

Pcounter for Windows configuration for Macintosh Computers

Overview

This document steps through setting up Pcounter for Windows to work with Macintosh computers. Pcounter can be downloaded from <http://www.pcounter.com/download.html> and installed on a test server or a live server. A reboot is not required for setup of this server.

Important Concept

PC vs. Macintosh printing

In order to track print jobs with Pcounter we need to know what user or client code will be associated to every job. In an "All PC" world this can be done with or without a Popup. If a Popup is used in an "All PC" world the user hits the print button and a Popup window will be displayed for them to answer. This works great for PC's but can not work for Macintosh computers do to the fact that they are not using the RPC protocols used by the PC's to create the Popup. For Macintosh printing, In place of a Popup we use a web site hosted by IIS services and Pcounter to release print jobs. The Macintosh user prints any number of jobs then goes to a web site hosted by Pcounter and releases jobs. This method does require a slightly higher user input from the Macintosh user, but it does give the Macintosh user the advantage of batching all their print jobs at once.

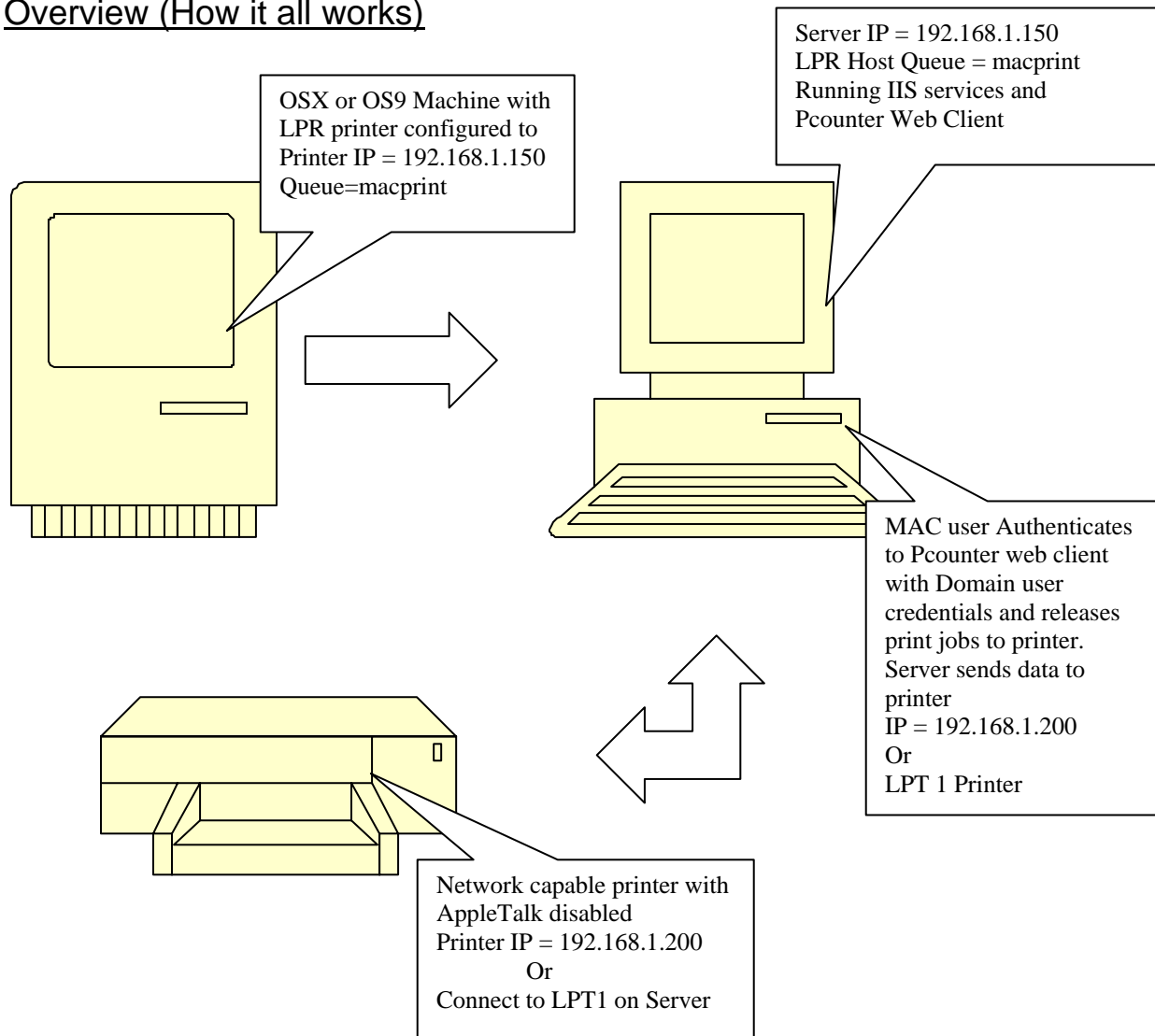
SAMBA Authentication Problems

The only authentication Mac OSX has for windows printing uses a Samba client to authenticate to the windows share. Unfortunately this authentication does not pass along the current logged in user on the Mac. When a job prints with this authentication method the user that is displayed is the user that Setup the printer object on the Mac instead of the user that is currently logged in. Because of this problem with OSX Samba authentication can not be used.

AppleTalk Issues

AppleTalk was one of the first printing protocols Apple used. AppleTalk is still supported in Mac OSX. If you want to track print jobs from Macintosh computers it is highly recommend you disable AppleTalk protocols on your Printers. If AppleTalk protocols are not disabled on the printer, a Mac OS9 or OSX user can browse for the printer and print directly to that printer, this would bypass any control Pcounter has on printing.

Overview (How it all works)



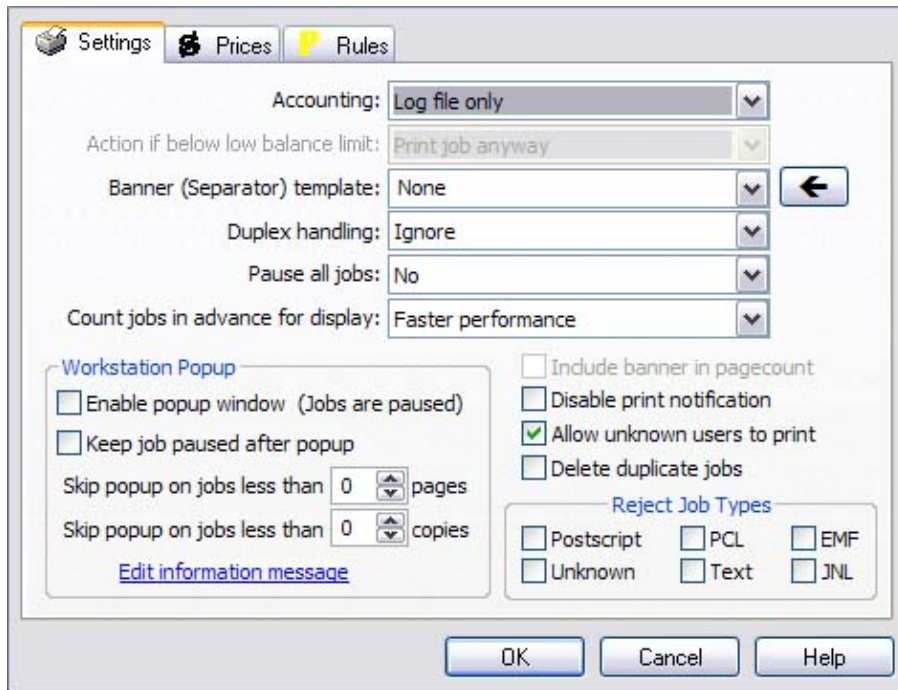
Install Pcounter

Before beginning, make sure there is one printer setup on the Windows server that will be used for Macintosh printing. This print can be a TCP-IP, LPR, or LPT Printer. Download the most current version of Pcounter from <http://www.pcounter.com/download.htm>. Extract the zip file and run the setup.exe file.

Setup the Data Server

- Open Pcontrol, browse the Microsoft network on the left side of Pcontrol and select the Windows computer that is your server *Right click* on that computer and choose Pcounter configuration. NOTE** You may get a windows asking you to allow Pcounter to modify the registry, please say ok to this as it is necessary for Pcounter to function properly.
- Go to the Data Server tab and Create the Pcounter shared directory by *clicking* on the Create Share button, Specify where it should be created or accept the default value and *Click OK*.

- c) Go to the Global Settings tab and select the server to get user information from. Point Pcounter to the nearest PDC if there is one.
- d) Delete paused jobs after XX should be set to 60 minutes. This will delete any unclaimed jobs from the queue after 60 minutes.
- e) *Click* on Default printer configuration; Count Jobs in advance should be set to faster performance. When you are done the windows should look like this (see below). NOTE** If you would like Pcounter to charge against an account balance then set the Accounting to Account Balance and log File



- f) Go to the prices tab, *Click* on the set all prices link and set the price for all print jobs. After the prices have been set any price can be changed on specific sizes. Once prices are set *click* OK to save.
- g) Go to the Popup tab and select the Confirmation window type
- h) Go to the Services and Ports tab and *Click* Install and then the Start button on the Printer Control Service and the Data Server Service. *Click* install on the port monitors.
- i) Go to the Printers tab and select the printer you want the Macs to print too. *Click* on the port wizard button. Depending on the Microsoft port that was used Pcounter will select the best Pcounter port for you. Continue *clicking* Next until the Pcounter port is setup (default settings are usually fine).
- j) Go to the Services and Ports tab and stop and then start the Printer Control Service.
- k) *Click* apply and OK to close the configuration window.

Configuring the Printer for Macintosh use

Now that you have Pcounter configured there are special settings that need to be considered for Macintosh printing. The Printers will have to be prepared for LPR printing which is how the Mac will print to it.

- a) Open Pcontrol and select your server on the left side and then right *Click* and choose Pcounter Configuration.
- b) Go to Global Settings and *click* on the LPD Server link.
- c) Put a check mark by enable LPD Server.
- d) Put check marks by the printer that you want Pcounter to listen for LPR jobs.
- e) Highlight and the checked printer and set the LPR queue name (this is the queue that it will listen with). **While the printer is highlighted check the Pause All Jobs option as well.**
- f) Now Click OK and Go to the Services and ports tab and Stop and start the print control service.

Configuring the Web Client

Pcounter Web Client is an HTTP CGI application which runs on any Windows web server. It duplicates the functionality of PPopup in any web browser from any platform, including Macintosh, Linux, UNIX, and of course Windows. Pcounter Web Client has been tested on IIS 4-6, and Apache 2.0.43. Other web servers should also work.

The purpose of Pcounter Web Client is to allow any user to authorize, authenticate, and/or apply client billing codes to print jobs without any need for additional client software. Users are shown all pending print jobs, which can be authorized with a single button click.

Installation instruction for Internet Information Server (IIS)

- a) Copy WebClient.EXE to an executable directory, such as cgi-bin. If an executable directory does not already exist, create a new directory on the web site and copy WebClient.EXE into it.
- b) Find the new directory in Microsoft Management Console, and open the Properties of the new directory.
- c) On the Directory tab, set Execute Permissions to Scripts and Executables. Read permission is not required.
- d) On the Directory (or File) Security tab, set the authentication permissions and IP address restrictions accordingly. Browsers other than Windows Internet Explorer may have problems with authentication methods other than Basic authentication. We recommend using some form of Authentication do not use Anonymous access if you want to track the job back to the user. If Anonymous access is allowed, then the account used for anonymous access must have at least Print permission to the printers being monitored. Otherwise no jobs will be displayed.
- e) Drop to a DOS Command prompt and change directories to where you copied the Webclient.exe file in step A.
- f) From the directory where the Webclient.exe file is located type "Webclient config" to setup the parameters for the Webclient.
- g) In the Webclient configuration screen under **Window Type** choose the type of client you want your users to see, if you are unsure of which one to use see brief descriptions below. Once a type has been selected you can click on the Options tab to fine tune any advanced options. Most of the time the default values will give you the desired output.

- **Client Code List:** This will present the user with a List of Client Codes that is pre-defined by the administrator for print job association.
- **Entry Form:** This will prompt the user for a simple entry code to associate to jobs. The code is not saved from session to session.
- **Job Validation:** This is one of the most commonly used types. This will simply show the user a list of there jobs and allow them to select them and print them or select them and delete them.
- **Matter Number List:** This is similar to Client Code List but this allows a Pre-Defined Sub Code list for billing.
- **Embedded Login:** This type should only be used if you are using Anonymous access to the web client, and wanting to authenticate vs the Printer Popup user database that is setup inside Pcounter Administrator.
- **Job ID:** This is to be used in conjunction with Pcounter Station to create an arbitrary ID Name that can be used to identify print jobs on the Pcounter Station.

Once you have selected the type of client just *Click* OK to save the web client configuration.

Additional configuration information for IIS 6

CGI applications are disabled by default. It is necessary to configure WebClient.EXE as a CGI application.

- a) In the Application Server management console, find the web server computer, expand it, and choose Web Service Extensions.
- b) On the Action menu (or right-click), choose Add a new Web service extension.
- c) Set Extension name to WebClient.EXE or some other descriptive text.
- d) Add the full path to WebClient.EXE to the required files list.
- e) Make sure that Set extension status to Allowed is checked/enabled.

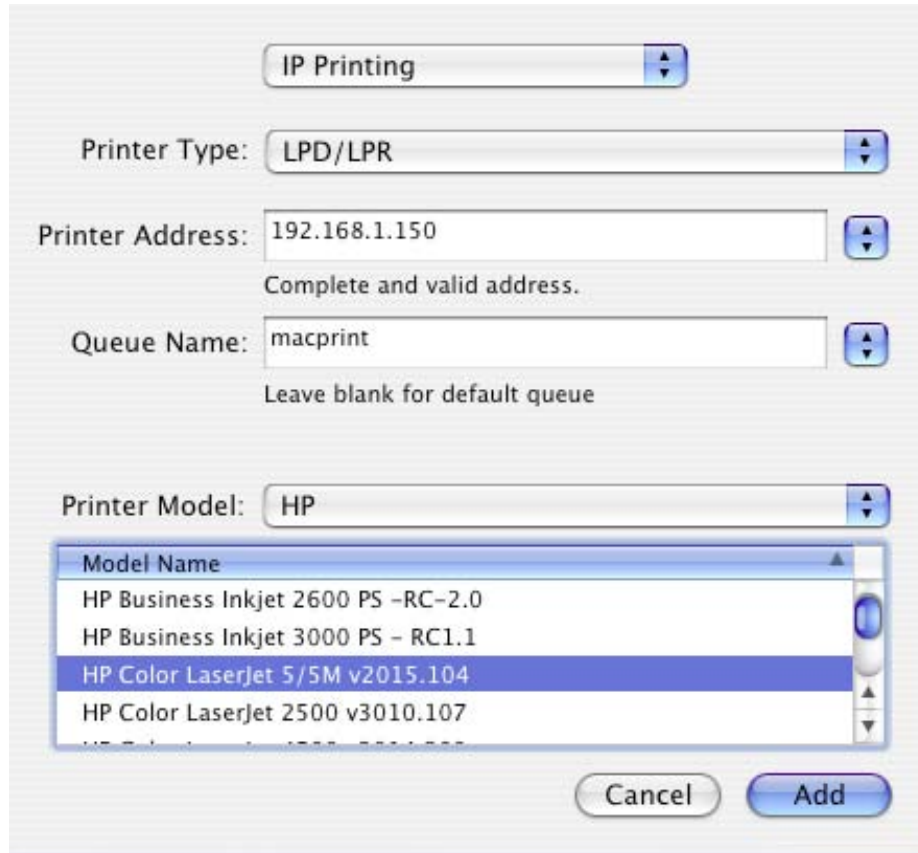
Getting to the web Client

Now that the Web client is configured it would be a good idea to bookmark it. IIS manager can be used to see what the link should be. One potential link may be <http://192.168.1.150/cgi-bin/webclient.exe>

Adding a Pcounter Printer to your Macintosh

For Mac OS9 LPR printing, please refer to the documentation of Apples web site.
http://images.apple.com/education/technicalresources/pdf/OS9_PrintClient_061103.pdf

See the picture below for what the settings should look like on the Mac that prints to Pcounter. These settings were based off the diagram in the **Overview** Section of this manual.



The screenshot shows the 'IP Printing' dialog box in Mac OS9. The settings are as follows:

- Printer Type:** LPD/LPR
- Printer Address:** 192.168.1.150 (with a note: 'Complete and valid address.')
- Queue Name:** macprint (with a note: 'Leave blank for default queue')
- Printer Model:** HP

The 'Printer Model' dropdown menu is open, showing the following options:

- Model Name
- HP Business Inkjet 2600 PS -RC-2.0
- HP Business Inkjet 3000 PS - RC1.1
- HP Color LaserJet 5/5M v2015.104 (highlighted)
- HP Color LaserJet 2500 v3010.107

At the bottom of the dialog are 'Cancel' and 'Add' buttons.

Congratulations! Pcounter is now configured to work with a Macintosh computer. Now all you have to do is print a document and go to the web site hosted by IIS servers and release your jobs.