# CUPS

### **Common Unix Printing System**

Matthew Walsh, MD Associate Professor University of New Mexico

## CUPS – Why?

- Output of computer work onto more traditional paper is a convenience (?) of modern IT.
- Programs originally had drivers for each printer (Word Perfect took over word processing in the USA based partly on good printer drivers.)
- CUPS provides a method to access printers not supported natively by current drivers in eCS (OS/2).

# CUPS - Why

- Many high grade printers work on HPL or PS drivers, but lots of printers use specific drivers – and only Windows and Mac/Linux supplied.
- New factory specific OS/2 (eCS) printer drivers are unknown now!
- Do not get a cheap printer labeled as a "Windows printer" as it is made with software to do all the "thinking" work in Windows, rather than in the printer.

## CUPS – Unix help

- The rise of Linux and the change of MacOS to Unix forced a significant push for drivers under these OS's. Many companies now make such drivers available on midrange printers.
- eCS (OS/2) developers & users with software skills have been able to port CUPS to eCS (OS/2)
- I needed to access USB and network printers that had no current OS/2 (eCS) drivers – hence the need to get CUPS working on my eCS Ver2 rc6 system.

### **CUPS-** Components

- Since printer drivers include directions for fonts, accessories, ports, etc several components are needed. As early as 2006 a talk at WarpStock Europe discussed eCUPS.
- Much development is ongoing, but the best current directions are found at: http://svn.netlabs.org/ecups/wiki/HowTo
- The wiki has links to the software and is reasonably up to date. Be sure to start with all the latest files as on of my biggest problems occurred when I got an older download missing files.

### CUPS - Wiki

🦛 • 🖷	🛚 🕶 🗼 👻 🚱 🏠 📥 😻 http://svn.netlabs.org/ecups/wiki				🔹 🕨 💽 - Google			9
🔂 PC Mag	) 🔯 ExtremeTech 🔯 The New York Tim	es N GroupWise M Gmail 🏮	🔯 Tom's Hardware	🔂 DailyTech	📄 Manuscript Centr	ral 🔂 The Re	gister	
	🛛 👙 eCUI	'S 🚨						1
	trac Integrated SCM & Project Management				L	ogin Help/Guid	de About Trac	Search
			Wiki	Timeline	Roadmap Browse	Source V	/iew Tickets	Search

#### Welcome to eCups

This project is intended to create a seamless integration of  $\ominus$  CUPS into eComStation.

It consists of a the following components:

- · Port driver (PDR) which allows printing to a CUPS server.
- Postscript printer driver replacement (PSCRIPT.DRV) to overcome the shortcomings of the current implementation (Binary added 11th July, 2008)
- eCUPS driver that includes many Gutenprint and Splix PPD files preimported into a postscript driver (ecups.drv) to aid ease of use (Updated and renamed 28th December, 2008)

Start Page Index History Last Change

- · Printer install tool, detect printers on the CUPS server and allow to create them automatically in your OS/2 system
- The CupsPort from Paul Smedley also contains Gutenprint and Ghostscript (Updated 3rd May, 09)
- eCUPS HowTo by Pete Brown

Bart's presentation from Warpstock Europe 2006 is available at:

⇔ftp://ftp.netlabs.org/pub/ecups/ecups.pdf

More to come soon

We have some additional information available:

- TerminoLogy : Some terms used in the mailing lists explained
- AddPpdFiles : How to add additional printers with a PPD file to pscript.drv by andywillis
- GhostScriptRasterPrinting : Using ghostscript to print to unsupported printers by frolof
- UsingCUPSServer : Print to printers that are managed by a remote CUPS server by Warp5
- ModifyingPPD : How to modify a gutenprint PPD file for use with pscript.drv by Rich Walsh

#### news groups & mailing list

### **CUPS** - Starting

- Look up your proposed printer under gutenprint: http://gutenprint.sourceforge.net/p\_Supported\_Printers.php which lists over 1400 printers.
- If your printer is a Samsung or Xerox look at: http://splix.ap2c.org/ which supports another 47 printers.
- If your printer isn't listed it may still be supported, but will require testing.
- Figure out if you need USB or network support and remember printers supported by eCS (OS/2) HPL or PS drivers can drive a USB printer with current software.

### CUPS - Install

- The wiki instructions are fairly clear, but require careful reading and exact following. Pictures are included!
- You do not have to modify your boot drive or config.sys files, but you do have to add files to multiple directories on the boot drive and set up a series of directories on a drive of your choice.

### **CUPS** - Resources

- Web URL for a news group about eCUPS: http://dir.gmane.org/gmane.org.netlabs.ecups.devel
- I have been able to contact Ed Durrant and Paul Smedley by e-mail with questions.
- There is a CUPS web site: http://www.cups.org/ which gives updates for the Linux/Unix program.
- I also want to thank Pete Brown, Rich Walsh (no relation), and Andy Willis for contributions.

### CUPS - Needs

- I've got my ink jet going, but still need an update to get my laser going. Donations can be made through Mensys: http://www.mensys.net/os2ports/
- It would be nice if someone was interested in doing this for a fixed price so if I wanted a printer I could pay \$50 or so and get an eCS (OS/2) driver set. Volunteers???

### CUPS - Demo

• Now we'll switch to a real life demo.