

# PaperCut Controls Student Printing

## Colchester Royal Grammar School Essex, England

Colchester Royal Grammar School (CRGS) is a venerable institution that was founded in 1206 AD. Now an 11-18 boys' school with girls in the Sixth Form and a small boarding section, the school is committed to excellence in all it does. CRGS has a history of scholarship dating back to the award of its first Royal Charter by Henry VIII in 1539, and was granted a second Royal Charter by Elizabeth I in 1584. The school is situated in a pleasant, residential area of Colchester, Essex and has buildings of character and delightful, mature gardens. The school's environment and ethos reinforce its commitment to blending traditional values with a forward-looking approach.

- Initial deployment in four hours
- Sheets of paper wasted by students down from 1000-1500 to 100-150 a week
- Monthly quotas for students encourage them to think before printing

### The Challenge

The Colchester Royal Grammar School needed to contain the rising costs of uncontrolled student printing.

### How PaperCut Helped

Chris Hill, IT Manager, selected PaperCut in 2005 after evaluating several options for controlling rising print costs. The initial deployment took around four hours, and put in place [automatic monthly quotas](#) for student printing. Students are given a quota of £3 to £5 per month depending on their academic year level. Students are not charged for printing in excess of their quota; however they are required to request additional credit from the ICT Support Team when they run out of credit. The introduction of PaperCut slashed wasted paper generated by student printing by ten fold: down to 100-150 sheets a week from the previous 1000-1500.

This initial installation was on servers only, and used [WinPopup](#) to communicate with users on workstations about low balances, print jobs that exceeded size limits and so on.

For the next stage of the school's PaperCut implementation, Chris deployed the [PaperCut client](#). This offered users more support in functionality (viewing current balances and recent print jobs, for example).

The success of the student print management encouraged Chris to implement monitoring of staff and faculty printing to raise awareness of waste and encourage people to decide whether they really needed to print. Most staff and faculty printing is performed from workstations with attached local printers, so Chris then rolled out PaperCut to these workstations. This deployment took approximately two days to deploy and test on 57 staff and faculty, using a script that was deployed to workstations to initiate a customized [secondary server](#) installation.

[Differential Charging](#) is used to set a rate of 5p for grayscale pages and 25p for color pages. Five of the grayscale printers are high volume MFPs that are charged at a lower rate per page than grayscale pages because the cost of consumables is significantly less than the other grayscale printers.

*PaperCut -  
Save your  
budget while  
you save the  
environment*



Increase  
Printer  
Availability



Pays for Itself



Designed for  
Education



Self Maintaining

sales@papercut.com  
www.papercut.com

## Colchester Royal Grammar School Essex, England

Selected students have limited [administrative rights](#) to grant additional credit, but upper limits are set for quotas to prevent quota build up if the entire quota is not used before the next quota is issued.

Instructors can distribute [Top Up](#) voucher cards to students when an assignment will require extra printing. This has significantly reduced the number of student requests to the ICT Support Team for additional credit.

Chris implemented [Shared Accounts](#) with personal identification numbers (PINs) to provide a mechanism for allocating printing across departments and groups. Since some staff members allocate printing to several budgets, simple departmental allocation was not enough. Department heads now receive reports at the end of each term that summarize the printing to be charged back to the department. Transaction reports for individual staff members and printers attached to faculty workstations are retained to support the departmental charges.

[Reports](#) are also used to monitor usage trends for bottlenecks. A recent increase in color laser printing has prompted an evaluation to replace some of the color laser printers with MFPs that are less expensive to operate. The Busiest Printers report will be used to select the printers that will be replaced first.

[Advanced filters](#) were set up to restrict students from printing jobs that were longer than 10 pages. Some students were confused by the notification message and thought that they were out of printing credit. Chris modified the notification message to make it clear to students that they had reached the job page count limit rather than the monthly quota.

Another filter was used to limit page sizes to A3 and A4. This has eliminated a systemic problem known as the “PC load letter problem” where some applications set the default page size to the US standard 8.5 x 11 inch paper. Prior to implementation, this error was a significant service call generator for the ICT Support Team.

A selected set of printers were also configured with a Document Name Filter that blocks specific documents containing graphs by filename because they cause errors on some printers.

Chris says there are “too many favorite features to list”, but particularly loves [Page Level Color Detection](#). “It’s great to know that people are being charged for exactly what they are using, whether they have remembered to switch the printer into ‘grayscale’ mode or not.”

Many of Chris’s feature requests have been implemented in PaperCut across the five years he’s been a user: including a filter for paper size, the ability to add credit balance by group, multi-domain support, a ‘disable printer’ time latch, and the ability to add variables such as the user name and account balance to custom notifications.

### What’s Next for PaperCut at Colchester Royal Grammar School?

Chris is investigating upgrading to PaperCut MF in order to be able to track off-the-glass copies. He’s also looking to virtualize various aspects of his IT infrastructure, including the print and PaperCut servers. This will not have any operational effect on PaperCut at the school.

## PaperCut Configuration Summary

PRODUCT:  
PaperCut NG

INSTALLED:  
2005

USERS:  
805 Students  
168 Staff & Faculty

WORKSTATIONS:  
435

GRAYSCALE PRINTERS:  
25

COLOR PRINTERS:  
30

CONFIGURATION:

PRIMARY SERVER:

Windows 2003 Server.  
This server also runs DHCP, RIS, WSUS, McAfee ePolicy Orchestrator with SQL Server Express 2005.

SECONDARY SERVERS:

Windows 2003 Server.  
This server also runs Active Directory, file server for staff home directories and shared resources directory, SIMS - schools information database with SQL Server 2005.

WORKSTATIONS:

Windows XP SP3

 sales@papercut.com  
[www.papercut.com](http://www.papercut.com)