

Pcounter-Novell OES Iprint Setup Guide

Pcounter-Novell OES-Iprint – Setup Guide
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Pcounter (Novell OES iPrint) Installation Guide

Common Configurations and Options

Revised October 4, 2011

The Goal

The goal of this document is to provide step-by-step setup instructions for Pcounter in some of its most common configurations.

Common Challenges

The most challenging thing about configuring Pcounter is to identify how you would like to use the product. In general, a system administrator installing Pcounter should consider these questions:

- 1) Do all users log into the PCs with their own OES accounts or are users pre-logged into computers with a common default user account? If users are pre-logged into computers workstations through one default user account, then you will need to pay close attention to *Anonymous mode* printing options.
- 2) Will it be necessary to assign per-page prices to each print job, or will you simply track each job by the number of pages printed—and/or assign a page quota to each user?
- 3) Do all user print currently print to iPrint-hosted printers? For print tracking with Pcounter, users should NOT be sending jobs to local printer objects on their workstations through the direct IP addresses of the printers.

Because of Pcounter's flexibility, it is impossible to cover all of the program's configuration options in this manual. The most common configurations and options are listed and described below.

How to use this manual

This manual has four sections, *Basic Pcounter Installation*, *Configuration Options*, *Optional Add-On Components*, and *Macintosh Support*.

Basic Pcounter Installation: Gives step-by-step instructions on how to install Pcounter—and how to use the program to log basic printer usage. If your goal is simply to collect data about the volume of pages printed on your network, this would be all you need.

Configuration Options: Lists seven Configuration Options. (**NOTE See the Note at the bottom of this page.) These Options cover some of the most common printer management scenarios implemented by our customers. Each Option presents a list of "typical" customers that the solution was designed to support and a description of the workflow of the users in that scenario. These configuration options are some of the most common configurations used by our customers. It is recommended that you read through each Configuration Option and choose one that best fits your needs.

Optional Add-On Components: This section of the manual covers additional products offered by A.N.D. Technologies to complement the Pcounter server. You'll find brief descriptions of what each add-on component does, and a list of any changes you would need to make in your Pcounter configuration to implement the component.

Macintosh Support: This section of the manual gives information on downloading Macintosh installation help from our website. (If you are using an all-PC environment, this section will not be needed.)

****NOTE--** If you are working in an environment where users do not log into the computers with individual user accounts, then please pay close attention to the sections of this guide labeled "**Anonymous mode.**" These sections are specifically designed for scenarios where your users are pre-logged into computers through a common default user account.

Basic Pcounter Installation (Novell OES\iPrint)

System Requirements

Pcounter for OES runs on *SUSE Enterprise Linux* **version 10.3** with the *Novell OES 2, SP1* rpm packages installed.

(This Linux OS distribution functions as an effective replacement host for an updated Pcounter that is similar to the version running on *Netware v. 6.5.*)

The following current IPrint RPM packages are known to work with Pcounter:

```
yast2-novell-iprint-2.14.8-61
novell-iprint-iprintman-6.2.20090908-05.
novell-iprint-migration-6.2.20091001-0.5
novell-iprint-management-6.2.20090924-0.6
novell-iprint-server-6.2.20100414-0.4
```

Server Installation:

- 1) The Yast *Iprint* and Novell *iPrint Manager* packages should be installed on the server along with *Novell OES 2, SP1..*

Note: A *driver store*, *print manager*, and at least one *printer agent* should be created and configured on the iPrint server **before** you attempt to install the *Pcounter OES* package.

- 2) Copy the appropriate *Pcounter for OES* rpm package (for the 32-bit or 64-bit platform) to a directory on your server.
- 3) Open a terminal window and run the following command (use Sudo, if not logged onto the computer as the root user):

```
rpm -Uvh [path]/pcounter-date_version_platform.rpm
```

Tip: If you have saved the Pcounter package on your desktop, you can simply drag it into the Terminal window to automatically display the path and package name.

The command above may be used whether this is an initial or update install.

- 4) You should be presented with the following output in the Terminal window after the successful completion of the command:

```
Preparing..... ##### [100%]
1:pcounter ....##### [100%]
Servername:#[Path]
```

- 5) Now verify that all Pcounter files were installed successfully by running the command:
- ```
ps -e | grep pcounter
```

You should see a response similar to this:

```
4598 7 00:00:00 pcounter
Servername:#[Path]
```

You can also query the Pcounter package to confirm that it is installed.

```
rpm -q -l pcounter
```

You should be presented with output approximately like what is shown below:

```
/etc/opt/novell/httpd/conf.d/pcounter.conf
/opt/novell/iprint/bin/pcounter
/opt/novell/iprint/httpd/lib64/mod_pcounter.so
Servername:#[Path]
```

- 6) Now that Pcounter is in place, we must restart Apache. Enter the following command in the terminal window (use SuDo if not logged on as the root user):
- ```
rcapache2 restart
```

If Apache restarts correctly, you will see the following output:

```
Syntax OK
Shutting down httpd2 (waiting for all children to terminate)  done
Starting httpd2 (worker)                                     done
```

- 7) At this point, the back end of *Pcounter for OES* is confirmed to be installed and running. **Do not reboot the server at this time!** In order for Pcounter to run successfully, the Pcounter Accounting modules must be associated with the printer agents that you wish to track. The next section explains how to do this.

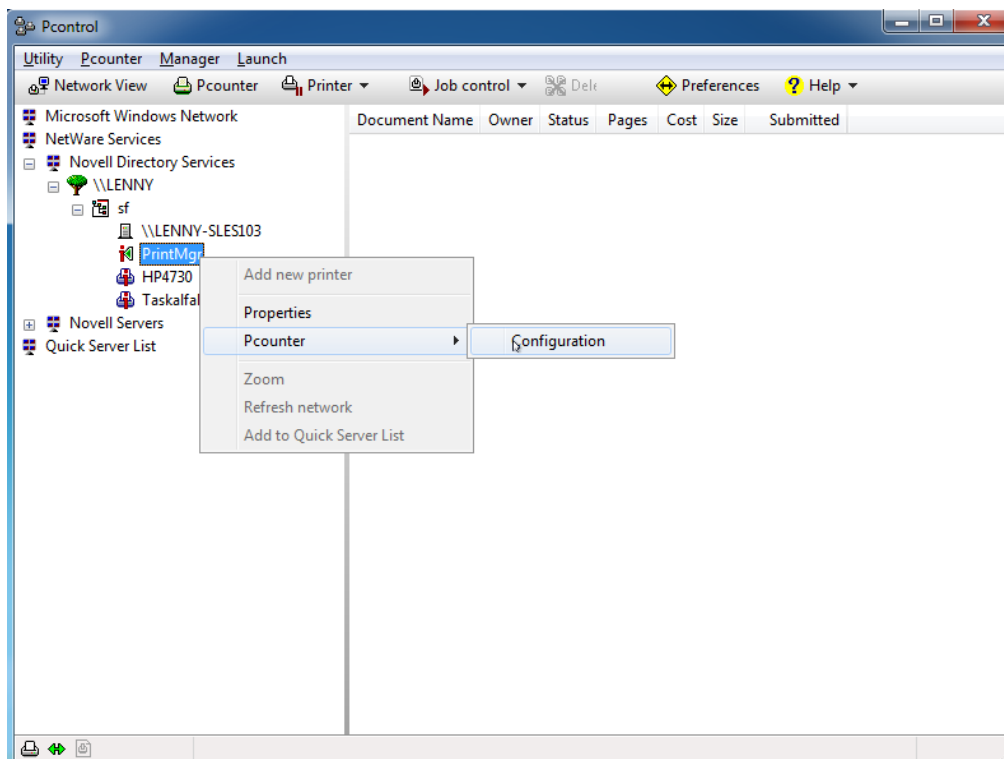
Note: If you have used the `nss_relocate` script to move `iprint` to an NSS volume or cluster, please create and run the following script.

```
chown root.iprintgrp /opt/novell/iprint/bin/pcounter
chmod 4750 /opt/novell/iprint/bin/pcounter
chown wwwrun.www /etc/opt/novell/httpd/conf.d/pcounter.conf
rcapache2 restart
```

Enabling Pcounter Accounting Modules

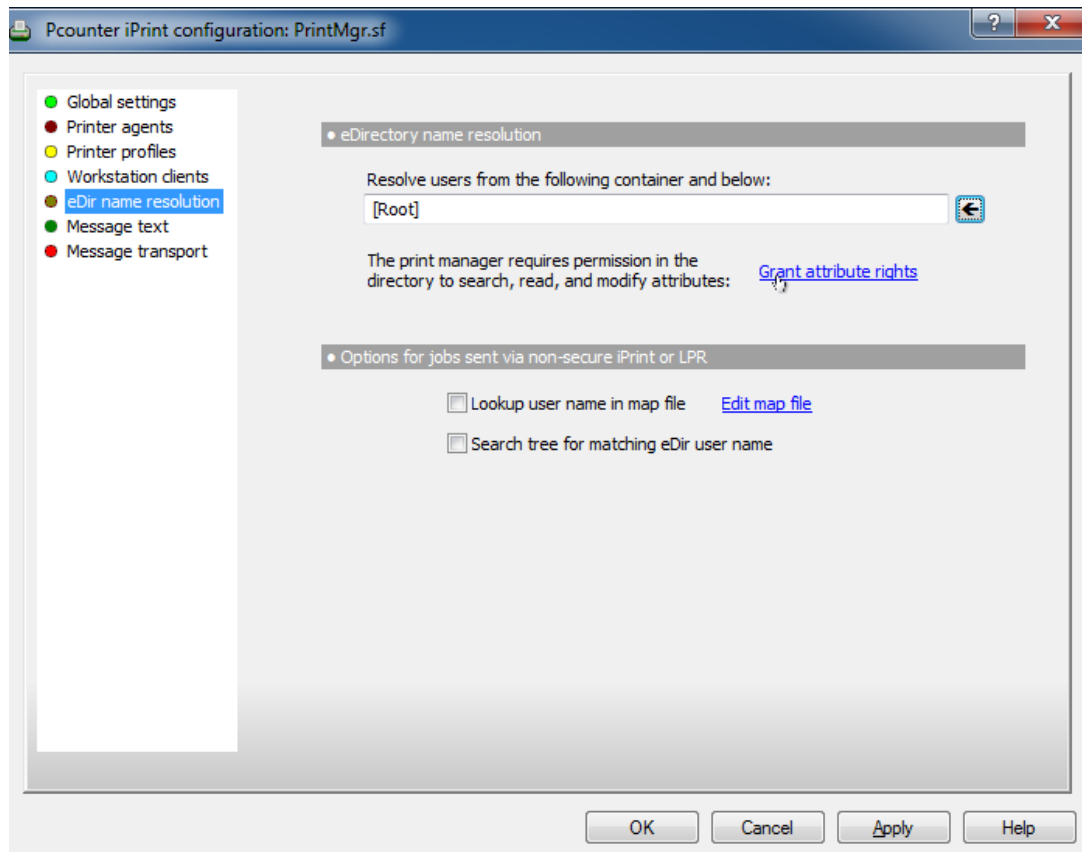
The following instructions assume that you are at a PC workstation running Windows XP Professional or a later desktop Windows OS, connected to the Novell OES server over the network, and that you are logged into the Novell tree through a valid Novell OES Client with iPrint support loaded. You will need to have admin rights to the Root of the NDS tree in order to install and configure Pcounter.

- 1) Run the Setup program on the Windows workstation. This will install a new program group in Windows called "Pcounter for Novell OES"
- 2) In the "Pcounter for Novell OES" program group, open Pcontrol.
- 3) In the left pane of Pcontrol, browse the NDS tree and find the iPrint manager object. Right click on the iPrint manager object and select Pcounter → Configuration.



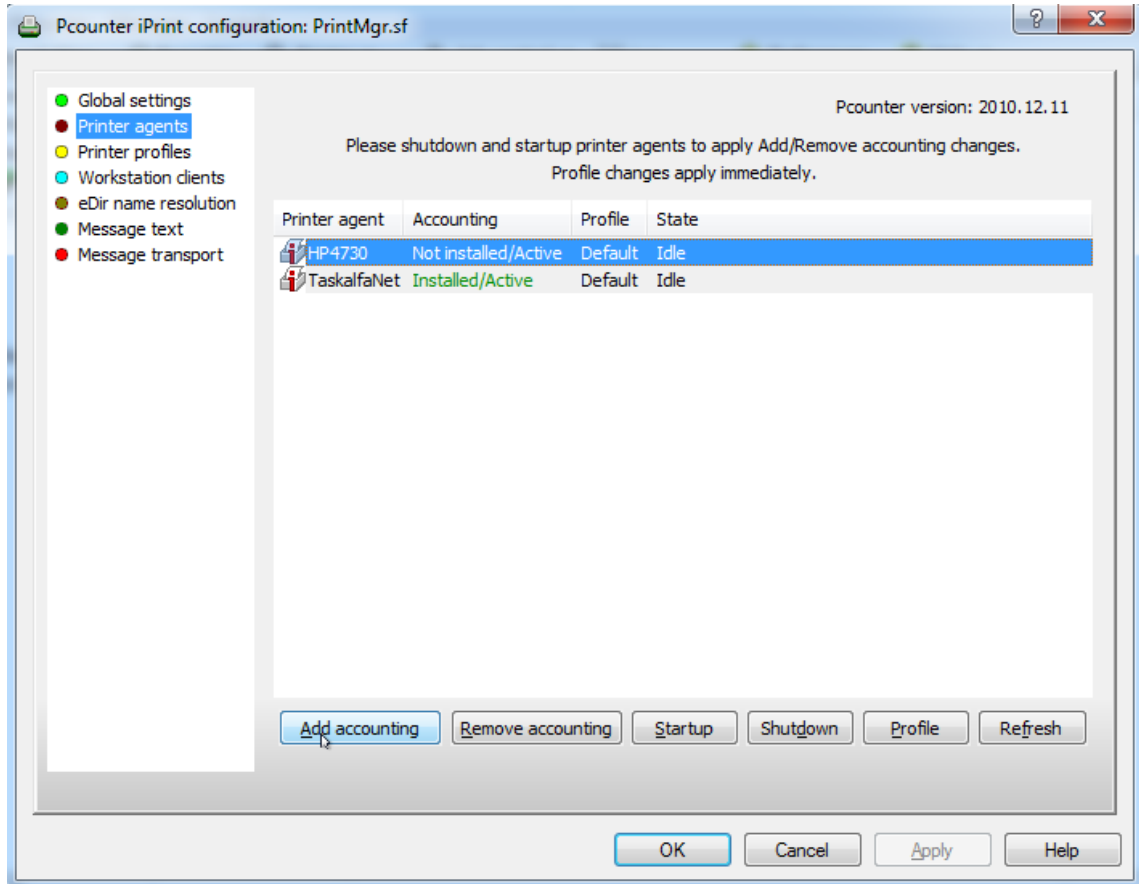
- 4) A seven-tabbed window will appear with tabs labeled *Global settings*, *Printer agents*, *Popup*, *Web interface*, *Non-secure options*, *Message text*, and *Message transport*.

Click on the *Grant attribute rights* link, select the context in NDS that contains your user accounts, click **Select**, then click the **Grant** button on the *Attribute Rights* screen. (This step may need to be repeated if multiple contexts are used to store user accounts.)



A "Success" message should pop up for each Context where you grant rights. If any error message appears, the current user logged into the workstation (and Novell tree) does not have Admin rights to the Root of the NDS tree.

- 5) Select the *Printer agents* tab. Click on a printer that you want Pcounter to monitor; and then click the **Add accounting** button. The Accounting column will show that Accounting is now installed.
- 6) After adding the accounting feature to the printer, click on the **Shutdown** button and then click the **Startup** button (same button). On the server, Pcountdp.nlm will load automatically. With the printer object highlighted, its accounting status should now show as “Active.”



- 7) Repeat Steps number 5 and 6 for each printer that you wish Pcounter to monitor, until all of the desired printers show Active accounting status.

Pcounter will now log all jobs that are printed through the printers that have accounting enabled (**Accounting Installed/Active**). If simple print job logging is the only desired action, then configuration is finished; if additional Pcounter printer control features are required, proceed to the *Configuration Options* section of this Guide.

Configuration Options

There are seven Pcounter setup options listed below. Choose the option that would best suit your needs. Under each option is a brief **Description** of how the workflow would go for users when that option is enabled. Each option also includes a **Where Used** section—a brief listing of the types of schools and businesses who use that option. **Be sure that you have completed the setup steps listed in the *Basic Pcounter Configuration* section of this manual before attempting to implement any of the options below.**

Open Pcontrol and find your iPrint manager object in the Novell Directory Services tree. Right-click and select **Pcounter → Configuration**. This will open the seven-tabbed *Pcounter Configuration* window that you will see in the configuration options discussed below.

Option #1 Simple page tracking and quotas. (Anonymous Mode)

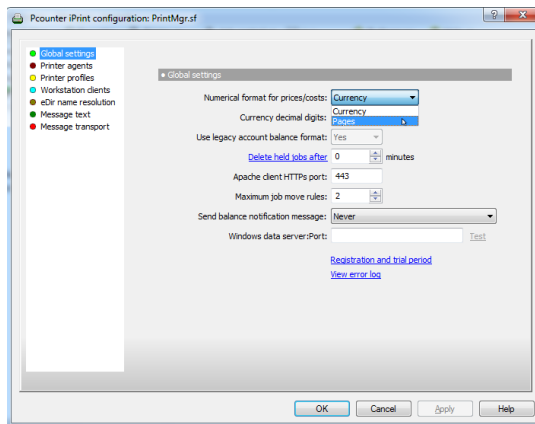
Description:

This option assumes users log into all workstations with the same pre-configured default user account. Pcounter will present a Popup whenever a print job is sent from the workstation. The actual user at the computer can authenticate through a Novell NDS user account. The username entered into the Popup window is authenticated and the page balance for that user is verified to be sufficient for the job. Once the NDPS manager notifies Pcounter that the job has been printed, the job will be debited against the user’s Pcounter account balance.

Where Used:

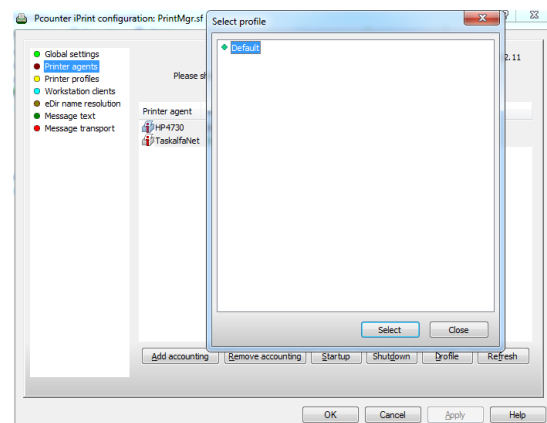
- 1) K-12 school labs where a default user account is employed to pre-log students into all computers.
- 2) Any school or office that only wishes to assign a page quota to users.

Global settings tab:



- 1) Change Numerical Format to **Pages**.
- 2) Set the *Delete held jobs after ...* option to some number of minutes after which you wish the system to delete the job if the user has not answered the popup. (0 holds jobs indefinitely.) Most sites set this field to between **15** and **30** minutes. Click OK to close this window and select the *Printer agents* tab.

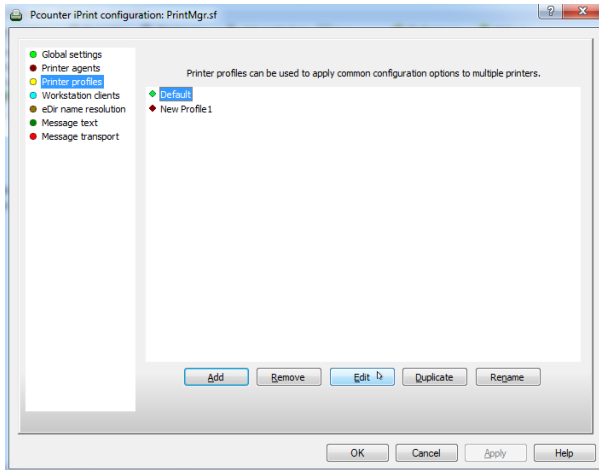
Printer agents tab



- 1) Select a printer where *Accounting* has been installed and then click the **Profile** button. Choose a Profile to associate with the printer from the *Select profile* window and click the **Select** button. (The Default profile will be the only one listed until additional profiles are created on the *Printer profiles* tab.)

After you’ve associated a profile with your printer, go to the *Printer profiles* tab to configure the profile settings.

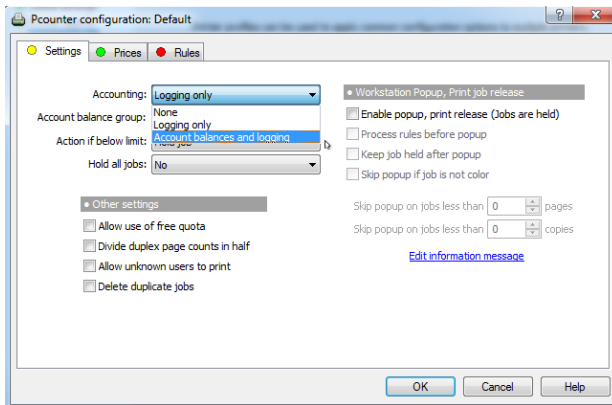
Printer profiles tab



- 1) On the *Printer profiles* tab. Select the profile that you have associated with the printer and click the **Edit** button to configure the settings.

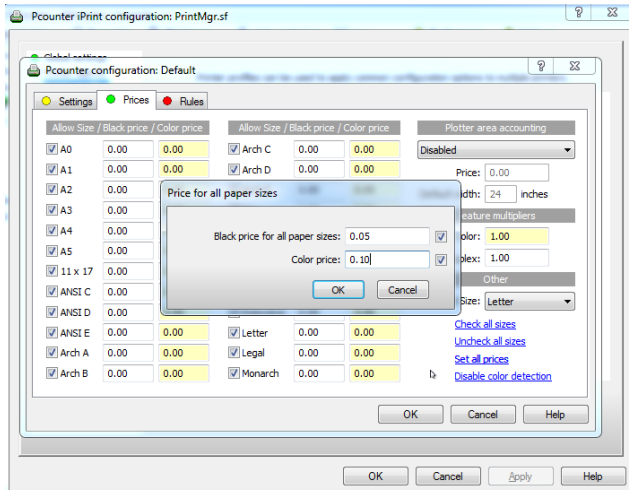
(To create a new profile, click the **Add** button.)

Pcounter configuration - Settings



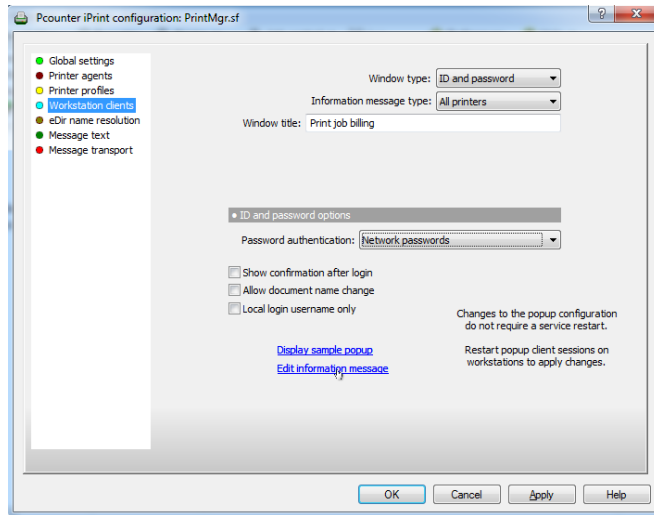
- 1) Perform the following steps to configure the Pcounter configuration settings:
 - a) Change *Accounting* to **Account Balances and logging**.
 - b) Set the *Action if below limit* option to either **Delete job** or **Hold job**. If set to **Hold job**, an administrator will need to resume the print job for the user.
 - c) **Check the Box** next to *Enable popup window*.
- 2) Go to the *Prices* tab to set prices,

Pcounter configuration – Prices



- 1) On the *Prices* tab, click **Enable color detection** if you wish to track color print jobs separately from black and white jobs..
- 2) Click on **Set all prices**; set the **Black price** and the **Color price** (if color detection has been enabled), and click OK to accept changes.
- 3) Click OK again and return to the *Printer agents* tab (shown on page 6 of this document). Click the **Shutdown** button followed by the **Startup** button to make the configuration changes take effect for this printer.
- 4) Repeat this procedure on all the iPrint printers that Pcounter will track.

Workstation clients tab



- 1) Change the *Window Type* to **ID and Password**.
- 2) Change *Information Message* type to **All printers**.
- 3) Click on *Edit information message* and type in what you would like the user to see when the Popup is displayed.
- 4) Set *Password authentication* to **Network passwords**.

Post Configuration:

Down the iPrint manager and reload it. This will ensure that all changes made to to the configuration will take effect. Copy Ppopup.exe onto the client workstations and have it load in the Windows Startup program group. (This executable can be found in C:\Program files\Pcounter for Novell OES\Novell OES\ **Users will NOT get a popup message unless Ppopup.exe is running on their workstations.** (When Popup is active, the Popup icon is displayed in the System Tray portion of the Taskbar, unless it is loaded with the "Hide" option.)

Special Consideration

If Pcounter Station will be used add the following configuration change:

- 1) On the *Pcounter configuration-settings* tab check the box that says "**Keep jobs paused after popup.**"

Option #2 Account Balance tracking with Deposits (Anonymous Mode)

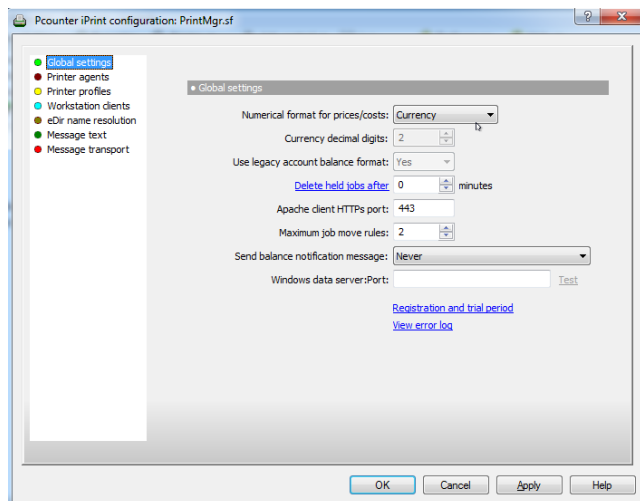
Description:

This option assumes users log into all workstations with the same pre-configured default user account, such as “Student.” Pcounter will present a Popup so that the actual user at the computer can authenticate to a Novell OES account. The username is authenticated, and the balance (in Currency) is verified to be sufficient for the job. The job will be debited against the user’s Pcounter account balance once the iPrint manager notifies Pcounter that the job has been printed. This option is very similar to **Option #1**. The primary difference in this scenario is that account balances are tracked in dollars instead of pages. This option offers the advantage of adding a TBS 9500 or 9900 deposit station to the network to handle user deposits. (Additional information on the TBS 9500/9900 is available in the **Optional Add-on Components** section of this manual.)

Where Used:

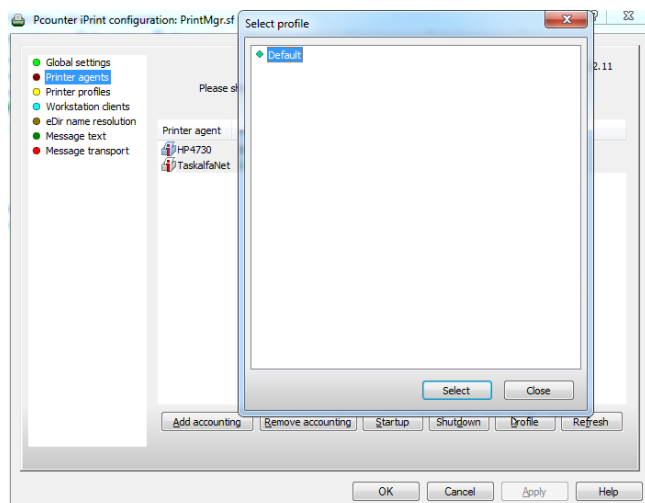
- 1) Higher Education school labs where all computers are pre-logged in as a default user.

Global settings tab



- 1) Change *Numerical Format* to **Currency**.
- 2) Set the *Delete held jobs after ...* option to some number of minutes after which you wish the system to delete the job if the user has not answered the Popup. (0 holds jobs indefinitely.) Most sites set this field to between **15** and **30** minutes.

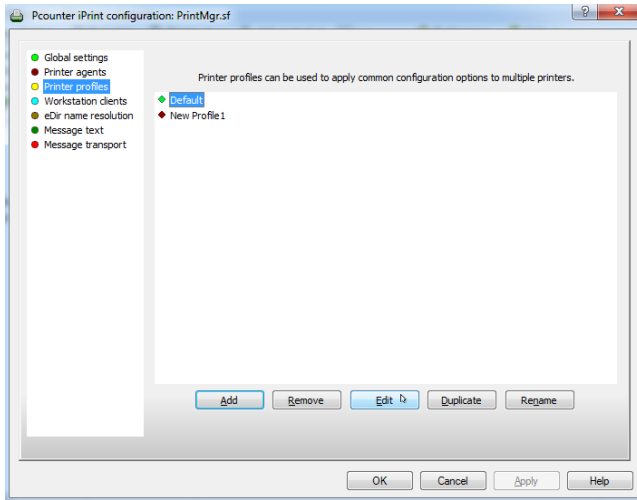
Printer agents tab



- 1) Select a printer where *Accounting* has been installed and then click the **Profile** button. Choose a Profile to associate with the printer from the *Select profile* window and click the **Select** button. (The Default profile will be the only one listed until additional profiles are created on the *Printer profiles* tab.)

After you’ve associated a profile with your printer, go to the *Printer profiles* tab to configure the profile settings.

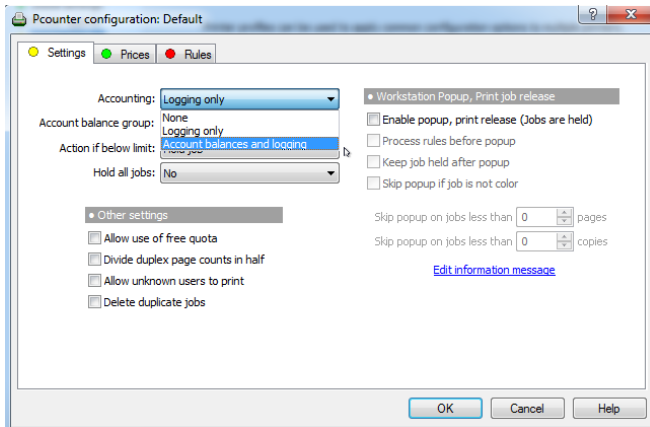
Printer profiles tab



- 1) On the *Printer profiles* tab, select the profile that you have associated with the printer and click the **Edit** button to configure the settings.

(To create a new profile, click the **Add** button.)

Pcounter configuration - Settings

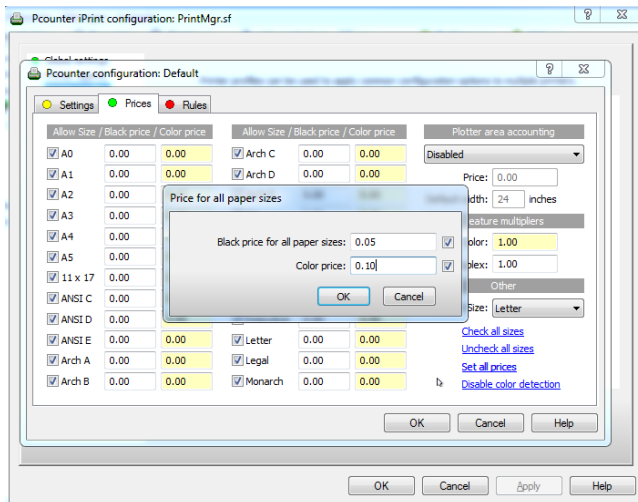


- 1) Perform the following steps to configure the Pcounter configuration settings:

- a) Change *Accounting* to **Account Balances and logging**.
- b) Set the *Action if below limit* option to either **Delete job** or **Hold job**. If set to **Hold job**, an administrator will need to resume the print job for the user.
- c) **Check the Box** next to *Enable popup window*.

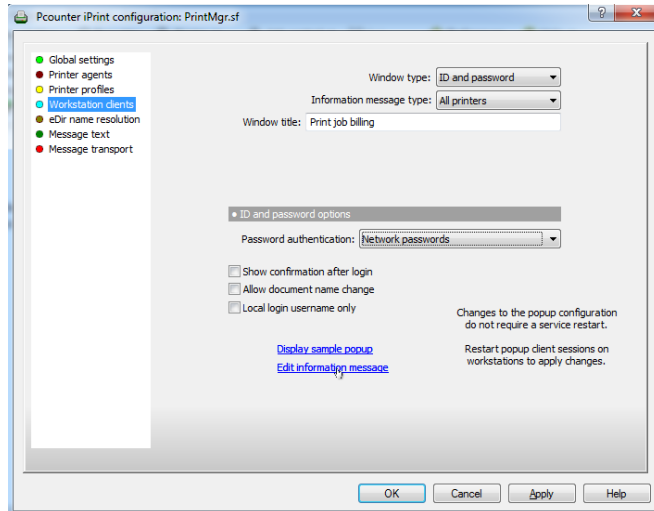
- 2) Go to the *Prices* tab to set prices,

Pcounter configuration – Prices



- 1) On the *Prices* tab, click **Enable color detection** if you wish to track color print jobs separately from black and white jobs..
- 2) Click on **Set all prices**; set the **Black price** and the **Color price** (if color detection has been enabled), and click OK to accept changes.
- 3) Click OK again and return to the *Printer agents* tab (shown on page 6 of this document). Click the **Shutdown** button followed by the **Startup** button to make the configuration changes take effect for this printer.
- 4) *Repeat this procedure on all the iPrint printers that Pcounter will track.*

Workstation clients tab



- 1) Change the *Window Type* to **ID and Password**.
- 2) Change *Information Message* type to **All printers**.
- 3) Click on *Edit information message* and type in what you would like the user to see when the Popup is displayed.
- 4) Set *Password authentication* to **Network passwords**.

Post Configuration:

Down the iPrint manager and reload it. This will ensure that all changes made to the Pcounter configuration will take effect. Copy Ppopup.exe onto the client workstations and have it load in the startup group. This .exe can be found in C:\Program files\Pcounter for Novell OES\Novell OES\Users will **NOT** get a popup message unless Ppopup.exe is running on their workstations. (When Popup is active, the Popup icon is displayed in the System Tray portion of the Taskbar, unless it is loaded with the "Hide" option.)

Special Consideration

If Pcounter Station will be used add the following configuration change:

- 1) On the *Pcounter configuration-settings* tab check the box that says "**Keep jobs paused after popup.**"

Option #3 Client Code Logging—Single Code (Authenticated and Anonymous mode)

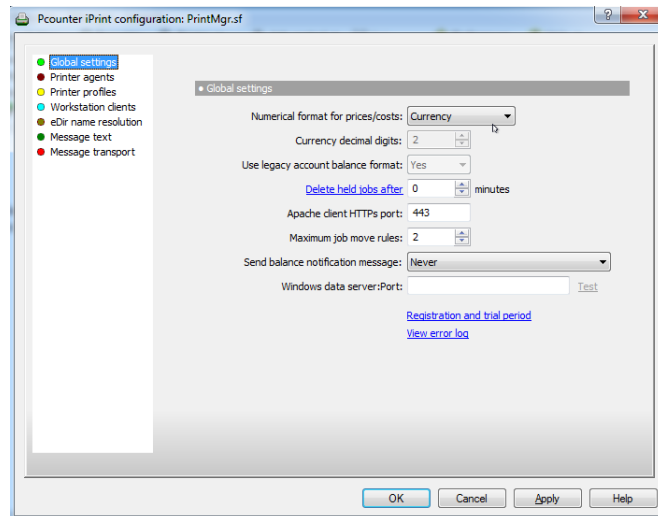
Description:

This option works the same way whether users are logged into the network with individual user accounts or all logged in through the same default NDS account. Pcounter will present a Popup so that users can manually type in a single client code or select the appropriate code from a list. Because the goal is to track codes and not users, no authentication is necessary. If tracking users is required, then all users must authenticate to their workstations with their own NDS logins.

Where Used:

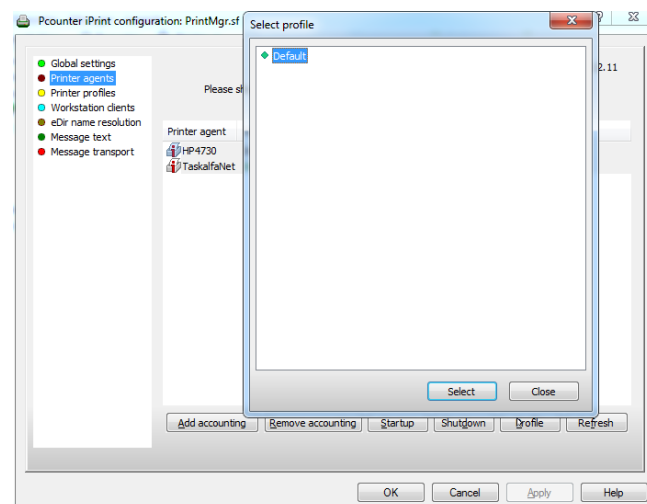
- 1) Any schools that wish to prompt departments for billing codes.
- 2) Law Offices, Architectural Offices, Engineering offices.

Global settings tab



- 1) Change *Numerical Format* to **Currency**.
- 2) Set the *Delete held jobs after ...* option to some number of minutes after which you wish the system to delete the job if the user has not answered the Popup. (0 holds jobs indefinitely.) Most sites set this field to between **15** and **30** minutes.

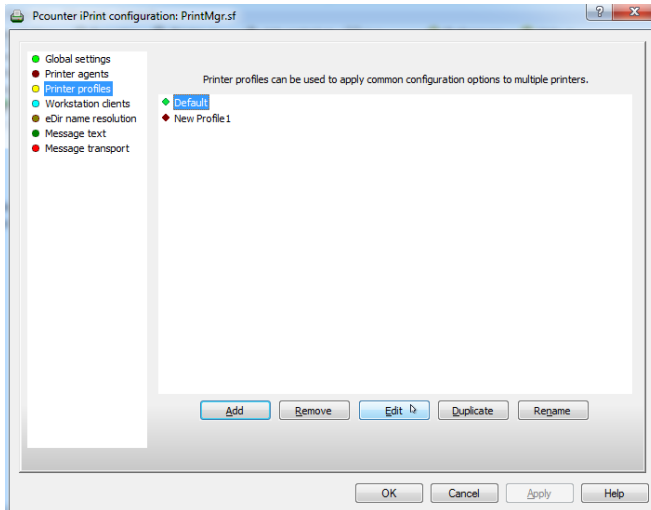
Printer agents tab



- 1) Select a printer where *Accounting* has been installed and then click the **Profile** button. Choose a profile to associate with the printer from the *Select profile* window and click the **Select** button. (The Default profile will be the only one listed until additional profiles are created on the *Printer profiles* tab.)

After you've associated a profile with your printer, go to the *Printer profiles* tab to configure the profile settings.

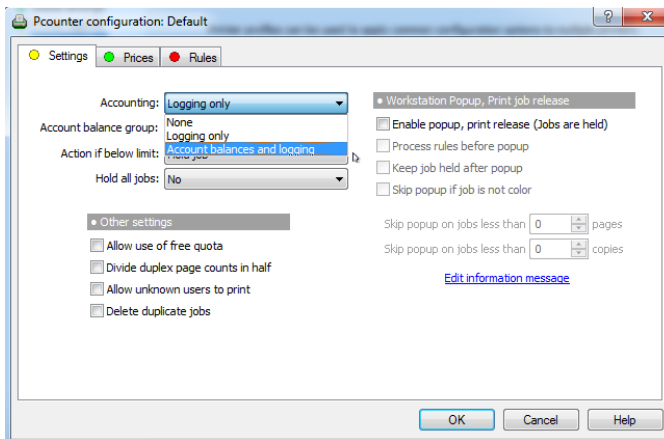
Printer profiles tab



- 1) On the *Printer profiles* tab, select the profile that you have associated with the printer and click the **Edit** button to configure the settings.

(To create a new profile, click the **Add** button.)

Pcounter configuration - Settings

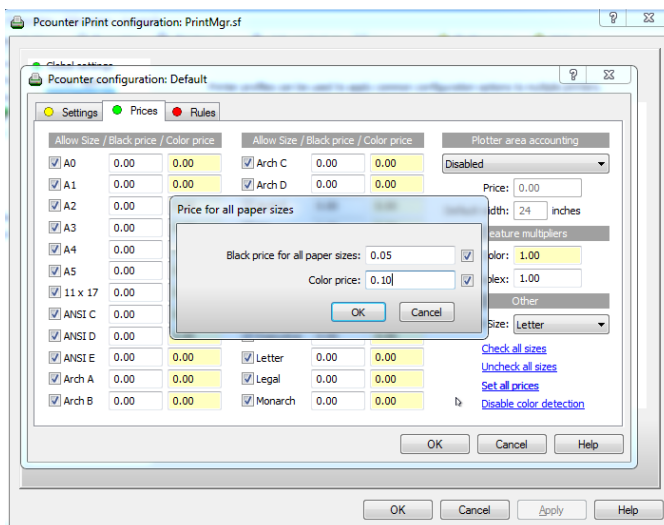


- 1) Perform the following steps to configure the Pcounter configuration settings:

- a) Change *Accounting* to **Logging only**.
- b) **Check the Box** next to *Enable popup window*.

- 2) Go to the *Prices* tab to set prices,

Pcounter configuration – Prices



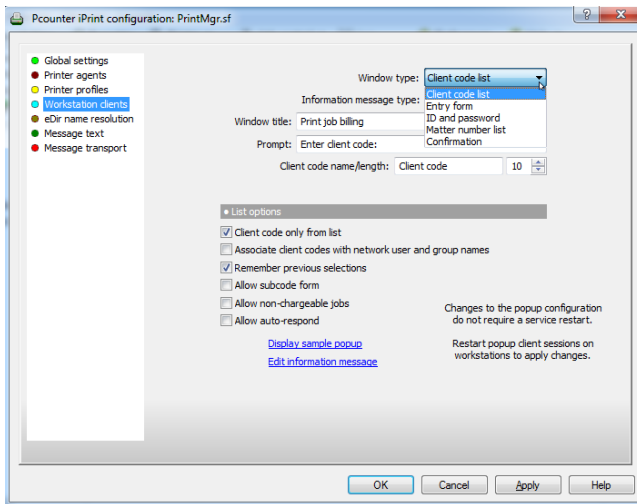
- 1) On the *Prices* tab, click **Enable color detection** if you wish to track color print jobs separately from black and white jobs..

- 2) Click on **Set all prices**; set the **Black** price and the **Color** price (if color detection has been enabled), and click OK.to accept changes.

- 3) Click OK again and return to the *Printer agents* tab (shown on page 6 of this document). Click the **Shutdown** button followed by the **Startup** button to make the configuration changes take effect for this printer.

- 4) *Repeat this procedure on all the iPrint printers that Pcounter will track.*

Workstation clients tab



- 1) Change the *Window Type* to **Client Code list** if you are using single codes. See **Option #4**, below, if you are using Subcodes.
- 2) Change *Information Message* type to **All printers**.
- 3) Click on *Edit information message* and type in what you would like the user to see when the Popup is displayed.
- 4) Choose the *List options* desired. Please see description of each list option below.

Client Code only from list – Allows the user to select or type in any codes that have been inputted by the Admin using **Pcounter Administrator**. If this option is not checked, a user can type any code they would like for tracking. That code will NOT be added to the database.

Associate Client Codes with Network users and group names— This option will only allow client codes and subcodes to be shown to those users for whom the administrator has assigned the codes. Codes are assigned to users through **Pcounter Administrator**. IMPORTANT: Be careful using this option. By default, no code associations are made. The list in Popup will be empty unless code associations are configured for specific users or groups.

Remember previous selection—This allows popup to remember the last client code selected.

Allow subcode form— When this feature is enabled, then the subcode field is available for users to type in any notes they please. **Note:** If you wish users to enter both client codes and *pre-configured* subcodes in the Popup, we recommend that you use the Matter Number window type. This setup is described in the **Option #4** scenario, below.

Allow non-chargeable jobs—Allows users to select a check box on the popup flagging the jobs as non chargeable.

Allow Auto-response—This will allow the user to select a time period where Popup will automatically respond with the current client code and subcode.

Post Configuration:

Down the iPrint manager and reload it. This will make sure all changes made have taken effect. Copy Ppopup.exe on to the client workstations and have it load in the startup group. This .exe can be found in C:\Program files\Pcounter for Novell OES\Novell OES\. **Users will NOT get a popup message unless Ppopup.exe is running on their workstations.** (When Popup is active, the Popup icon is displayed in the System Tray portion of the Taskbar, unless it is loaded with the “Hide” option.)

Special Consideration

If Pcounter Station will be used add the following configuration change:

- 1) On the *Pcounter configuration-settings* tab check the box that says “**Keep jobs paused after popup.**”

Option #4 Client Code Logging—Client code and Subcode (Authenticated and Anonymous mode)

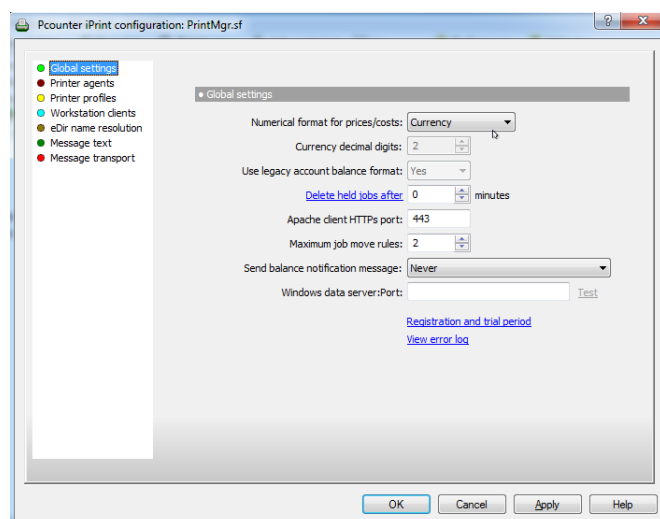
Description:

This option works the same way whether users are logged into the network with individual user accounts or all logged in through a single default NDS account. Pcounter will present a Popup so that the user can manually type in a client code and subcode or select the codes from a list. Because the goal is to track codes and not users, no authentication is necessary. If tracking users is required, then all users must authenticate to their workstations with their own NDS logins.

Where Used:

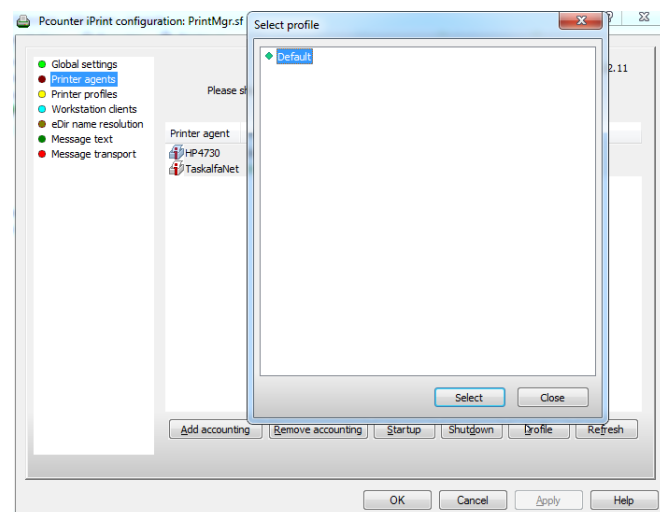
- 1) Any schools that wish to prompt departments for billing codes
- 2) Law Offices, Architectural Offices, Engineering offices.

Global Settings tab



- 1) Change *Numerical Format* to **Currency**.
- 2) Set the *Delete held jobs after ...* option to some number of minutes after which you wish the system to delete the job if the user has not answered the Popup. (0 holds jobs indefinitely.) Most sites set this field to between **15** and **30** minutes.

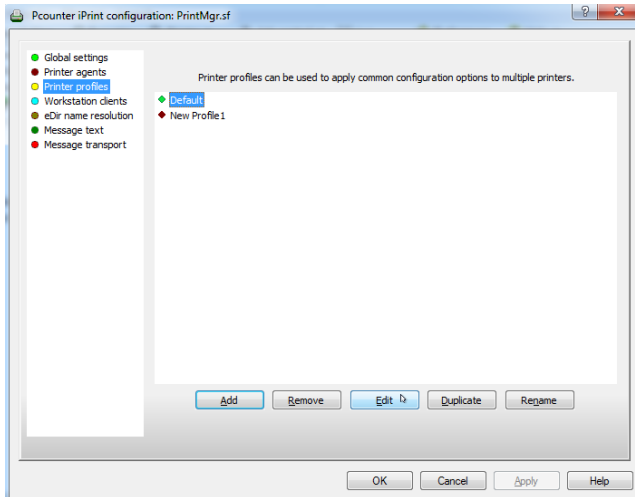
Printer agents tab



- 1) Select a printer where *Accounting* has been installed and then click the **Profile** button. Choose a profile to associate with the printer from the *Select profile* window and click the **Select** button. (The Default profile will be the only one listed until additional profiles are created on the *Printer profiles* tab.)

After you've associated a profile with your printer, go to the *Printer profiles* tab to configure the profile settings.

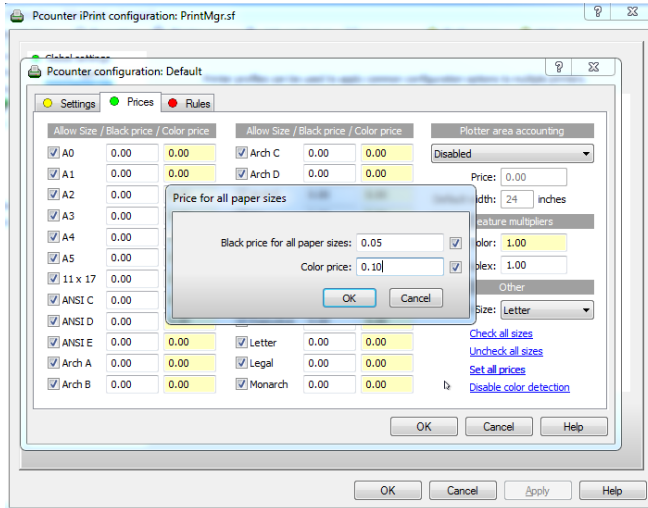
Printer profiles tab



- 1) On the *Printer profiles* tab, select the profile that you have associated with the printer and click the **Edit** button to configure the settings.

(To create a new profile, click the **Add** button.)

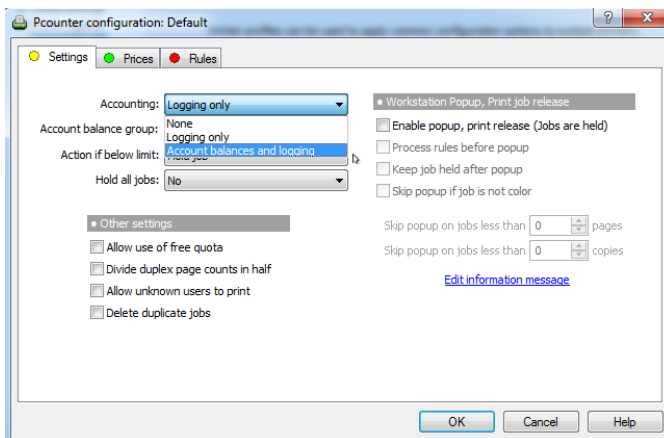
Pcounter configuration – Prices



- 1) On the *Prices* tab, click **Enable color detection** if you wish to track color print jobs separately from black and white jobs..
- 2) Click on **Set all prices**; set the **Black** price and the **Color** price (if color detection has been enabled), and click OK to accept changes.
- 3) Click OK again and return to the *Printer agents* tab (shown on page 6 of this document). Click the **Shutdown** button followed by the **Startup** button to make the configuration changes take effect for this printer.

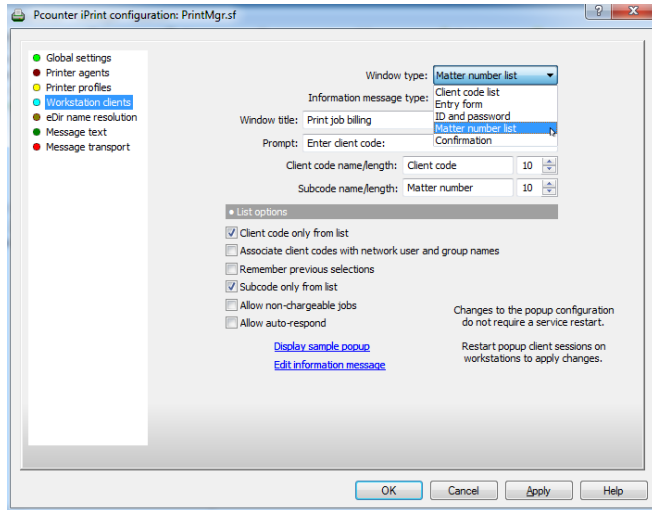
- 4) Repeat this procedure on all the iPrint printers that Pcounter will track.

Pcounter configuration - Settings



- 1) Perform the following steps to configure the Pcounter configuration settings:
 - c) Change *Accounting* to **Logging only**.
 - d) **Check the Box** next to *Enable popup window*.
- 2) Go to the *Prices* tab to set prices,

Workstation clients tab



- 1) Change the *Window Type* to **Matter Number** if you are using both client codes and subcodes. See **Option #3**, above, if you are using only single client codes.
- 2) Change *Information Message type* to **All printers**.
- 3) Click on *Edit information message* and type in what you would like the user to see when the Popup is displayed.
- 4) Choose the *List options* desired. Please see description of each list option below.

Client code only from list—Allows the user to select or type in any codes that have been inputted by the Admin using **Pcounter Administrator**. If this option is not checked, a user can type any code they would like for tracking. That code will NOT be added to the database.

Subcode only from list—Allows the user to select or type in any subcodes that have been inputted by the Admin using **Pcounter Administrator**. If this option is not checked a user can type any subcode they would like for tracking. That code will NOT be added to the database.

Associate client codes with Network users and group names—This option will only allow client codes and subcodes to be shown to those users for whom the admin has assigned the codes. Codes are assigned using **Pcounter Administrator**. IMPORTANT, be careful using this option. By default, no code associations are made. The list in Popup will be empty unless code associations are configured for specific users or groups.

Remember previous selection—This allows popup to remember the last client code selected.

Allow non-chargeable jobs—Allows users to select a check box on the popup flagging the jobs as non chargeable.

Allow Auto-response—This will allow the user to select a time period where PPopup will automatically respond with the current client code and subcode.

Post Configuration:

Down the NDPS manager and reload it. This will make sure all changes made have taken effect. Copy Ppopup.exe on to the client workstations and have it load in the startup group. This executable can be found in C:\Program files\Pcounter for Novell OES\Novell OES\. **Users will NOT get a popup message unless Ppopup.exe is running on their workstations.** (When Popup is active, the Popup icon is displayed in the System Tray portion of the Taskbar, unless it is loaded with the “Hide” option.)

Special Consideration

If Pcounter Station will be used add the following configuration change:

- 1) On the *Printer configuration* tab check the box that says “**Keep jobs paused after popup.**”

Option #5 Page tracking via Page Quotas or Balance (Authenticated Printing)

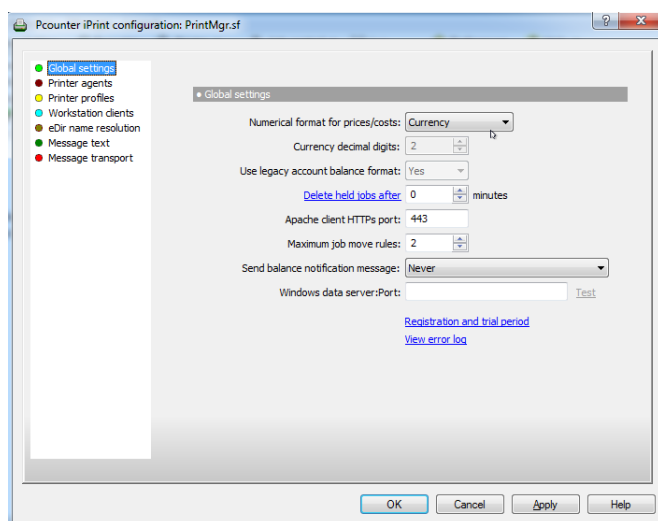
Description:

This is probably one of the most direct ways to charge students a simple print quota. This configuration also has the ability to connect a TBS 9500 deposit station to it so that students can add their own currency to the system (Currency Only). Each student logs into the computer with his or her own NDS login credentials. Pcounter calculates either the number of pages or the currency needed for the job, and compares the total against the user's Pcounter balance. The job will be debited against the student's Pcounter account balance once the iPrint manager notifies Pcounter that the job has printed. If the account balance reaches zero, the student cannot print.

Where Used:

- 1) K-12 or Higher Education computer labs.
- 2) Any School or office that only wishes to give a page quota to its users.

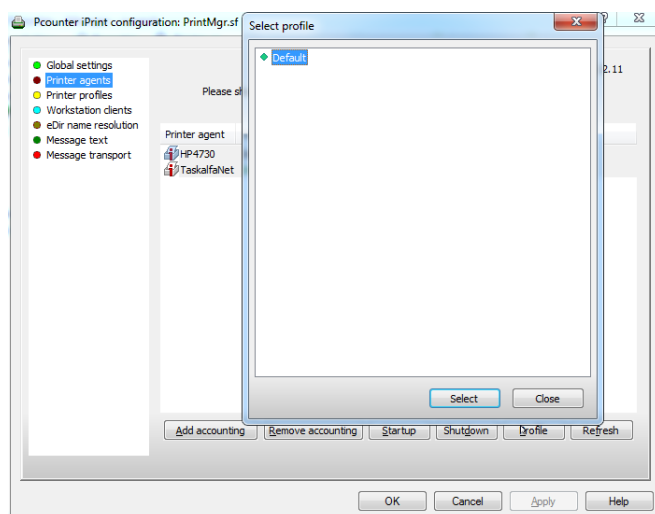
Global settings tab



- 1) Change *Numerical Format* to **Pages** or **Currency.****

**** Note** Currency is required if the TBS 9500 will be used to allow students to deposit money—or if you intend to charge decimal amounts for printing.

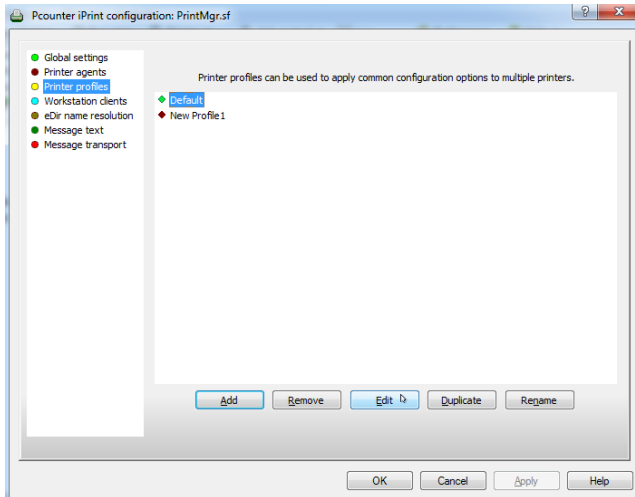
Printer agents tab



- 1) Select a printer where *Accounting* has been installed and then click the **Profile** button. Choose a profile to associate with the printer from the *Select profile* window and click the **Select** button. (The Default profile will be the only one listed until additional profiles are created on the *Printer profiles* tab.)

After you've associated a profile with your printer, go to the *Printer profiles* tab to configure the profile settings.

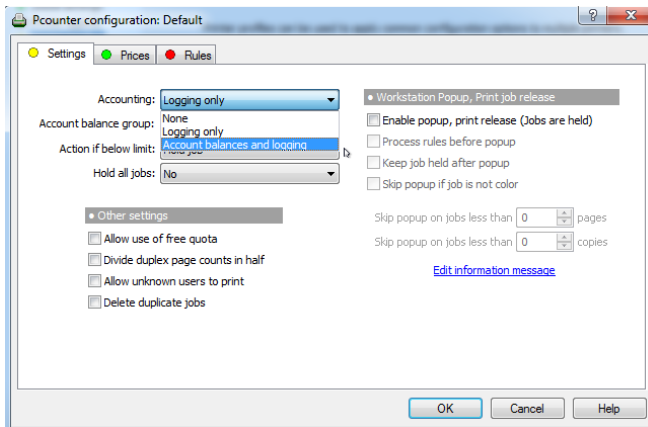
Printer profiles tab



- 1) On the *Printer profiles* tab, select the profile that you have associated with the printer and click the **Edit** button to configure the settings.

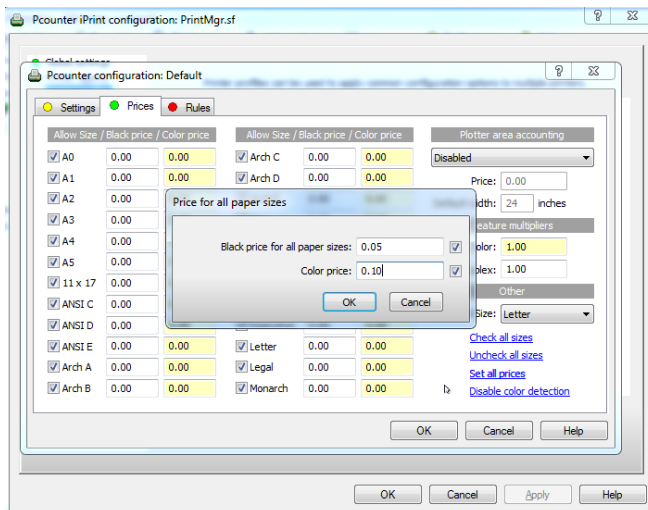
(To create a new profile, click the **Add** button.)

Pcounter configuration - Settings



- 1) Perform the following steps to configure the Pcounter configuration settings:
 - a) Change *Accounting* to **Account Balances and logging**.
 - b) Set the *Action if below limit* option to either **Delete job** or **Hold job**. If set to **Hold job**, an administrator will need to resume the print job for the user.
 - c) **Check the Box** next to *Enable popup window*.
- 2) Go to the *Prices* tab to set prices,

Pcounter configuration – Prices



- 1) On the *Prices* tab, click **Enable color detection** if you wish to track color print jobs separately from black and white jobs..
- 2) Click on **Set all prices**; set the **Black price** and the **Color price** (if color detection has been enabled), and click OK to accept changes.
- 3) Click OK again and return to the *Printer agents* tab (shown on page 6 of this document). Click the **Shutdown** button followed by the **Startup** button to make the configuration changes take effect for this printer.
- 4) Repeat this procedure on all the iPrint printers that Pcounter will track.

Post Configuration:

Down the iPrint manager and reload it, this will make sure all changes made have taken effect.

Special Consideration

If Pcounter Station will be used add the following configuration change.

- 1) On the *Printer configuration* tab check the box that says “**Enable popup window.**”

Option #6 Anonymous simple print release with Pcounter Station (with or without vending)

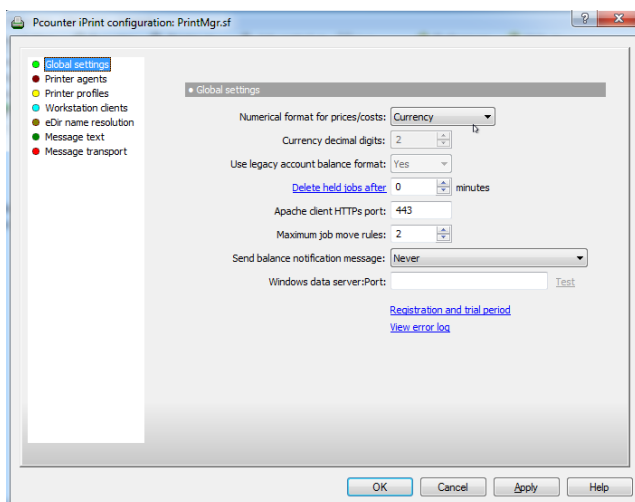
Description:

This option is designed specifically for use with Pcounter Station. If a Pcounter Station release station is not being used, this configuration should not be used. This configuration is a simple **non secure** print release format. Students print from workstations where the same default user account is used to log into each computer. The user then goes to a Pcounter Station release station to release the jobs to the printer. A vending charge through an external device can be added, if required.

Where Used:

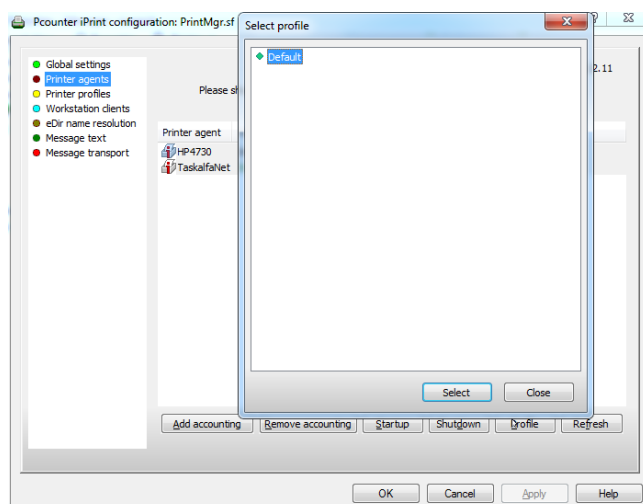
- 1) K-12 school labs where all computers are pre-logged in with a default user account.
- 2) Universities and colleges where a default user account “pre-logs” students into lab machines; and jobs need to be charged to an external card charging system such as a magnetic or Smart Card reader.
- 3) Universities and colleges where a default user account “pre-logs” students into lab machines; and jobs need to be charged to an external card charging system such as a Blackboard, CBORD, or CardSmith.

Global settings tab:



- 1) Change *Numerical Format* to **Currency**.
- 2) Set the *Delete held jobs after ...* option to some number of minutes after which you wish the system to delete the job if the user has not answered the Popup. (0 holds jobs indefinitely.) Most sites set this field to between **30** and **120** minutes.

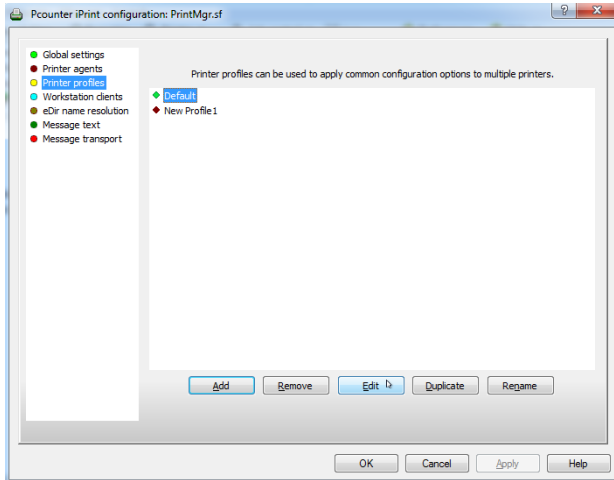
Printer agents tab



- 1) Select a printer where *Accounting* has been installed and then click the **Profile** button. Choose a Profile to associate with the printer from the *Select profile* window and click the **Select** button. (The Default profile will be the only one listed until additional profiles are created on the *Printer profiles* tab.)

After you've associated a profile with your printer, go to the *Printer profiles* tab to configure the profile settings.

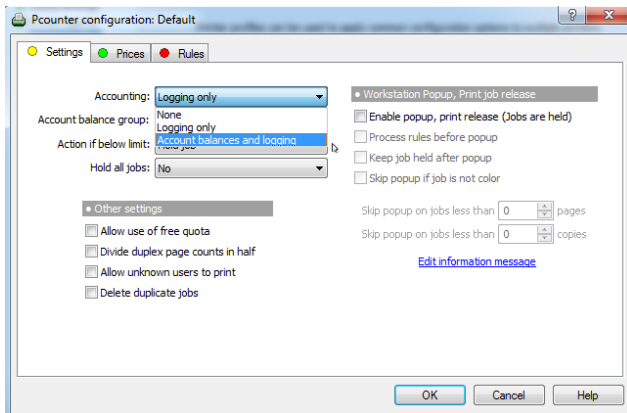
Printer profiles tab



- 1) On the *Printer profiles* tab, select the profile that you have associated with the printer and click the **Edit** button to configure the settings.

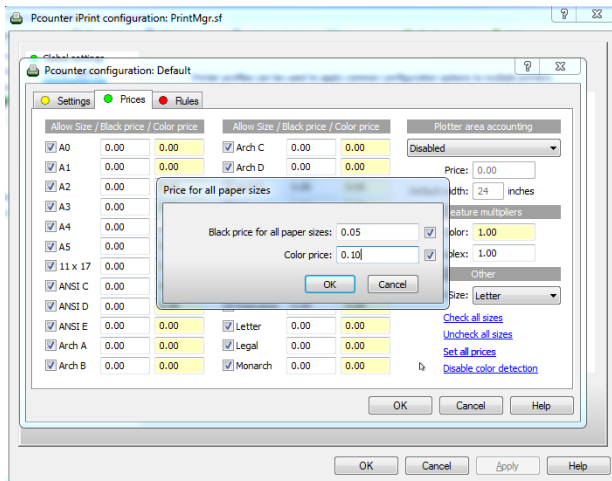
(To create a new profile, click the **Add** button.)

Pcounter configuration - Settings



- 1) Perform the following steps to configure the Pcounter configuration settings:
 - a) Change *Accounting* to **Logging only**.
 - b) **Check the Box** next to *Enable popup window*.
 - c) Verify that *Count jobs in advance for display* is Checked.
- 2) Go to the *Prices* tab to set prices,

Pcounter configuration – Prices



- 1) On the *Prices* tab, click **Enable color detection** if you wish to track color print jobs separately from black and white jobs..
- 2) Click on **Set all prices**; set the **Black price** and the **Color price** (if color detection has been enabled), and click OK to accept changes.
- 3) Click OK again and return to the *Printer agents* tab (shown on page 6 of this document). Click the **Shutdown** button followed by the **Startup** button to make the configuration changes take effect for this printer.
- 4) Repeat this procedure on all the iPrint printers that Pcounter will track.

Post Configuration:

Down the iPrint manager and reload it. This will ensure that all changes made have taken effect. Install and configure Pcounter Station on the computer that will be used for print release. An installation guide for Pcounter Station can be found here: <http://www.pcounter.com/download/docs/Pcounter-Station-Installation.pdf>.

Option #7 Secure Simple print release with Pcounter Station (with or without vending)

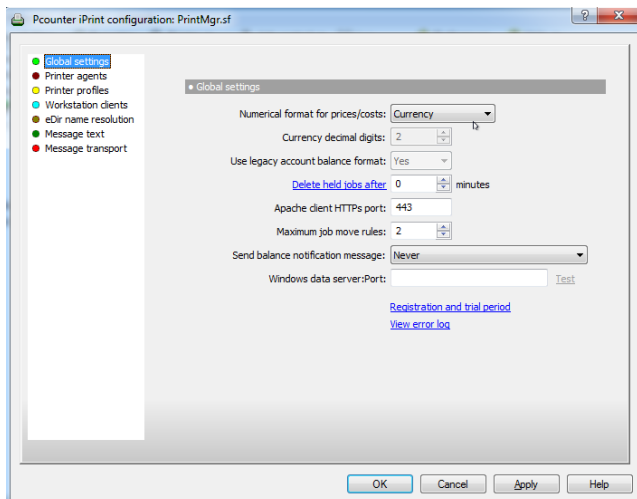
Description:

This option is designed specifically for use with Pcounter Station. If a Pcounter Station release station is not being used, this configuration should not be used. This configuration is a simple **secure** print release format. Users print from workstations that are usually pre-logged in with a default user account. Pcounter presents a popup to ask the user for an ID and an optional password. These IDs and passwords are completely “made up” by the user. Users then go to a Pcounter Station release station and enter the same ID (with password optional) to release the job(s) to the printer. If required, users can be charged for their print jobs, paying through an external device.

Where Used:

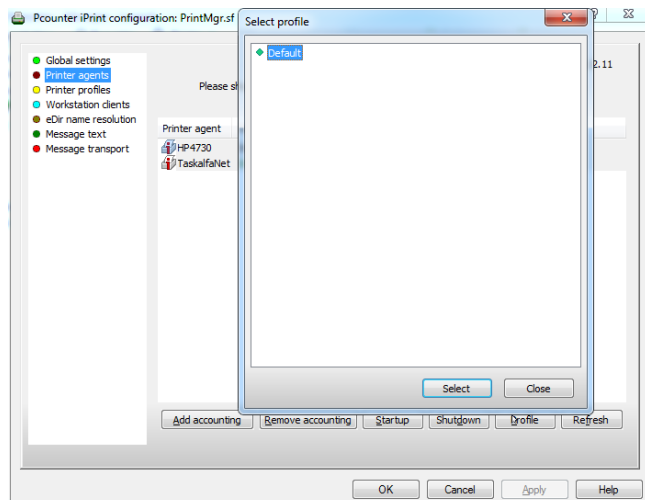
- 1) K-12 school labs where all computers are pre-logged in with a default user account.
- 2) Universities and colleges where a default user account “pre-logs” students into lab machines; and jobs need to be charged to an external card charging system such as a magnetic or Smart Card reader.
- 3) Universities and colleges where a default user account “pre-logs” students into lab machines; and jobs need to be charged to an external card charging system such as a Blackboard, CBORD, or CardSmith.

Global settings tab:



- 1) Change *Numerical Format* to **Currency**.
- 2) Set the *Delete held jobs after ...* option to some number of minutes after which you wish the system to delete the job if the user has not answered the Popup. (0 holds jobs indefinitely.) Most sites set this field to between **15** and **30** minutes.

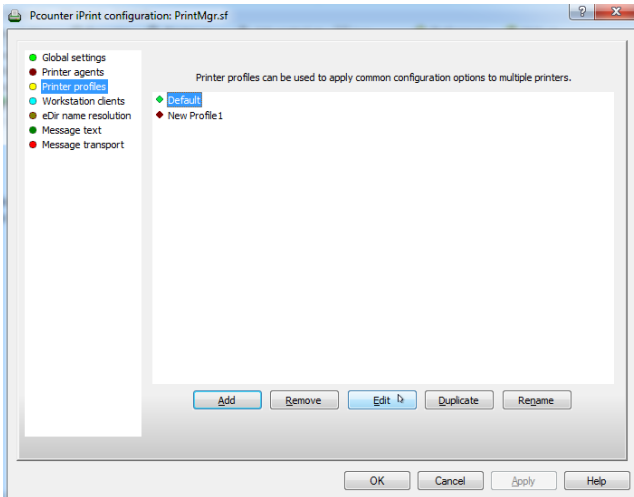
Printer agents tab



- 1) Select a printer where *Accounting* has been installed and then click the **Profile** button. Choose a Profile to associate with the printer from the *Select profile* window and click the **Select** button. (The Default profile will be the only one listed until additional profiles are created on the *Printer profiles* tab.)

After you've associated a profile with your printer, go to the *Printer profiles* tab to configure the profile settings.

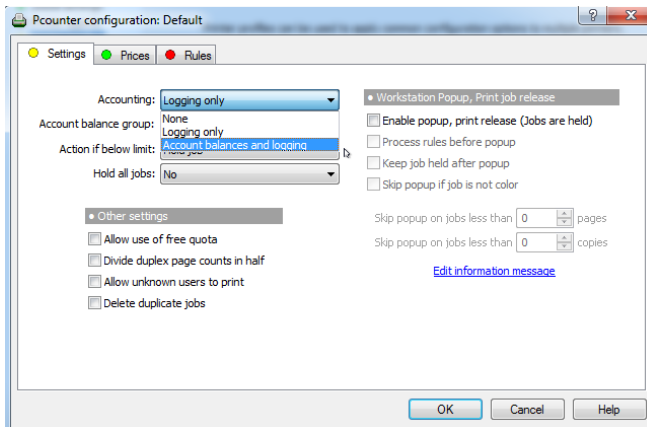
Printer profiles tab



- 1) On the *Printer profiles* tab, select the profile that you have associated with the printer and click the **Edit** button to configure the settings.

(To create a new profile, click the **Add** button.)

Pcounter configuration - Settings

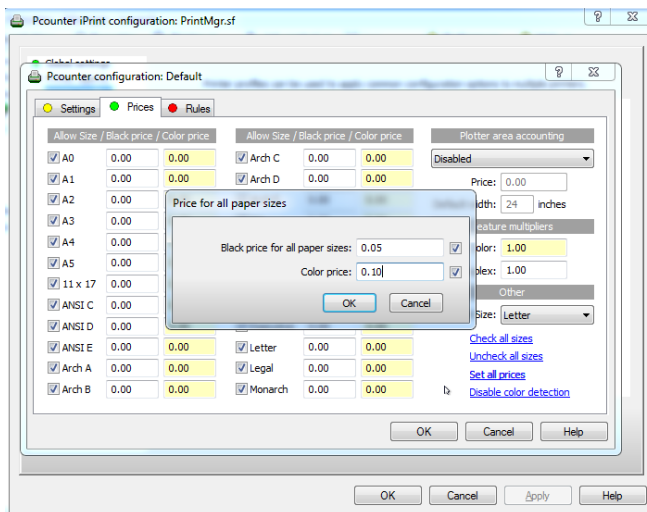


- 1) Perform the following steps to configure the Pcounter configuration settings:

- a) Change *Accounting* to **Logging only**.
- b) **Check the Box** next to *Enable popup window*.
- c) Verify that *Count jobs in advance for display* is checked.

- 2) Go to the *Prices* tab to set prices,

Pcounter configuration – Prices



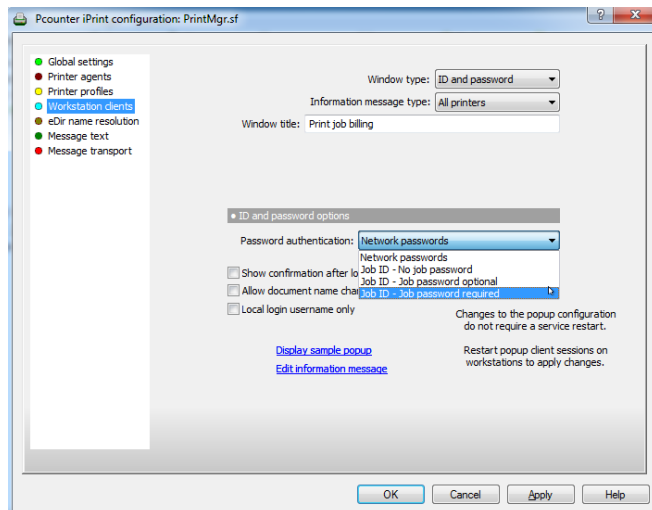
- 1) On the *Prices* tab, click **Enable color detection** if you wish to track color print jobs separately from black and white jobs..

- 2) Click on **Set all prices**; set the **Black price** and the **Color price** (if color detection has been enabled), and click OK to accept changes.

- 3) Click OK again and return to the *Printer agents* tab (shown on page 6 of this document). Click the **Shutdown** button followed by the **Startup** button to make the configuration changes take effect for this printer.

- 4) Repeat this procedure on all the iPrint printers that Pcounter will track.

Workstation clients tab



- 1) Change the *Window Type* to **ID and Password**.
- 2) Change *Information Message type* to **All printers**.
- 3) Change the Password authentication to one of the following:
 - a) **Job ID – No Job Password**
users make up ID and do not use password.
 - b) **Job ID – Job password required**
users make up ID and make up a password.
 - c) **Job ID – Job password optional**
users make up ID and optionally use a password.

Post Configuration:

Down the iPrint manager and reload it. This will make sure all changes made have taken effect. Copy Ppopup.exe on to the client workstations and have it load in the startup group. This executable can be found in C:\Program files\Pcounter for Novell OES\Novell OES\.

Users will NOT get a popup message unless Ppopup.exe is running on their workstations.. (When Popup is active, the Popup icon is displayed in the System Tray portion of the Taskbar, unless it is loaded with the "Hide" option.)

Install and configure Pcounter Station on the computer that will be used for print release. An installation guide for Pcounter Station can be found here: <http://www.pcounter.com/download/docs/Pcounter-Station-Installation.pdf>. .

Optional Add-on Components

Pcounter Station (Release Station)

Pcounter Station is kiosk-style print release software. It turns a Windows PC that you provide into a print release station. When Pcounter Station is implemented, jobs remain paused in their respective server queues after users print and (optionally) answer the Popup. Users must then walk up to the Pcounter Station computer (usually situated near a printer) and log into Pcounter Station to release their print job. An Installation Guide for Pcounter Station can be found here: <http://www.pcounter.com/download/docs/Pcounter-Station-Installation.pdf>.

TBS9500 (Deposit Station)

The TBS9500 is a coin and bill acceptor that can be used to add money to a user's NDS account. The unit is sold in both US and Canadian models. The TBS 9500 includes a free license for Pcounter station. To install the TBS9500 please see the Pcounter Station installation manual here: <http://www.pcounter.com/download/docs/Pcounter-Station-Installation.pdf>.

Configuration Changes Needed:

The only configuration option to be aware of is that Currency MUST be the default accounting type.

Macintosh Support

To configure Pcounter for iPrint with Macintosh computers, please download and install the Macintosh iPrint client (see: <http://download.novell.com/Download?buildid=BkrScErVW2E~>).

Troubleshooting:

- Q. My iPrint printers are not visible on the Pcontrol *Printer agents tab* after installation.
- A. The OES iPrint manager (IPSM) must load the Pcounter Daemon. If the iPrint manager is not active when the Pcounter RPM is installed, or if the OES server is rebooted before Accounting has been enabled on your printers, they may not be visible when you open the Pcontrol *Printer agents tab*.

Solution 1

- 1) Verify that the iPrint manager is running and that your printers are active in the NDS tree.

Reinstall the Pcounter rpm package using the Force option:

```
rpm -Uvh --force [path]/pcounter-date_version_platform.rpm
```

- 2) Verify that all Pcounter files were installed successfully by running the command:
`ps -e | grep pcounter`

You should see a response similar to this:

```
4598 7      00:00:00 pcounterServername:#[Path]
```

- 3) Restart the Apache server using the command:
`rcapache2 restart`
- 4) Double-click the OES Print Manager in Pcontrol, go to the Printer agents tab and confirm whether the iPrint printers are now displayed.
- 5) If you see the printers on the Printer agents tab, follow the instructions on page 6 of this manual to add Pcounter Accounting to the printers you wish to support.

Solution 2

If the forced reinstallation of the Pcounter-OES rpm does not resolve the problem, you can manually add Pcounter to the “Accounting Autoload” area of the printer agent. Open a browser window and go to: <http://ipADDRESS/PsmStatus> (Use your Server’s IP)

- 1) Click on one of the printer agents names

iPrint Manager 'oesprint.SF'

Number of Printer Agents: 23

Printer Agent Name	Current Status	Jobs		Jobs Printed Since	
		Scheduled	Active	Since 01/26/2010 10:00:00 AM	Since 01/26/2010 12:00:00 AM
printer1	Idle	0	0	0	0
barts	Idle	0	0	0	0
hp	Idle	0	0	0	0
printer10	Idle	0	0	0	0
printer11	Idle	0	0	0	0
printer12	Idle	0	0	0	0
printer13	Idle	0	0	0	0
printer14	Idle	0	0	0	0
printer15	Idle	0	0	0	0
printer16	Idle	0	0	0	0

- 2) Select “Configuration Options”

Printer Agent 'printer10' Information

Previous Printer Next Printer

Printer Agent Status: Idle Shutdown Printer ▾ Apply

Printer Console: Ready - Select Features to scan your job.
Some Network Controller services unavailable. Please notify System Administrator.

[Job List](#)
 [Shutdown/Startup History](#)
 [Message from Admin](#)
 [Configuration Options](#)

Job Processing Information	Scheduled	Active	Requested	Last Job Finished Printing
Jobs	0	0	1	(none)

- 3) Add “pcounter” to the “Accounting Autoload Command” area and click **Apply**.

Configuration Options for Printer Agent 'printer10'

Enable Auditing

LPR Enabled

Require SSL

Printer Location

Gateway Autoload Command

iprintgw PORT=LPR HOSTNAME=null PRINTERNAME=PASSTHROUGH null

Accounting Autoload Command

pcounter

Apply Cancel

- 4) Now, go into iManager and restart the printer agent, as the printer agent comes back up, it will process the Pcounter Autoload command and load the Pcounter Daemon.
- 5) To verify the Pcounter Daemon is running, run the following command:
ps -e/grep pcounter
- 6) You should see output resembling the following:
4 S 0 6967 6945 0 75 0 - 24381 1 ? 00:00:00 pcounter
- 7) Now that the Pcounter is in place, we must restart Apache. Input the following command:
rcapache2 restart
- 8) If Apache restarts correctly, you will see the following output:
Syntax OK
Shutting down httpd2 (waiting for all children to terminate) done
Starting httpd2 (worker) done