Why you should replace CUPS with EasySpooler

Background:

CUPS (freeware) was written to be a replacement print spooler for Linux/Unix systems. There is no CUPS for the Windows OS. EasySpooler/Rhapsody runs natively on Linux/UNIX and Windows, so from one screen, EasySpooler/Rhapsody can manage a mixed environment. Basically, CUPS is free for a reason. It has limited functionality, flexibility and robustness compared to EasySpooler/Rhapsody. It has a very slow development cycle and users have little influence as to what, when and how functions might get added. It is not supported and developed full time like EasySpooler/Rhapsody. A person might be able to get CUPS support from some forum on the web. ROC Software has been in the printer business since the early 90's and has used this experience to continually develop EasySpooler/Rhapsody to meet the needs of the market place. Our products are installed at more than 8,000 locations around the world. Our EasySpooler/Rhapsody product suite is mature product with an incredible amount of functionality, flexibility and robustness. We provide assistance with planning, installation, setup, training, evolving enhancements, on-going support and analysis of the who, what, when, where, costing and tracking trends/problems of a print environment. We also provide continuity for a print environment so employee turnover isn't a problem. Utilizing us as a resource for a printing environment saves significant man hours in discovery, development and implementation while providing a much more efficient, robust and compliant output solution.

Installation:

With many LINUX versions (REDHAT in particular) you can specify that CUPS is the default print spooler during install. (CUPS replaces the native spooling system and doesn't work in parallel with it) If it was not specified during the install, there are several steps (there are scripts available for some systems) to accomplish this. EasySpooler/Rhapsody has a very easy installation process and can work in parallel with the native spooling system or totally replace it. EasySpooler/Rhapsody can easily be set up with the initial configuration of the server or at a later date. Printers can be can be added on the fly via our very easy, 3 step process.

Interfaces:

CUPS and EasySpooler/Rhapsody have three interfaces: a command line interface, a web interface and a GUI. CUPS uses the X-Windows environment (KDE) for its GUI. EasySpooler/Rhapsody also provides the same web interface and GUI interface in the Windows spooling environment where CUPS is not a solution.
• Command Line: The command line interface is a mirror of the UNIX system. You use lpadmin commands to do the basic printer setup. For the more complicated things (scripts, filter modification, etc) you have to know the structure of the directories and files and make manual edits.
• Web Interface: The web interface is easy to use, but doesn't have many views or options. You can create print queues/classes and view current and printed jobs. You can also set queues to Accept, Reject, Cancel and Hold print jobs. CUPS doesn't have as much functionality or the security features of EasySpooler/Rhapsody, so its users can see all jobs and take actions against them like; reprint and delete.
• GUI: The GUI is usually a KDE program (X-Windows) and while there is usually one for a specific UNIX OS type, there is no guarantee. Usually it will have the same functionality as the Windows printer program. EasySpooler/Rhapsody has one web interface for all the mainstream LINUX, UNIX and Windows operating systems. Again the EasySpooler/Rhapsody GUI provides much more functionality.

Security/User Permissions:

The CUPS interfaces use UNIX security so any account with the correct permissions will have access. If a user has access, he can see all printers and jobs, if not, then he can't see any of the jobs. If a user has permission/access to see print jobs, then he can be given some basic control capabilities like stop, restart,

and delete, but he cannot edit the job once it is in the queue (change copies, destinations, add print controls, forms, etc.). To give a user some basic control capabilities you must edit configuration files using their own scripting language (much like the Apache configuration). CUPS does not have a GUI for the security setup. EasySpooler/Rhapsody has a much more comprehensive GUI user/security setup.

Within EasySpooler/Rhapsody there are over 30 permissions that can be granted to a user and/or group. As an example, a user could be set up to only see certain queues/printers and only take limited actions on the jobs in those queues. He may not be granted permission to change the queues configurations etc.

Printer Advertising:

CUPS does printer advertising utilizing the IPP protocol. This is similar to Windows queue sharing. Unlike EasySpooler/Rhapsody, it does not propagate or continually update. This means that any time a change is made, the print subsystems must be restarted for the sending and receiving servers. EasySpooler/Rhapsody advertises more than printers. EasySpooler/Rhapsody advertises queues which can be printers, fax servers, e-mail, ftp, web servers, archives etc. EasySpooler/Rhapsody changes can be made on the fly and automatically propagated to other EasySpooler/Rhapsody servers.

Printer Classes: CUPS printer classes seem to be compiled printer definitions. They don't
have much in the way of intelligence. They will print to each printer in a round robin fashion, with out checking status. CUPS will deliver to each printer in the class no matter what the status and will only stop if the queue is set to reject. EasySpooler/Rhapsody again has a more robust Class solution. It checks the status of each printer in the class and if one is not available or goes down in the middle of a job, it can send an alert notification and send the job to the next available printer.

Printer Grouping: CUPS doesn't provide printer grouping. EasySpooler/Rhapsody
provides printer grouping which enables much easier maintenance.

Bi-directional Printer Communications: CUPS has one bi-directional
protocol. It's the HP Jet Direct protocol. It will know if the printer is off, but if the printer takes the data into its buffer and it doesn't print completely, the protocol is still satisfied and therefore the job is lost. In testing, several jobs were spooled and an error was intentionally generated which required a server reboot to unlock the system. After rebooting, all of the jobs had a 'printed' status, but none had printed. EasySpooler /Rhapsody can communicate with the printers via multiple protocols and has much more robust capabilities. It can communicate with the printer before printing to verify readiness and that it's not low on toner, paper etc. It can communicate during printing on a page by page basis so if the job needs to be re-directed or restarted it can be done so on an appropriate page instead of re-running the entire job. It can verify the last page landed in the output tray and send a notification that the job did or did not complete successfully. If the job didn't complete successfully, it can automatically be redirected to another printer.

Event Scripts: CUPS has no event scripts for easy customization. EasySpooler /Rhapsody has
many areas for event scripts. In many places along the printing process EasySpooler/ Rhapsody monitors whether and event has taken place or not and then an appropriate action command/s can be inserted there as a response to that event. An example would be, a 100 page job stopped printing at page 53. An action command has that job restarted on page 52 on a backup printer and an alert notification is sent to the appropriate personnel.

Forms Association: CUPS can not verify the correct form/paper stock is associated with a
job like check stock for payroll runs. EasySpooler/Rhapsody verifies the correct form is associated with a job manually or automatically. EasySpooler/Rhapsody also has an Advanced Form function that enables users to create a job 'form' which can split one large job across multiple printers.

Banner Pages: CUPS can do limited banner pages, but there is no intelligent print stream discovery, so if a dissimilar PS banner is added to an ASCII print job there will be casing problems. EasySpooler/Rhapsody can handle this by discovering that they are dissimilar and handling them separately so the one doesn't override the other.

Filter Processes: CUPS uses a filter to convert print streams into a PostScript data stream (unless you specify raw). However this is the only transformation allowed. CUPS typically uses Adobe PPD (post script drivers) but they do have some facility for interfacing with HP and Epson MFD's with extra CUPS software. If there was a need for a process with another filter step you would need to program a custom filter process. EasySpooler/Rhapsody can handle multiple inputs and provide multiple outputs. It can run the data through multiple filter processes. These processes can be easily setup via our menu driven screens. As an example, EasySpooler/Rhapsody could take a large report and burst it into sub reports. Those sub reports could have appropriate electronic forms applied and converted to the appropriate format to be sent to printers, faxes, e-mails, web servers and archive systems.

Print Controls: For CUPS, any "print controls" will need to be added to the print stream before CUPS gets the data and if there is any PCL encoding, CUPS will need to spool raw or a PS conversion will remove the PCL. EasySpooler/Rhapsody does not have this limitation. We can easily add commands to select appropriate printer functions for a job.

Automatic Data Typing: CUPS does not have this so each printer has to be setup with its data type. ROC automatically analyzes the incoming data stream so it can intelligently make decisions about what to do with data and how/where to send it. We also use this information to limit what can be printed on certain printers, like color, size, format etc.

Electronic Report Distribution: CUPS does not have this ability. EasySpooler/Rhapsody has powerful rules processing which gives it the ability to scan jobs for particular data and then take predetermined actions. This enables EasySpooler/Rhapsody to electronically burst, bundle, collate and distribute jobs.

Encryption: CUPS does not encrypt data between print servers or from print servers to the printer. Rhapsody encrypts data between print servers and can encrypt data down to the printers using the Printcryption technology with Lexmark printers.

Logs: CUPS has a general system log but we believe it collects only general information and is of little real use. EasySpooler/Rhapsody has an Audit Log that tracks communications between EasySpooler/Rhapsody and output devices. It is searchable enables the help desk to understand why a printer is down so it can take the appropriate action to get it back up quickly. EasySpooler/Rhapsody also has an Accounting Log that captures the who, what, when, where, errors of jobs running through EasySpooler/Rhapsody. This enables a company to understand its print usage/needs/problems so it can properly allocate the printer fleet, set policies, determine costing and right size the support staff.

Archive: CUPS has no real archive capability except for what can be held in the status screen. EasySpooler/Rhapsody has 3 levels of archiving. The first is temporary archiving of jobs within our main status screen. The second is intermediate within our Archive Module. The Archive module has a flat file architecture with about 5 standard indexes for searching.

Summary: CUPS can do some of the things EasySpooler/Rhapsody can do, although, as you would expect with freeware, those things that it can do, it does not do as well. As a chargeable solution,

EasySpooler/Rhapsody obviously can do more, and provides deeper functionality, flexibility and robustness. CUPS may be attractive from an initial cost perspective, but when considering the overall cost of doing it on your own (discovering, planning, installation, setup, training, evolving enhancements, on-going support and the ability to analyze the who, what, when, where, costing and track trends/problems of a print environment) EasySpooler/Rhapsody can be very attractive. EasySpooler/Rhapsody is also supported and developed on a full time basis so if you have a problem or need, ROC Software will be there to help