

Pcounter for Ricoh

Setup Guide

Pcounter Embedded for Ricoh 2018.06.29

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0.0.0 Introduction

Pcounter for Ricoh is software that resides on a Window server.

Pcounter for Ricoh is used to control walkup user access **(authentication)** to Ricoh MFPs as well as capture walkup usage **(accounting)** for copy, scan, and fax.

A quick technical note; MFP = Multifunction Printer, and in this instance the MFP is the Ricoh printer being configured.

0.0.1 Trial Period Information

Without a valid registration number, the Pcounter for Ricoh software runs will run with full functionality for 90 days in trial mode. During this time there are no restrictions to the software's functionality and it can be used for testing all features. At the end of the trial period a valid registration number must be inserted or the software will no longer function until a valid registration number is entered.

1.0.0 Goal

The goal of this document is to provide an overview of the basic concepts of Pcounter Embedded for Ricoh. As well as step-by-step instructions for installing and configuring a Pcounter for Ricoh server and Ricoh MFP for authentication, accounting, print release, and more.

1.1.0 Common Challenges

- 1) Determining the Pcounter for Ricoh configuration that best suits the needs of the environment.
- 2) Successfully configuring the Pcounter server.
- 3) Successfully configuring the Ricoh MFP.
- 4) Maintaining the Pcounter server and Ricoh MFP configurations once enabled.

1.2.0 What is Pcounter for Ricoh

Pcounter for Ricoh is Windows server software that interfaces directly with the embedded operating system of the Hewlett Packard MFP. Pcounter for Ricoh works in combination with Pcounter for Windows. Pcounter for Ricoh provides a point of access control (Authentication), the ability to log job based data for copy, scan, and fax (Logging), and the ability to assign page quotas or currency balances to users, debiting them for individual jobs (Accounting).

Pcounter for Ricoh combines all MFP print, copy, and scan data into a single log file managed by the Pcounter for Windows Data Server. Reporting can then be done quickly and easily for all job types using Pcounter Administrator and Pcounter Web Report.

1.3.0 Authentication

The first and most basic feature that Pcounter for Ricoh provides for Ricoh MFPs is Authentication. Authentication is any process by which a system verifies the identity of a user who wishes to access it. The Pcounter for RICOH service adds Embedded Ricoh MFP Authentication to the Pcounter solution. **Pcounter for Ricoh** supports the following Authentication types, with some additional options:

Username (Network Name) | Username & Password

ID Number (ID#) | ID# & PIN#

Client Code | Client Code & Sub Code | Username or ID & Client Code or Client Code & Sub Code



A full list of options from the Pcounter for Ricoh configuration UI when configuring an MFP for authentication.

Note, for **Print Release** to function the user that is the print job owner must be the user that is authenticating at the MFP. Thus, Username or ID# must be included in the authentication fields. Print Release will not function with only client code authentication.

1.5.0 Supported Models

Pcounter for Ricoh supports all Ricoh MFPs that internally support 'Java Platform' 4.19 and above; Version 4.1x is also supported. For a list of Ricoh models and their Java Platform versions please see our Pcounter for Ricoh compatibility chart located online at:

https://apps.pcounter.com/docs/ricoh_compatibility_chart.pdf

1.6.0 Requirements

Please see our Pcounter System Requirements document at:

https://apps.pcounter.com/docs/pcounter_system_requirements.pdf

The Pcounter for Ricoh server software can be installed on Windows 2008R2 Server or any later Windows "business" operating system. Windows "Home" products that lack domain support are not recommended.

The Pcounter for Windows software (version 2.88 or later) must be installed and ready to use on the Windows print server before installing and configuring the Pcounter for Ricoh embedded management software on the server.

For more detailed information about Pcounter installation and administration please refer to the Pcounter Setup Guide and the Pcounter Documentation PDFs on the Pcounter Wiki at: https://pcounter.wixanswers.com/en/

Pcounter for Windows can be downloaded from http://www.pcounter.com To download Pcounter for Ricoh please contact Pcounter support at support@pcounter.com

2.0.0 Prepare Server

2.1.0 Install JRE & .Net

Java Runtime Environment 1.7, or newer, and .Net Framework 3.5 both must be installed on the Pcounter Server for the Pcounter for Ricoh software to function.

- On the Pcounter server, install Java Runtime Environment 1.7 or newer. <u>Here</u> is a link, or download it from the official Java web page.
- 2) On the Pcounter server, install .Net Framework 3.5.

Go to Server Manager > Add Roles and Features > click next until viewing the features list > expand the .NET Framework 3.5 Features list > check the box for .NET Framework 3.5.

e.g.



2.2.0 Open Firewall Ports

The following TCP ports must be open between the Pcounter for Ricoh server and Ricoh MFP: 80, 443, 8080, 9590, 9591, 9592, 51443, 53001, 53002

- 1) Open the Windows Firewall control panel on the Pcounter for Ricoh server.
- 2) Create a new Inbound Rule to allow the ports.

e.g. ÷ New Inbound Rule Wizard Protocol and Ports Specify the protocols and ports to which this rule applies. Steps: Does this rule apply to TCP or UDP? Rule Type Protocol and Ports TCP O UDP Action Profile Name Does this rule apply to all local ports or specific local ports? O All local ports Specific local ports: 80, 443, 8080, 9590, 9591, 9592, 51443, 53001, 53002 Example: 80, 443, 5000-5010

3.0.0 Install Pcounter for Ricoh

3.1.0 Download & Install

- 1) Download the Pcounter for Ricoh package on the Pcounter Server. To obtain a link please contact Pcounter Support at support@pcounter.com.
- 2) Run the Pcounter for Ricoh installer, take all the installer defaults or change the values as needed.
- **3)** Once installed, the Pcounter for Ricoh configuration UI will open automatically. If not, open it manually. Click Start, type Ricoh, and the "Pcounter for Ricoh Configuration" icon should pop up.



3.2.0 Configure Global Settings

1) When the Pcounter for Ricoh Configuration UI opens for the first time Global Settings should automatically be displayed. If not, access it by clicking on Settings > Global Settings.



3.2.1 'General' Settings - SNMP

- 1) Once in Global Settings, set the SNMP GET (public) and SET (private) string values.
- 2) Click apply if a change is made.

Language: English		neral
	ndows v Configure	Pcounter accounting/network type:
	glish 🗸	Language:
SNMP v2 GET community string: public	ıblic	SNMP v2 GET community string:
SNMP v2 SET community string: private	ivate	SNMP v2 SET community string:

The SNMP string values must match exactly on all embedded MFPs.

3.2.1 'Login' Settings

These settings modify the welcome screen login text and how the user can logout.

- **1)** In the 'Login' section of Global Settings, configure the login header text and intro screen text that will be displayed on a configured MFP.
- 2) Also in the 'Login' section, check the boxes as needed to allow registration of unknown cards, mask usernames/ID#s, and allow 'swipe to logout'.
- **3)** Click apply if a change is made.

• Login	
Login header text:	Welcome to Pcounter
Intro screen text:	
Force logout text:	
Status display:	Logged on user name 🗸 🗸
	Allow registration of unknown cards
	Mask username and ID numbers
	Allow login from on-screen keyboard
	(Can be disabled if using a card reader)
	Allow swipe to logout

3.2.2 'Print job release' Settings

These settings modify the Print Release application that can be installed on the MFP.

- **1)** In the 'Print job release' area of Global Settings, configure the Title and Description test that will displayed on a configured MFP.
- 2) Also in the 'Print job release' section, check the boxes as needed for user balance, page count, job cost, and submission time to be displayed in the print release screen.
- **3)** Click apply if a change is made.

• Print job release	2
Title text:	Print job release
Description:	Print job release
	✓ Display user account balance
	✓ Display job page count
	✓ Display job cost
	✓ Display job submission time
	Apply client codes to released print jobs
	Check printer online status before releasing jobs

3.3.0 Configure Network/Advanced Settings

3.3.1 Set Pcounter Data Server

Within the Pcounter for Ricoh configuration UI the Pcounter Data Server must be set. This is where the Pcounter Log file and all Pcounter databases are residubg. After making a change to the Pcounter Data Server restart the Pcounter for Ricoh service if already installed.

1) Open the Pcounter for Ricoh configuration UI and click on Settings > Network/Advanced Settings.



- 2) Set the 'Data Server name' to be the name of the Pcounter server that is running the Pcounter Data Server service and has the Pcounter Data share.
- **3)** Click OK to accept any changes.



4) If the Data server name was changed and Pcounter for Ricoh service is already installed it should be restarted to accept the change.

3.4.0 Pcounter for Ricoh Service

3.4.1 Install Pcounter for Ricoh Service

- 1) Open the Pcounter for Ricoh config UI. Click on Services > Pcounter for Ricoh service.
- 2) Make note of the 3 port numbers listed in this Window. These three TCP ports must be open on the network between the MFP, server, and any network card readers.
- 3) Click the Install button to install the Pcounter for Ricoh service.
- 4) Click the Start button to start the Pcounter for Ricoh service.

Pcounter for Ricoh service configuration	?	x
		1
Current Version: 2016.06.28		-1
HTTP port: 9590 <u>Test availability</u>		
HTTPS port: 9591 <u>Test availability</u>		
Card server port: 9592 <u>Test availability</u> (0 to disable)		
The Pcounter for Ricoh Gateway service is running. (Version 2016.05.31)		
Remove Update Stop		
<u>View status log</u>		
Delete status log		
Email status log		
Test authentication		

3.4.2 Test Authentication

- 5) Once the service is started click 'Test Authentication' to open the authentication tester.
- 6) Change the fields to network name/password (username/pw) and test an administrator account to ensure that user authentication is working as expected.

•	Authentication test
	Authentication fields: Network name/Password
	Validate entries in database
	Enforce client code associations
	Enter Network name: administrator
	Enter Password:
	Test Close
	Success!

3.5.0 Configure Printer Configuration Profiles

All MFPs will use the (Default) Printer Configuration Profile unless additional profiles are created, named, and selected.

Properly configuring the Printer Configuration Profiles is critical to the success of the implementation.

3.5.1 Configure/Create Profile

1) Open the 'Printer configuration profiles' selection window by clicking on Server > Printer configuration profiles.



2) Double click on the (Default) profile to edit it, or click Add to create a new profile.



3.5.2 Set Accounting Mode

1) Open the Printer configuration profiles selection window by clicking on Server > Printer configuration profiles.



2) Double click on the (Default) profile, or any profile, to edit it.

•	Printer configuration profiles
	(Default)

- 3) The window opens to the Configuration Profile's Settings tab.
- 4) Set the Accounting dropdown as needed.
 - Set to 'logging only' to have Pcounter only log without charging users for the cost of the job.
 - Set to 'User account balances and Logging' to have the cost of the job deducted from the user's balance. This option requires prices be set in the Prices tab.
 - NOTE. Ricoh Embedded does not support real time accounting. Balance checks are session based. If a user has enough credit login to the MFP for one page they will be allowed full access.
 - During setup and testing it is recommended to use 'Logging only'. Then once authentication and logging are working properly strict accounting can be configured if needed.



Real Time Accounting Note: Ricoh Embedded does not support real time strict accounting. Consequently, when embedded is enabled and users are being charged for copy jobs by using the 'User account balances and logging' Accounting mode, a user can authenticate to the MFP and access the Copy function whenever the account has sufficient credit to submit a one-page job.

If, after being authenticated, the user submits copy jobs for more than one page, these jobs will go through. The user account balance may be debited below 0 if the user has insufficient page credit to cover the pages on the job. This is due to a lack of response in the Ricoh operating system. Once a lack of credits is detected, a signal will be sent to the MFP's engine to stop the copy job. The engine will adhere to the stop command, but it will take several pages to do so, thus resulting in a negative balance.

3.5.3 Set Prices

When the profile's accounting mode is set to 'logging only' copy and scan prices will be logged but not deducted from the user's account balance.

When the profile's accounting mode is set to 'user account balance and logging' copy and scan prices will be subtracted from the user's account balance as well as logged.

To set prices:

1) Open the Printer configuration profiles selection window by clicking on Server > Printer configuration profiles.



2) Double click on the (Default) profile, or any profile, to edit it.

•	Printer configuration profiles
	◆ (Default)

- 3) Click on the Prices tab.
- 4) At the bottom ensure the configure prices dropdown is set to Copy prices.
- 5) Click the 'Set all prices' text to open a small window that sets all prices on all paper sizes at once.
- 6) Configure pricing as needed for copy, scan, and fax. Make note of the Duplex multiplier as well.

• _		F	Printer config	uration	profile: (De	efault)	? X
😑 Setti gs	Prie	ces					
Paper size	/ Black pr	ice / Color price	Paper size	/ Black pric	ce / Color price	Plotter area	accounting
AO	0.00	0.00	Arch C	0.00	0.00	Disabled	~
A1	0.00	0.00	Arch D	0.00	0.00	Price:	0.00
A2	0.00	0.00	Arch E	0.00	0.00	Each click equals	0 inches
A3	0.00		Duine fear all			Roll width is	0 inches
A4	0.00		Price for all	paper s		Price m	ultipliers
A5	0.00			_		Color:	
11 x 17	0.00	Black	price for all pape	r sizes: 0	.00	Duplex:	
ANSI C	0.00		Colo	r price: 0	.00		
ANSI D	0.00			ОК	Cancel		ettings
ANSI E	0.00			OK	Cancer	ult paper size:	Letter 🗸
Arch A	0.00	0.00	Legal	0.00	0.00	Fax cost: 0.00	per Page 🗸 🗸
Arch B	0.00	0.00	Monarch	0.00	0.00	Scan cost: 0.00	per Page 🗸 🗸
Conf	igure pric	es: Copy price	S		×	Set all	prices
L							

4.0.0 Prepare MFP

Before the MFP can be configured it must be prepared. Repeat the steps in the following sections on each MFP that will use Pcounter for Ricoh. These processes should not alter the MFP's behavior at this time.

4.1.0 Confirm Model Support

Pcounter for Ricoh supports all Ricoh MFPs that support 'Java Platform' 4.19 and above; Version 4.1x is also supported. For a list of supported models please see our Pcounter for Ricoh compatibility chart located online at:

https://apps.pcounter.com/docs/ricoh_compatibility_chart.pdf

4.2.0 Enable Usage Control Service

This is a one-time install on MFP that allows for 3rd party login control.

If additional assistance is needed with this vital setup step please contact support@pcounter.com. In the subject field please include 'Ricoh Embedded Support Needed' and a detailed description of the issue including the model number of the printer in question.

4.2.1 Enable Usage Control Service on Ricoh MP C401

- 1) Enter SP mode:
 - Press 'Reset', then press 806182 (may be different for different printer models)
 - press c and hold
- 2) Press System SP, then:
 SP 5-113 001 → Keep 0
 5-113 002 → Set to Unit 1
- **3)** Restart the MFP.

4.2.2 Enable Usage Control Service on MPC4501 / Java 7.23.00

- 1) Press 'Clear modes'
- 2) Enter '107'.
- **3)** Press the red 'C' button.
- 4) Enter SP Mode 3.07

4.3.0 Turn off User Authentication Management

User Authentication Management must be set to **OFF** in the MFP's web interface. To do so:

- 1) Go to the MFP's Web Image Monitor
- 2) Browse to Device Management -> Configuration -> Device Settings -> User Authentication Management
- 3) Set User Authentication Management to OFF and click OK to apply.

e.g.
← → C ☆ ③ 192.168.2.45/web/entry/en/websys/webArch/mainFrame.cgi
🏥 Apps 📋 file:///C:/Users/Jean-N 🚺 Suggested Sites 🚺 Web Slice Gallery 🔀 Google Maps 🔺 Bookm
RICOH MP C401 Web Image Monitor
Home
User Authentication Management
OK Cancel
User Authentication Management : Off
OK Cancel

4.4.0 Set Enhanced External Charge Unit Management

This is a one-time install on MFP that allows 3rd party service locking.

If additional assistance is needed with this vital setup step please contact <u>support@pcounter.com</u>. In the subject field please include 'Ricoh Embedded Support Needed' and a detailed description of the issue including the model number of the printer in question.

Procedure:

- **1)** Go to System Settings > Administrative Tools > Enhanced External Charge Unit Management.
- 2) Select all Copier functions and all 'Other Functions' functions.
- 3) De-select all Printer functions (Color and Black & White).
- 4) De-select all 'Extended Features'

4.5.0 Install Java Platform

The Java Platform must be installed on the MFP for the embedded features to be available. This process may require a software and/or hardware installation process and will vary by model. With newer models it may already be pre-installed. With older models the MFP hardware provider may be needed for assistance with installing the Java Platform.

If additional assistance is needed with this vital setup step please contact <u>support@pcounter.com</u>. In the subject field please include 'Ricoh Embedded Support Needed' and a detailed description of the issue including the model number of the printer in question.

To view if the Java Platform is installed on the MFP:

- Login to the MFP's web interface as administrator and browse to <u>Device Management</u> > <u>Configuration</u> > <u>Extended Feature Settings</u> > <u>Startup Setting</u>.
- **2)** Scroll through the pages to view all features installed on the MFP. Look for "JavaTM Platform". The version of the Java Platform is listed as well.

Startup Setting								
Back								
Start Up/Stop								
(∢ 2/3	(4 2/3))							
	Total Applications:9							
Selection	Extended Feature Name	a	Туре	Status	Description	Version		
•	PanelTest	⊞	J	Stop	GUI Testing	2.26		
•	RmLogSender	⊞	J	Stop	Remote Log Sender	apli_ve		
•	JndiLdapSampleJava	⊞	J	Stop	Jndi Ldap Sample Application	1.01		
	JavaTM Platform 🥌	≣	С	Starting Up	Extended Feature(JavaTM Platform)	12.00.19		

4.6.0 Install RXConfServlet

RXConfServlet is a Ricoh embedded prerequisite and must be installed prior to Pcounter Embedded. Installing RXConfServlet does not change the behavior of the MFP in any way.

- 1) Open a web browser such as Internet Explorer and navigate to the MFP's Web Image Monitor by browsing the MFP's IP address with the web browser.
- 2) Login as admin.
- 3) Browse to Device Management>Configuration.
- 4) Browse to Extended Feature Settings>Install.
- 5) Choose 'Local File', then click 'Choose File' and browse to the 'Embedded Files' directory. By default the path is:

<u>C:\Program Files (x86)\Pcounter for Ricoh\Embedded Files</u>

6) Select the file <u>RfConfServlet-3.4.1.zip</u> and click open.



7) Click "Display Extended Feature List".

Install	
Back	
elect a source media, then click [Display Extended Feature List].	
Source Media	
SD Card Slot Web Server Local File : Choose File rxconfServlet-3.4.1.zip Display Extended Feature List	
Back	

-Continued on next page-

- 8) There will be a brief delay as the package is processed by the MFP.
- 9) Once the options have expanded, set 'Install to' to 'Device HDD'.
- **10)** Set 'Auto Start' to 'On'.
- **11)** Select the bullet at the bottom next to RXConfServlet.

Install				
Back				
Select a source media, then click [Display Extended Feature List].				
Source Media				
SD Card Slot Web Server Local File : Choose File No file chosen Display Extended Feature List				
Installation Target Setting				
■Install to : Device HDD ▼				
Type-J Setting				
Auto Start : On Off				
Extended Feature List				
Install				
Total Applications:1				
Extended Feature Name	Туре	Description	Version	Source Medi

rxconfServlet

	ded Feature List		
•	1/1 🕞 🕞 Total Applications:1		
	Extended Feature Name	Туре	Description
۲	rxconfServlet	J	rxconf Serv
	rxconfServlet	1	rxco

J

rxconf Servlet

3.4.1

Local File

-Continued on next page-

13) Next, browse to Device Management>Configuration>Extended Feature Settings>Startup Setting.



- 14) Select the bullet next to 'RXConfServlet'.
- 15) Click 'Start up/Stop'.
- **16)** After a short wait the status will update to 'Starting Up'.

RICOH MP C401 Web Image Monitor							
Home							
Startu	p Setting						
Back	_						
Start Up/Stop							
(d) 1/2 () (d)							
	Total Applications:8						
Selection	Extended Feature Name	e 🗉	Туре	Status	ß	Description	
۲	rxconfServlet	⊞	J	Starting	Up	rxconf Servlet	

- **17)** RXConfServlet is now installed and started.
- **18)** The MFP is now prepared for further configuration in later chapters.
- **19)** Repeat the Chapter 4.0.0 4.6.0 with each additional MFP that will be used with Pcounter for Ricoh Embedded.

5.0.0 Configure MFP

The following processes are used to enable embedded authentication and accounting on Ricoh MFPs using Pcounter. Please note that these processes may change the behavior of the MFP and users may need to be informed beforehand of a change in workflow and MFP behavior.

5.1.0 Add MFP to List

- Open the Pcounter for Ricoh configuration interface on the Pcounter server. It should be located at C:\Program Files (x86)\Pcounter for Ricoh and named "pcounterRicohConfig.exe" by default.
- 1) At the top of the window, click on Printer>Add printer to list.

Pcounter for Ricoh Configuration					
📋 Server 👻 🏹 Settings 👻 🕲 Services 👻 🕘 Printer 👻 🥐 Help 👻					
MFP IP Address Associated print queue Profile Device type					
Printer IP address					
Device hostname or IP address: OK Cancel Import					

- 2) Enter the IP address of the MFP and click OK.
- 3) The MFP will now be shown in the device list.



Repeat this process as needed until all devices are in the list.
 Note, this device list is intended for embedded Ricoh MFPs only.

5.2.0 Configure Print Queue & Configuration Profile

The device name used for logging purposes comes from the associated print queue.

The MFP's Configuration Profile in the same window as the associated print queue.

- 1) Doubleclick any device in the list to open its Device Configuration window. Alternatively, right click the device in the list and choose Device Configuration.
- 2) In the first tab of the Device Configuration window that opens:
 - Ensure the 'Associate with print queue' matches the MFP's unique print queue. Click the left arrow button to change the queue if necessary.
 - Configure the 'Configuration Profile' as needed. Click Select to change profiles or Edit to modify the currently selected profile. <u>See 'Configure Printer Configuration Profiles' for</u> <u>more information.</u>

<u>+</u>	Device configuration: 192.168.2.30		? X
🕒 192.168.2.30 🜔 Access p	ermissions Authentication configuration		
Associate with print queue:	Lexmark CX725		+
Device type:	Lexmark CX725		Detect
Configuration profile:	(Default)	Select	Edit
Pcounter pull queues: (Enter one per line)		<	÷

5.3.0 View Embedded Status

Pcounter can quickly display an MFP's embedded status. This shows if the MFP is configured to use embedded authentication, embedded print release, and/or embedded client code selection, as well as display the embedded server's IP address and the ports being used for authentication. To view an MFP's embedded status:

- Open the Pcounter for Ricoh configuration interface on the Pcounter server. It should be located at C:\Program Files (x86)\Pcounter for Ricoh and named "pcounterRicohConfig.exe" by default.
- 2) Double click the printer being configured in the device list to open its configuration window.



-continued on next page-

3) Click on the Embedded Status tab and after a brief delay the device's current embedded status will be displayed on the left.



4) If the message "Java needs to be installed in order to configure the printers." Is displayed then the Pcounter server is missing Java. If so, please refer back to section <u>1.0 Prepare MFP</u> and <u>install Java</u> Runtime Environment 1.7 or newer on the Pcounter server.

 Embedded Status 	

Java needs to be installed in order to configure the printers.

5.4.0 Define Server IP

To begin the configuration process, first define the server IP in the device's 'Embedded Status' tab. This process should not change the current workflow or the behavior of the MFP.

- Open the Pcounter for Ricoh configuration interface on the Pcounter server. It should be located at C:\Program Files (x86)\Pcounter for Ricoh and named "pcounterRicohConfig.exe" by default.
- 2) Double click the printer being configured in the device list to open its configuration window.



- **3)** Click on the Embedded Status tab and after a brief delay the device's current embedded status will be displayed on the left.
- **4)** Click on 'Set server address configuration in printer' below the Embedded Status in the middle of the window to define the server's IP in the MFP. This should not yet alter the behavior of the MFP.

L	I Device configuration: 192.168.2.45
	🕒 192.168.2.45 🕓 Access permissions 🗍 🏶 Authentication configuration 🔍 Embedded Status
i	Embedded Status
	PrintReleaseVersion = 2016.4.1 AuthenticationVersion = 2016.4.1 ClientCodeVersion = Not installed PcounterServerIP = 192.168.2.201 PcounterServerPort = 9590 PcounterServerSecurePort = 9591
	 Open printer web page Set server address configuration in printer

5.5.0 Install Authentication Package

This section details installation of the PcounterAuthentication.zip package.

- 1) Open a web browser such as Internet Explorer and navigate to the MFP's Web Image Monitor by browsing the MFP's IP address with the web browser.
- 2) Login to the MFP's web page using the MFP's admin username and password.
- **3)** Browse to Device Management>Configuration.
- 4) Browse to Extended Feature Settings>Install.
- 5) Choose 'Local File', then click 'Choose File' and browse to the 'Embedded Files' directory. By default the path is:

C:\Program Files (x86)\Pcounter for Ricoh\Embedded Files

6) Select the file <u>PcounterAuthentication.zip</u> and click open.



7) Click "Display Extended Feature List".

MP C401	Web Image Monitor
edia, then click [Dis	splay Extended Feature List].
Choose File Pco Display Extended	unterAuthentication.zip
	edia, then click [Dis Choose File Pco

-Continued on next page-

- 8) There will be a brief delay as the package is processed by the MFP.
- **9)** Once the options have expanded, set 'Install to' to 'SD Card Slot 1' or 'SD Card Slot 2' (depending on where your SD card is installed).
- **10)** Set 'Auto Start' to 'On'.
- **11)** Select the bullet at the bottom next to 'Pcounter Login'.

← → C f 192.168.2.45/web/entry/en/websys/webArch/mainFrame.cgi							
Apps	file:///C	:/Users/Jean	Suggested Sites	🗐 Web Sli	ce Gallery 👂	🖣 Google Maps	🛨 Bookmarks
RIC	ЮН	MP C40)1 Web Image	Monitor			
∢ Home							
Insta	11						
Bac	k						
Select a s	ource me	dia, then click	[Display Extended F	eature List]			
Source	Media						
SD Ca Web S Local f	Gerver File :		No file chosen ded Feature List				
Installa	tion Targe	t Setting					
∎Install t	to : S	D Card Slot	1 🔻				
Type-J S	Setting						
Auto St	Auto Start : On Off						
Extended Feature List							
∎Inst	all						
Total Applications:1							
	Extended	d Feature Nam	ie		Туре	Description	
۲	Login Pc	ounter			J	Pcounter Auth	entication Module

12) Click the 'Install' button.

Extended Feature List						
(
	Total Applications:1					
	Extended Feature Name	Туре	Description			
۲	Login Pcounter	J	Pcounter Auth			
Back						

-Continued on next page-

13) Next, browse to Device Management>Configuration>Extended Feature Settings>Startup Setting.



- 14) Select the bullet next to 'Login Pcounter.
- **15)** Click the 'Start up/Stop' button
- **16)** After a short wait the status will update to 'Starting Up'.

RICO	RICOH MP C401 Web Image Monitor						
Home							
Startu	p Setting						
	Back						
E Start	Up/Stop						
(1/	2 🕨 🗎						
Total Applications:8							
Selection	Extended Feature Name		Туре	Status	Description		
	rxconfServlet	⊞	J	Starting Up	r conf Servlet		
۲	Login Pcounter	⊞	J	Starting Up	Pcounter Authentication Module		

17) Pcounter Authentication is now installed and started.

5.6.0 Set Function Priority

The MFP's 'function priority' defines what embedded service has priority. Setting it to 'Pcounter Login' will ensure the Pcounter login screen has priority and is displayed by default.

5.6.1 Set Function Priority on 10.x

1) Going back to 'Device Management' > 'Configuration' > 'Device Settings' > 'Function Key Allocation/Function Priority'.

Home Home	
Conf	iguration
Ba	ck
-	Device Settings
-	 System Function Key Allocation/Function Priority Paper

2) Set 'Function Priority' to 'Pcounter Login'.

Function K	ey Allocat	ion/Funct	ion Priority

ОК	Cancel		
Function Key A	llocation		
Function Key 1	:Copier	Ch	ange
Function Key 2	:Docun	nent ServerCh	ange
Function Key 3	:Printe	- 🖌 Chi	ange
Function Priorit	y :Pcoun	ter Login Ch	ange

3) Reboot the MFP.

5.6.2 Set Function Priority on 7.x

 Function Priority must be set to 'Java TM/X' and the Pcounter Login app must be set to 'Priority' (Extended Features Settings -> Startup Setting, click on Priority button next to Pcounter Login).

5.6.3 On Android models (Smart Operation Panel)

- 1) Go to Screen Features -> Screen Device Settings -> Function Priority
- 2) Scroll down to find and select Pcounter Login

Notes:

- To get to the *Pcounter Login* app, click on the *'Home' button'* and scroll up or down to find the *Pcounter Login* button.
- Some models have a 'Other Function' button instead of a 'Home' button. If 'Other Function' button only displays 'Java TM', then click on 'Java TM' to see the installed apps (Pcounter Login, Client Code, Print Release, etc).

5.7.0 Configure Authentication Prompt

The 'Authentication Prompt' setting in the Pcounter for Ricoh configuration interface directly controls what the user will be prompted for during walkup authentication.

- 1) Open the Pcounter for Ricoh configuration interface.
- **2)** Double click on the previously configured MFP in the list to open the device's configuration window.
- **3)** Click on the Authentication configuration tab.
- 4) Set the Authentication field dropdown as desired.

For testing try Network Name or Network Name/Password.

)	I Pcounter for Ricoh Configuration
	🔝 Server 👻 Settings 👻 🎯 Services 👻 📇 Printer 👻 🥐 Help 👻
	MFP IP Address Associated print queue Profile Device type
	4 192.168.2.45 RICOH MP C401 (Default) RICOH MP C401
5	Device configuration: 192.168.2.45
	□ 192.168.2.45 ○ Access permissions ◆ Authentication configuration
	Authentication options
	Authentication fields: Network name
	Network name ID number
l	Client code
1	Print job options Network name/Password Network name/Client code
	ID number/PIN number
	Automatically releat ID number/Client code s are enforced Network name/Password/Client code
	Run print release a ID number/PIN number/Client code
	Allow jobs to be kept for reprint
	Client code options
	Validate entries in database
	Enforce client code associations
	Ask for subcode

5.8.0 Install Print Release Application (Optional)

Pcounter Embedded has an optional secure print release application that can be installed on the MFP. The Print Job Release application is required for Secure Print Release and allows users to release their print jobs that are held in a Pcounter hold queue on the Pcounter server. Secure Print release both reduces paper waste and improves security.

There are two types of Secure Print Release:

With **<u>Pull Printing</u>** users print to a master hold queue then release the print job at any embedded MFP. Pull printing requires both a hold queue and an exit queue.

With **<u>Simple Print Release</u>** users print to an MFP specific hold queue then release the print job at that same MFP only. Simple print release only requires an exit queue.

To enable Secure Print Release the PrintJobRelease.zip must first be installed on the Ricoh MFP:

- 1) Open a web browser such as Internet Explorer and navigate to the MFP's Web Image Monitor by browsing the MFP's IP address with the web browser.
- 2) Login to the MFP's web page using the MFP's admin username and password.
- **3)** Browse to Device Management>Configuration.
- **4)** Browse to Extended Feature Settings>Install.
- **5)** Choose 'Local File', then click 'Choose File' and browse to the 'Embedded Files' directory. The default path is:

C:\Program Files (x86)\Pcounter for Ricoh\Embedded Files

6) Select the file <u>PrintJobRelease.zip</u> and click open.



7) Click "Display Extended Feature List".

RICOH MP C401 Web Image Monitor
↓ Home
Install
Back
Select a source media, then click [Display Extended Feature List].
Source Media
SD Card Slot Web Server Local File : Choose File PcounterAuthentication.zip
Display Extended Feature List

- 8) There will be a brief delay as the package is processed by the MFP.
- **9)** Once the options have expanded, set 'Install to' to 'SD Card Slot 1' or 'SD Card Slot 2' (depending on where your SD card is installed).
- **10)** Set 'Auto Start' to 'On'.
- **11)** Select the bullet at the bottom next to 'Print Job Release.

← → C 1	192.168.2.45/web/entry/en/websys/webArch/mainFrame.cgi
🔛 Apps 📄 file	e:///C:/Users/Jean 🚺 Suggested Sites 📑 Web Slice Gallery 👷 Google Maps 🛪 Bookmarks
RICOI	H MP C401 Web Image Monitor
Install	
Back	
Select a source	media, then click [Display Extended Feature List].
Source Media	
SD Card Slo Web Server	
Installation T	arget Setting
Install to	SD Card Slot 1 *
Type-J Settin	g
Auto Start	: * On © Off
Extended Fea	ature List
↓ Install	
 1/1 	D (0)

12) Click the 'Install' button.

Extended Feature List					
	1/1 💽 🗐				
	Total Applications:1				
	Extended Feature Name	Туре	Description		
۲	Login Pcounter	J	Pcounter Auth		
			1		

13) Next, browse to Device Management>Configuration>Extended Feature Settings>Startup Setting.

Extended Feature Settings				
Startup Setting				
Extended Feature Info				
Install				

- 14) Select the bullet next to 'Print Job Release'.
- **15)** Click the 'Start up/Stop' button
- **16)** After a short wait the status will update to 'Starting Up'.

RICO	OH MP C401	Web	lmag	ge Monitor	
Home					
Startu	p Setting				
	2 () ()				
	Total Applications:8				
Selection	Extended Feature Name		Type	Status	Description
•	rxconfServlet	⊞	J	Starting Up	r conf Servlet
۲	PrintJobRelease		J	Starting Up	Print Job Release Application

17) Print Job Release is now installed and started.

5.10.0 Install Client Code Application (Optional)

Repeat the steps in section 5.8.0 but use the ClientCode.zip instead of PrintJobRelease.zip for every step.

5.11.0 Enable Card Access (Optional)

When a supported USB reader is attached to the Ricoh MFP the reader should power on and start allowing card swipes immediately, however there must be an ID# database of some sort to validate the ID# contained on the card.

There are three ways ID#s validation can be handled:

- 1) Automatic ID# Association
- 2) ID# database in Pcounter
- 3) ID# attribute in Active Directory

5.11.1 Automatic ID# Association

If no existing ID# database is present Pcounter can automatically create ID#s during first time user login. If enabled than when the user swipes their card for the very first time they are prompted to enter their username then password. If they enter a valid username and password then an ID# entry is created for them in Pcounter Administrator's ID# database automatically.

The ID# entry will be the result of the card swipe.

Future card swipes with the same card will log the user in immediately without further prompting. To enable:

- 1) Open the Pcounter for Ricoh configuration interface and click on Settings>Global Settings.
- 2) Check the box for 'allow registration of unknown cards'. Restart the Pcounter for Ricoh service.



- **3)** The unknown card that is swiped will trigger the automatic registration process and the user will be prompted to enter a valid username and password.
- **4)** If a valid username and password is entered, the card swipe result will be saved as an ID# for the user in Pcounter Administrator's ID# database. Future swipes with the same card will log the same user in immediately.

5.11.2 ID# Database

Pcounter Administrator has an ID# database located at Pcounter Administrator's bottom right corner.

Pcounter Adminis	trator: PIN/Card I	Database		
Jtility Accounting Po	ipup Database P	counter Users Pro	Help	
🎝 Domain 👻 🚀 Repo	rts 🛛 🔶 Preferer	nces 🛛 🤱 Automatic	n	
Jsername Fullna	me ID Number F	PIN Number ID Nun	ber 2 PIN Nu	umber 2
administrator	A00000000			
🔓 bcase	777			
🔓 dwilson	888			
test level 1	123			
test2	781			
testy	23922			
b tomc	999			
🐣 User Accounting	▲ Client codes	Note that the second se	associations	Pcounter Pro ID/PIN numbers

- **4)** Populate ID#s manually by right clicking any user and choosing 'set ID number'. Change OU's using 'user accounting' in the bottom left.
- 5) Import ID#s from a txt or csv file by clicking Database > Import at the top of the Pcounter Administrator window.
- 6) To view all existing ID#s, right click in an empty area and choose 'view database'.
- 7) To view the existing OU of users, right click and choose 'view domain'.

5.11.3 ID# Attribute

The ID# can reside in an Active Directory attribute as well. To configure this:

- 1) Open the Pcounter for Ricoh configuration interface and click on Settings > Network/advanced settings.
- 2) Populate the name of the attribute to be used, e.g. 'employeeid', then click test.

Pcounter accounting cor	nfiguration	? ×
🕒 Configure 🔵 Advance	ed settings	
	DLL version: 10.29.2013	
 Pcounter data server 		
Data server name:	Windows services using this DLL should be running on the Pcounter data server.	
 Login credentials for rem 	ote print/data servers	
Login name:	administrator@andtechsf.com Test	
Password:	••••	
NetWare/OES and LDAP	support	
🗖 Use eDirecto	ry authentication	
Active Directrory support	t y	
ID number attribute:	employeeid Test	
PIN number attribute:		
Begin directory searche	is at:	
LDAP://DC=ANDTECHS	5F,DC=com	-
		-
	Check database if directory lookup fails	
	On card registration, save to AD attribute	
	OK Cancel He	lp

3) Enter a test ID# into the blank field and click test again. If the lookup is successful the corresponding username will be displayed. If not, an ADS error will be displayed.

Success!	×
	Tom
	OK

5.12.0 Ricoh Logout Timers (Optional)

Ricoh MFPs have two internal timers that will automatically log the user out. Both are configured in the MFP's web interface. To configure the MFPs Logout timers:

- 1) Open a web browser such as Internet Explorer and navigate to the MFP's Web Image Monitor by browsing to the MFP's IP address.
- 2) Login to the MFP's web page using the MFP's admin username and password.
- **3)** Browse to Device Management > Configuration.
- **4)** Browse to Device Settings > Timer.
- 5) The only two timers that effect the embedded authentication session are "Sleep Mode Timer" and "Low Power Mode Timer", at this time.

Sleep Mode puts the MFP entirely to sleep and requires more startup time than low power mode.

Low Power Mode put the MFP into a low power mode and requires less startup time than sleep mode.

Timer		
ОК	Cancel	
Sleep Mode Ti	mer	: 60 minute(s)
Low Power Mo	ode Timer	: • On Off 20 minute(s)

6.0.0 Pcounter Print Release

Please consult our Pcounter Print Release document online at: <u>https://apps.pcounter.com/docs/Pcounter_Print_Release.pdf</u>

7.0.0 Testing

7.1.0 Authentication & Accounting Test

Use the following process to test authentication and accounting by performing a copy job and then confirming it logged using Pcounter Administrator's Report Generator.

- 1) If needed, use Pcounter Administrator (PAdmin.exe) to view users, client codes, and/or ID#s. This is information will be needed to login to the MFP.
- 2) Make note of the MFP's Authentication Fields setting.
- 3) Walkup to the MFP and login using a username, client code, ID# or whatever was configured.
- 4) While logged into the MFP, perform a 1 page copy job and then log out completely.
- 5) Open Pcounter Administrator and at the top left click Utility>Open Log File.
- 6) In the Window that opens the Pcounter.log should be displayed in the default log directory of C:\Pcounter\Data. Click Open to generate a default report.



7) The job that was just performed should be visible in the log. Note the date and time.

PCOUNTER.LOG Print History: 08/12/2015 to 08/12/2015							
🔚 Save 📇 Print 🚘 Print setup 🔶 Preferences 🖃 Email 👻 🔎 Search							
User	Document	Printer	Date/Time	Computer	Client Code		
PrinterPopupUsers\	Job_G073PC01090_1439415460698	\RICOH RICOH MP C401	08/12/2015 14:37:27		beta		
1 Total Jobs							
Report Totals	-	-	-	-	-		
Average Job	-		-	-	-		

8.0.0 Manual Processes (Optional)

8.1.0 Define Server IP (Optional)

<u>Note</u>: This process can be done in Pcounter GUI and is documented in a previous chapter. The manual version of this process is optional and can be used for troubleshooting.

1) Open a command prompt and run the following command:

(Replacing MFP.IP.ADD.RESS with the IP of the MFP and SERV.IP.ADD.RESS with the IP of the server)

java -jar RicohConfigTool.jar -host MFP.IP.ADD.RESS -user admin -pass admin setServerIP -IP SERV.IP.ADD.RESS -port 9590 -securePort 9591

C:\U: adm:	sers∖Tom> java in setServerIP	-jar RicohConfigTool.jar -host 192.168.2.45	ser admin	-pass
			MFP IP	
	Server IP/Ports			

NOTE: If the MFP Admin password is not set, use two quotation marks "" in the script for admin password.

9.0.0 Customization & Troubleshooting

9.1.0 Supported Languages

Pcounter for Ricoh supports the following languages: English, Spanish, French, Italian, German, Portuguese, Finnish, Dutch, Czech, Swedish, Danish, Polish, Norwegian, Hungarian, and French Canadian.

The language used by the Pcounter Embedded application is defined in Global Settings. e.g.



9.2.0 Customize Embedded Text

It is possible to modify much of the text used by Pcounter for HP. To do so please consult our Customize Embedded Text document online at: https://apps.pcounter.com/docs/Customize_Embedded_Text.pdf

10.0.0 Documentation and Video Links

Download or view this guide online at: http://apps.pcounter.com/docs/Ricoh_Setup_Guide.pdf

Please view all Pcounter Videos online at: <u>https://www.youtube.com/andtechsf/</u>

Please also visit our Pcounter Support website at: https://pcounter.wixanswers.com/en/

This concludes the guide. If there are any questions, please email support@pcounter.com