Administrator Settings page is comprised of the following components.

Item	Description
[Default Administrator Password]	Specify the default administrator password. The value specified in this field is displayed as the default on a page that requires entry of the administrator password.
[OpenAPI Authentication Default Settings]	Specify the default user name and password for OpenAPI authentication. Specify them when using the user name and password for OpenAPI authentication. The value specified in this field is displayed as the default on a page that requires entry of the user name and password for OpenAPI authentication.
[Connection Settings]	Configure communication settings such as MFP search time or communication timeout (sec.) between MFP and <b>LK-114_SetupTool</b> .
[Initial setting for serverless pull printing]	Specify the default values that are to be sent to an MFP with new serverless pull printing settings required.

### 2.4.3 Creating a serverless pull printing group

Create a serverless pull printing group on an MFP that is not set to a serverless pull printing group.

**LK-114\_SetupTool** allows you to set only the configuration of the topology machine in the serverless pull printing group.

- 1 Click [Create a Group].
- 2 Enter the serverless pull printing group name in [Group name], select the check box of the MFP to be set to a topology machine in the serverless pull printing group, then click [OK].
  - Specify the serverless pull printing group name using up to 16 single-byte characters or 8 double-byte characters.
- 3 Select the [Topology Manager Function] check box, then click [OK].
- 4 Enter the MFP administrator password and the OpenAPI user name and password, then click [OK].
  - When not using the user name and password for OpenAPI authentication, only enter the administrator password.A serverless pull printing group is created.
- 5 Click [Close].



#### Tips

- After setting the configuration of the topology machine in the serverless pull printing group using **LK-114\_SetupTool**, when you want to add a storage or client machine to the serverless pull printing group or change the configuration of storage and client machines in the serverless pull printing group, use the Control Panel of the MFP. To associate multiple serverless pull printing groups, set the target serverless pull printing groups using **Web Connection**.
- A serverless pull printing group cannot be structured over WAN.
- When using the MFP, which is available in both the wired LAN environment and wireless LAN environment by installing the optional Wireless LAN Interface Kit, as the storage machine for serverless pull printing, assign a serverless pull printing group to the wired network interface of the storage machine.

### 2.4.4 Changing the serverless pull printing group configuration

To change the configuration of a serverless pull printing group, use the Control Panel of the MFP or **Web Connection**.

## 2.5 LK-114\_Editor for SetupTool (for the administrator)

### 2.5.1 System Environment Requirements

LK-114\_Editor for SetupTool requires the following system environments.

Item	Specifications
Operating system	Windows Vista Home Basic (Service Pack 2 or later)* Windows Vista Home Premium (Service Pack 2 or later)* Windows Vista Ultimate (Service Pack 2 or later)* Windows Vista Business (Service Pack 2 or later)* Windows Vista Enterprise (Service Pack 2 or later)* Windows 7 Home Premium (Service Pack 1 or later)* Windows 7 Professional (Service Pack 1 or later)* Windows 7 Enterprise (Service Pack 1 or later)* Windows 7 Ultimate (Service Pack 1 or later)* Windows 8.1* Windows 8.1 Pro* Windows 8.1 Enterprise* Windows 10 Home * Windows 10 Pro* Windows 10 Enterprise* Windows 10 Education * * Supports the 32-bit (x86) or 64-bit (x64) environment.
Software	Microsoft .NET Framework 4.5 or later
System	Any processor of the same or higher specifications as recommended for your operating system HDD space: 100 MB or more
Monitor	1024 × 768 pixels or more




## 2.5.2 Creating a serverless pull printing group configuration file in a local environment

A serverless pull printing group can be created in a local environment in which the MFP is not connected to the network.

Use **LK-114\_Editor for SetupTool** to specify information such as the IP address of the MFP to be set to a topology machine in a serverless pull printing group, and create a serverless pull printing group configuration file.

When the configuration file is loaded using **LK-114\_SetupTool**, a serverless pull printing group can be registered.

- ✓ **LK-114\_Editor for SetupTool** allows you to set only the configuration of the topology machine in a serverless pull printing group.
  - ✓ Before starting the procedure, check the IP address or host name, administrator password, OpenAPI user name, and OpenAPI password of the MFP to be set to a topology machine in the serverless pull printing group.
- 1 Use **LK-114\_SetupTool** to export the serverless pull printing group configuration file.
    - For details, refer to the User's Guide.
  - 2 Double-click [LK114EditorForSetupTool.exe].  
**LK-114\_Editor for SetupTool** starts.
  - 3 Click [Read an import file].
  - 4 Select a serverless pull printing group configuration file, then click [Open].
  - 5 In [Device Setting Information], enter the information of the MFP to be set to a topology machine in the serverless pull printing group.
    - [Group name]: Enter the name of the serverless pull printing group to add the MFP to. Specify the serverless pull printing group name using up to 16 single-byte characters or 8 double-byte characters.
    - [Device IP Address/Host Name]: Enter the IP address or host name of the MFP.
    - [Administrator password], [OpenAPI User Name], [OpenAPI Password]: Enter the administrator password, OpenAPI user name, and OpenAPI password of the MFP.
  - 6 Select [ON] in [Topology Manager Function].
    - [Timeout (From topology management device) (sec.)]: Specify the timeout for a communication from the topology machine when using this machine as the topology machine.
    - [Timeout (To topology management device) (sec.)]: Specify the timeout for a communication to the topology machine when using this machine as a client machine.
  - 7 Click [Add].  
MFP information is displayed in the list at the bottom of the screen.
  - 8 Click [Create an import file].
    - Specify the folder to save data in, then enter the file name.  
A configuration file is created.
  - 9 Start **LK-114\_SetupTool** to load the configuration file.
    - For details on how to load the configuration file, refer to the User's Guide.
-  **Tips**
- To change setting information of an already added MFP, select the desired MFP from the list, then change the setting in [Device Setting Information]. Change the setting, then click [Apply].

## 2.6 Serverless Pull Printing Setting on the Control Panel (for the administrator)

### 2.6.1 Configuring the topology function

Configure the topology function setting using the Control Panel of the MFP. When the topology function setting is enabled, the MFP that enabled the topology function can manage configuration information of the serverless pull printing group.

Tap [Utility] - [Administrator Settings] - [System Connection] - [Serverless Pull Printing Setting] - [Topology Function Setting], then configure the following settings.

Settings	Description
[Topology Function Enable Settings]	Select whether to use the topology function. To use the topology function, select [Enable].
[Serverless Pull Printing Group Setting]	Specify the name of the serverless pull printing group that this machine joins. This option is available when [Topology Function Enable Settings] is set to [Enable].
[Connection Timeout Setting]	Specify the timeout to make an inquiry from the topology machine to another MFP. This option is available when [Topology Function Enable Settings] is set to [Enable].
[Rebuild Serverless Pull Printing Group]	Reconfigures the configuration list of the serverless pull printing group that this machine joins. This option is used to update information of the configuration list in a case where the MFP in the serverless pull printing group is removed or in other cases. This option is available when [Topology Function Enable Settings] is set to [Enable].

#### Tips

- The topology function can also be configured by selecting [System Settings] - [Universal Print Settings] - [Topology Function Setting] in the administrator mode of **Web Connection**.

## 2.6.2 Configuring the storage function

Configure the storage function using the Control Panel of the MFP. If the storage function is enabled, you can spool print jobs sent from a computer on the storage machine.

Tap [Utility] - [Administrator Settings] - [System Connection] - [Serverless Pull Printing Setting] - [Store Print Documents Settings] to configure the following settings.

Settings	Description
[Store Print Documents Usage Settings]	Select whether to use the storage function. When you want to use the storage function, select [Enable].
[Delete after Print Setting]	Select whether to automatically delete print jobs spooled on the storage machine each time they are executed. This item is available when [Store Print Documents Usage Settings] is set to [Enable].
[Document Delete Time Setting]	Specify the time required to automatically delete print jobs spooled on the storage machine. This item is available when [Store Print Documents Usage Settings] is set to [Enable].
[Delete All Documents]	Deletes all print jobs spooled on the storage machine. This item is available when [Store Print Documents Usage Settings] is set to [Enable].

### Tips

- The storage function can also be configured by selecting [System Settings] - [Universal Print Settings] - [Store Print Documents Settings] in the administrator mode of **Web Connection**.

## 2.6.3 Configuring the client function

Configure the client function using the Control Panel of the MFP. Enabling the client function allows you to execute print jobs spooled on the storage machine through the MFP with the client function enabled.

Tap [Utility] - [Administrator Settings] - [System Connection] - [Serverless Pull Printing Setting] - [Client Function Setting] to configure the following settings.

Settings	Description
[Client Function Usage Settings]	Select whether to use the client function. When you want to use the client function, select [Enable].
[Protocol Setting]	Select [IPP] or [Raw port] as the protocol used to connect to the storage machine. This item is available when [Client Function Usage Settings] is set to [Enable].
[Connection Timeout Setting]	Specify the timeout to connect to the storage device. This item is available when [Client Function Usage Settings] is set to [Enable].

### Tips

- The client function can also be configured by selecting [System Settings] - [Universal Print Settings] - [Client Function Setting] in the administrator mode of **Web Connection**.

## 2.6.4 Joining the serverless pull printing group

When this machine is used as a storage machine or client machine, specify the serverless pull printing group this machine joins.

Tap [Utility] - [Administrator Settings] - [System Connection] - [Serverless Pull Printing Settings] - [Group settings], then configure the following settings.

Settings	Description
[Serverless Pull Printing Group Setting]	Specify the serverless pull printing group that this machine joins. <ul style="list-style-type: none"> <li>• [Serverless Pull Printing Group Name]: Enter the name of the serverless pull printing group.</li> <li>• [Address]: Enter the IP address or host name of the topology machine in the serverless pull printing group.</li> </ul>
[Connection Timeout Setting]	Specify the timeout to make an inquiry regarding the topology machine.

### Tips

- The setting of the serverless pull printing group this machine joins can also be configured by selecting [System Settings] - [Universal Print Settings] - [Topology Function Setting] in the administrator mode of **Web Connection**.
- On the client machine, [Group settings] is available when the topology function is disabled.
- It takes approximately 20 seconds to complete sharing of information between serverless pull printing groups in the topology machine after executing [Group settings].

## 2.6.5 Checking the status of the serverless pull printing group

You can check the status of each MFP included in the serverless pull printing group that this machine joins.

Tap [Utility] - [Administrator Settings] - [System Connection] - [Serverless Pull Printing Settings] - [Status of devices in Group] to display a list of the addresses and connection states of MFPs included in the group.

To confirm the details, select the desired MFP in the list, then tap [Details].

### Tips

- The status of the serverless pull printing group can also be checked by selecting [System Settings] - [Universal Print Settings] - [Domain group list] in the administrator mode of **Web Connection**.

## 2.7 Associating with Another Serverless Pull Printing Group (for the administrator)

When associating with another serverless pull printing group, you can access **Web Connection** of the topology machine to configure settings.

To configure the setting of the serverless pull printing group to be associated, select [System Settings] - [Universal Print Settings] - [Topology Function Settings] in the administrator mode of **Web Connection**.

Settings	Description
[Topology Group Settings]	Specify the serverless pull printing group to be associated. The host name, IPv4 address, and IPv6 address of this machine (topology machine) are displayed in the drop-down list of [Group1]. In [Group2] to [Group10], enter the IP address or host name of the topology machine in the serverless pull printing group to be associated. When entering the host name, select the [Please check to enter host name.] check box.

## 2.8 Setting up LK-114\_ManagerPort

Set up **LK-114\_ManagerPort**. Print jobs can be sent to the storage machine by selecting the printer for which **LK-114\_ManagerPort** is set as the port when making prints.

- ✓ Check that **LK-114\_ManagerPort** is installed.
- 1 Open the **LK-114\_ManagerPort** setting screen.
  - For information on how to open the setting screen, refer to the User's Guide.
- 2 In [LK-114 Destination Domain], specify the topology machine to obtain the serverless pull printing group list.
  - Enter the IP address of the topology machine.
  - If destination information is stored, you can select the desired topology machine from the drop-down list.
- 3 Click [Acquire Group Information].
- 4 In [Destination Group], select the serverless pull printing group you want to send print jobs to.
  - To obtain group information again and update the contents of the drop-down list, click [Update Group Information].
- 5 Save the configured destination information as needed.
  - Click [Save Destination Information], then specify the destination name for management.
  - Clicking [Manage Saved Destination Information] displays the destination information management screen. On this screen, you can change the destination name or delete destination information.
- 6 If a change is made in the SNMP setting or OpenAPI setting of the storage machine, click [Communication Settings], then configure a setting for communications with the storage machine.
- 7 Click [Change Printer Port Which Printer Users].
- 8 Change the port of the target printer to [LK-114\_ManagerPort], then click [OK].
  - When the printer driver is installed using the **LK-114\_InstallTool**, make sure that [LK-114\_ManagerPort] is being selected.
- 9 Click [OK].

### Tips

- The computer's administrator privileges are required to change the printer port.
- Destination information can be imported from the file. Click [Update to Destination Information Distributed by Your Administrator], then select the desired destination information file.
- If destination information is saved using **LK-114\_ManagerPort**, the serverless pull printing group of the destination can be switched depending on the location in which serverless pull printing is to be performed.

## 2.9 Creating LK-114\_InstallTool (for the administrator)

### Creating LK-114\_InstallTool

Create **LK-114\_InstallTool** to be distributed to the user's computer using **LK-114\_InstallerCreateTool**.

Copy **LK-114\_InstallerCreateTool** to any folder on the computer in advance.

- ✓ This task requires the user ID, Windows domain name, and password of the user with the computer's administrator privileges.

- 1 Open the [LK-114\_InstallerCreateTool] folder, then double-click [InstCreator.exe].  
**LK-114\_InstallerCreateTool** starts.
- 2 In [Specify access rights for installation on a client PC], set privileges to install **LK-114\_ManagerPort**.
  - If the user who executes **LK-114\_InstallTool** has no administrator privileges on their own computer, enter [User ID], [Domain], and [Password] of the user who has administrator privileges.
  - If the user who executes **LK-114\_InstallTool** has administrator privileges on their own computer, clear the [Specify access rights for installation on a client PC] check box. This carries out installation using the privileges of the user who executed [invoke.exe] of **LK-114\_InstallTool**.
- 3 In [Installation operation of the user], select whether the user will need to configure the printer driver and **LK-114\_ManagerPort** settings.
  - If [Automatically perform all] is selected, the user does not need to configure settings.
  - To enable **LK-114\_ManagerPort** to use the printer driver that has already been installed on the user computer, select [Automatically perform all], select the [The installed printer port which name is partially matched the following string, port is changed to the LK-114\_Manager Port] check box, then enter the printer driver name in the text box.
  - To display the **LK-114\_ManagerPort** setting screen after the **LK-114\_ManagerPort** installation has been completed, select the [Display ManagerPort setting after the installation is complete.] check box.
  - When the user configures settings, select [User selects a printer driver to be installed and sets ManagerPort Settings.].
- 4 In [Enter the setting when sending a print job to the server device.], configure settings to send print jobs.
  - In [Settings], configure destination information of **LK-114\_ManagerPort**.  
[Destination Name]: Enter the destination name for management.  
[Topology Device IP Address]: Enter the IP address of the topology machine to obtain the serverless pull printing group list.  
[Topology device IP Address of the Group You Belong To]: Enter the IP address of the topology machine of the serverless pull printing group you want to send print jobs to.
  - When you want to import destination information from a file, click [Import Setting File], then select a destination information file.
  - If a change is made in the SNMP setting or the OpenAPI setting of the storage machine, click [Communication Settings], then configure a setting for communications with the storage machine.
- 5 In [Include the printer driver in the installer], specify whether to package the printer driver in **LK-114\_InstallTool**.
  - To package the printer driver in **LK-114\_InstallTool**, select the check box for [Include the printer driver in the installer], then click [Add a driver]. Proceed to step 6.
  - When not including the printer driver in **LK-114\_InstallTool**, clear the [Include the printer driver in the installer] check box. Go to Step 8.
- 6 Specify the folder created using **Driver Packaging Utility**, select the printer driver setup file (exe), then click [Open].
  - Specify the printer driver compatible with the user computer.
- 7 In [Driver], select the check box for the printer driver to be packaged.
  - In [Driver name], change the name of the printer driver setup file (exe) as necessary.

8 Click [Create an installer].

**LK-114\_InstallTool** is created. When creation is completed, the creation completion window is displayed.

9 Click [OK].

The [LK-114\_InstallTool\_YYYYMMDDHHMMSS] folder is created in the [LK-114\_InstallerCreateTool] folder. "YYYYMMDDHHMMSS" indicates the date and time when **LK-114\_InstallTool** has been created.



### Reference

*For details on the destination information file, refer to page 2-17.*



## 2.10 Destination Information File (for the administrator)

The destination information file is an xml file that contains information regarding connecting the computer to a serverless pull printing group.

Creating a destination information file reduces the number of steps required to enter destination information in the **LK-114\_InstallerCreateTool** or **LK-114\_ManagerPort** settings.

The xml hierarchical structure of the destination information file is as follows.

```

1 ----- <?xml version="1.0" encoding="UTF-8"?>
      - <UserSettings>
        - <ConfigurationSetting>
2 ----- <ShowManagerPort>false</ShowManagerPort>
        - <ConnectionInformation>
          - <DomainInfoList>
3 ----- <DomainInformation>
4 ----- <DomainName>Site1</DomainName>
5 ----- <DomainIPAddress>192.168.1.10</DomainIPAddress>
6 ----- <MIBOff>false</MIBOff>
7 ----- <SelectedGroupInfo>
8 ----- <GroupName>GroupA</GroupName>
9 ----- <TMIPAddress>192.168.1.11</TMIPAddress>
          </SelectedGroupInfo>
        - <GroupInfoList>
10 ----- <GroupInfo>
11 ----- <GroupName>GroupA</GroupName>
12 ----- <TMIPAddress>192.168.1.11</TMIPAddress>
          - <TargetDeviceList>
13 ----- <TargetDeviceIP>192.168.1.12</TargetDeviceIP>
          </TargetDeviceList>
        </GroupInfo>
      </GroupInfoList>
    </DomainInformation>
  </DomainInfoList>
</ConnectionInformation>
</ConfigurationSetting>
</UserSettings>


```

No.	Tag	Description
1	XML declaration	Describe the xml version and text encoding method.
2	ShowManagerPort	Always write "false". This information is not used.
3	DomainInformation	Unit of destination information. Multiple values can be specified in DomainInfoList.
4	DomainName	Describe the destination name for management.
5	DomainIPAddress	Describe the IP address of the topology machine to obtain the serverless pull printing group list.
6	MIBOff	When not obtaining the print job congestion status from MIB, write "true"; otherwise, write "false".
7	SelectedGroupInfo	Information of the serverless pull printing group selected as the destination.
8	GroupName	Describe the name of the selected serverless pull printing group. Specify the group name included in GroupInfoList.
9	TMIPAddress	Describe the IP address of the topology machine for the selected serverless pull printing group.
10	GroupInfo	Unit of serverless pull printing group information. Multiple associated serverless pull printing groups can be described in GroupInfoList.
11	GroupName	Describe the name of the serverless pull printing group.
12	TMIPAddress	Describe the IP address of the topology machine for the serverless pull printing group.
13	TargetDeviceIP	Describe the IP address of the storage machine included in the serverless pull printing group. Multiple IP addresses can be described in TargetDeviceList.

## 2.11 Serverless Pull Printing Operations

### 2.11.1 Printing on the client machine

Execute print jobs stored on the storage machine from the client machine.

- 1 Tap [Serverless Pull Printing] on the main menu.
- 2 Select the job you want to print.
  - Tapping [Other Group] displays a list of print jobs in another group the active client machine does not join.
  - Tapping [List Update] updates the print job list. If you tap [Cancel List Update] while updating the print job list, print job list update processing is stopped.
  - Tapping [TX/RX Result] displays the status of each of MFPs in all serverless pull printing groups.
  - Tapping [Select All] selects all print jobs.
  - Tapping [Reset] deselects the selected print jobs.
  - Tapping [Delete] deletes the selected print job.
- 3 If necessary, tap  to change print settings.
  - Print settings cannot be changed for the jobs saved from the PS driver.
  - For details on each print setting item, refer to the User's Guide.
- 4 Press the **Start** key.

Printing starts.



#### Reference

*For the restrictions that are applied when you perform Serverless Pull Printing operations on the client machine, refer to the User's Guide.*