



# PaperCut Enterprise

*Advanced Print Tracking and Cost Recovery for Windows Networks*

## System Printing Integration

Linus Chang, MCSD SCP  
PaperCut Enterprise Lead

May 2002

### Executive Summary

Many organizations have pre-existing system printing mechanisms – automated methods of submitting print jobs without a user manually printing. These mechanisms include:

- Printing scheduled using the system scheduler (also known as “at” jobs)
- Status report printing by services such as 3<sup>rd</sup> party tape backup or fax software
- Printing initiated by web server or transaction server components

PaperCut Enterprise can be set up to correctly allow printing from these system processes and services without requiring the submission of an account in the popup window. This document describes how to correctly configure PaperCut Enterprise.

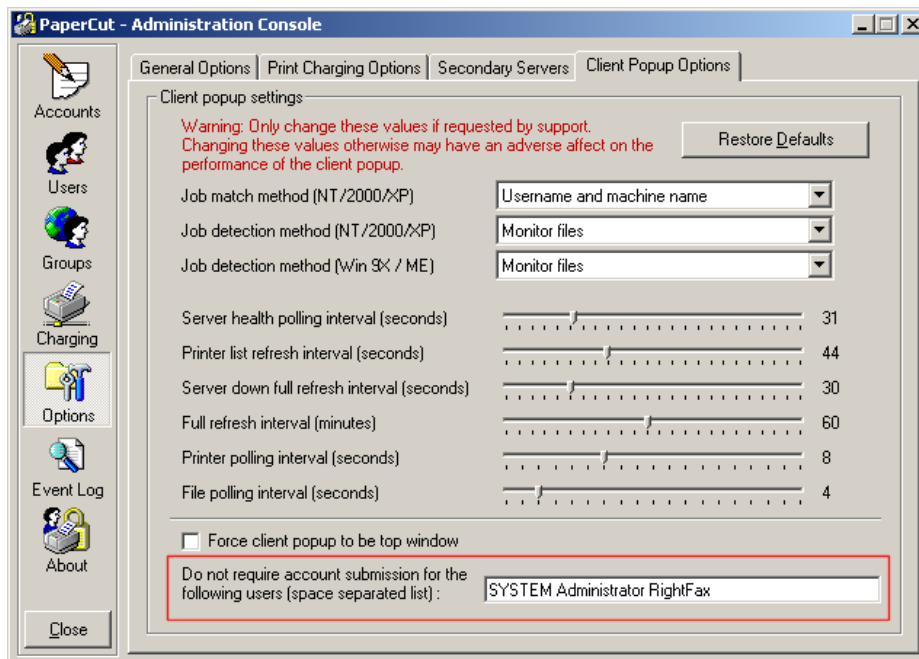
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## Allowing System Printing

PaperCut Enterprise has a configuration setting that allows administrators to set up a list of users who can print without submitting an account. Their print jobs are still logged as normal, but are assigned an account\_id of 0 in the database.

To change this setting, run the Administration Console on your Primary Print Server, and select the Options section, Client Popup Options tab, as shown below.



The relevant option is highlighted in red. Here you may enter in a list of users for which account submission is not required. This list is a space-separated list.

All your PaperCut print servers will monitor these settings every 5 minutes for any changes to the list of users.

The list of users you supply is entirely configurable, but the following sections give some suggestions as to how best to deal with system printing.

## Script printing and system scheduled processes

System scheduled processes and printing from automated scripts are a popular way of printing batch jobs such as reports.

By default, processes run by the *at* system scheduler run under the identity of the SYSTEM user. Thus, print jobs initiated by *at* jobs will appear under the username of SYSTEM.

To allow printing to proceed, simply add SYSTEM to the list of users who don't require account submission for printing, as shown in the previous screenshot.

## 3<sup>rd</sup> party System Software

3<sup>rd</sup> party system software, such as Fax software (eg. Zetafax, RightFax) or tape backup software may print out status reports. Depending on the software, such print jobs may appear under the System account, under the Administrator account, or under a special user's account, such as a user created to run the software (eg. a tape backup user).

The usernames for these software should be entered into the textbox highlighted on the previous page to allow for printing. These users will now not require account submission for printing.

**Tip:** try to keep these users separate from your normal "real" users for whom account submission is required.

## Web Server or Transaction Server initiated print jobs (complex)

Catering for web server or transaction server initiated print jobs can be complex because of the various security and impersonation mechanisms in Windows NT and 2000.

In general, if NT Integrated security is used to initiate printing from a website, such as through ASP, initiated actions will be performed as the authenticated user thanks to impersonation. Thus, print jobs will appear as if they were printed by the user authenticated to the site, but the machine from which the job originates will be the web server. This causes problems for the popup client, because the popup client will only pop up for print jobs that were printed from the current machine by default. However, this can be changed to allow for printing from a website by changing the **Job Match Method** to **Username only** (refer to the previous screenshot). Now when a user initiates a print job through the website, the popup client running on the user's workstation will appear, prompting them to enter an account as if it was printed from a local application.

If the website accepts anonymous users, the username used in impersonation will usually be IUSR\_MACHINENAME, where MACHINENAME is the name of the web server. In this case, the

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IUSR\_MACHINENAME user should be added to the list of users who can print without requiring an account. IWAM\_MACHINENAME may also be used depending on your web server settings.

If a Transaction Server component initiates a print job, the submitting username may be one of the following:

- IUSR\_MACHINENAME
- IWAM\_MACHINENAME
- The authenticated user
- A dedicated user as set up for out of process Transaction Server Libraries

Due to the complex impersonation rules, the only sure way of ensuring that print jobs will print out as normal is to try submitting some print jobs and noting the usernames of the print jobs. If the username is a system user such as IUSR\_MACHINENAME or IWAM\_MACHINENAME, then these names should be added to the list of users who can print without submitting an account. Otherwise, the change the **Job Match Method** to **Username only** (refer to the previous screenshot) so that the popup client running on the user's workstation will appear, prompting them to enter an account as if it was printed from a local application.