



Pcounter for Windows

Pcounter Client and Printer Distribution Guide

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A.N.D. Technologies
4104 24th Street #627
San Francisco, CA 94114
USA

E-Mail: support@pcounter.com
Web: <http://www.pcounter.com>
Phone: (415) 701-9222
Fax: (415) 651-9000

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0.0 Disclaimer

This guide describes, in detail, certain processes that are out of the scope of Pcounter support.

AND Technologies does not, and will not, provide support for the processes described in this guide. If support for the processes in this guide are needed, please contact Microsoft, or escalate to an appropriate internal IT support team.

AND Technologies does not, and will not, provide support for any processes involving Microsoft Server Snap-in's such as GPMC.MSC, GPEDIT.MSC, DSA.MSC (Active Directory Users and Computers), PRINTMANAGEMENT.MSC, etc.

To recap, distribution of the Pcounter Clients and/or Windows Printer Shares is out of the scope of Pcounter support. This guide is intended as a resource to help domain administrators navigate the hurdles involved with these processes. If further assistance is needed, please contact Microsoft or escalate internally.

0.1 Goal

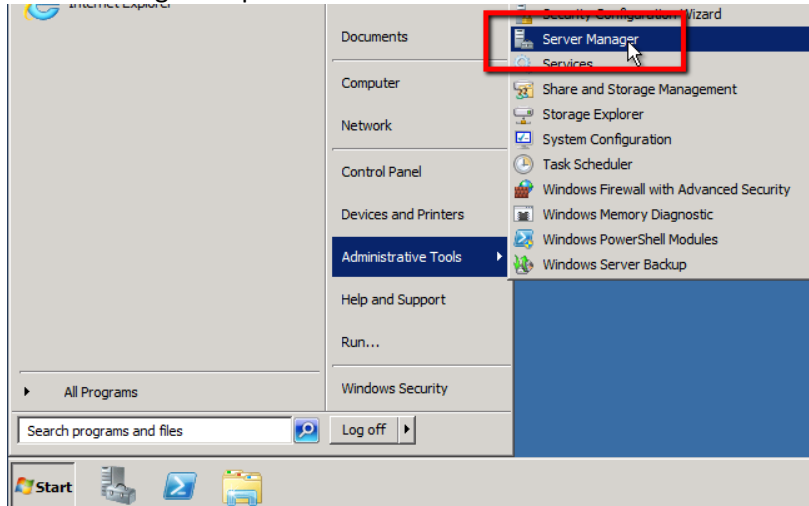
The goal of this document is to assist a domain administrator in distributing PPopup.exe or PcounterClient.exe as well as distributing Windows Server Printer Shares to domain authenticated user workstations.

1.0 Distributing Printer Shares In Domain Environment

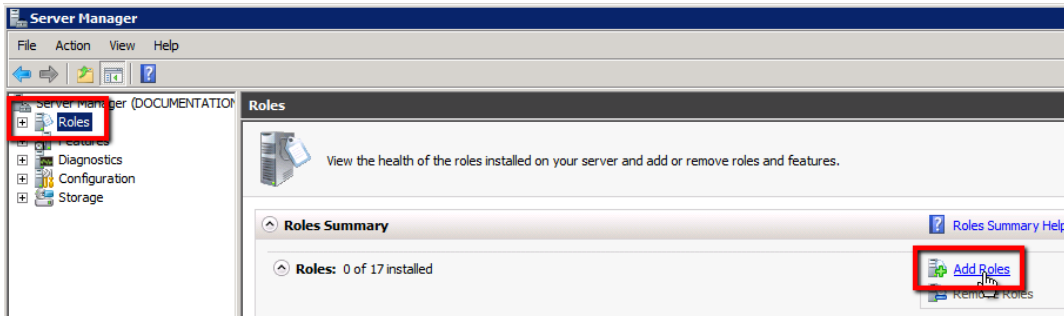
1.1 Add Print Server Role

To distribute printer shares, we must add the Print Server role to the server for access to Print Management. If the Print Server Role has already been configured, skip this section.

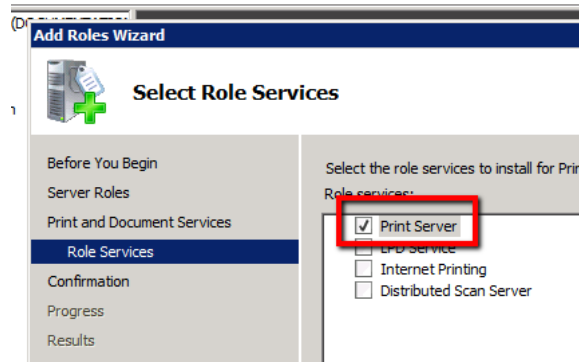
- 1) Open the Server Manager snap in:



- 2) Go into Roles and choose 'Add Roles':



- 3) Check the box for 'Print and Document Services'
- 4) Ensure only 'Print Server' is checked:



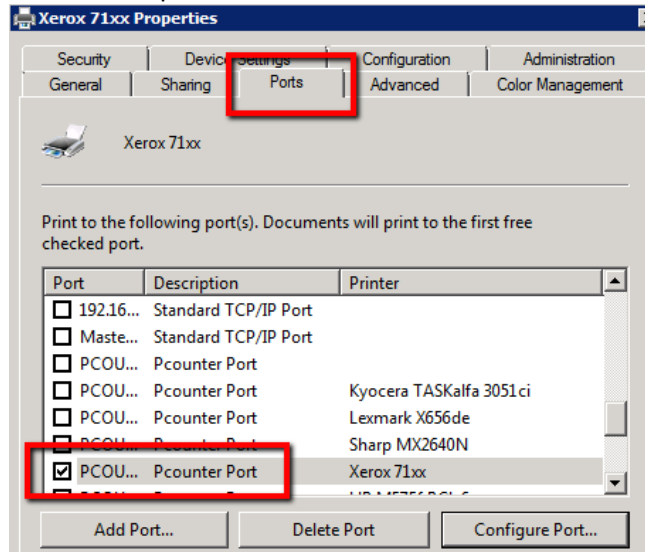
- 5) Finally, click install. This will take a few minutes to process, but should not require a reboot to proceed. Once the wizard is complete, close it.
- 6) This process adds 'Print Management' to the server. It is located at Start>Administrative Tools.

1.2 Confirm Printer & Pcounter Configuration

Confirm Pcounter is fully configured on all printers that will be later distributed.

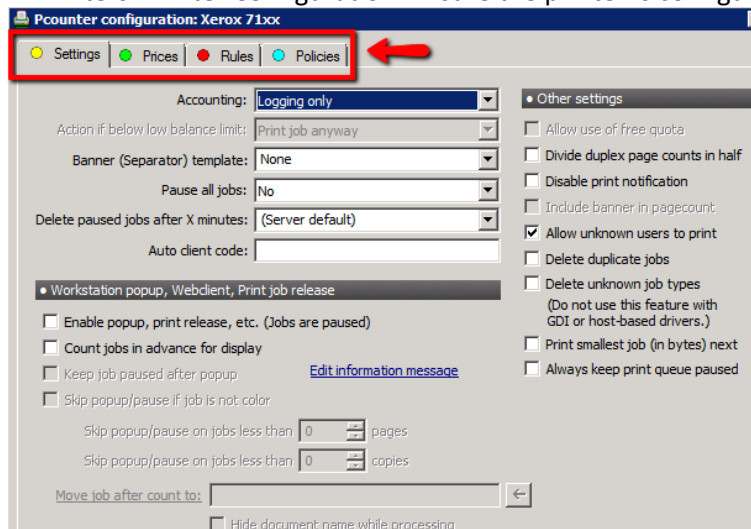
All printers that are intended to be distributed should be fully configured and tested before distribution. If in a mixed x86/x64 workstation environment, ensure both x86 and x64 drivers are installed.

- 1) Confirm the printers intended for distribution 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 distribution are configured in Pcontrol. Go to Pcontrol>Server Configuration>Printers>Printer Configuration. Ensure the printer is configured and tested.



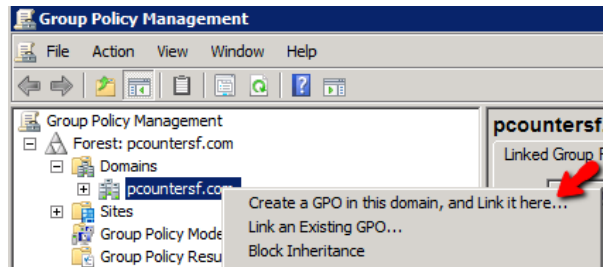
If not, consult our Pcounter - Prepare, Install, Configure document and video [here](#) for instructions on configuring Pcounter on a printer share. These settings can be changed anytime, even after distribution.

- 3) If in a mixed x86/x64 workstation environment, ensure both x86 and x64 drivers are installed. If differing architecture drivers are needed, use the article [here](#) for reference.

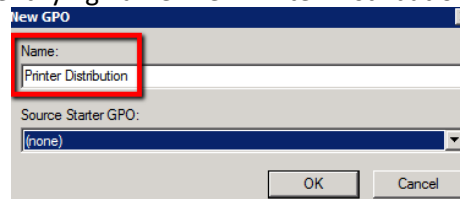
1.3 Create GPO For Printer Distribution

The GPO used for distribution should contain only users and groups that you wish to receive the deployed printer objects. If a GPO has already been created for printer distribution, skip this section.

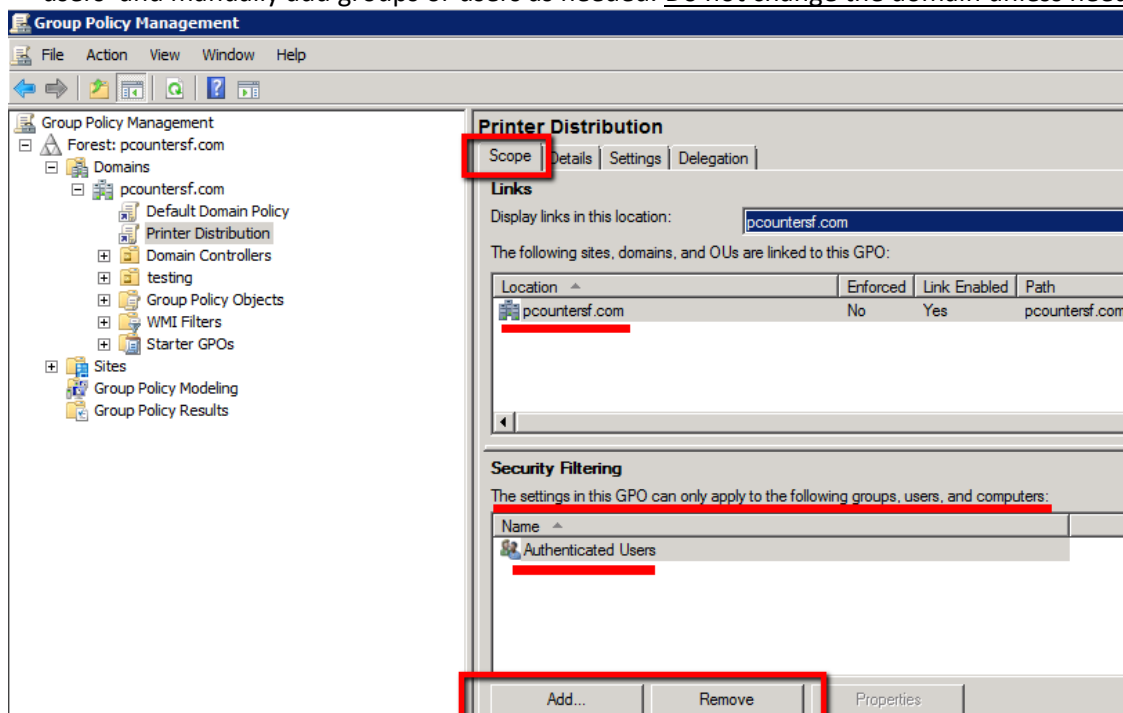
- 1) Go to Start>Run and launch GPMC.MSC
- 2) In the Group Policy Management window that opens, right click your domain and choose “Create a GPO in this domain and link it here...”



- 3) Give the new GPO an identifying name like “Printer Distribution” and click OK.



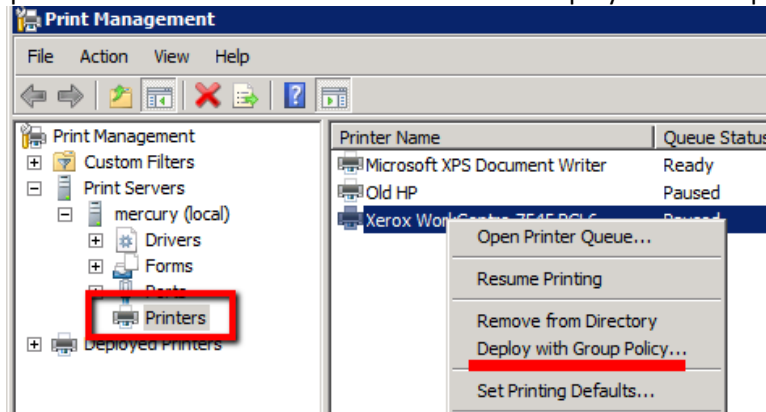
- 4) Once created, the new GPO will display in the explorer pane on the left of the GPMC window. Left click the newly created GPO to display its ‘scope’. Scope defines what the GPO applies to.
- 5) By default, the GPO will apply to the entire domain, but only to ‘authenticated users’. If a printer share is deployed to a GPO using these default settings, the result will be, all users in the entire domain will receive the printer share. If that is not the desired result, remove ‘authenticated users’ and manually add groups or users as needed. Do not change the domain unless needed.



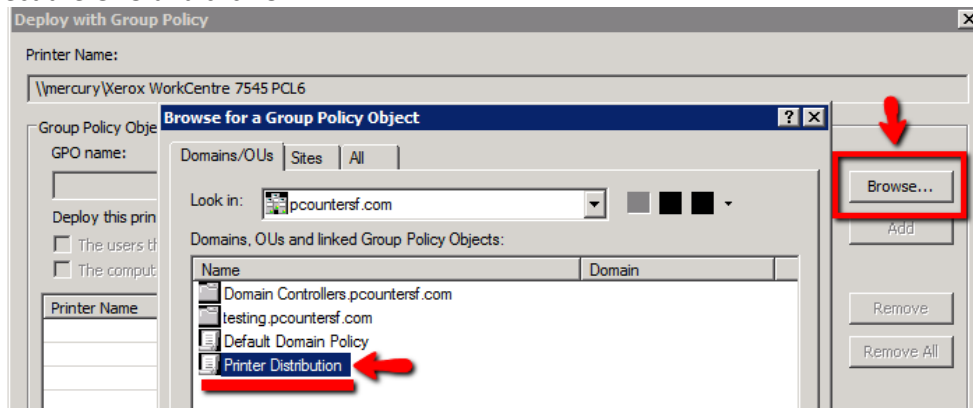
1.4 Use Print Management To Publish Printers

Using PrintManagement.msc, we will now publish printers to the GPO created in the previous section.

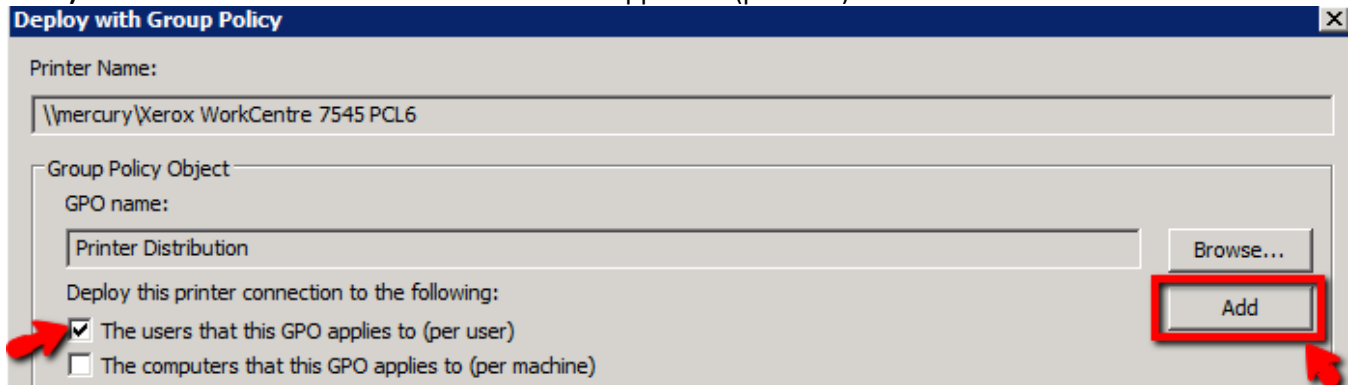
- 1) Open Print Management, Start>Administrative Tools>Print Management.
- 2) In the explorer pane on the left, expand Print Servers>Your Server>Printers.
- 3) Right click a printer that is to be distributed and choose ‘Deploy With Group Policy’



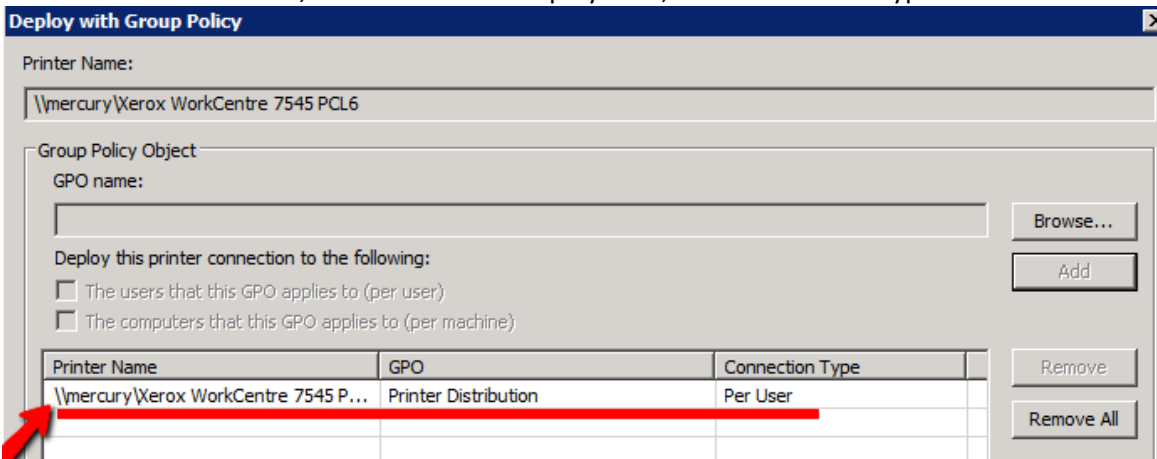
- 4) In the window that opens, choose ‘Browse’ and choose the GPO created in the previous section. In my example screenshot the GPO we are choosing is named “Printer Distribution”.
- 5) Select the GPO and click OK.



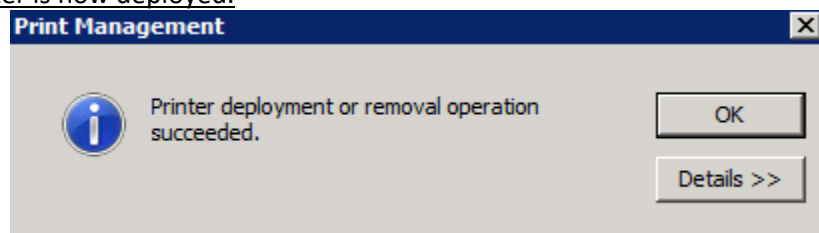
6) Check the box for 'The users that this GPO applies to (per user)' and click 'Add'.



7) This should create an entry in the white list area of the window. 'Printer Name' is the print share name in UNC format, 'GPO' is the GPO deployed to, and 'Connection Type' should be 'Per User'.



8) Click 'Apply' and 'OK' to apply the changes now. You should receive a pop up window that says 'Printer deployment or removal operation succeeded.'
The printer is now deployed.



1.5 Confirm Printer Distribution

Confirm a printer connection is created on a user workstation. If needed, use `gpupdate /force` to force group policy updates to the workstation.

- 1) Connect to a workstation via remote desktop or interactively as a user that is part of the scope of the GPO that printers are deployed to.
- 2) Examine the printers folder once fully logged in. Is the printer there already?
- 3) If not, try running this command from a command prompt "`gpupdate /force`".
- 4) Also, if in a x86/x64 environment, ensure both drivers are available on the print server.

2.0 Distributing Pcounter Client In Domain Environment

2.1 Fully Prepare Pcounter Client For Distribution

Before distributing a Pcounter Client to a live, production environment, ensure that it is fully prepared, configured, and tested in the workstation environment it will be deployed to.

2.1.1 Determine Pcounter Client Type

- 1) For Windows workstations, there are two Pcounter Clients, PPopup.exe and PcounterClient.exe. PPopup.exe is for domain attached workstations where RPC is allowed. PcounterClient.exe is for domain attached workstations, and non-domain workstations, where HTTP is allowed.
- 2) If unsure which client to use, please consult our PPopup Training Video [here](#).

2.1.2 Test Pcounter Client In Intended Workstation Environment

Before distributing PPopup.exe or PcounterClient.exe, ensure it will work as expected by manually transferring to a domain user workstation and testing with a domain user account, thoroughly. It will be inefficient to have to redeploy an updated Pcounter Client at a later time due to insufficient preparation and testing.

2.1.3 Integrate INI Options

Before distributing the client, use the /integrateini command to permanently force certain settings. More info is in the PcounterWin.pdf, in the Pcounter Client Overview chapter, found [here](#).

2.2 Create Batch File

In this section, we will create the batch file that will perform the commands that both transfer and launch the Pcounter Client at user login.

The batch file described will first transfer the Pcounter Client file to the user's user profile directory, then after a three second delay, will launch the Pcounter Client running as the currently logged in user and close any command windows.

The batch file will only copy the Pcounter Client if the source file is newer than the destination file if the /d switch is used with xcopy.

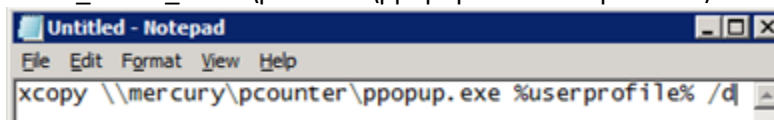
NOTE. For our example, we will be copying the PPopup.exe from a Pcounter Server named "Mercury"

NOTE. %userprofile% is a universal Windows shortcut to the current user's user profile directory.

NOTE. In our example, we are transferring files from the Pcounter share on the Pcounter server. Either place the PPopup.exe or PcounterClient.exe in this directory, or use a different directory.

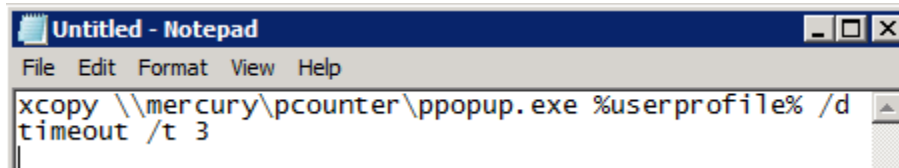
- 1) On the Pcounter server, open notepad.
- 2) In the Notepad window, type the first line of our command, which transfers the PPopup.exe from the server to the workstation:

```
xcopy \\pcounter_server_name\pcounter\ppopup.exe %userprofile% /d
```



- 3) Add a three, or more, second delay to ensure the system is fully prepared to execute the next commands. Add the following to the next line of text in notepad:
timeout /t 3

IE:

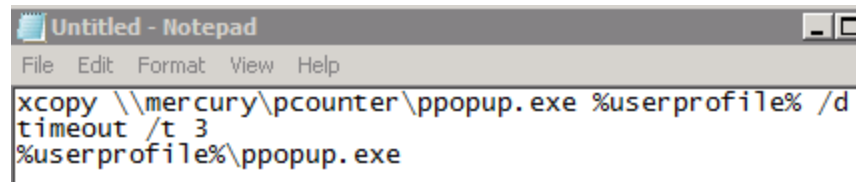


```
Untitled - Notepad
File Edit Format View Help
xcopy \\mercury\pcounter\ppopup.exe %userprofile% /d
timeout /t 3
```

- 4) Now, the script will execute the PPopup.exe from the userprofile directory. Add the following to the next line of text in notepad:

%userprofile%\ppopup.exe

IE:

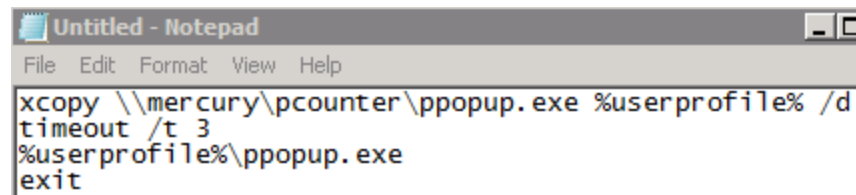


```
Untitled - Notepad
File Edit Format View Help
xcopy \\mercury\pcounter\ppopup.exe %userprofile% /d
timeout /t 3
%userprofile%\ppopup.exe
```

- 5) Now, force the script closed to ensure no windows are displayed to the user. Add the following to the next line of text in notepad:

exit

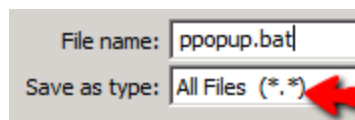
IE:



```
Untitled - Notepad
File Edit Format View Help
xcopy \\mercury\pcounter\ppopup.exe %userprofile% /d
timeout /t 3
%userprofile%\ppopup.exe
exit
```

- 6) Save the file on the desktop as PPopup.bat. Make sure to change 'save file type' to 'All Files'.

IE:

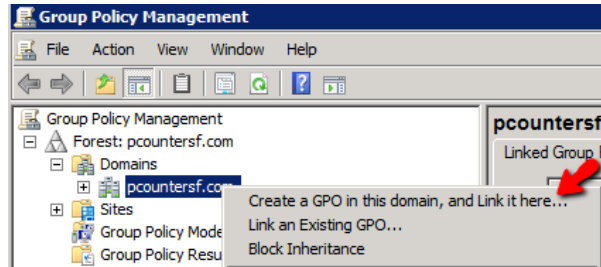


- 7) Ensure the .bat runs correctly before distributing by manually executing it on the server, and on a user workstation logged in as a domain test user. The result should be the PPopup.exe placed in the %userprofile% directory of the current user, and then the PPopup.exe is launched.

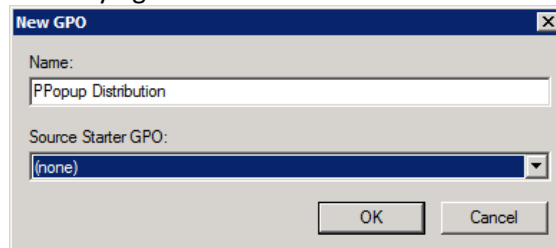
2.3 Create GPO For Pcounter Client Distribution

The GPO used for distribution should contain only users and groups that you wish to receive the Pcounter Client. If a GPO has already been created for Pcounter Client distribution, skip this section.

- 1) Go to Start>Run and launch GPMC.MSC
- 2) In the Group Policy Management window that opens, right click your domain and choose “Create a GPO in this domain and link it here...”



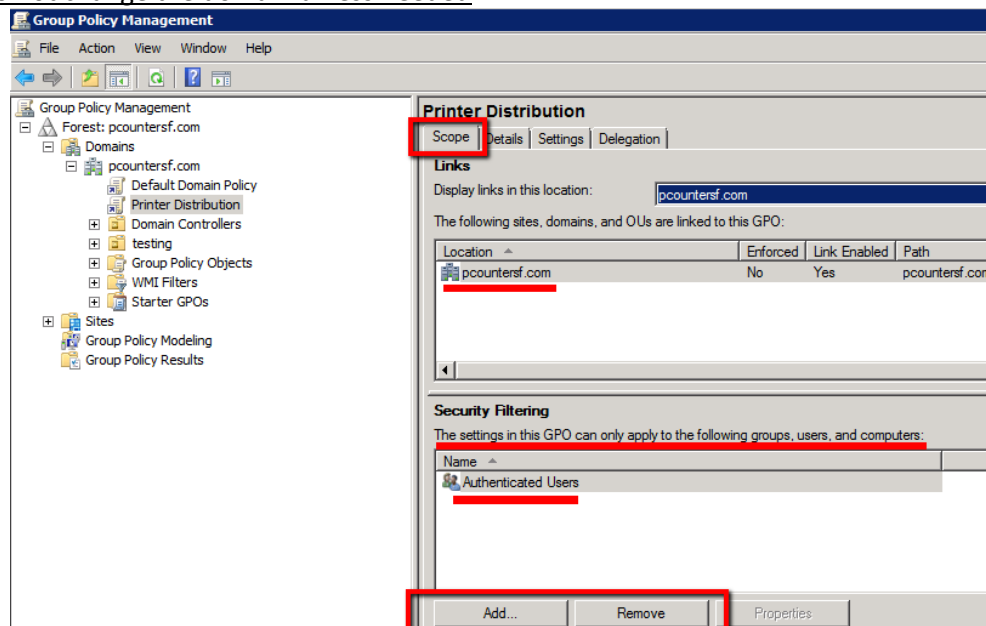
- 3) Give the new GPO an identifying name like “Pcounter Client Distribution” and click OK.



- 4) Once created, the new GPO will display in the explorer pane on the left of the GPMC window. Left click the newly created GPO to display its ‘scope’. Scope defines what the GPO applies to.

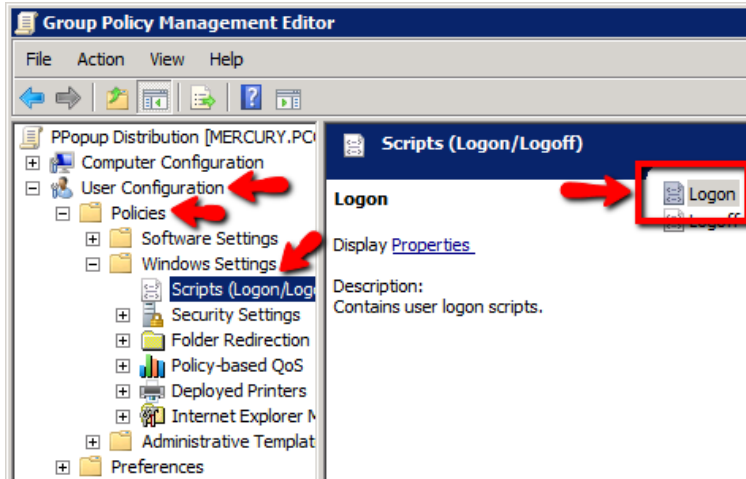
- 5) By default, the GPO will apply to the entire domain, but only to ‘authenticated users’. If a Pcounter Client is deployed to a GPO using these default settings, the result will be, all users in the entire domain will receive the Pcounter Client. If that is not the desired result, remove ‘authenticated users’ and manually add groups or users as needed.

Do not change the domain unless needed.

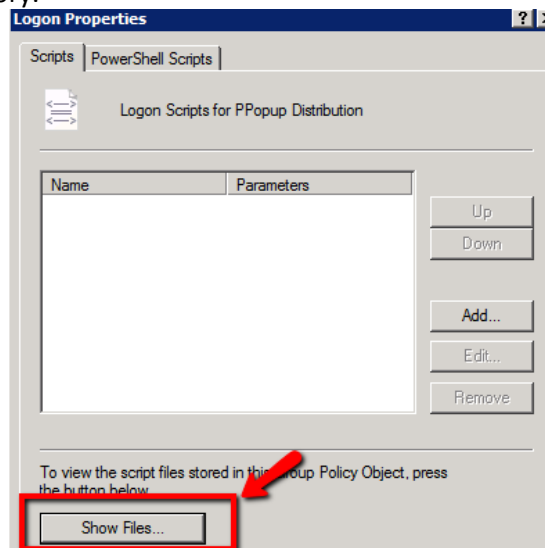


2.4 Use GPMC.MSC To Distribute Pcounter Client Via User Login Script

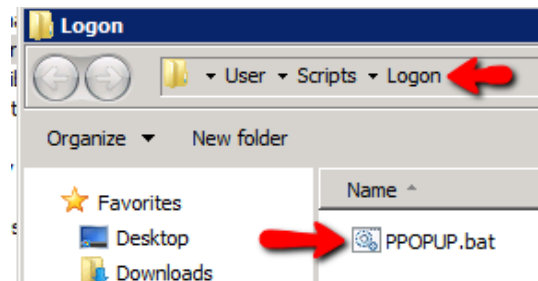
- 1) Go to Start>Run and launch GPMC.MSC
- 2) Right click the previously created GPO for Pcounter Client Distribution and choose 'Edit'.
- 3) In the GPO specific GPMC window that opens, expand User Configuration, then browse to Policies>Windows Settings>Scripts>Logon.
- 4) Right click 'Logon' and choose 'Properties'.



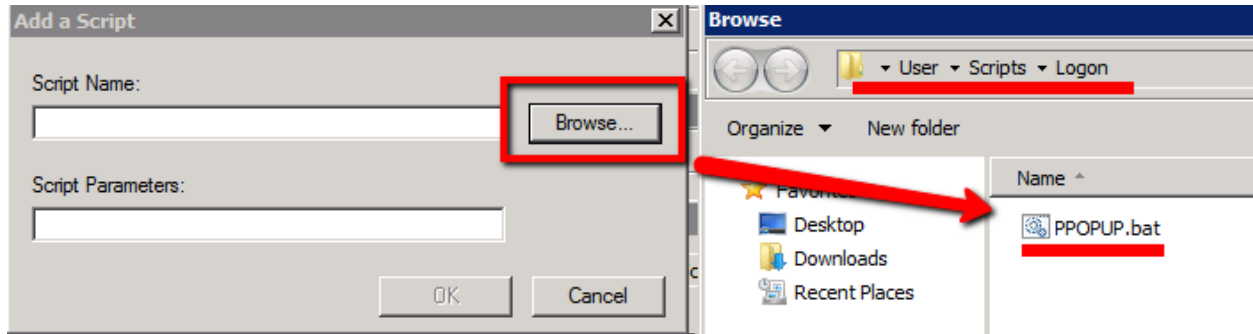
- 5) In the 'Logon Properties' window that opens, click 'Show Files'. A window will open to the special scripts directory.



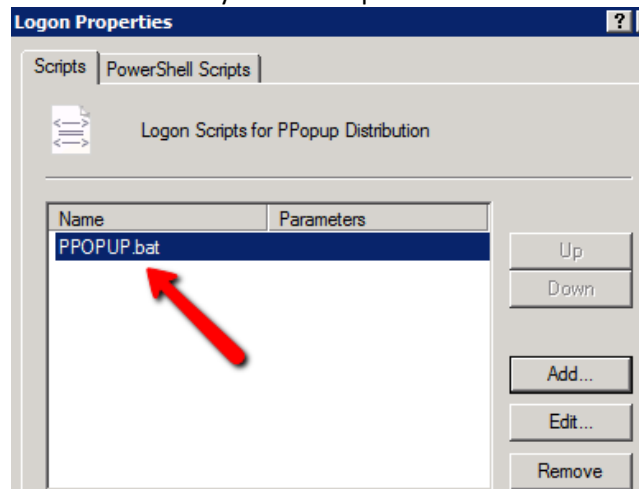
- 6) Copy the batch file created in the previous section from the server desktop to the special directory.



- 7) Return to the 'Logon Properties' window and click 'Add'.
Click browse on the 'Add a Script' window that opens.
The .bat will be visible immediately in the window that opens, in the special script directory.
DO NOT manually browse to the .bat located on the desktop.
Use the copy made in the previous step using the 'Show Files' button.



- 8) Once selected, click OK and return to the 'Logon Properties' window. There should now be an entry in the scripts list for the newly added script. IE:



- 9) Click 'Apply' and 'OK' to have the script take effect immediately for the users in the selected GPO.
The Pcounter Client is now deployed.

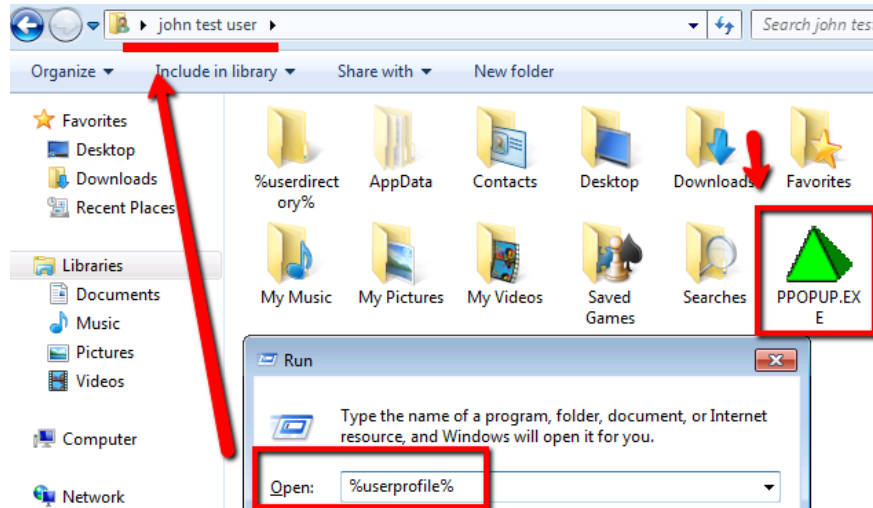
2.5 Confirm Pcounter Client Distribution & Launch At User Login

Confirm the Pcounter Client is transferred and executed at user logon.

If needed, use `gpupdate /force` to force group policy updates to the workstation.

- 1) Connect to a workstation via remote desktop or interactively as a user that is part of the scope of the GPO that the Pcounter Client is deployed to.
- 2) Examine the %userprofile% directory, the PPopup.exe or PcounterClient.exe should be located there.

IE:



- 3) If not, try running this command from a command prompt "`gpupdate /force`". Then logoff and login as a user that is part of the GPO scope that the Pcounter Client is deployed to.

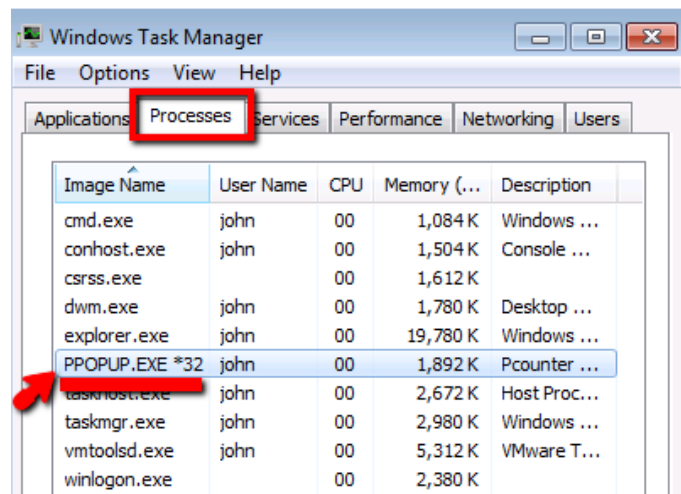
- 4) If the file is present in %userprofile%, check the taskbar for the PPopup icon.

IE:



- 5) If the icon is hidden, check task manager's process list for PPopup.exe or PcounterClient.exe.

IE:



3.0 Distributing Pcounter Client In Workgroup Environment

3.1 Fully Prepare Pcounter Client For Distribution

Before distributing a Pcounter Client to a live, production environment, ensure that it is fully prepared, configured, and tested in the workstation environment it will be deployed to.

3.1.1 Determine Pcounter Client Type

- 1) For Windows workstations, there are two Pcounter Clients, PPopup.exe and PcounterClient.exe. PPopup.exe is for domain attached workstations where RPC is allowed. PcounterClient.exe is for domain attached workstations, and non-domain workstations, where HTTP is allowed.
- 2) If unsure which client to use, please consult our PPopup Training Video [here](#).

3.1.2 Test Pcounter Client In Intended Workstation Environment

Before distributing PPopup.exe or PcounterClient.exe, ensure it will work as expected by manually transferring to a domain user workstation and testing with a domain user account, thoroughly. It will be inefficient to have to redeploy an updated Pcounter Client at a later time due to insufficient preparation and testing.

3.1.3 Integrate INI Options

Before distributing the client, use the /integrateini command to permanently force certain settings. More info is in the PcounterWin.pdf, in the Pcounter Client Overview chapter, found [here](#).

3.2 Manually Distribute Pcounter Client

Place the Pcounter Client .exe file in the All Users startup directory, for Windows 7 and newer use:
C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Startup

For individual users use:

%userprofile%\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup

4.0 Conclusion & Links

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

Pcounter Wiki: www.pcounter.com/wiki

Links to common 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>