

This course explains how to service the RICOH Remote Communication Gate A2.

This training course assumes that you are familiar with the @Remote system.

To learn about this machine, please study the user's guide and the field service manual in addition to this TTP.



Overview of the Course

No additional notes

■ Sections in this Course

- What is Remote Communication Gate A2?
- Comparison with RC Gate A
- Installation
- Operating Procedures
- Maintenance of Devices Connected to the RC Gate A2
- Replacement and Migration Procedures
- Troubleshooting

No additional notes



What is Remote Communication Gate A2?

No additional notes

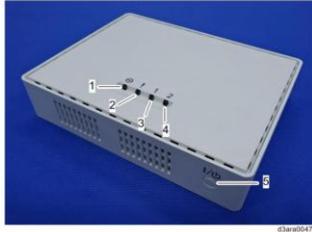


- RICOH Remote Communication Gate A2 is a desktop external appliance for @Remote.
 - During this course, it may be referred to as 'the appliance' or 'RC Gate A2'.
- It is the successor to the RC Gate A (UZ-A1) and RC Gate (Basil).

No additional notes

Front View

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- 1: Power LED (Blue)
- 2: Alert LED (Red)
- 3: Status 1 LED (Yellow)
- 4: Status 2 LED (Yellow)
 - The state of the four above LEDs convey information on the status of the machine.
- 5: Power button
 - Press this button to turn on the power, or to switch to standby mode.

No additional notes

Rear View



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- 1: Power Socket
- 2: LAN Port
 - This connects the RC Gate to the network.
- 3: USB 2.0 interface (Maintenance port)
 - This port is used when a customer engineer does maintenance, or connects a PC to start the initial setup and registration of the RC Gate A2.

7

No additional notes



- 1: Power switch
- 2: DIP switches
 - Use to reset the RC Gate A2 to the factory-default settings.
 - See the service manual.
 - 'Features > Resetting the RC Gate A2 to the Factory Default Settings'
- 3: Coin cell
- 4: SD card slot
 - Slot 1: Has a card containing the RC Gate A2 software
 - Slot 2: For the optional SD card.
- 5: Tact switch
 - Do not use in the field.

If you happen to press the tact switch while the power is on and the cover is open, any operation will be stopped and the RC Gate will be rebooted in the same way as when the power cord is disconnected and connected again.

These components are not available as service parts. If one of them fails, replace the RC Gate A2.

SD Card failure: See the Troubleshooting section of this course.

■ Power Button

- The power turns on when the power cable is plugged into the wall socket, even without pressing the power button.
- Also, by holding down the power button for 4 seconds, the system shuts down and switches to the standby mode.
- Before disconnecting the power plug, be sure to switch to the standby mode. Otherwise, the storage medium may be damaged, causing the most recent log data (up to 1 hour) to be lost.

No additional notes

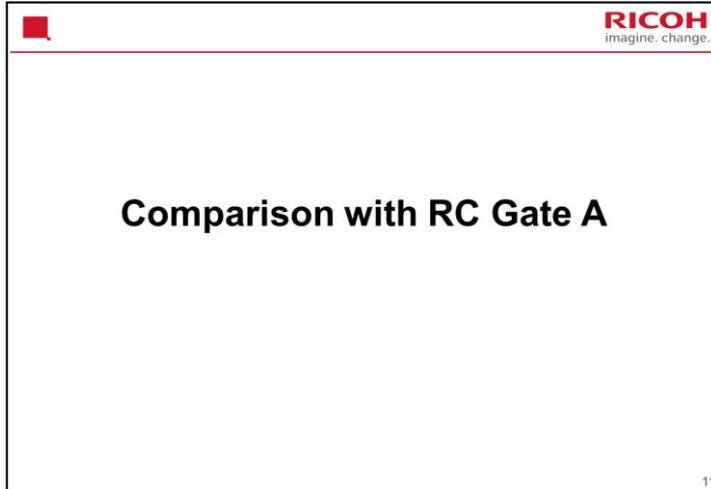
Options for Remote Communication Gate A2 imagine. change.

- Remote Communication Gate A2 Accounting Report
 - Allows the appliance to capture user code counters.
 - To activate this option, input a license code. There is no additional hardware (RC Gate A uses a DIMM for this function).
- Remote Communication Gate A2 Storage 1000
 - 2GB SD card: Increases the maximum number of managed devices from 100 to 1000.
 - It also increases the maximum number of target devices for the accounting report option from 100 to 300.

10

In RC Gate A, the storage 1000 option did not work if the accounting report option was not installed.

In RC Gate A2, the storage option 1000 will work without the accounting report option.



In this section, we will look at the main specifications. There are a few improvements from the RC Gate A, and these will be pointed out.

■ Major Improvements

- **Selectable encryption strength (SSL/TLS)**
 - For enhanced security, the encryption strength of communications between the appliance and the devices can be selected.
 - This is to counteract the POODLE vulnerability and other problems.
- **Simplified installation procedure**
 - To install the RC Gate A2, a micro-USB cable is used instead of an Ethernet crossover cable.
 - It is no longer necessary to change the IP address of the CE's computer in "Internet Protocol Version 4 (TCP/IPv4) Properties".
- **Remote Communication Gate A2 Accounting Report option**
 - The counter information of each user can be collected from the devices.
 - A license is required to use this function.

No additional notes

■ Major Specifications - 1

- Network Protocol when communicating with Devices
 - @Remote Devices: SOAP
 - GW MIB Devices: SNMP V1/V2/V3
 - Other MIB (Std. MIB) Devices: SNMP V1/V2/V3
- Discovery Functions
 - Auto Discovery
 - Manual Discovery
 - Search function for Add Device
- Number of Devices
 - Registered Devices (Managed): 100
 - 1,000 if the Storage Option (2GB SD card) is installed
 - Monitored Devices (Un-Managed): 500
 - 1,500 (including 1,000 Managed Devices) if the Storage Option (2GB SD card) is installed

SOAP: Simple Object Access Protocol

■ Major Specifications - 2

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- HTTPS Connection Type
 - @Remote Devices: SSL 3.0, TLS 1.0, TLS 1.1, TLS 1.2 *1
 - RC Gate A can only use SSL 3.0, TLS 1.0
 - RC Gate can only use SSL 3.0, SSL 2.0
 - The default is 512-bit encryption (SSL).
 - GW MIB Devices, Other MIB (Std. MIB) Devices: None
- Meter Reading
 - @Remote Devices: Acquired monthly
 - GW MIB Devices: Acquired monthly
 - Other MIB (Std. MIB) Devices: No
- Counter (for Reporting)
 - Acquired daily for all types of device

14

*1: TLS1.1 or 1.2 can be set with devices 11A or later

SSL 3.0, SSL 2.0: 512-bit encryption key

TLS 1.0, 1.1, and 1.2: 2048-bit encryption key

Enabling 2048-bit encryption is explained later in the course.

■ Major Specifications - 3

- Regular Device Information
 - @Remote Devices: Acquired daily
 - GW MIB Devices: No
 - Other MIB (Std. MIB) Devices: No
- User Code Counter Capturing (with the Remote Communication Gate A2 Accounting Report option)
 - @Remote Devices: Acquired monthly *1
 - GW MIB Devices: No
 - Other MIB (Std. MIB) Devices: No
- Remote Firmware Update
 - @Remote Devices: Yes *2
 - GW MIB Devices: No
 - Other MIB (Std. MIB) Devices: No

15

*1: A license is required (difference from RC Gate A)

*2: Supports package firmware update from the center server (difference from RC Gate A)

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Major Specifications - 4

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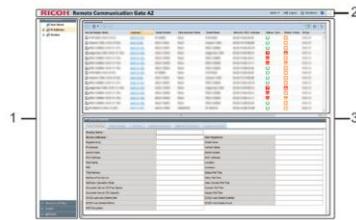
		@Remote Device	GW MIB Device	Other MIB (Std. MIB) Devices
Auto Call	SC Call	Yes	Yes	No
	CC Call	Yes	No	No
	Alarm Call	Yes	No	No
	Supply Call	Yes	Yes	Just Toner
Manual Call		Yes	No	No

16

Same as RC Gate A

Screen Configuration

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- 1. Section area
 - When a section is clicked, details of each item are displayed in a tree structure.
- 2. Header area
 - Login user name ('admin' in this case)
 - Logout
 - Shutdown
- 3. Tab area
 - The upper part is the List area and the bottom part is the Properties area.

17

Before we start installing the machine and start to make settings, it is a good idea to become familiar with the screen and the terminology used to refer to each section of the screen.

It is very similar to the @Remote Connector NX.



This section will explain the main points about installing an RC Gate A2 at a customer site.

For full details of the procedures, see the service manual.

■ A Summary of the Steps - 1

- Step 1. Preparation for Visiting the Customer
 - Gather the necessary information for the installation
 - Will the machines be 'Monitored' or 'Managed'?
 - How many RC Gate A2s will be needed?
 - Make sure you take the required equipment.
 - Ask the Center GUI operator to issue a request number for the RC Gate A2.
- Step 2. Hardware Setup
 - Install the RC Gate A2.

No additional notes

■ A Summary of the Steps - 2

- Step 3. Make Initial Settings and register the RC Gate A2 with the @Remote Center
- Step 4. Register the devices that are connected to the RC Gate A2(s) that you just installed
- Step 5. Test device connections to @Remote center
 - This confirms that the devices were registered correctly.
- Step 6. Install the Remote Communication Gate A2 Accounting Report option
- Step 7. Make sure that the installed SD card option is working

No additional notes

■ Important Notes - 1

- A micro-USB cable is required when setting up the Remote Communication Gate A2 (type micro-B).
 - After you finished all installation and registration procedures, disconnect the USB cable from the RC Gate A2 before you leave the customer.
 - The RC Gate A2 may not work properly if the USB cable is kept plugged in during normal operation.
- For customers who want to use the appliance in an operating environment certified in accordance with CC certification, configure it according to the service manual.
 - Installation > Configuration for a CC-Certified Environment

No additional notes

■ Important Notes - 2

- Make sure that the default IP address (192.168.10.153) is not used at the customer site.
 - If it is used, you can change the IP address to one that is not used at the customer site.
- This product supports the dual-stack environment of IPv4 and IPv6 but it does not support this environment using a translator.
 - In an environment using a translator, depending on the MFP or printer in use, no communication with this product can be established.
 - If no communication is possible between the device and the appliance, check whether the environment uses a translator.

No additional notes

■ Important Notes - 3

- If a dialog appears, asking "Stop running this script?", always click [No]. Correct operation is not guaranteed if you click [Yes].
- You cannot login to the RC Gate A2 until startup has finished.
- When the installation of the Remote Communication Gate A2 Accounting Report option is complete, the @Remote Center must activate the function and select the target devices.

No additional notes



Installation

Step 1. Preparation

No additional notes

- In this section, we will:
 - Determine how many units of RC Gate A2 are required to cover all the machines at the customer site
 - Learn what equipment you need to take to the customer site when installing the RC Gate A2
 - Learn what must be prepared at the customer site before you start to install the RC Gate A2
 - Get a request number for the RC Gate A2 so that it can be registered at the @Remote center

No additional notes

■ Managed or Monitored Devices

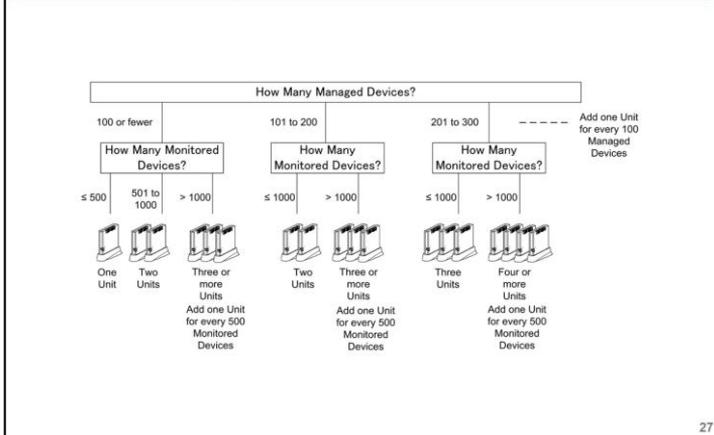
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- RC Gate, RC Gate A/A2 with no optional memory
 - Maximum managed devices - 100
 - Maximum monitored devices - 500
 - Maximum total devices - 500
- RC Gate A/A2 with optional memory
 - Maximum managed devices - 1000
 - Maximum monitored devices - 1500
 - Maximum total devices - 1500
- RC Gate S Pro, @Remote Connector NX
 - Maximum total devices - 5000 (any mixture of managed and monitored)
 - This is a theoretical specification, but in practice these systems can probably handle many more devices than this

26

For the RC Gate A2 without memory, the number of managed devices is fewer.

To manage more devices, the optional SD card must be installed.



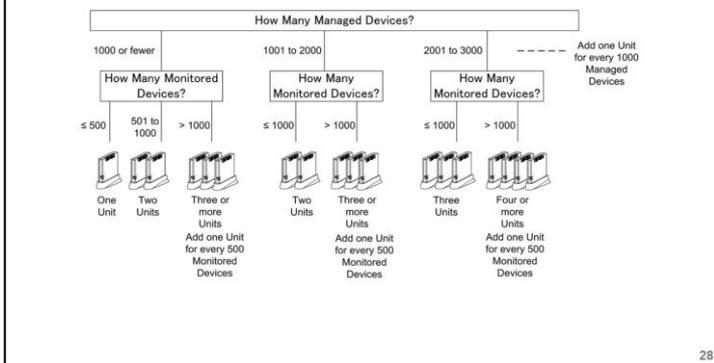
Keep in mind that the customer may remove some of these machines or install some new ones. So you may need to change the number of RC Gate A2s at the location.



How Many Units do I Need? With Optional Memory



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28

Keep in mind that the customer may remove some of these machines or install some new ones. So you may need to change the number of RC Gate A2s at the location.

What Equipment Must I Take When Installing?

- Laptop computer
 - Windows 7 (32-bit or 64-bit)
 - Internet Explorer 8 or later, or Firefox 28.0 or later
 - Chrome is not compatible
 - USB 2.0 port
- Micro USB cable
- If the customer wants to manage more than 100 devices, the 2GB SD card option must be installed in the RC Gate A2.

This model must be connected to the PC with a micro USB cable. The previous model (RC Gate A) requires an Ethernet cross cable.

■ Necessary at the Customer Site

- Hub for connecting the RC Gate A2 to the customer's network, and router for access to the internet.
- Power outlet for the RC Gate A2
- Request number for connection to the @Remote Center (see the next slide)
- In all machines that the customer will connect to @Remote, SP5-816-001 must be set to 2 before we start to install the RC Gate A2, to permit @Remote connection in those machines.
- For installing the Remote Communication Gate A2 Accounting Report option: Product key for this option, and serial numbers of the devices that will be used for this function.

No additional notes

■ Getting a Request Number

- Login to the center server.
 - Make sure that your PC has the required settings to access the center GUI.
 - Make sure that you already have your ID and password to login to the following URL:
<https://rcg.support.ricoh.com/atremotecenter/MainServlet>
- In the center GUI, click “New Registration” in the Registration menu.
 - Input the necessary information.
- Click “Register” to obtain a Request Number.
 - The technician needs this number to install the RC Gate A at the customer site.

31

This slide is an overview of the steps. The procedure is the same as for the previous models ‘RC Gate’, and ‘RC Gate A’.



Installation

Step 2. Hardware Setup

No additional notes

- In this section, we will:
 - Install the RC Gate A2 (and the SD card option, if requested by the customer).
- Service manual sections to refer to:
 - Main unit:
 - Installation > Installing the RC Gate A2 and Connecting the Power Cord
 - Optional SD card memory expansion:
 - Installation > SD Card
- Procedure
 - Install the SD card first.
 - Then install the main unit.

If the customer wants to install the SD card at a later time, this is not a problem. Just shut the RC Gate A2 down, and install the card. It is not necessary to remove the RC Gate A2 from the @Remote Center.

■ Storage 1000 Option (SD Card)

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- The SD card is installed here [A].
- Make sure that the power cord is disconnected before you start to install this option.

34

Service manual: Installation > SD Card

In the @Remote Connector NX, it is necessary to enable installed options. In the RC Gate A2, this is not necessary.

■ Install the RC Gate A2

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- You can put the RC Gate A2 in the supplied stand, or you can put it on a flat surface with the LEDs facing up.



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35

No additional notes

■ Installing the SD Card at a Later Time **RICOH** imagine. change.

- The previous procedure assumes that you install the SD card at the same time as installing the RC Gate A2.
- If you install the option at a later time, you do not need to remove the RC Gate A2 from the @Remote Center.
- Just shut down the RC Gate A2, then install the option, using the procedure that we already described.
 - Shutdown procedure: Service manual
 - Installation > Installing the RC Gate A2 and Connecting the Power Cord > Shutdown

36

Very rarely, you might have to uninstall a memory option.

If you uninstall the memory option after you have registered the RC Gate A2 at the @Remote Center, then you must do the following:

1. Remove the RC Gate A2 from the @Remote center.
2. Remove the Memory Option from the RC Gate A2.
3. Perform "A to A replacement".

If you remove the option before removing the RC Gate A2 from the @Remote center, device registration data will still remain in the storage option.

Removing the RC Gate A2 from the @Remote center will erase all data in the storage option.

If there are more than 100 managed devices or more than 500 monitored devices, it is not possible to restore the backed-up data to the RC Gate A2 after removing options.

■ Plugging in the Power Cable

- When you plug in the power cord, the RC Gate A2 starts to power up.
- It takes about 5 minutes to get ready.
- When the blue lamp lights at 1 second intervals, the RC Gate A2 is ready. You can now access it from your PC and start to make settings.
 - Normally, the RC Gate A2 is ready when the blue lamp stays lit.
 - But, before the RC Gate A2 has been registered, the blue lamp lights at 1 s intervals when the RC Gate A2 is ready.

No additional notes

■ Turning off the Power

- To turn off the power, if you need to disconnect the RC Gate A2:
 - First, click 'Shutdown' in the header of the main screen.
 - Then click 'Yes' when the dialog box appears.
 - Wait until all LEDs are off, then disconnect the power cord
- Turning off the power without safe shutdown can damage the RC Gate's hard drive and result in loss of up to an hour of log data.
- Another method:
 - Hold down the Power button for 4 seconds (until the red LED starts flashing).
 - Wait until all LEDs are off, then disconnect the power cord.

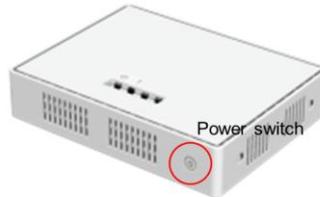
38

No additional notes

■ Turning On Again

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- Plug in the power cord of the RC Gate A2.
 - If the power cord was not disconnected, press the power switch for 1 second to turn the power on again.
 - Note that if the customer uses DHCP, the IP address of the RC Gate A2 may be changed after turning the RC Gate A2 off and on.



39

See the 'Plugging in the Power Cable' slide earlier for more details.



Installation

Step 3. Making Initial Settings

No additional notes

- In this section, we will:
 - Connect the RC Gate A2 to a PC, so that we can make settings on the RC Gate A2.
 - Connect the RC Gate A2 to the customers LAN and set up the network settings
 - Set up the RC Gate A2 settings, then register the RC Gate A2 with the @Remote Center
- Service manual sections to refer to:
 - Initial settings:
 - Installation > Initial Settings
 - Registering the RC Gate A2 at the @Remote Center:
 - Installation > Registration with the @Remote Center

No additional notes

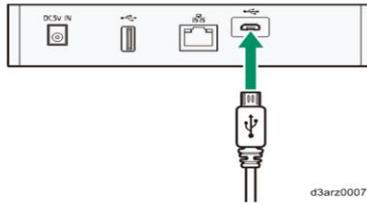
■ Important Points

- If a dialog appears, asking "Stop running this script?", always click [No].
 - Proper operation is not guaranteed if you click [Yes].
- Problems may occur in the following conditions:
 - The web browser is older than the recommended version.
 - JavaScript is disabled.
 - Cookies are disabled.
 - Cache files are being used.
 - The text size setting of the browser is too large. It is recommended that you set it to "Medium" or smaller.
 - Characters may be corrupted if the browser does not support the selected language.

No additional notes

Outline of the Procedure - 1

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- Connect the RC Gate A2 to the PC with the microUSB cable.
 - Do not connect the RC Gate A2 to the customer's network yet.

43

Service manual: Installation > Initial Settings

■ Outline of the Procedure - 2

- Now we must set up communication between your computer and the maintenance port of the RC Gate A2. To do this, confirm that the network properties of the RC Gate A2 maintenance port are at the default settings.
 - To do this, open a command prompt window and input ipconfig /all.
 - Step 2 of the service manual procedure shows what the settings should be.
 - The IP address for 'DHCP Server' is the IP address for the maintenance port of the RC Gate A2.
 - If the settings are different, then you should get another RC Gate A2, unless these settings were input earlier as part of a customized set-up.
 - If the IP address of the maintenance port clashes with other equipment on the customer's network, there could be a problem. We deal with this later in the procedure.

Service manual: Installation > Initial Settings

■ Outline of the Procedure - 3

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- In your PC, start up a browser and input the url of the RC Gate A2.
 - It should be <http://192.168.10.153:8080/index.html>

45

Service manual: Installation > Initial Settings

■ Outline of the Procedure - 4

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- Check that the LEDs show that the RC Gate A2 is ready (the blue lamp lights at 1-second intervals).
 - If you try to login before the RC Gate A2 is ready, the initial settings screen might not appear.
- When the login screen appears, input the special user name and password for technicians.
 - The user name for CEs is RicohAtRemoteOperator. For the password, consult the person in charge of supporting this product.

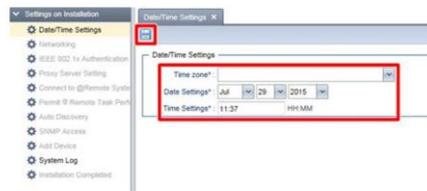


46

Service manual: Installation > Initial Settings

Outline of the Procedure - 5

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- Check the time zone settings. If they are correct, click the Save icon at the top left of the screen.
 - You cannot go to the next screen (Network Settings) until you click this Save icon.

47

Service manual: Installation > Initial Settings

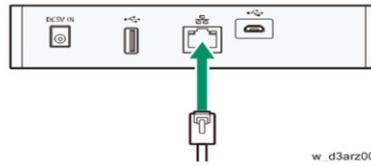
■ Outline of the Procedure - 6

- Now we are ready to set up the network settings.
- The maintenance port of the RC Gate A2 has a default IP address (192.168.10.153). However, this may clash with the customer's network environment.
 - This means that devices in the customer's network cannot have the IP addresses 192.168.10.152 - 192.168.10.159.
 - Consult the customer.
 - If you need to change this IP address, follow the instructions in step 9 of the procedure.
 - It must be 192.168.x.153.
 - The table in step 9 shows, for each value of x, which IP addresses cannot be used for devices on the customer's network. Choose a convenient value of x for the customer.

Service manual: Installation > Initial Settings

Outline of the Procedure - 7

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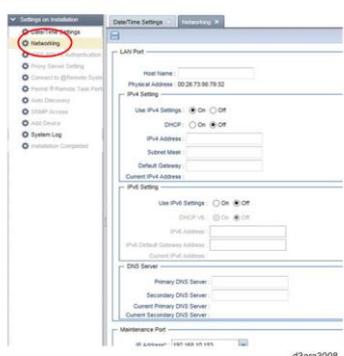
- Next, connect the RC Gate A2 to a hub on the customer's network with a LAN cable.

49

Service manual: Installation > Initial Settings

Outline of the Procedure - 8

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- You can now input the settings for connecting the RC Gate A2 to the customer's network (click Networking in the section area of the display).
 - Consult the customer for assistance if needed.

Service manual: Installation > Initial Settings

Outline of the Procedure - 9

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- Click IEEE802.1x Authentication.
 - This is disabled by default.
 - You can enable it (select 'Use') if the customer wishes additional security.
 - If this function is enabled, communications over Ethernet are encrypted using IEEE802.11x technology. Configure the settings as requested by the customer.

51

Service manual: Installation > Initial Settings

IEEE802.11x: The RC Gate A2 does not have Wireless LAN. However, these settings can be used to provide even more security for Ethernet communications.

Outline of the Procedure - 10

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- Click Proxy Server Setting
 - At the bottom of this screen, you can use the Check Connection button to test communication between the RC Gate A2 and the servers in the @Remote system.

52

Service manual: Installation > Initial Settings

Communication test: If it fails, see 'How to Check Connection with Related Servers' in the troubleshooting section of the service manual.

Outline of the Procedure - 11

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- Now, we can register the RC Gate A2 at the @Remote center.
- Input the request number and click 'Register'.
- If registration is successful, the status will change to 'registered'.
- If the customer is operating in a CC-certified environment, change Security Settings to '2048 bit' and click Batch Modification.

53

Service manual: Installation > Registration with the @Remote Center
The items 'Permit @Remote Task Performance', 'Auto Discovery', and 'SNMP Access' in the menu on the left side that are greyed out can be skipped until you start to discover and register devices.
These should normally be set up by the customer anyway.



Installation

Step 4. Register the Devices that are Connected to the RC Gate A2

No additional notes

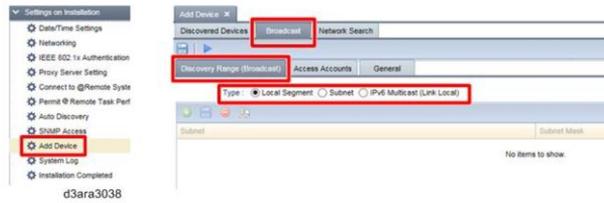
Overview

- In this section, we will look for devices on the customer's network and register them at the @Remote center.
 - Search for devices using either broadcast (over the whole of the customer's network), or network search (searching portions of the customer's network).
 - Then register the devices that were found.
 - Finally, click 'Installation Complete'
 - To allow the RC Gate A2 to discover new devices automatically, the customer must make sure that Auto Discovery is enabled in the Permission Settings, and then set up 'Auto Discovery'.
- Service manual sections to refer to:
 - Looking for devices:
 - Installation > Registering Devices (MFPs/Printers) > Discovering Devices with [Broadcast]
 - Installation > Registering Devices (MFPs/Printers) > Discovering Devices with [Network Search]
 - Registering the devices:
 - Installation > Registering Devices (MFPs/Printers) > Device Registration

The technician can also enable and set up auto discovery.

■ Setting up a Broadcast Search

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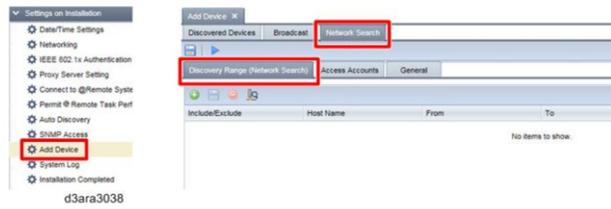
- Click 'Add Device', then 'Broadcast'.
- Set up the search conditions in the [Discovery Range (Broadcast)] tab as explained in the manual.
- Discovered devices appear in the [Discovered Devices] tab.
- Discovery may take a long time if the search range is large.

56

Service manual: Installation > Registering Devices (MFPs/Printers) > Discovering Devices with [Broadcast]

Setting up a Network Search

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- Click 'Add Device', then 'Network Search'.
- Set up the search conditions in the [Discovery Range (Network Search)] tab as explained in the manual.
- Discovered devices appear in the [Discovered Devices] tab.
- Discovery may take a long time if the search range is large.

57

Service manual: Installation > Registering Devices (MFPs/Printers) > Discovering Devices with [Network Search]

■ Registering the Devices that were Found **RICOH** imagine. change.



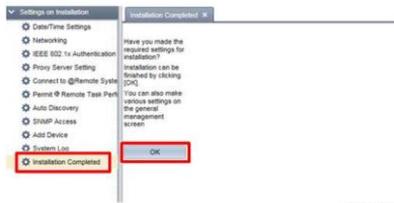
- In the [Discovered Devices] tab, right-click on the device you want to register, and then click [Register].
- Registered devices disappear from the list.

58

Service manual: Installation > Registering Devices (MFPs/Printers) > Device Registration

Completing the Procedure

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- When all devices have been registered, click [Installation Completed] in the section area, and then click [OK].
- Check the device list to make sure all registered devices are displayed.

59

Device list: To access the device list, click 'Device List' in the section area. For more details on accessing the device list, see section 4 'Device List' in the Operating Instructions.



Installation

Step 5. Test Device Connections to the @Remote Center

No additional notes

- This step will test device connections through the @Remote network.
 - Each device calls the @Remote Center server, and shows whether the call was successful
- Service manual section to refer to:
 - Installation > Replacement/Migration > Operation Check
 - Sending a Test Call from a Device
 - Accounting Report Function test

This test lets technicians know that the devices were registered with the servers properly.



See Installation > Accounting Report Option in the service manual.



- How many devices does the customer want to use with this option?
 - 100 or more: The Storage 1000 option (SD card) must be installed
 - Maximum: 300 devices
- This option cannot be used in an IPv6 environment.

If the customer wants to manage more than 300 devices under the accounting report option, then more than one unit of RC Gate A2 must be installed. It is not possible to handle this with one unit of RC Gate A2 and installing more memory.

- What information does the technician need from the customer in order to install this option?
 - Product key: The technician has to input this during installation to activate the function
 - Which of the customer's devices are to be managed with this feature?
 - If all the devices will be included, the technician passes this information to the @Remote Center operator.
 - If only some of the customer's devices will be included, the technician must inform the serial numbers of these devices to the @Remote Center operator.

No additional notes



- There is no hardware to install.
- Work through the procedure in the service manual.
 - Installation > Accounting Report Option.
 - You will need the product key from the customer.
- After you finished activating this feature, inform the @Remote Center operator immediately.
 - The @Remote Center operator must then activate this function for this RC Gate A2, and then activate it in all the customer's devices (or in only the devices selected by the customer, as explained earlier)

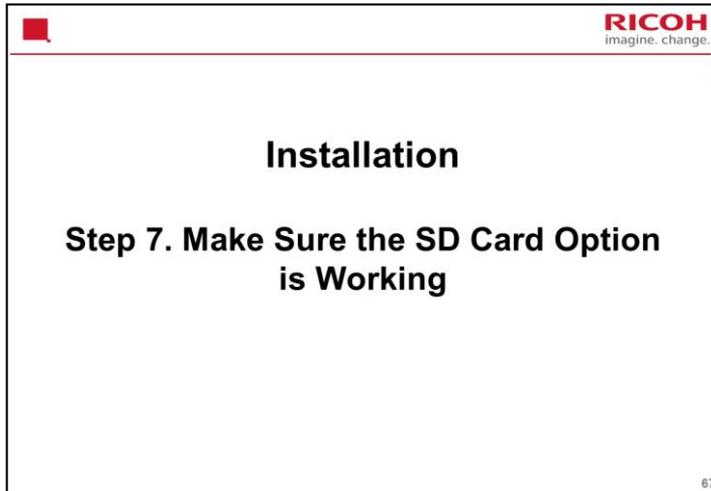
Service Manual: Installation > Accounting Report Option

In the RC Gate A, it is necessary to enable installed options. In the RC Gate A2, this is not necessary.

■ Uninstalling this Option

- If the customer wishes to uninstall this option, you must deactivate it, for licensing purposes.
- Procedure:
 - Service manual > Features > About the Accounting Report Option

No additional notes



See Installation > SD Card > Operation Check in the service manual.

Does the RC Gate A2 Recognize the Installed SD Card Option? **RICOH**
imagine. change.

Device List (1)
Discovery & Polling
System
Setup
Data/Time Settings
Networking
IEEE 802.1x Authentication
Server Settings
Activation
Display
Networking
System Information and Settings
Logs
System Log

System Information and Settings

System Information
System Version : 1.0.0
Build Number : 39796
Build Date : 07/24/2015
Number of registered Devices : 1

Resource Information
Used Memory Space : 441 MB
Available Memory Space : 566 MB
Used Storage Space : 818 MB
Available Storage Space : 1,102 MB
Used Expanded Space : 13 MB
Available Expanded Space : 1,907 MB

d3ara3057

- Login to the RC Gate A2 as a CE.
- Navigate to the screen shown above.
 - The above example shows that the SD card is functioning properly.

68

This is a possible troubleshooting tool in case there is a problem with the memory.

Look at the values in the red square as shown above to see the memory space.

Note that due to a firmware limitation, these two lines on the screen are currently only displayed in English (or in Japanese).

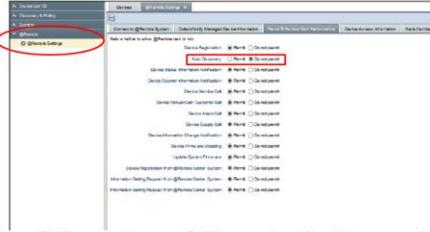


Installation

Setting up Auto Discovery

No additional notes

Enable Auto Discovery

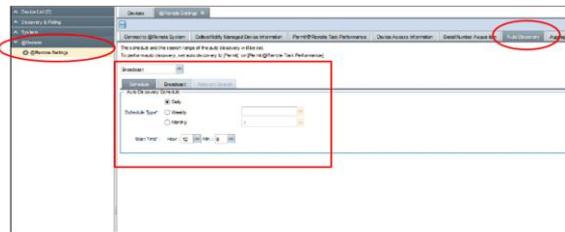


- Under @Remote > @Remote Settings, click 'Permit @Remote Task Performance'. Make sure that Auto Discovery is set to 'Permit'.
 - If the customer wants to discover new devices automatically, auto discovery must be permitted. If not, new devices will not be discovered and the new devices must be added manually to the registered devices.

70

This screen is from the operation manual, in user mode.
In CE mode, all settings are greyed out except Auto Discovery.

Set Up Auto Discovery



- Click 'Auto Discovery', and make the required settings (when, how often, broadcast or network search).

No additional notes



Operating Procedures

Basic Operation Method

No additional notes

- Start a browser. The following are recommended:
 - Internet Explorer 8.0 or later
 - Firefox 28.0 or later
- Input one of the following URLs.
 - If SSL is disabled:
 - `http://(IP Address):8080/index.html`
 - `http://(Host name):8080/index.html`
 - If SSL is enabled:
 - `https://(IP Address):(port)/index.html`
 - `https://(Host name):(port)/index.html`

No additional notes



Login

RICOH
Remote Communication Gate A2

User Name:

Password:

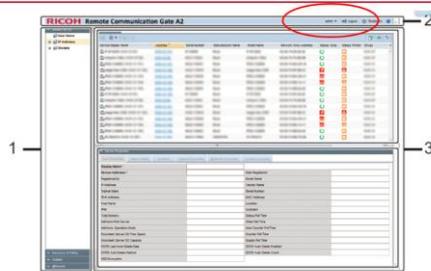
Language: English

Login

- To login as a CE, there is a fixed user name that you must use:
RicoHAtRemoteOperator
- Then input your Password.
 - The password is case-sensitive, so make sure you enter it correctly.
 - For the password, consult the person in charge of supporting this product at your company.
- Click Login to continue.

There are two ways to login: as an administrator (customer) or as a CE.

Login - 3



- 'admin' in the top right corner indicates that the customer administrator has logged in.
 - 'RicohAtRemoteOperator' in the top right corner indicates that you are in CE mode. Some user administrator features are not displayed in this mode.
- To logout, click 'Logout' at the top right before you quit the browser.

No additional notes

■ Administrator Password

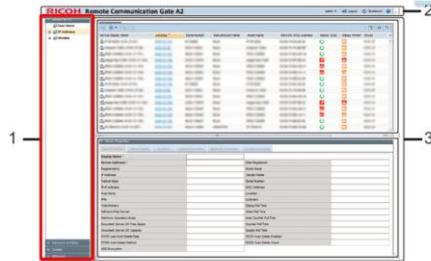
- If the administrator forgot the administrator password, a CE can login and reset that password. Then the administrator must set a new password as soon as possible.
 - See the procedure in the service manual.
 - Troubleshooting > If the Administrator Forgot the Administrator Password
- However, if login by a CE is disabled, the password cannot be reset.
 - Reset the RC Gate to factory-default settings, or replace it with a new one.
 - Resetting to the factory settings: Features > Resetting to the Factory Default Settings

No additional notes

- You should change the CE password from the default during installing the RC Gate A2.
 - See the procedure in the service manual.
 - Features > About Accounts, Passwords, and Access Permission > About the Login Password
- However, be sure to make a careful note of this password. If you forget the CE password, the RC Gate A2 must be replaced.
 - 'Replaced' means reset by returning the RC Gate A2 to the factory default settings, and then performing a replacement procedure with the @Remote Center.

No additional notes

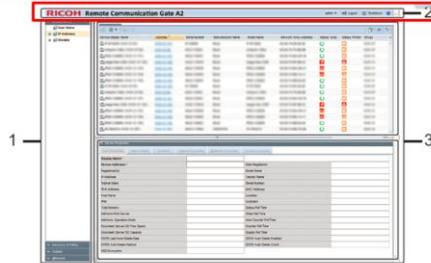
Screen Layout - 1



- 1. Section area
 - This is a list of menus. Click on one of these and a sub-menu tree appears. Click on a sub-menu item, and the items in the top and bottom halves of the tab area (3) change.
 - The selected sub-menu item appears in yellow.

No additional notes

Screen Layout - 2



2. Header

- This shows the login user name (admin in this case).
- To quit the RC Gate A2, click 'Logout' before you leave the browser.
- To shut down the RC Gate A2 and put it in standby mode, click 'Shutdown'.

79

Shutdown is explained in more detail later.

Screen Layout - 3 **RICOH**
imagine. change.

1 2 3

- 3. Tab area
 - The upper part is called the 'list area' and the lower part is called the 'properties area'.
 - The list area contains a list of devices, or settings related to the tab that is opened.
 - Click on one item in the list, and properties of that item appear in the properties area.

80

In this example, the list area shows a list of devices that have been discovered on the network, and their most recently discovered statuses (to update to the latest status, the device must be polled manually).

Click on a device and details will appear in the properties area.

To update the status, and the contents of the property area, the device must be polled manually.

Some columns of the discovered device list contain symbols. Just move the mouse pointer over a symbol and you will get an explanation of what it means.

Use of the Screen - 1

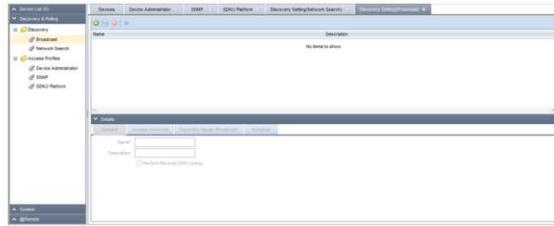


- When you click on a feature in the section area, it opens up as a tab at the top of the list area of the tab area. The currently active tab has a darker shade.
- The Options bar contains various tools that can be used with the active feature.
 - Examples (from the left as seen above): Add a new one, save, delete the selected one, copy, export to CSV.
 - Different options appear for different features. To find out what an option does, move the mouse pointer over it. The operation manual also has some detail on these options.

81

No additional notes

■ Use of the Screen - 2

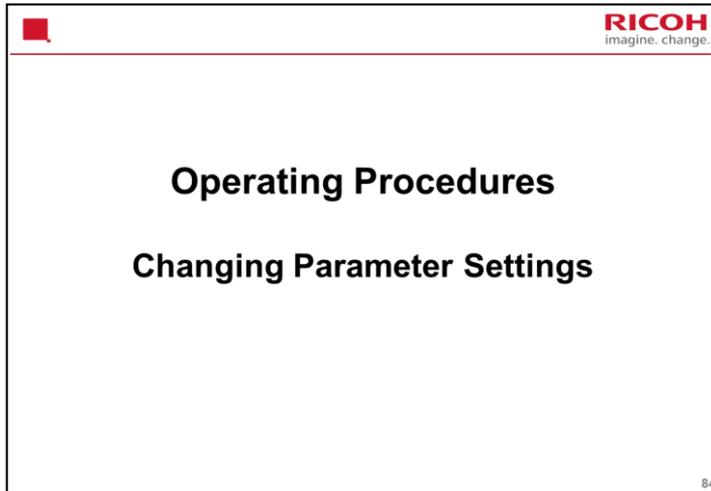


- The list area shows the tab that is now active.
 - The appearance of tabs across the top of the top pane shows what tabs you were looking at recently, for your convenience.
 - You can either navigate using the tree in the section area on the left of the screen, or use the tabs across the top of the screen.
- The properties area shows properties or details of the selected item in the list area.

No additional notes

- For full details on how to install and operate the RC Gate A2, see the Setup Guide and the Operating Instructions.

No additional notes



Basic settings were covered in the Installation section. We will look at some other settings here.

- Section 2 (Setting up the RC Gate) of the operating instructions explains the settings that must be made.
- Summary:
 - Time zone and date/time settings: Set to the correct time zone and the current date and time.
 - 'Use SSL' must be enabled in @Remote Settings and Server Settings.
 - 'Disable HTTP' must be selected in Server Settings.
 - 'S/MIME Setting' must be enabled in @Remote Settings
 - The encryption level must be set to 2048 bits (see the next slide).
 - The login password length must be set to minimum 8 characters.
 - 'Update System Firmware' must be set to 'Do not permit'.
 - CC-certification is authorized only for Version 1.0 of the firmware.

No additional notes

Enabling 2048-bit Encryption

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imagine. change.

■ If you click 'Batch Modification', 2048-bit encryption will be applied to all to all the devices.

86

No additional notes



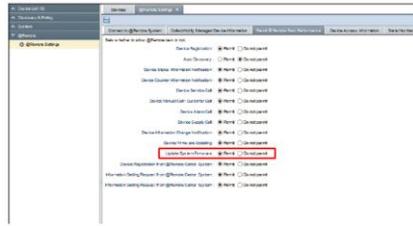
Operating Procedures

Remote Update of the RC Gate A2 Firmware

No additional notes

Enabling Remote Firmware Update

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- Enable/disable is set with 'Update System Firmware' in the Permit @Remote Task Performance tab.
 - This must be done by the customer.
 - In a CC-certified environment, remote firmware update must be disabled.

88

This is remote update of the firmware of the RC Gate A2, not the devices. Remote firmware update for the devices is enabled or disabled with the 'Device Firmware Update' setting immediately above.

■ From the @Remote Center

- You can also contact the @Remote Center and ask them to update the firmware.
- There is no procedure to update the firmware with an SD card.

No additional notes



Operating Procedures

Setting up Access Profiles

No additional notes

- An access profile is a method by which the RC Gate A2 tries to authenticate itself for access to the machine.
- In almost all cases, the default profiles already set up in the RC Gate A2 are enough to do the job.
- This section briefly explains problems that may occur if the default profiles need adjusting, and how to adjust them.

No additional notes

■ Access Profiles – Two Types

- There are two types of access profile:
 - SNMP
 - Device Administrator

No additional notes

■ What Each Type of Profile Does

- The SNMP profile is used for:
 - Searching for devices, including searching in order to add a device, and auto discovery (which is a scheduled search).
 - Communicating with MIB (non-HTTPS) devices on the customer's network, after registration.
- The Device Administrator profile is used for:
 - Communicating with HTTPS devices (@Remote compatible Ricoh devices) on the customer's network, after registration.
 - It uses SOAP protocol.

No additional notes



When does the Default SNMP Profile Need Adjusting?

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imagine. change.

- The default SNMP profile is designed to work with the device's default settings for SNMP communication.
- If the customer requires different SNMP settings in any of their devices from these defaults, then a new SNMP profile must be made.
 - The default profile can be modified, and new profiles can be made.
 - A different SNMP profile can be used for each search range for auto discovery (or other type of search).
 - Also, each search range can have more than one profile (up to 5), in case the search range contains machines with different SNMP settings.

94

In the device list, you can select a profile for each machine in the device properties (you don't need to do this because RC Gate A2 will use each profile in priority order until you can connect).

SNMP settings in devices can be changed with Web Image Monitor.



- The RC Gate A2 cannot access a device which has different SNMP settings from those in the profile.

No additional notes



**When does the Default Device Administrator
Profile Need Adjusting?**

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- If the devices do not all have the same name and password for authentication, then the user must set up a profile for each case and allocate each device to the correct profile.

96

No additional notes



**Problems when a Device Administrator Profile
Does Not Work**

- The RC Gate A2 cannot get accounting report Information from devices that have this profile assigned to them.
- The RC Gate A2 cannot do firmware update (RFU) for devices that have this profile assigned to them.
- The devices that have this profile assigned to them cannot be managed from the Center GUI remotely. They can only be monitored.

No additional notes

■ How to Fix Problems with Profiles

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- There are two basic steps:
 1. Create the required new accounts
 2. Assign accounts for each device, or range of devices

98

No additional notes

Creating a New SNMP Account - 1

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The screenshot shows a web interface for managing network devices. At the top, there's a navigation menu with 'Access Profiles' selected. Below it, a table lists existing profiles. A red box on the left sidebar highlights the 'SNMP' option under 'Access Profiles'. A red circle highlights the '+' icon in the top right corner of the table. Below the table, there's a form for creating a new profile with fields for Name, Description, and various configuration options.

Name	Description	Protocol	Exec/Discovery	SNMP/Discovery	Link Name
default		SNMPv1v2	SNMP	SNMP	SNMP

- To create an SNMP access profile, select Discovery and Polling > Access Profiles > SNMP.
- Then click the + icon to add a new profile.

99

The top half of the screen shows a list of SNMP profiles already made. Normally, there is only one, the default profile.

Creating a New SNMP Account - 2

RICOH
imagine. change.

The screenshot shows a web-based management interface. On the left is a navigation tree with 'SNMP' selected. The main area displays a table with columns: 'Description', 'Protocol', 'Read Community', 'Write Community', and 'User Name'. A 'Create' dialog box is open, and its bottom half, which contains various configuration fields, is highlighted with a red box and a circled '1'. A circled '2' is also present in the top left corner of the main interface.

Description	Protocol	Read Community	Write Community	User Name
SNMP1112	SNMP	public	private	snmp

1

2

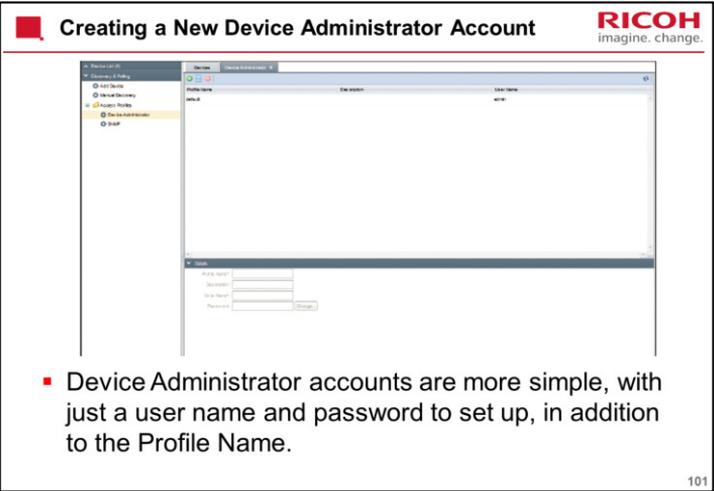
- Make your settings in the bottom half of the screen.
- Then click the 'Save' icon.

100

For details on the settings, see the operating instructions.

5. Discovery and Polling > Discovery and Polling > Access Profiles

Creating a New Device Administrator Account **RICOH**
imagine. change.



The screenshot shows a web-based interface for creating a new device administrator account. On the left, there is a navigation menu with options like 'All Profiles', 'Device Profiles', and 'Device Administrator'. The main area displays a form with fields for 'Profile Name' (containing 'admin'), 'User Name', and 'Password'. The password field is masked with 12 dots. Below the form are buttons for 'Cancel' and 'Create'.

- Device Administrator accounts are more simple, with just a user name and password to set up, in addition to the Profile Name.

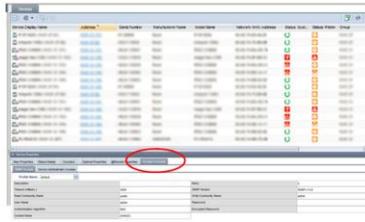
101

The top half of the screen shows a list of profiles already made. Normally, there is only one, the default profile.

The password always appears as 12 dots, regardless of the actual length.

■ Assigning Accounts to Devices - 1

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imagine. change.



The screenshot shows a web interface with a table of devices at the top. Below the table, there are several tabs: 'Access Accounts', 'Access Profiles', 'Access Policies', and 'Access Rules'. The 'Access Accounts' tab is highlighted with a red circle. The table above has columns for 'Device Name', 'IP Address', 'Device Type', 'Device Model', 'Device Vendor', 'Device Location', and 'Device Status'.

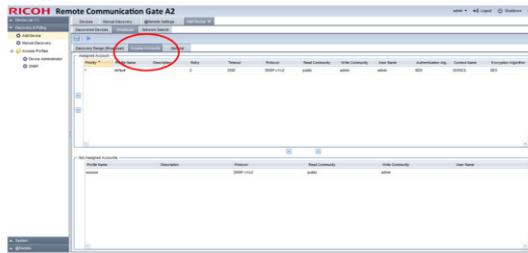
- For a single device, use the device list.
- Select the device in top part of the screen. Then click the Access Accounts tab in the bottom half and select one account of each type (SNMP Access, Device Administrator Access)

102

The customer must make the accounts, but the CE can allocate accounts to devices if necessary.

Assigning Accounts to Devices - 2

RICOH
imagine. change.



- For a range of devices, select the required profiles when setting up Auto Discovery.

103

The customer must make the accounts, but the CE can allocate accounts to devices if necessary.



Maintenance of Devices Connected to the RC Gate A2

No additional notes

Overview

- If you do maintenance on a device that is connected to @Remote:
 - Before you start: Set SP5-816-002 to "0". This informs the @Remote Center that maintenance has started, and the @Remote function will be turned off.
 - If you start maintenance without turning off the @Remote function, service calls during maintenance will be sent to the @Remote Center and the jam alert count will increase.
 - After you finish: Set SP5-816-002 to "1". This informs the @Remote Center that maintenance has ended, and the @Remote function will be turned on.
 - If SP5-816-002 is kept at "0", it will be changed to "1" after 4 hours. If maintenance is taking longer than 4 hours, set SP5-816-002 to "0" again.

SP5-816-002 (Remote Service: CE Call)



Replacement and Migration Procedures

Migrating from RC Gate to RC Gate A2

No additional notes

■ Overview

- This section will explain how to help a customer who has a number of RC Gates to change over to RC Gate A2.
- This is a lot simpler than with the previous model (RC Gate A).
 - The procedure is basically the same as installation of a new RC Gate A2, except that device registration is not needed.
- Service manual:
 - First, replace one of the RC Gates with a new RC Gate A2.
 - Installation > Replacement/Migration > Replacement
 - Then, migrate the other RC Gates to the new RC Gate A2.
 - Installation > Replacement/Migration > Migration

No additional notes

- Check the number of managed devices on the old appliances. Install the SD card storage option when over 100 devices are going to be managed.
 - You can replace an RC Gate A2 (with the optional SD card) with an RC Gate A2 (without the optional SD card) if there are 100 or fewer managed devices.
- If the firmware version of the RC Gate Type BN1/BM1 is lower than 3.5, update the firmware to the latest version before Replacement/Migration.

No additional notes

- Migration will fail if an appliance has the IP mask function activated.
- When you replace an RC Gate A2 in which the accounting report is activated, deactivation and activation will be done automatically. However, if it fails, refer to the troubleshooting procedure in the service manual.
 - Troubleshooting > When an error occurs during activation or deactivation of Accounting report option

No additional notes

■ Timing

- Avoid replacing an appliance on the M/R Date or on the day before. Otherwise, closing counter data may not be sent and received correctly.
 - For example, if the M/R Date is the 20th of the month, do not replace an appliance on the 19th or 20th of a month.

No additional notes

■ Replacing the 1st RC Gate - 1

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- First, you replace one of the old RC Gates with a new RC Gate A2.
- To do this, you must first contact the @Remote Center and do the following:
 - Tell the @Remote Center the serial numbers of all the old RC Gates and the new RC Gate A2. For the old RC Gates, you must also specify which is the one for replacement (the 1st RC Gate), and which are the ones for migration.
 - Check how many managed devices there are.
 - If there are more than 100, you must install the SD card option in the new RC Gate A2.
 - Check if the Remote Communication Gate A2 Accounting Report option is being used.
 - If there are more than 300 devices for the Accounting Report option, you will need more than one RC Gate A2s.
 - Also, you must choose an appliance with the Accounting Report activated as the unit that will be replaced, before migrating the others.

111

Service manual: Installation > Replacement/Migration > Replacement

■ Replacing the 1st RC Gate - 2

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imagine. change.

- Wait for the reply from the @Remote Center. You will be given the request number.
 - For your interest, the service manual shows how this request number is generated.
 - Don't input this request number yourself until informed by the @Remote Center.
 - This is because a replacement procedure must be done at the @Remote Center first, before you input the request number.
- Then shut down the RC Gate that will be replaced.
- Install the RC Gate A2 in the same way as a normal installation, except that device registration is not needed (the @Remote Center takes care of that).

112

Service manual: Installation > Replacement/Migration > Replacement



- After replacing the 1st RC Gate, check that the accounting report option has been turned on.
 - Service manual: Installation > Replacement/Migration > Replacement of the Accounting Report Option

Service manual: Installation > Replacement/Migration > Replacement of the Accounting Report Option

■ Migrating the Other RC Gates

- Do the following for each old RC Gate, one by one.
 - Shut down the old RC Gate.
 - In the Migration screen, input the request number and click Run.
 - A separate request number is required for each old RC Gate.
 - When 'migration confirmation complete' appears, click OK.

Service manual: Installation > Replacement/Migration > Migration

- Settings are copied from the first RC Gate, along with managed device information.
- From subsequent RC Gates, only the managed device information is copied.
 - So, if the Accounting Report option is being migrated, the first appliance being replaced must be one with this option activated, or the licensing information and activation information will not be transferred to the new RC Gate A2.

No additional notes

■ Notes - 2

- If the total number of managed devices is more than 100, the optional SD card must be installed in the RC Gate A2.
- If there is no SD card, then migration will only be partially successful.
- Example:
 - A customer has some old RC Gates (let us call them A, B, C, D, and so on): A has 50 managed devices, B has 20, C has 50, D has 30, and so on
 - Replacement of A was successful, and so was migration of B. But during migration of C, the limit of 100 was exceeded, and that migration failed. The process stops.
 - As a result, the customer now has a new RC Gate A2, but still has to use the old RC Gates C, D and so on.

116

No additional notes



Troubleshooting

No additional notes



- **Restoring Connection With the @Remote Center:**
 - Use this when communication with a device is lost. It tests communication between a device and the @Remote Center via the RC Gate A2.
- **How to Check the Communication Status between the RC Gate A2 and the Imaging Device:**
 - This tests communication between the RC Gate A2 and a device.
- **How to Check Connection with Related Servers:**
 - This tests communication between the RC Gate A2 and the @Remote Center.

No additional notes



- A LAN-Connected Device Is Discovered as an SNMP-Connected Device
- LED Displays and their Meanings
- Error Codes
- When an Error Occurs during Activation or Deactivation of the Accounting Report Option
- When the IP Address of a Device Stored on the RC Gate Does Not Change Automatically After the IP Address of the Device Changes
- When Replacing the Controller Board of a Device connected to an RC Gate A2
- If the Administrator Forgot the Administrator Password
- Connection with Devices or the Computer Fails
- If the Login Screen of RC Gate Monitor Does Not Appear

No additional notes

■ DIP Switches

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imagine. change.



- Use the DIP switches to reset the RC Gate A2 to the factory settings.
 - Includes the settings, counters, and system log.
- Service manual:
 - Features > Resetting the RC Gate A2 to the Factory Default Settings

120

No additional notes

■ SC Codes - 1

- A few SC codes are listed in the service manual:
 - 002: Insufficient Memory
 - 200: Insufficient SD card capacity error
 - 500: System Critical Authentication error
 - 600: System Critical Communication error
 - 700: System Critical Database error
 - 901: System Critical Internal error

Troubleshooting > Error Codes > SC Codes

- If one of the error codes listed on the previous slide appears, do the following:
 - Turn the RC Gate off using the safe shutdown procedure.
 - Service manual: Installation > Installing the RC Gate A2 and Connecting the Power Cord > Shutdown
 - If the SC code still appears after turning on again, the RC Gate A2 must be replaced.
 - Service manual: Installation > Replacement/Migration > Replacement

Troubleshooting > Error Codes > SC Codes

■ SD Card Failure

- The following is a summary of the procedure.
 - First, try to reboot the RC gate A2.
 - If that does not work, reset the RC Gate A2 to the factory settings (see the service manual).
 - Features > Resetting the RC Gate A2 to the Factory Default Settings
 - Execute the replacement procedure to restore the data.
 - If this does not solve the problem, replace the RC Gate A2.

This works for both the SD cards (system SD card and optional SD card).

■ Some Messages Only Appear in English

RICOH
imagine. change.

- These messages and wordings only appear in English.
 - Processing is taking some time.
 - Please push the Refresh button after some time has passed.
 - Processing is taking some time. Please check the Device List after some time has passed.
 - Manual Network Search
 - Failed to get MIB value.
 - Connection with the server has been lost. Please perform a refresh on your browser.
 - Used Expanded Storage Space
 - Available Expanded Storage Space
 - Long Power Off
 - RC Gate

124

No additional notes



The End