

Types of NUP Printing on a Windows Network

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Overview

NUP is a printing acronym meaning "number up". It refers to the number of pages printed per sheet of paper.

If you are trying to account for printing on a Windows network, it is important to make sure that you charge for the number of full impressions (sheets), not the original number of pages prior to NUP being applied.

Keep in mind that NUP can be used in conjunction with Duplex (in and out of Word).

Types of NUP

Although the result is ultimately the same, there are different types of NUP, depending on which NUP was applied within an application, as well as the application producing the print job.

Power Point NUP

If you want to print multiple power point slides on a single sheet of paper, you normally choose "handouts" in the print dialog and then choose the NUP setting (say 6 slides per sheet). To our knowledge, all NUP print jobs out of the Power Point print dialog (handouts) report the correct number of sheets printed, regardless of printer, so Power Point NUP (opening print dialog) does not present a print accounting problem.

Primary NUP (Word)

Primary NUP refers to the NUP selection in the opening print dialog for a Word print job. To our knowledge, all Word print jobs utilizing only this NUP setting report number of sheets printed correctly. Still, we recommend that if you have a choice between a postscript (2, preferably 3) and PCL print driver for a networked printer, that you use the postscript driver. See below.

Secondary NUP (Adobe, Web, etc.)

Many print drivers offer NUP in printer properties for applications that are not Power Point or Word. Secondary NUP reports the true number of sheets for all postscript and many PCL printers when **Print-Track** is used. See the supported printers list on the Print-Track web page on our Tekvend website.

Examples of postscript printers supporting full (all application) NUP compliance are:

All Lexmark PS2 and PS3 drivers
All Canon iR Series PS drivers
All Canon Image Class PS drivers
Panasonic PS drivers
RICOH Aficio PS drivers
Xerox WorkCentre 24 PS

Examples of PCL printers that support full NUP compliance are:

HP LaserJet 8100 Series PCL
All Fiery X3e PCL version 2.0
HP LaserJet 4050 Series PCL 5e
HP LaserJet 4050 Series PCL 6
Xerox WorkCentre 24 PCL 6
Xerox Document Centre 460
HP Color LaserJet 3700 PCL 6

Please note that many people labor under the false impression that "you must use the printer driver that comes with the printer". In point of fact, many print drivers are essentially the same, and many printers can use a driver that was nominally written for another printer. Since not all print drivers are written with equal accuracy and functionality, it is a good idea to see if a specific printer can use a print driver that reports accurately for a specific set of print job characteristics. The "Supported Printers List" on the [Print-Track](#) web page of the [tekvend](#) website is very handy for finding drivers that accurately report complex print jobs.

[Adobe Page Count Postscript 3](#)

Many PS3 drivers report pages out of Adobe Reader incorrectly. Specifically, a multipage document in Windows NT will report as 1 page. [Print-Track](#) automatically corrects for this error.

Please note that it is a bad idea to use "print as image" in Adobe Reader, as this printing method generates huge spool files and causes timing problems with spool file parsing methods.

[NUP of NUP \(Power Point, Word\)](#)

Although it is unusual, you can choose primary and secondary (properties) NUP when printing a Power Point or Word print job. We call this NUP of NUP, because you are producing a document whose true NUP is the product of the two NUPs (primary and secondary). For example, suppose you choose NUP = 3

in the opening print dialog (handouts for Power Point, primary NUP for Word), and you choose NUP = 2 in printer properties (secondary NUP). The true NUP (which ought to, and does, print 6 up) is then equal to 6.

Print-Track correctly reports NUP of NUP for Power Point and Word print jobs for drivers supporting full NUP compliance.

Duplex Applied to an NUP Print Job

Choosing Duplex as well as NUP (primary and/or secondary) adds another level of complexity to accounting for a print job. In **Print-Track**, we apply a duplex discount factor to print jobs that are being duplexed, assuming that the final result is not a single page document.

Duplex spool file filtering, if any, is applied to a print job after it is parsed for NUP.

Print-Track support duplex filtering for all Word documents, and supports full duplex compliance for most printers, whether they are PS or PCL.

Summary

Printing NUP is complicated. There are different kinds of NUP. NUP is not always reported accurately in Windows, especially applications that are not part of the Office Suite.

Print-Track corrects for these reporting errors, giving an accurate sheet count, and correctly applies its duplex discount factor, where applicable, for most print jobs.

All print drivers accurately report true page and sheet count for Power Point and Word print jobs using primary NUP only. Some print drivers do not accurately report true page counts for print jobs out of Adobe Reader, regardless of whether secondary NUP is being used. **Print-Track** corrects for the vast majority of these reporting errors, giving accurate sheet counts for all applications for most printers.