

Pcounter for Netware (NDPS) Configuration for Macintosh Computers

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Overview

This document steps through setting up Pcounter for Netware NDPS to work with Macintosh computers. Only NDPS is supported for Macintosh computers, Queue based printing is not supported. Pcounter can be downloaded from <http://www.pcounter.com/download.html> and installed on any Netware 5.1, 6.0 or 6.5 server hosting an NDPS manager. A reboot is not required for setup of this server.

Important Concept

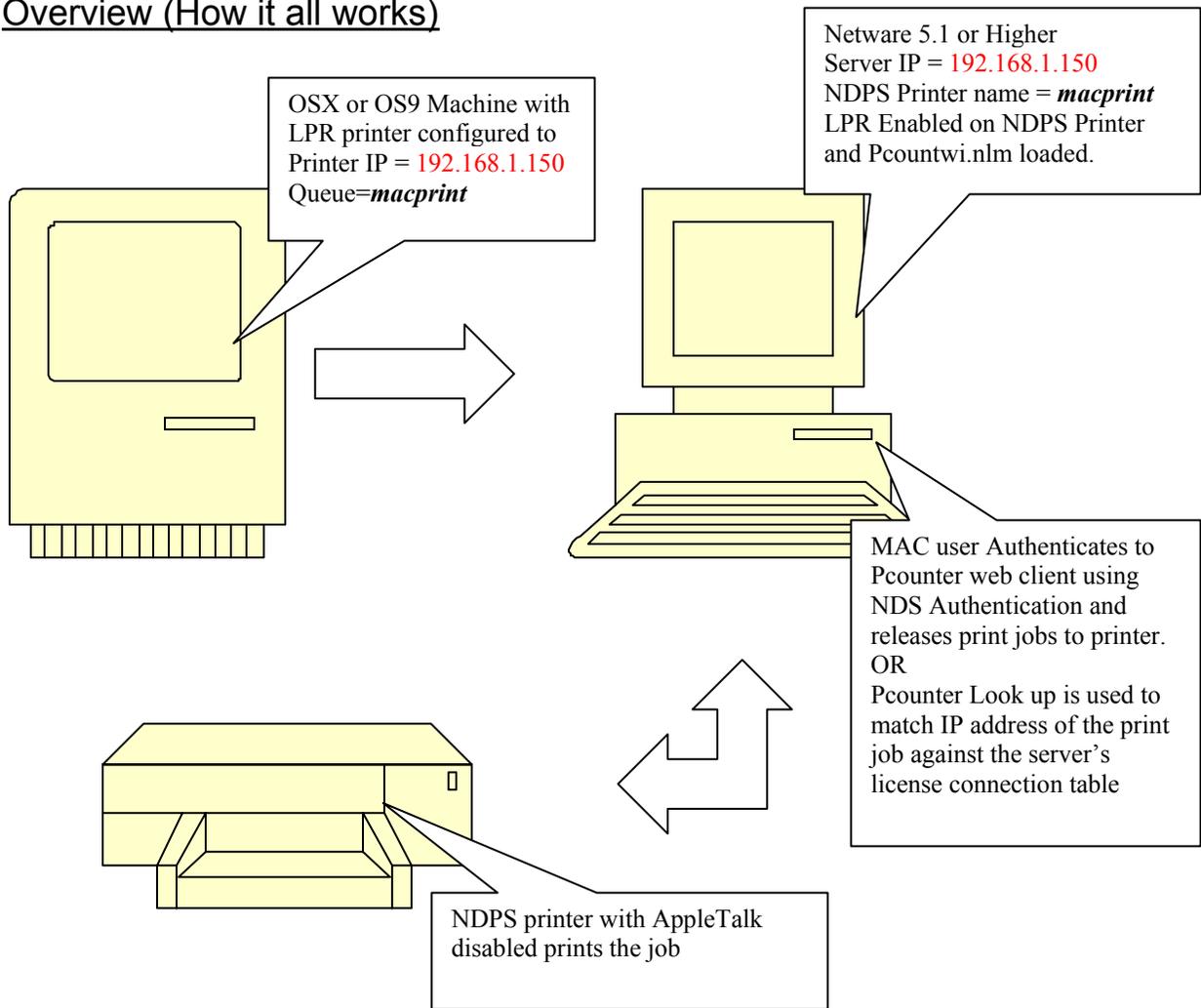
PC vs. Macintosh printing

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 NCP protocols used by the Novell Client PC to create the Popup. In place of a Popup Pcounter uses Web Release hosted by the Netware server to release print jobs. The Macintosh user prints any number of print jobs then goes to a web site to release those jobs.

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.

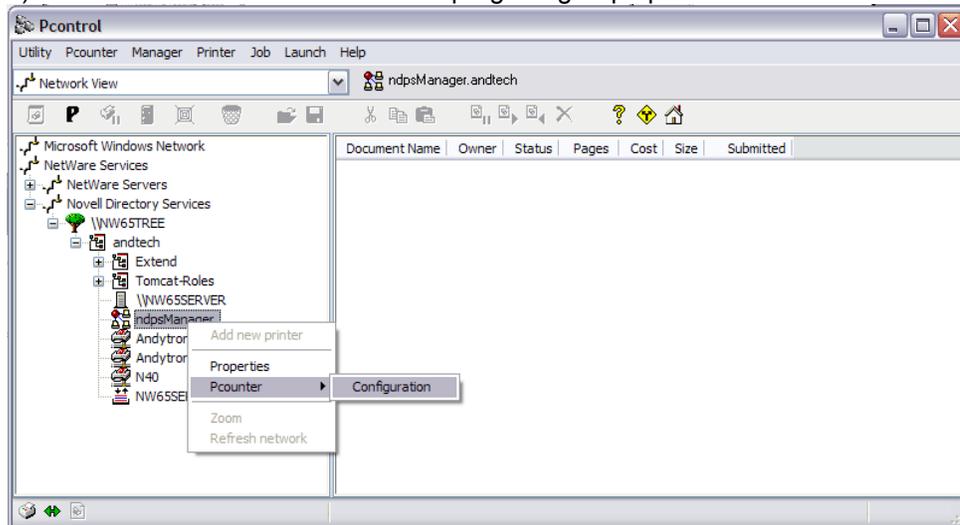
Overview (How it all works)



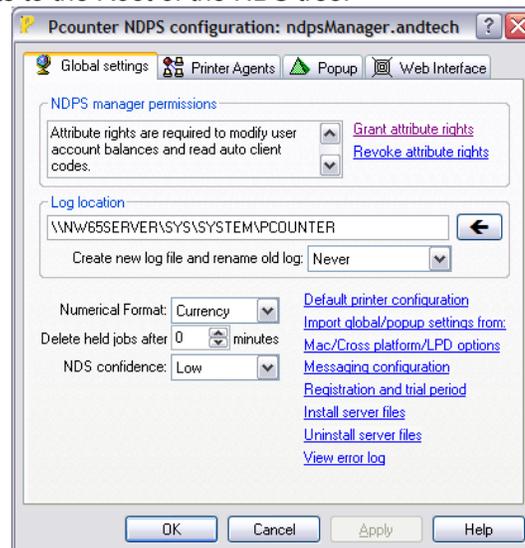
Install Pcounter for NDPS

This installation guide assumes that you are at a PC workstation that is connected to the Netware server using Client 32 and that you have admin rights to the Root of the NDS tree.

- 1) Download the most recent version of Pcounter for Netware. The software can be obtained at <http://www.pcounter.com/download.html>.
- 2) Extract the zip file to any directory on the local workstation and run the setup file. This will install a new program group in windows call "Pcounter for Netware".
- 3) In the "Pcounter for Netware" program group open Pcontrol



- 4) In the left pane of Pcontrol, browse the NDS tree and find the NDPS manager object. Right click on the NDPS manager object and select Pcounter → Configuration
- 5) Click on the "Install server files" link. A message should then be displayed saying that the pcountdp.nlm was successfully copied to the server system directory.
- 6) Click on the "Grant attribute rights" link and select the context in NDS that the users are in and click on the "Grant" button (This step may need to be repeated if multiple contexts are used for user objects). A message pops up saying Success. If any error messages appear the current user logged into the workstation does not have Admin rights to the Root of the NDS tree.



- 7) Select the "Printer Agents" tab and select the printer that you want Pcounter to monitor and then click on the "Add Accounting" button (an arrow will appear next to the printer object).
- 8) After adding the accounting feature click on the "Shutdown" button and then click on the "Startup" button (same button). On the server the Pcountdp.NLM will load automatically. The accounting status of the printer should show as active with the Pcounter version in brackets.
- 9) Repeat instruction number 7 and 8 until all desired printers have accounting active on them.

Configuring the Printer for Macintosh use

When configuring Pcounter for Netware for use with Macintosh computers there are a few options. Below are the options with a description of how each works. Use the appropriate option to setup Pcounter for Netware.

Option 1 (IP Address Lookup)

Pcounter will lookup the users IP address in the connection table of the server and then charge the appropriate logged in user. This option requires that the user be logged in using Native Files access or some other Novell/Mac client with a mounted drive on the Pcounter server.

Option 2 (Web Release)

Pcounter pauses all the Mac jobs and the user will then go to a Web Site hosted by the Netware server and release the print jobs. The user logs into Netware before they see the jobs and therefore Pcounter knows who to charge the job too.

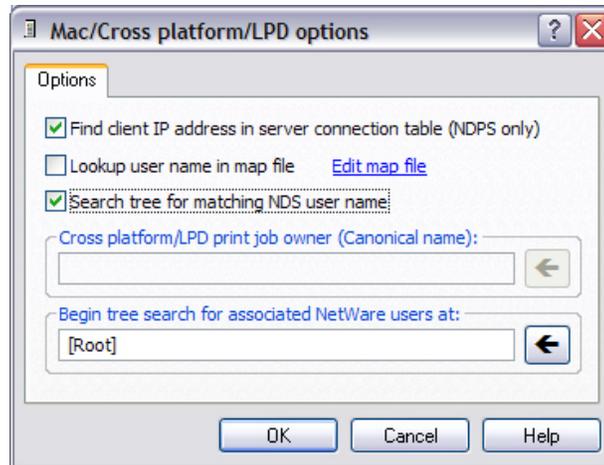
Option 3 (User Name lookup)

When a LPR jobs is submitted to the NDPS manager it comes in as USER@IPADDRESS. Pcounter uses the user portion to search the NDS Context and find the user to charge. Since LPR is an un-secure protocol it is possible to impersonate other user names when using this method.

On the next page are the settings for each Option. Each option has a slightly different configuration in Pcounter. Before proceeding open Pcontrol and find the NDPS manager on the left side by browsing the NDS Tree. Right click on the NDPS manager object and choose Pcounter → Configuration. After all settings have been set the NDPS manager will need to be restarted on the server.

Option 1 (IP Address Lookup)

- A) Under the *Global Setting* Tab, click on the Mac/Cross platform/LPD Option. Make sure the following options are checked (see Picture below).
- B) Choose where to begin the Tree search by clicking on the Arrow and selecting the NDS context. If users are stored in multiple contexts the search will need to start one tier above those contexts.



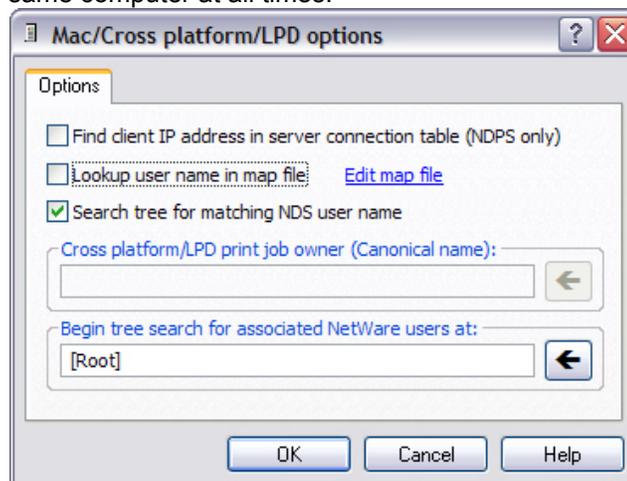
- C) Each Macintosh will now need mount a Volume on the Pcounter server using “Native File Access” or some other Novell Client.

Option 2 (Web Release)

- A) On the *Printer agents* tab double click on a printer that account is already active on (look for the arrow).
- B) Select “*Enable popup window (jobs are pause)*”
- C) Select “*Count jobs in advance for display*”
- D) Click ok and shutdown and startup the printer agent
- E) Now the Web Client must be configured to use the “**Authenticate Jobs Page**” please go to the section labeled “Configure and Install the Web Client”

Option 3 (User Name lookup)

- A) Under the *Global Setting* tab, click on the Mac/Cross platform/LPD Option. Make sure the following options are checked (see Picture below).
- B) Choose where to begin the Tree search by clicking on the Arrow and selecting the NDS context. If users are stored in multiple contexts the search will need to start one tier above those contexts.
- C) (optional) If a user uses the same IP address at all times you can also use the “Lookup user name in map file” option. In order to use this option one user must use the same computer at all times.



Configure and Install the Web Client

Configuration

If you are using Option2 described above you will need to Install and load the Web Client. You will need to choose the type of services you want the Web Client to do for you. To configure the web client go into Pcontrol and right click on your NDPS manager, choose Pcounter → configuration. Select the Web Interface tab and then check the appropriate boxes that will enable the options you would like. A description of what each does is below.

- a) **Account Balance Page** -- This will ask the user to log into a Netware account and then show the users Pcounter balance.
- b) **Administrator Page** -- This page will allow any Administrator with the appropriate tree and server access to log in and modify user balances.
- c) **Authenticate Jobs Page** -- This page will prompt the user for a Netware login and then show the user all jobs that originated from the IP address of the computer they are logged in from. This option is most often used to release print jobs from Macintosh computers when the user is not known (see option 2 above)
- d) **Use HTTPSTK/Portal** -- This option is selected by default. This configures Pcounter to use the standard authentication method the Netware uses for remote Administration. It is recommended that this setting stays at default.

After the selections above have been selected click the *Install* button then the *Load* button. Notice the status will change to running once it has been loaded.

Getting to the web Client

Now that the Netware Web client is loaded it would be a good idea to bookmark a few pages. The Pcounter Web client uses the same ports as the Netware server administration console (8008). There are 3 separate web pages that do different function.

<http://SERVERNAME:8008/AuthJobs>

This link will prompt the user to Login into NDS and then show them they jobs they have paused. The user can either delete the jobs or release them to print.

<http://SERVERNAME:8008/Balance>

This link will prompt the user to Login into NDS and then show the Pcounter balance.

<http://SERVERNAME:8008/PcounterAdmin>

This link will prompt the user for NDS Authentication. If the user has sufficient NDS rights they can modify any users balance from this interface.

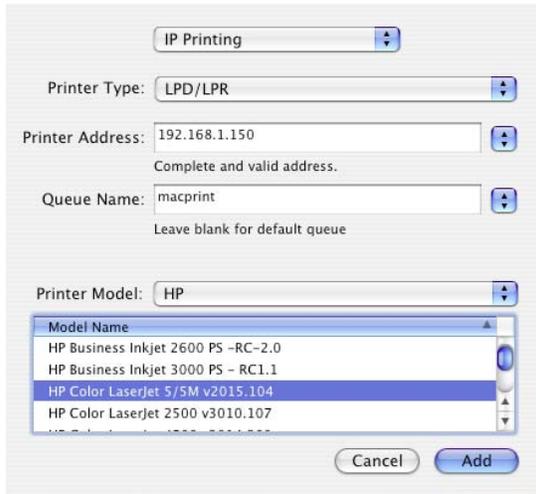
Adding a Pcounter Printer to your Macintosh

Mac OS9

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

Mac OSX (10-10.3)

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.



Mac OS X (10.4)

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.



Congratulations! Pcounter for Network is now configured to work with a Macintosh computer.