PaperCut

Why 1 in 3 Australian schools manage print with PaperCut

Industry-leading A+ printing for your teachers, students, and staff

Foreword

Let me guess what brought you here...

Lately you've been asking yourself...

Is my school's printing environment running at its best? Is it safe for students to use? Is it cost effective? Is it chewing up my IT team's time?

No matter what problem you're trying to solve, if you're looking for an A+ school print environment, you've picked the right book.

In the following chapters we're going to cover education's biggest printing problems, and how to solve them.

Who are we to say so?

PaperCut has been an industry leader in print management software for over 20 years. In 2021, IDC* placed PaperCut at number 1 for global market share in device and print management. As of writing, 1 in 3 Australian schools manage print with our solutions. That remaining two thirds is what inspired this book.

Printing is an area of IT that you only notice when it goes wrong; which can be rather often. Managing printers in schools is no simple task. You have hundreds/thousands of printers, devices, students, teachers, and staff to take care of. Sometimes it's difficult to know where to get started, let alone how to solve the problem. That's why there's plenty of Australian schools out there still seeking a solution for their print environment.

That's what's been driving my work with PaperCut for the last 6 years. In my role as global education lead and principal product manager, I talk to both schools and our engineers daily. My job's to ensure our engineering teams deeply understand the challenges schools face so that we can build better products to solve those problems.

Some issues, like print enablement, consume so much IT time. That is why I personally lead Mobility Print and Print Deploy, just two of the print solutions you'll soon hear a lot about. School's have plenty to worry about, and my passion is to ensure printing isn't one of those things.

If you're seeking to simplify print enablement, recover costs and save time, reduce waste, support multiple devices, secure data, and keep your school safe, we hope you find this book to be the beginning of your journey towards improving your school's printing environment.

Happy reading - and seriously, prepare yourself for lots of print geekiness!
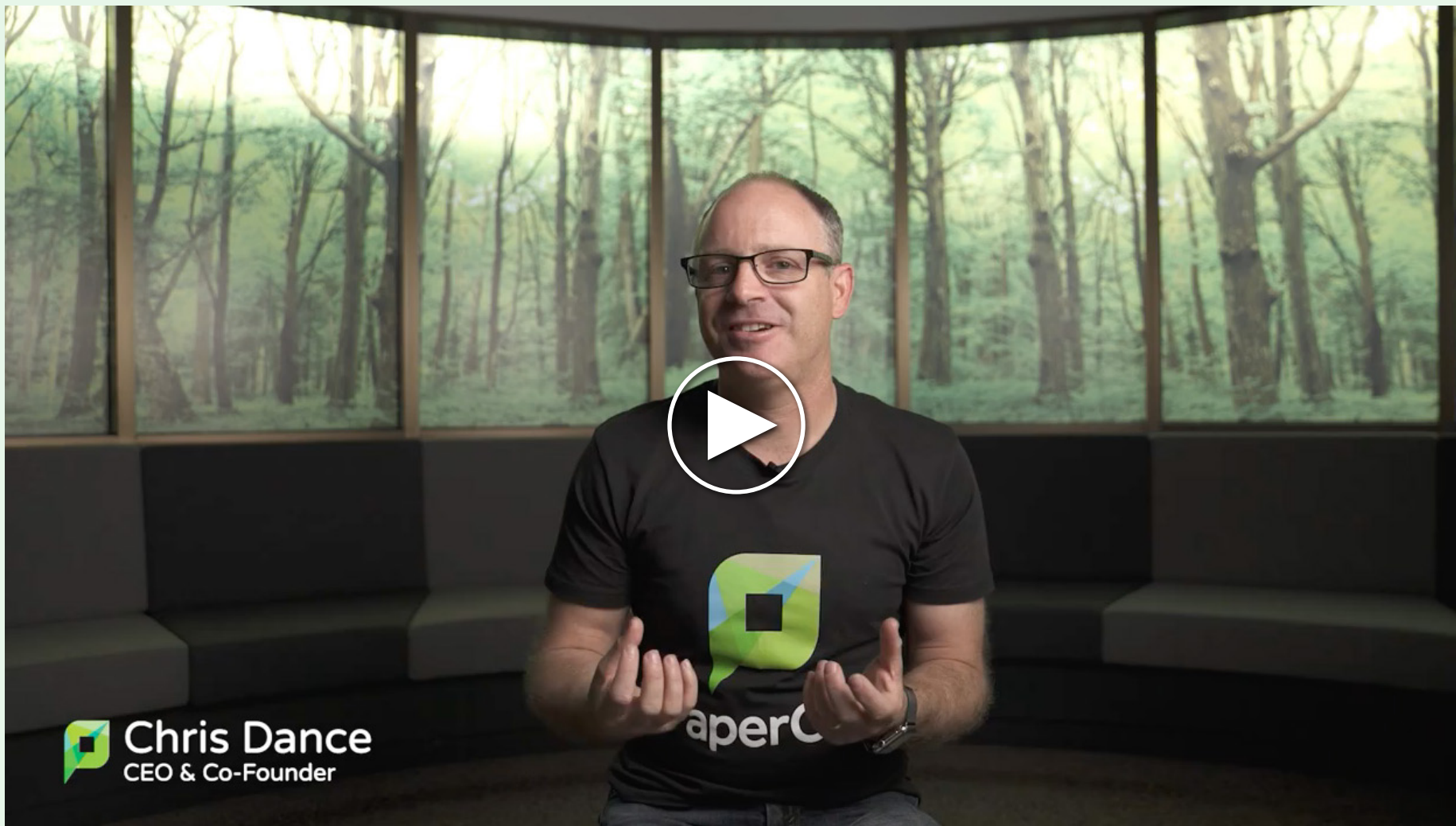

Willem Groenewald
Global Education Lead and Principal Product Manager

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Video: This is PaperCut the print management software team

This is **PaperCut**

We build thoughtful printing software. Empowering businesses and saving trees one piece of paper at a time.

Image: Matt Doran and Chris Dance, PaperCut's Co-founders.

It all started with an overflowing recycle bin...

"

"In the late 90s, fellow PaperCut co-founder, Matt Doran, and I were university students who were used to problem solving.

"While there, we noticed the 27,000 students and 3,500 staff sure did a lot of printing on thousands of printers!

"Then, when I was a part-time IT admin at a local high school, I saw overflowing bins of abandoned printouts... 'Aha!' That was the light bulb moment.

"Tucked in a corner of my garage, Matt and I tinkered with 'a bit of code' to help the school monitor their printing and reduce waste. Then before we knew it, we'd founded a company with offices in Australia, the USA, and the UK."

Chris Dance,
CEO & founder - PaperCut

Ease of use

Printing used to be simple. Then smartphones, tablets, Chromebooks, and all types of mobile devices happened. Now, students, teachers, and staff all have their personal gadget of choice.

And you bet they want to print with them!

But printing doesn't have to be complicated. PaperCut makes pressing "Print" simple again with our device agnostic approach.

BYOD (Bring Your Own Device) printing

Modern schools and workplaces are multi-OS (Operating System) and multi-device worlds. We've crafted solutions specifically for these environments – to keep both users and administrators happy.

Name an operating system, PaperCut has been leading the way with cross-platform support for more than 15 years (more on this in a later chapter).

Whether your faculty and pupils are carrying Windows, Mac, or Chromebooks, smartphones or tablets, PaperCut Mobility Print will get them printing quickly and simply. This is especially helpful for Casual Relief Teaching (CRT) guest-printing – on-board emergency/substitute teachers in minutes and have them printing instantly!

Print where you are

You're a Math teacher. You're in the shared staff room finishing a lesson plan over lunch when you need to press print.

Oh no, now you need to go all the way to your desk, in a different building, just to grab your print job!

Right? *Wrong*.

With Find-Me printing, that print job is sent to a single print queue and can be released from whatever printer you're closest to, whenever you're ready.

Print queue and printer driver deployment

This one's for every school system administrator (Sysadmin).

Installing printers and managing queues for a school's worth of users and operating systems can be laborious.

With our feature Print Deploy, your network administrator can deliver the right print queue and driver to the right person in the right location - making printing painless for IT professionals and end-users alike.

Remote printing

Many Chromebook-centric schools have been seeking an alternative for Google Cloud Print since its deprecation. The COVID-19 pandemic also created heightened demand for a remote cloud printing solution.

Not only does Mobility Print enable easy printing for any OS, its Cloud Print feature has remote printing covered for Windows, Chromebook, and Mac users.
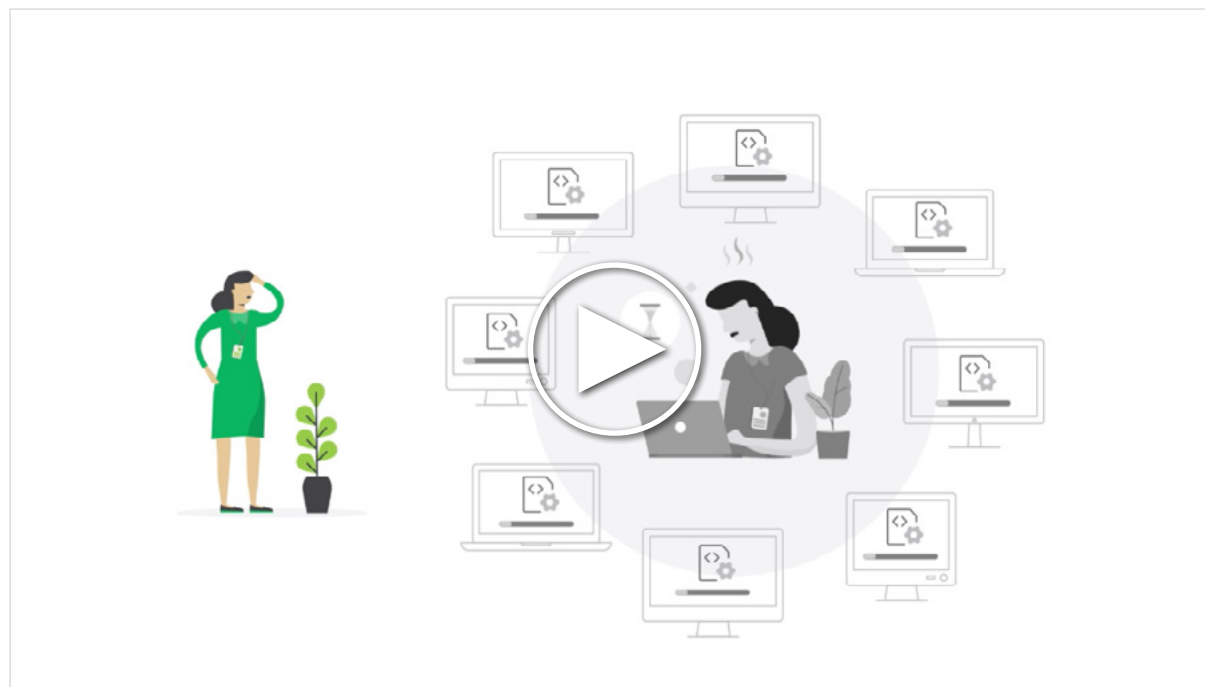
Video: Solve your print queue problems with PaperCut Print Deploy
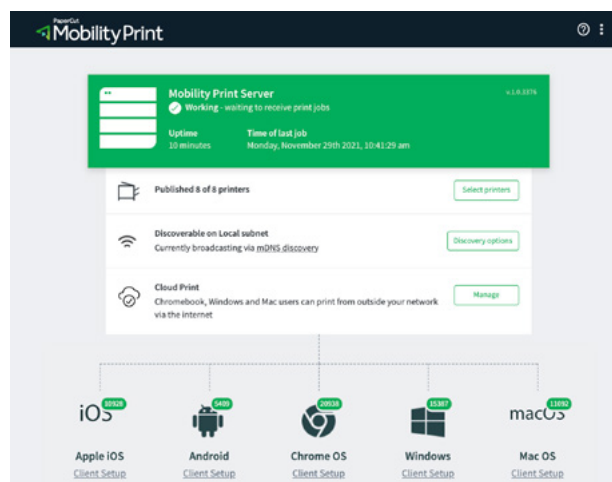
Video: [PaperCut In Primary and Secondary (K-12) Schools](#)

Printing that just works

Schools need printing to work for anyone, with anything, from anywhere. No matter what you throw at it, PaperCut just works.

School district subtracts two thirds of its printers by adding PaperCut MF

"

The number of printers has dramatically reduced. We went from several thousand printers to, I think, right now our fleet is 700, so two-thirds of our printers have been removed."

Robert Causer, Technology Services
Lubbock Independent School District, Texas, USA

Case Study Overview

Problem
Too many printers. Google Cloud Print going away.

Solution
Set up reporting. Add Mobility Print with badge authentication.

Outcome
Reduced the number of printers by two thirds and reduced costs.

▶ **READ THE FULL CASESTUDY HERE**

Reduce waste, reduce costs

Unchecked, printers can chew through your wallet and your clock.

PaperCut's suite of print management solutions empowers IT teams and users to reduce print wastage, cutting costs and freeing up time in the process.

Save money and the planet

Reducing print spend is good for your bottom line and the environment. The following PaperCut features will help you lower print costs whilst also benefiting mother nature.

Print charging and quotas

Ensure your students and staff print only when they really need to:

▶ **Quotas**
Setting a print allowance for students, staff, and entire departments creates more accountability. When printing isn't unlimited, they'll rethink hitting CTRL/CMD+P when they know there's a cap.

▶ **Payment gateways**
If users need to print beyond their quota, you can recoup the additional costs by implementing print quotas with a third-party payment gateway. Then, the cost of anything printed over an allocated quota is directly covered by your faculty and students.

Print policies

Decrease paper and toner waste through gently nudged print rules:

▶ **Duplex**
Also known as "print on both sides" - this simple but powerful fix instantly slashes paper usage. Configure pop-ups to prompt users to print double-sided, or (on some printers) automatically convert all documents to duplex printing.

▶ **Grayscale**
Color is pretty, but expensive. Limit this spend by printing grayscale (aka black and white) with either a gentle nudge or a default policy. Then just reserve color printing for specific purposes.

PaperCut MF environmental dashboard
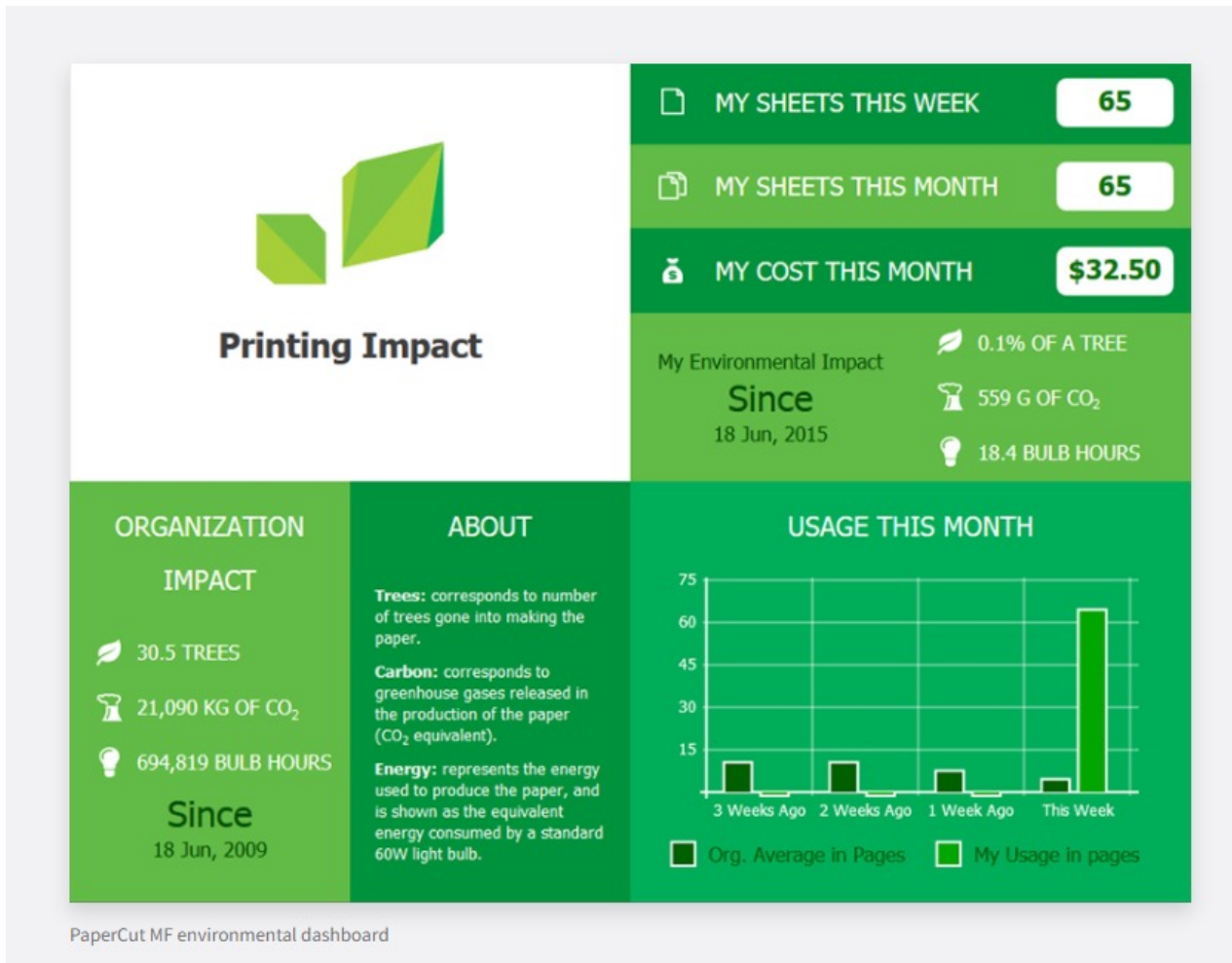
We're a print management solutions company, but we see it as the business of minimizing waste. In fact, environmental action is a huge part of why many PaperCutters join our operation. So many easy wins for planet Earth can be found in your school's print environment.

Through minor changes to your workflow you can reduce your carbon footprint by decreasing your paper, toner, and power usage.

Environmental dashboard

If you want users to help reduce waste, they need to feel engaged with those efforts. A sure way to empower anybody clicking 'Print' is to provide them with concrete visual data.

Our environmental dashboards provide a clear snapshot of user printing habits – translated into carbon footprint statistics. These include how many trees, CO2, and electricity has been saved by each user's individual activity.

Printing visibility: Reporting, archiving, and logging

The simplest but most powerful tool PaperCut provides your administrators is visibility.

The moment you install our products you have access to real-time and historic data which tells the story of your printing. By seeing who's printing what, where, when, and, how, you can identify what printing habits are necessary.

Features like reporting, archiving, and logging empower your sysadmins to curb any wastage by enacting printing policies.

Print policies to promote thoughtful user behavior

You can prevent paper misuse from happening in the first place by gently nudging better printing behaviors, with the option to set solid printing policies. Some of our favorites, as mentioned earlier, are default duplex (single-sided) and grayscale (black and white) printing to save paper and ink/toner respectively.

**Paper waste down 90%
for a UK school**

"

The introduction of PaperCut slashed
student paper waste by tenfold."

Chris Hill, IT Manager
Colchester Royal Grammar School, Essex, UK

More than one way to eliminate waste

PaperCut's philosophy is thoughtful printing. Wasteful printing doesn't just harm the environment, it also impacts your school's operational costs and individual workflows.

Part of our approach to sustainability is to think of how we can create a better tomorrow for people, planet, and profit. Just like there are multiple positive benefits to being more sustainable, there are multiple ways you can reduce waste.

PaperCut provides you with the tools to cut down wastage, the way that best benefits your school.

Case Study Overview

Problem
No quotas or visibility = unaccounted-for printing and spiraling costs.

Solution
Quotas for students, plus monitoring and reporting for the faculty.

Outcome
Student paper waste was reduced by 90%, dramatically cutting costs.

▶ **READ THE FULL CASE STUDY HERE**

on your server...

and in the cloud...

Suits any environment/ device agnostic

One barrier to print management for some schools is whether or not the software will suit their current printing environment.

Challenge accepted...

PaperCut print management software supports all platforms equally. Our applications suit your operating systems, not the other way around.

On top of supporting many OS options, our software can track any printer and can run on a long list of multifunction devices (MFDs).

Cross-platform printing

PaperCut has supported cross-platform printing since releasing the first Apple Mac version of our software more than 15 years ago.

Our software makes it a breeze to print from Android, iOS, Windows, Mac and Chromebook devices.

You also get the choice to host the server on a physical machine or a VM in the cloud, whether you are in camp Windows, Mac, Linux or Novel OES, we support all of these equally well.

Domain infrastructure

PaperCut can sync and authenticate users from multiple cloud and local directory services. Freeing you up to manage your users where you like, and also more easily move from a local AD to a cloud directory service.

▶ Google Cloud Directory

▶ Azure Active Directory

▶ Windows Active Directory

▶ LDAP

▶ eDirectory

▶ Apple Open Directory

▶ Standard POSIX (PAM, NIS/Yellow Pages)

▶ Samba

▶ Workgroup-only environments

Cross-platform administration

Any computer with a web browser is supported by PaperCut. You don't need any new hardware with extra bells and whistles.

All of our administration and user interfaces are web-based, it all looks and feels the same no matter what server technology you're operating.

"

"[PaperCut's] a one-stop-shop for pretty much everything we've needed and its cross-platform capabilities are fantastic."

Ben Saunders, Specialist Technician
McKinnon Secondary College, Victoria, Australia

▶ **WATCH THE VIDEO TESTIMONIAL**

Data and document security

When it comes to IT security, printing is often overlooked. But many security wins and losses happen at that big gray box in the corner of your staff room.

Schools are home to sensitive information for hundreds of students. But print security in schools isn't about hackers infiltrating your network.

The most common education print security "spills" are human errors. Understandable little lapses, but with major implications for student, teacher, and staff welfare.

Shielding the print lifecycle

PaperCut's solutions protect a document throughout its entire journey from submission to collection:

1. **Before printing**
   Who can print what, when, where, why, and how

2. **During printing**
   The actual printing process itself

3. **After printing**
   Protecting the literal physical documents

With end-to-end encryption shielding your data at every step of this process, PaperCut security protects your print environment physically, administratively, and technologically.

1. Securing print infrastructure

- System Access Control
- Device and Network Security
- Secure Printing Software

BEFORE

2. Securing print workflows

- Secure Print Release
- Managing Device Errors
- 2-Factor Authentication
- USER NAME:
- PASSWORD:

DURING

3. Securing printed output

- TIME 12:45PM — Audit Trails and Reports
- Watermark — Watermarking and Digital Signatures
- Print Archiving

AFTER

Before: securing your print infrastructure

When considering end-to-end print security, it makes sense to start with the infrastructure that supports the printing processes. Think of the network and devices that support the print job from the time a user presses "Print" to creating a printed document.

PaperCut's security white paper provides a detailed guide on how to secure your print infrastructure through access control and network security, allowing you to go even so far as offering printing from anywhere over the internet.

During: securing your print workflow

The simple forgotten document is so common it's the most prominent print security leak.

Secure Print Release prevents data loss with a central hold-and-release queue. Your MFD will only print a document when that user is physically standing at the printer.

You can make this security tool a time and money-saver with Find-Me printing. Users send their print job from their device to a single queue, then release it from whichever printer they're closest to.

All of the above is supported with multiple methods of user authentication. One of the securest methods is 2FA (Two-factor Authentication). Before a document is printed, users must authenticate at the MFD with two forms of identification, i.e. a combination of an access card swipe plus PIN.

After: securing your printed output

[Watermarking and digital signatures](#) unlock accountability and visibility of your print jobs. System administrators can physically trace forgotten or misplaced documents back to their rightful owners. Staff can see that their documents can be traced back to them, which greatly helps them to be more mindful not to leave documents laying around.

With [print archiving](#) your system administrator can access all information about a print job. This provides a human-readable view of the document if they need to review any details.

Physical, administrative, and technological protection

These are just a handful of the ways PaperCut protects your school's sensitive information.

Our full suite of print management solutions are tailor-made to protect your print documents at every stage of their lifecycle.

By safeguarding your print jobs before, during, and after printing, PaperCut is a vital element of your school's physical, administrative, and technological print environment security.

Keeping schools safe

Safety has become a higher priority for schools since the COVID-19 pandemic.

Not security - safety. Print environments are another crucial piece of protecting the physical welfare of students, teachers, and staff.

This global health crisis is already having a long-lasting impact on how schools operate safely. Now print environments demand additional safety measures at short notice.

On top of improving areas like security and ease of use, PaperCut features can also assist in keeping teachers, students, and staff safe.

Reducing printing environment touchpoints

Using Find-Me printing to release jobs at any printer of your choosing can translate to the safest printer location.

Users can avoid congested areas by selecting a less busy printer, and reducing any scrambling to one location.

Contactless / touch-free printing: in PaperCut Secure Print Release / Find-Me printing environments

COVID-19 led to heightened scrutiny of high-touch surfaces. Secure Print Release and Find-Me printing can be configured as a touch-free/contactless experience in a variety of ways.

Admins can configure swipe-card with automatic release of documents as soon as the user swipes their badge – they won't need to even touch the touchpad.

No card reader? No problem. QR codes are now day-to-day. With Mobile Print Release you can still reduce touchpoints by setting up a QR code for users to scan with their mobile device.

Even further, similar to automatic release – users can specifically swipe on a Fast Release Terminal to spit out a job instantly.

## Remote print enablement

With PaperCut MF users can press print from home, then release on campus. If they're unable to travel, Delegated Print Release lets them designate a helper to retrieve the print job on their behalf.

Available both as a free standalone tool and an add-on for PaperCut MF, Mobility Print and its Cloud Print feature mean you can print from anywhere over the Internet.

This has become particularly handy for those seeking a Google Cloud Print alternative. Recommended by Google, Mobility Print currently supports printing for more than **8.8 million Chromebooks in the world** – and counting!

JUST, MAKE IT WORK!

PRINT NOW!

MY MUM TOLD ME TO HOLD THIS!
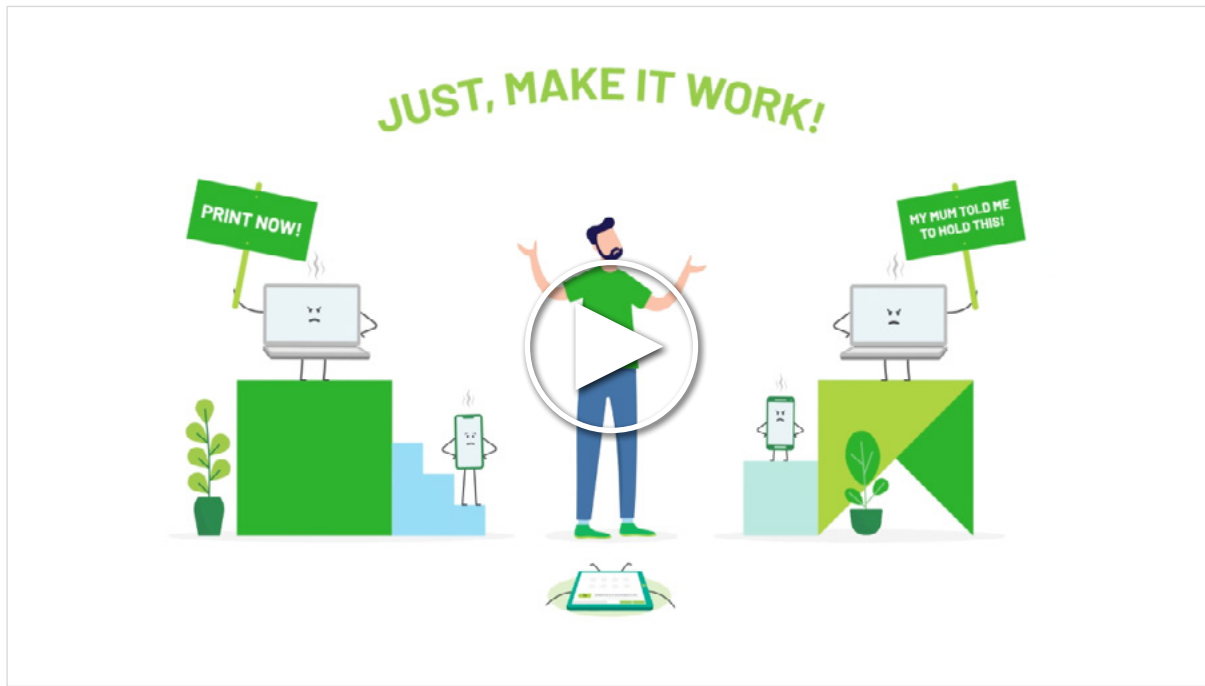
Video: PaperCut Mobility Print | your free Google Cloud Print alternative

Keeping students, teachers, and staff safe

Schools are one of the most highly impacted environments feeling the pinch of the COVID-19 pandemic.

Some are entering a "new normal" but this global health crisis has reinstated the importance of futureproofing. Sysadmins, no matter where they are, need to keep students, teachers, staff, and themselves safe.

PaperCut doesn't just save cost, resources, and time with thoughtful and secure printing. Our solutions also safeguard your school's wellbeing.

Now what?

PaperCut NG

If your school's new to print management, we recommend our entry-level solution, PaperCut NG.

This is a self set-up DIY option that your IT team can implement themselves. You can even get started with a free 40-day trial.

PaperCut MF

Our industry leading full-featured solution, PaperCut MF, is for schools who need powerful print management with all the bells and whistles, with setup provided by a local expert. This includes embedded printer and MFD functionality, secure print release, and full tracking, charging, and management of printing, copying, and scanning. PaperCut MF are self-hosted server solutions:

PaperCut Mobility Print

If your school just wants to sort out simple print enablement, start with our free software, Mobility Print. Recommended by Google themselves as a Google Cloud Print alternative, Mobility Print and its Cloud Print tech is a feature-rich and easy to use print enablement tool. Get Windows, Chromebook, and Mac users, and Apple iOS and Android devices printing instantly. Compatible with PaperCut NG and PaperCut MF to unlock full control and visibility of your printing environment.

Solution summary

From simple print job tracking and monitoring, to easy BYOD printing, to advanced print security - PaperCut offers a full suite of print management solutions for your school.

▶ Hosted on a server of your choice

▶ One-off license with optional upgrades

▶ Optional premium support on a recurring subscription

▶ Suited to schools with complex printing needs

PaperCut™ NG

▶ Track, charge, and manage printing

▶ DIY print management

▶ Entry level

▶ Self set-up

FIND OUT MORE

PaperCut™ MF

▶ Powerful print management

▶ Embedded printer and MFD functionality

▶ Scanning and copying functionality

▶ Setup provided by a local expert

FIND OUT MORE

more than **89,000 customers**

across **195 countries**

translated into **30 languages**

managing **139 million users**

using **7 million printers**

installed on **1.2 million MFDs**

and **9 million Chromebooks...**

Makes PaperCut the

world's number one print

management solution*

*Source: IDC MarketScape: 'Worldwide Print Management Solutions Independent Software 2021 Vendor Assessment' (Doc #US47348521 , December 2021)

And that's the story of why 1 in 3 Australian schools choose PaperCut for their print management

Printing should be waste free, easy, secure and safe.

Schools need to print simply and securely in any environment, while saving money, time, reducing waste, and keeping their students, teachers, and staff safe.

If you want to give PaperCut a spin, visit our products overview page on our website.

Want that personal touch? Speak to a PaperCutter from our Melbourne office, and let them know this book sent you.

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PaperCut™