



Pcounter Swipe

Installation Guide

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0.0 - Introduction

Pcounter Swipe is an add-on component for Pcounter Pro that enables Secure Print Release and provides a Follow/Pull Printing Solution for all printer makes and models. It is intended especially for printers that do not support embedded authentication.

With **Pcounter Swipe**, the user swipes their card on a preconfigured, network-attached card reader and all of their jobs print immediately at the corresponding printer.

All printer activity is tracked, logged, and controlled through Pcounter Pro.

0.1 - Prerequisites

Pcounter Swipe requires:

- A Pcounter Swipe license for each printer.
- A Pcounter approved Network Card Reader for each printer.
- A HID or Magstripe card for each user.
- An ID# database or attribute.

1.0 - Installation

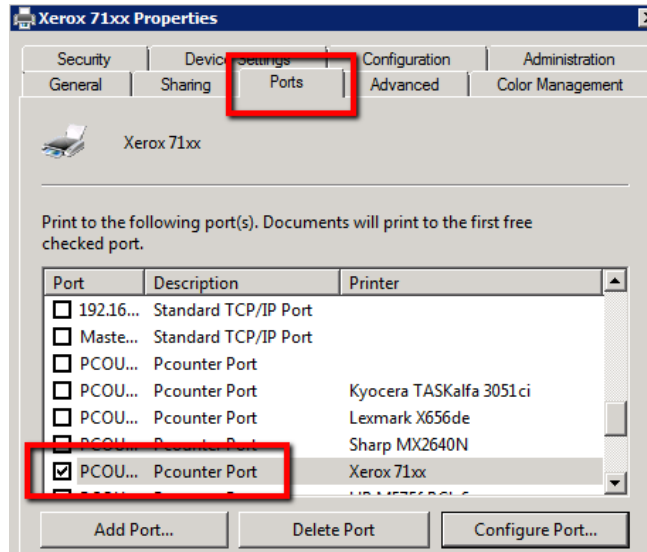
How to install Pcounter Swipe.

1.1 - Confirm Pcounter Configuration For Intended Printers

Confirm Pcounter is fully configured for all printers that will be used with Pcounter Swipe.

NOTE. Pcounter Pro is needed if job logging, job accounting, PPopup, or other Pcounter features are needed.

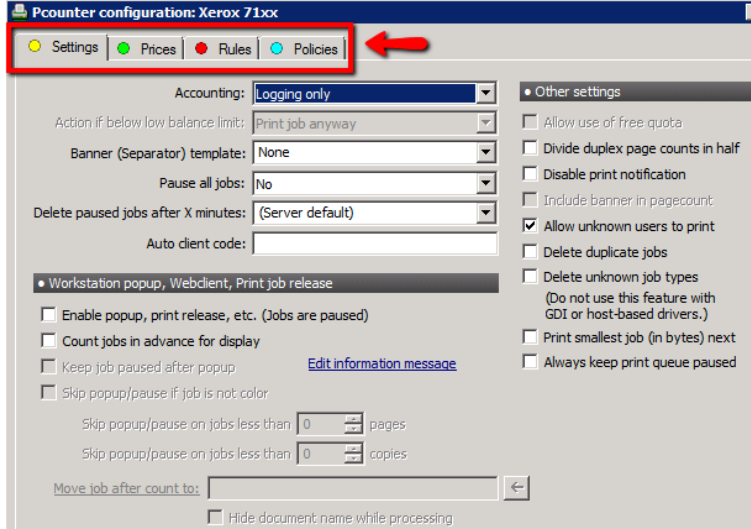
- 1) Confirm the printers intended for Pcounter Swipe are currently using a Pcounter Port. Go to Printer Properties>Ports.



A Pcounter port should be selected. If not, consult our Pcounter - Prepare, Install, Configure document and video [here](#) for instructions on configuring Pcounter on a printer share.

If the printer is not using a Pcounter Port, Pcounter will not track its usage.

- 2) Confirm the printers intended for Pcounter Swipe are configured in Pcontrol. Go to Pcontrol>Server Configuration>Printers>Printer Configuration.

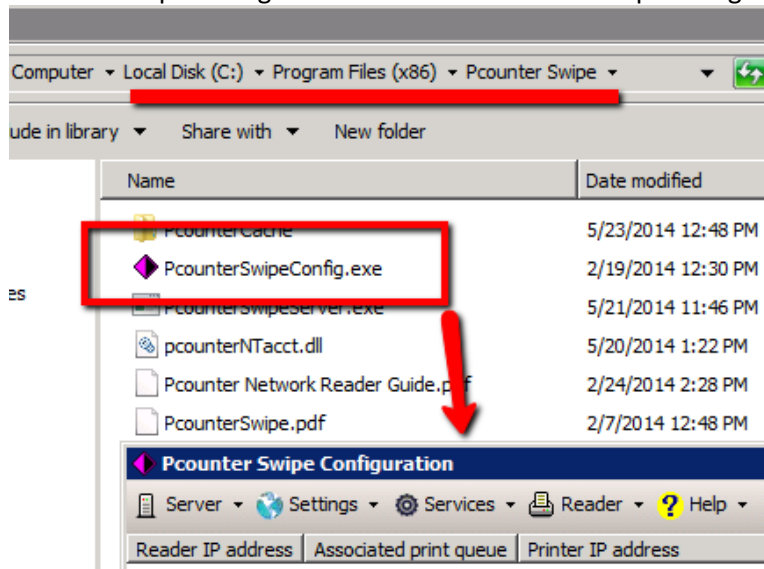


Ensure the printer is configured and tested. If not, consult our Pcounter - Prepare, Install, Configure document and video [here](#) for instructions on configuring Pcounter on a printer share. These settings can be changed anytime, even after Pcounter Swipe configuration.

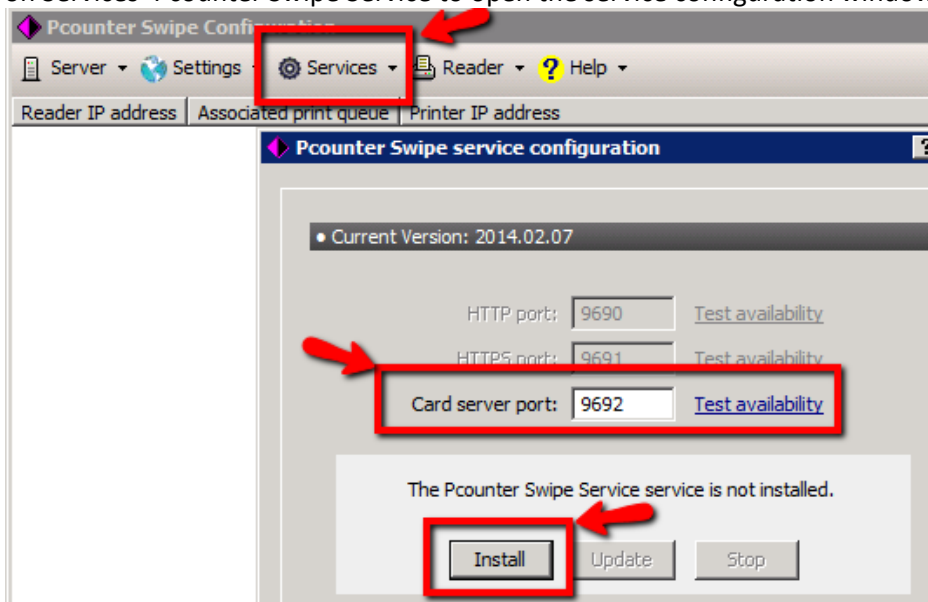
1.2 - Install Pcounter Swipe

In this section, we will download and install the Pcounter Swipe software, as well as install the Pcounter Swipe service.

- 1) Download Pcounter Swipe [here](#).
- 2) Click next to take all defaults in the installation wizard.
- 3) Browse to the Pcounter Swipe installation directory, by default C:\Program Files (x86)\Pcounter Swipe.
- 4) Launch the Pcounter Swipe Configuration interface 'PcounterSwipeConfig.exe'.



- 5) Click on Services>Pcounter Swipe Service to open the service configuration window.

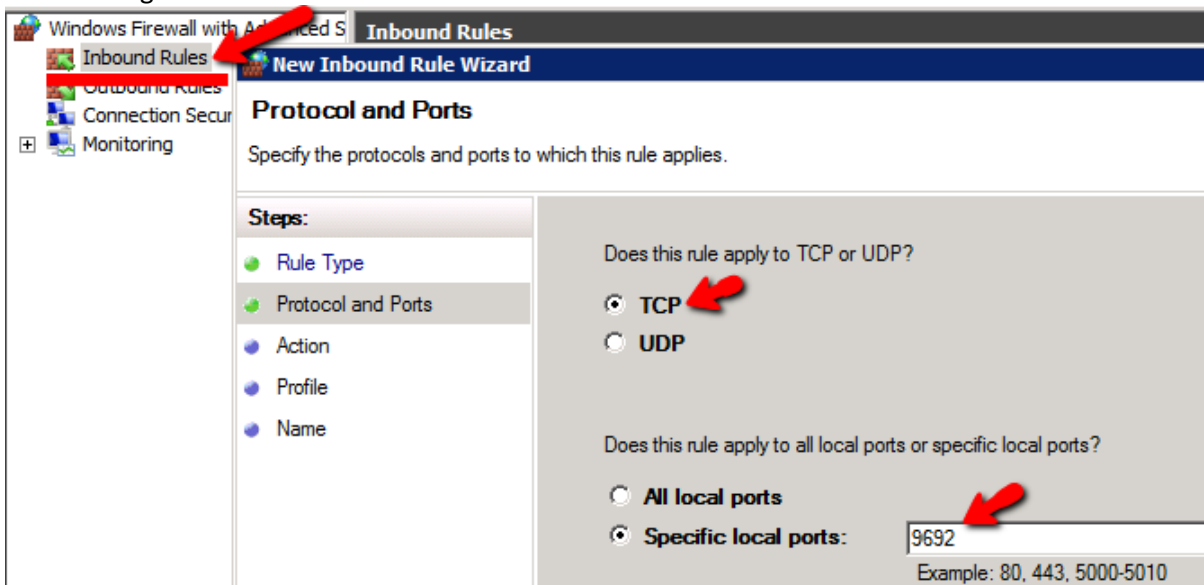


- 6) Click the 'Install' button to install the Pcounter Swipe service.
7) Note of the 'Card Server Port'. The default is 9692. This is the port the network reader will use to communicate with the Pcounter Swipe Server and, if the server is using a firewall, must be opened.
8) Click 'Start' to start the service.
9) Click OK to close the Swipe service configuration window.

1.3 - Open Firewall For Pcounter Swipe

TCP Port 9692 is the default port for Pcounter Swipe. The Windows Firewall, if enabled, will block this port by default. If this is the case, an exception must be created to open the port.

- 1) Use the Windows Firewall snap in to create an incoming Windows Firewall exception for TCP port 9692, or whatever port is defined for 'Card server port' in the Pcounter Swipe service configuration window.



1.4 - Attach Network Reader To Network

- 1) Attach the network reader's network directly to the network via Ethernet in a location where it will receive an IP address from DHCP.
- 2) The reader should be located next to the printer that it will be associated with for print release.
- 3) The lights on the network reader should light up green to show a good connection to the network.

1.5 - Locate Network Reader

Now that the network reader is attached to the network, it should receive an address from the site's DHCP server automatically.

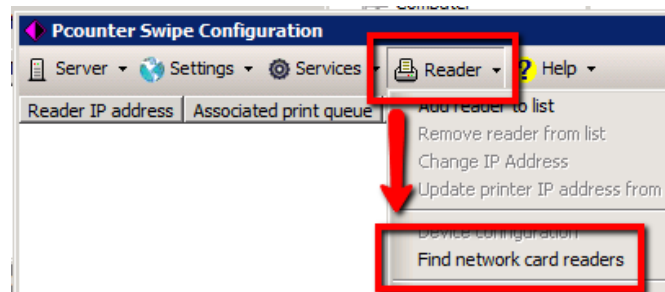
We must now locate the IP address of the reader to proceed with configuration.

There are three options for locating the reader in DHCP, either:

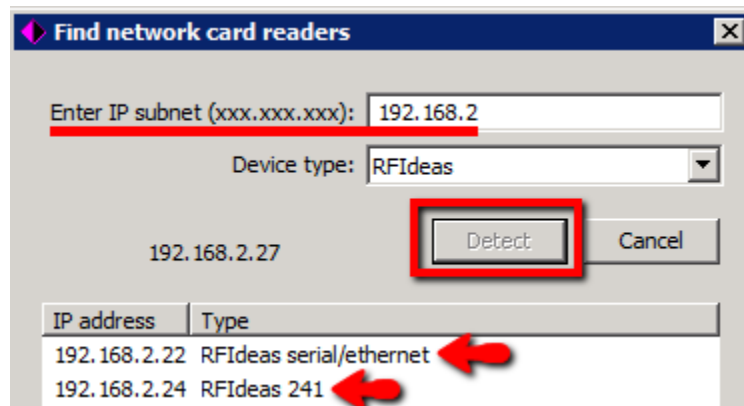
- 1) Have the site's DHCP administrator locate the reader's IP address by searching in the DHCP scope for a DHCP client with the MAC address that matches the MAC address printed on the sticker attached to the network reader, or;
- 2) Scan for the IP address of the reader using the first three octets of the DHCP scope and the 'Find Readers' interface built into Pcounter Swipe.
- 3) Scan for the IP address of the reader using the first three octets of the DHCP scope and the Pcounter PScan utility.

1.5.1 - Scan For Network Reader With 'Find Readers' Interface.

- 1) Open the Pcounter Swipe Configuration interface.
- 2) Click Reader>'Find network card readers'



- 3) Enter the first three octets of the IP address range the reader should be in and click 'Detect'.
- 4) Detected readers will be displayed in the field below. Our example picture shows two readers detected at the IPs 192.168.2.22 and 192.168.2.24



- 5) Once the IP address is obtained, the reader can be configured.

1.5.2 - Scan For Network Reader With PScan

If the 'Find Readers' interface is not an option, scan using PScan.

- 1) The network reader must be attached to a segment of the network that has DHCP and you must know the first three octets of the DHCP scope, such as 192.168.1 or 10.10.10.
- 2) Download PScan [here](#) and extract to c:\
- 3) The command syntax is:
pscan findreaders ip.ip.ip

ip.ip.ip = the first three octets of the IP address range the reader is in.

For our example shown below, we will search the subnet '192.168.2'

pscan findreaders 192.168.2

```
C:\>pscan findreaders 192.168.2
```

- 4) Hit enter to execute the command, the IP address will be searched one by one. If a reader is located, it will display 'Found', the IP address of the reader, and the reader type.
In our example screenshot, two readers are detected at the IPs 192.168.2.22 and 192.168.2.24
IE:

```
Administrator: Command Prompt - pscan findreaders 192.168.2
C:\>pscan findreaders 192.168.2
Searching.....
Found 192.168.2.22 [RFIdeas serial/ethernet]
Searching....
Found 192.168.2.24 [RFIdeas 241]
Searching.....
```

- 5) Once the IP address is obtained, the reader can be configured.

1.6 - Configure Network Reader

The network reader must now be configured to send card swipe data to the Pcounter server IP and special Swipe service port. This is done in the reader's configuration web page.

AND Technologies recommends Firefox for accessing and configuring RFIdeas network readers.

- 1) Using Firefox, browse to the IP address of the reader obtained in chapter 1.5.
- 2) Based on the look of the web page, use the appropriate walkthrough in the next two sections:

1.6.1 - Configure RFIdeas AKE Serial/Ethernet Reader

- 1) Under 'Passive Connection', change 'Accept Incoming' to 'Yes'.
- 2) Under 'Active Connection', change 'Active Connect' to 'With Any Character'.
- 3) Check the box for 'Auto increment for active connect'.

Connection Settings

Channel 1

Connect Protocol
Protocol: TCP

Connect Mode

Passive Connection:
Accept Incoming: Yes

Active Connection:
Active Connect: With Any Character

Password Required: Yes No
Password:

Start Character: 0x0D (in Hex)
Modem Mode: None
Mdm Esc Seq Pass Thru: Yes No

Endpoint Configuration:
Local Port: 10001
Remote Port: 9692
Remote Host: 192.168.1.2
 Auto increment for active connect

- 4) 'Remote Port' corresponds to 'Card Server Port' as defined in the Pcounter Swipe service UI.
- 5) 'Remote Host' is the IP address of the server where the Pcounter Swipe service is installed.

Endpoint Configuration:
Local Port: 10001
Remote Port: 9692
Remote Host: 192.168.2.201
 Auto increment for active connect

Current Version: 2014.02.19

HTTP port: 9690
HTTPS port: 9691
Card server port: 9692

The Pcounter Swipe Service service is running.
(Version 2014.05.20)

```
C:\Users\Administrator>ipconfig
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . . . : 
    Link-local IPv6 Address . . . . . : fe80::476a:dec
    IPv4 Address. . . . . : 192.168.2.201
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.2.200

Tunnel adapter isatap.{B336A187-AD06-41A1-BCE8-C31B93596
Media State . . . . . : Media disconnected
```

- 6) Once all settings are defined, click 'OK' at the bottom of the window, then click 'Apply Settings' and wait until the page refreshes. This may take a minute or so. This step is critical.

1.6.2 Configure RFIdeas 241 Reader

- 1) Set 'Data Server Str' to '/demo/data/put.php?csn=\$1' Critical step.
- 2) 'Data Server IP' is the IP address of the server where the Pcounter Swipe service is installed.
- 3) 'Data Server Port' corresponds to 'Card Server Port' as defined in the Pcounter Swipe service.
- 4) Set 'Data Retry Count' to 1, 'Data Retry Sleep' to 1, 'Data Long Beep' to 1, and 'Data Short Beep' to 1.
- 5) Once all settings are defined, click 'Update' at the bottom of the window, then manually refresh the web page and ensure the settings are shown correctly.

The screenshot displays the 'Ethernet 241 Configuration' web interface. The 'Server' tab is active, showing various configuration fields. Red boxes highlight the 'Data Server Ip' (192.168.2.201), 'Data Server Port' (9292), and 'Data Server Str' (/demo/data/put.php?csn=\$1). Red arrows point from these fields to the Windows command prompt and the service configuration window. The command prompt shows the IP configuration for the Ethernet adapter, with the IP address 192.168.2.201 highlighted. The service configuration window shows the 'Card server port' set to 9692.

Ethernet 241 Configuration

Ip Ports Server Status System Log

Init Server Ip: 0 . 0 . 0 . 0 Init Server Port: 80

Init Server Url: http://www.rfideas241.com

Init Server Str: /demo/init/init.php?csn=\$1&mac=\$2&luid=\$3&seq=\$4&ip=\$5&devmac=\$6&devip=\$7&rdr=\$8&fwver=\$9

Init Retry Count: 9 Init Retry Sleep: 2 Init Long Beep: 2 Init Short Beep: 5

Data Server Ip: 192 . 168 . 2 . 201 Data Server Port: 9292

Data Server Url:

Data Server Str: /demo/data/put.php?csn=\$1

Data Retry Count: 1 Data Retry Sleep: 1 Data Long Beep: 1 Data Short Beep: 1

```
C:\Users\Administrator>ipconfig
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . : 
    Link-local IPv6 Address . . . . . : fe80::193a:de9:204c:2356%
    IPv4 Address. . . . . : 192.168.2.201
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.2.200

Tunnel adapter isatap.{B336A187-AD06-41A1-BCE8-C31B93596D87}:

```

Current Version: 2014.02.19

HTTP port: 9690 Test availability

HTTPS port: 9691 Test availability

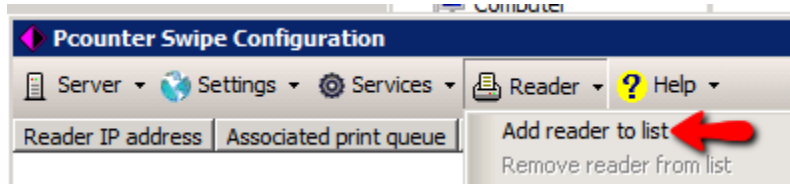
Card server port: 9692 Test availability

The Pcounter Swipe Service service is running. (Version 2014.05.20)

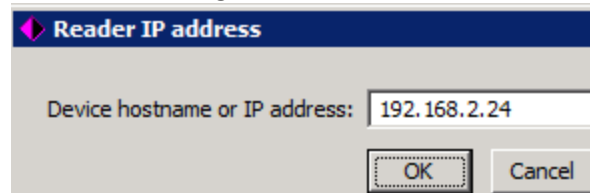
1.7 - Configure Pcounter Swipe

Once the reader is configured, Pcounter Swipe can be configured.

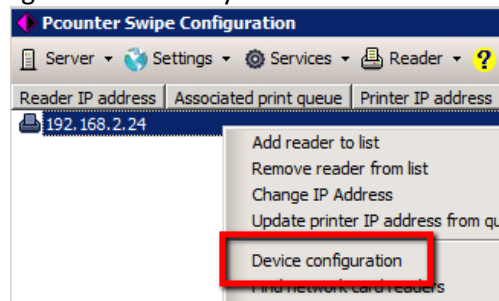
- 1) Open the Pcounter Swipe Configuration interface.
- 2) Click Reader>Add reader to list



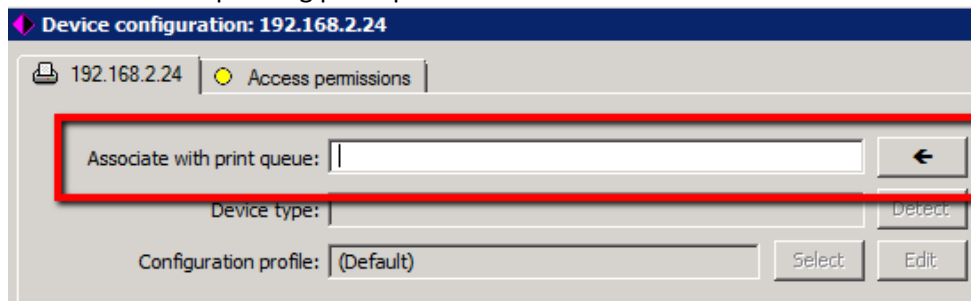
- 3) Enter the IP address of the first configured network reader and click OK.



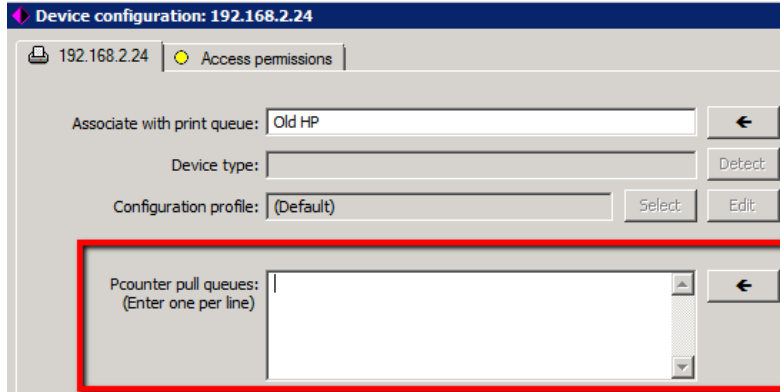
- 4) Once in the device list, right click the entry and choose 'Device configuration'



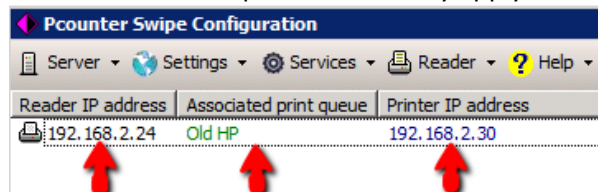
- 5) In the configuration window that opens, define the print queue of the printer that will be associated with the reader in the 'Associate with print queue' field. Click the arrow button, then browse to the corresponding print queue.



- 6) If using pull printing/follow printing, define the pull/hold/master queue in the 'Pcounter pull queues' field.



- 7) Click OK, then restart the Pcounter Swipe service to fully apply the changes.

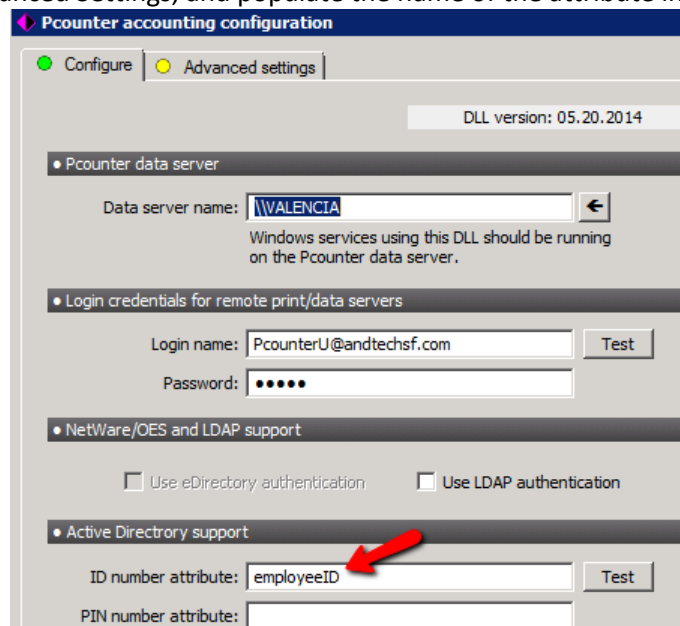


1.8 - ID# Database/Attribute

With card swipe authentication, the number contained on the card must be in some way associated with the user by residing in one of two locations, either in Active Directory as an attribute, or in the Pcounter ID# database.

By default, Pcounter Swipe will use the Pcounter ID# database. This database of ID#s is managed using Pcounter Administrator. Please consult our Pcounter Administrator Training Video Part 1 [here](#) for more information on managing the Pcounter ID# database via Pcounter Administrator.

To instead specify an attribute in Active Directory for ID# usage, open Pcounter Swipe and go to Settings>Network/Advanced Settings, and populate the name of the attribute in the ID# attribute field:



2.0 - Conclusion & Links

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

Links to recommended Pcounter Videos:

Pcounter for Windows - Prepare, Install, Configure: <https://www.youtube.com/watch?v=hyOaYOnVp3k>

Pcounter Administrator Training Video Part 1: <https://www.youtube.com/watch?v=FxwmXCE6ebU>

Pcounter Administrator Training Video Part 2: <https://www.youtube.com/watch?v=5jLsOj4tKJw>

Pcounter Popup Training Video: <https://www.youtube.com/watch?v=chSbuDZJIhQ>

Pcounter for Windows - Balance.exe as a Web App: https://www.youtube.com/watch?v=J_IVgsgopnl

All Pcounter Videos: <https://www.youtube.com/user/andtechsf>