

Simplified Chromebook Printing

How to simplify a Chromebook printing environment
in 6 easy steps using PrinterLogic SaaS (formerly
PrinterCloud)



PrinterLogic

Introduction

Chromebooks make it both inexpensive and convenient for educators to meet the challenges of one-to-one computing initiatives. They do so by providing an easy-to-use, tightly integrated platform of hardware and software that is compact, lightweight and adequately suited to students' needs. Because all of their data is stored in the cloud, Chromebooks allow students to easily share or transfer devices. And with their minimal system requirements, they are more appealing to students and school districts that operate within a strict budget. This might explain why two million Chromebooks recently shipped in a single quarter, with the K–12 educational sector being a major driver of that impressive growth.*

But Chromebooks are not like computers running Windows or macOS. Their bare-bones, Web-based operating system and limited management tools make it difficult for administrators to support Chromebook printing in even the most cutting-edge environments.

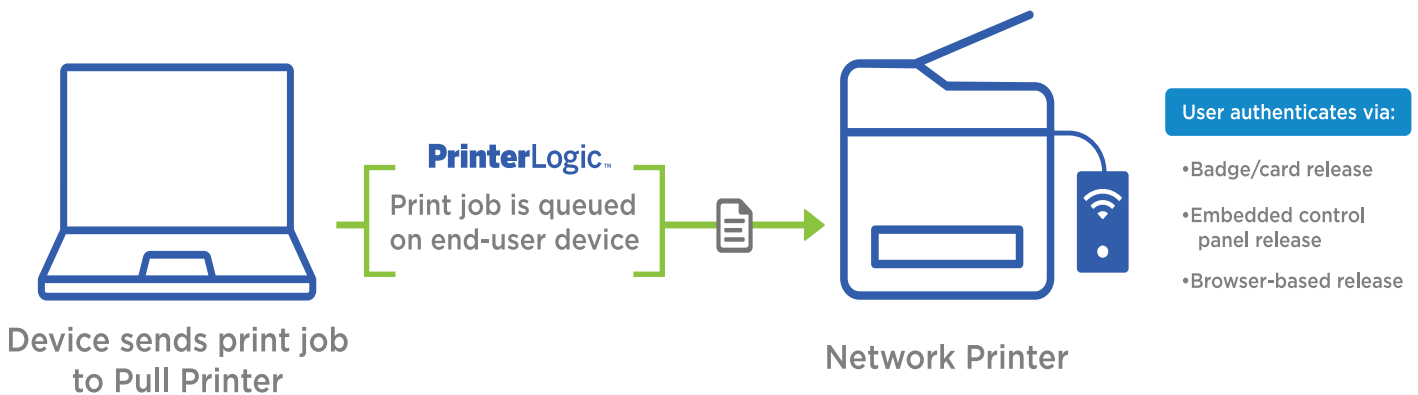
Through its Google Cloud Print manager and Google Cloud Print-enabled printers from various manufacturers, Google has made some effort to solve these ongoing printing problems. But educational institutions can rarely justify spending extra money to replace their existing printer fleet just to gain Chromebook printing functionality.

Supporting Chromebook printing also adds one more layer of complexity to the work of educational institutions' already busy IT staff. For example, before school begins every year, all the students' computers must be redirected to new printers. Not only do tasks like this result in a heavy seasonal burden on IT departments, it also makes it difficult for them to focus on core initiatives to support the students and faculty throughout the year.

As a result, in many school districts, IT departments have had to employ a dedicated full-time tech just to handle the problem of Chromebook printing in their organization. Unfortunately, this added expense can offset the initial cost savings of Chromebook computers.

PrinterLogic addresses all these Chromebook printing issues and more with a rapid-deployment print-management solution that is ideal for the educational sector. This solution eliminates the need for print servers by providing a centrally managed direct-IP print environment for all PCs and Macs. Among many other features, it includes driver management, print auditing and an intuitive self-service installation portal for end users. Once installed, PrinterLogic's mobile printing module integrates seamlessly to provide straightforward yet powerful Chromebook, iOS and Android printing functionality to each networked printer in the organization.

PrinterLogic Solves Chromebook Printing



How Chromebook Printing Works within PrinterLogic SaaS

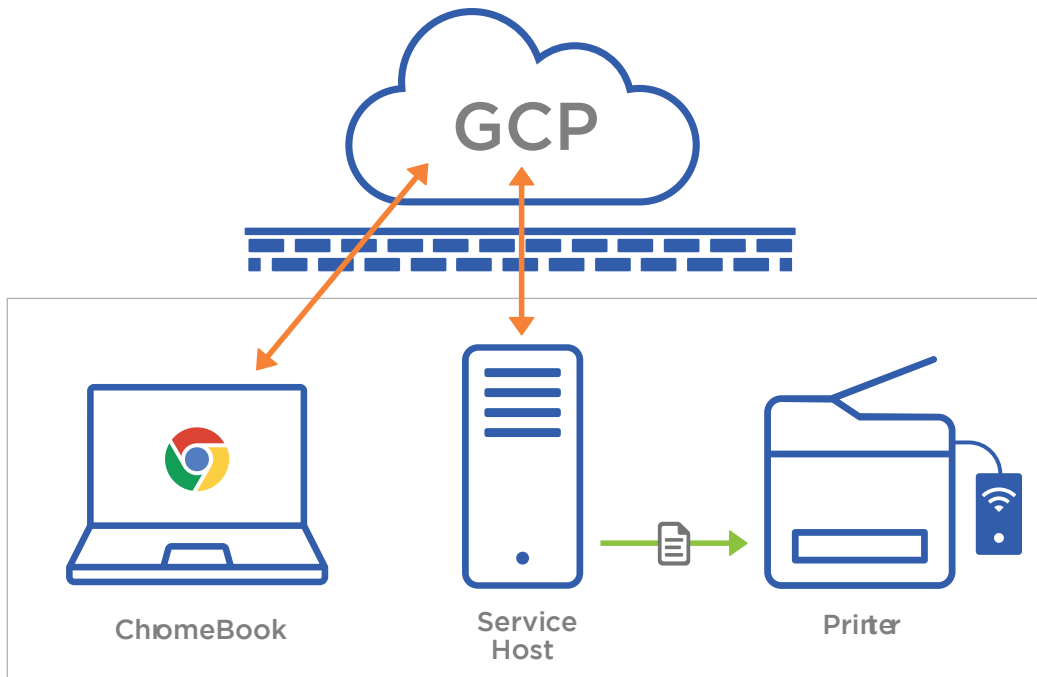
PrinterLogic's PrinterLogic SaaS (formerly PrinterCloud) solution leverages Google Cloud Print but simplifies the process of Chromebook printing by enhancing the native user experience.

To set it up, the IT administrator just creates a pull printer in PrinterLogic SaaS. This automatically creates a virtual printer in Google Cloud Print. End users will see this virtual printer as a single available printer. They simply click "Print" from their Chromebook device, select "PrinterLogic Printer," and then send the print job. The end user can print from any webpage or Chromebook app that supports Google Cloud Print on the Chromebook.

The second (optional) step for the end user is to release the print job using the PrinterLogic SaaS release portal. Here they can select their print jobs and release them to the nearest or most convenient printer. From the end user's perspective, this simple two-step process is intuitive and makes it easy to print to any network printer using their Chromebook.

Setup and Configuration of Google Cloud Print

To enable printing from any Chromebook to any networked printer in your organization, install PrinterLogic SaaS and import the print queues from existing print servers using the automated tool. Once you have the basic print infrastructure in place for your existing Windows and Mac workstations, the next step is to implement the mobile printing option and configure your Google Cloud Print queue.



Step 1: Create a Service Host

PrinterLogic SaaS's service host processes all mobile and email-to-print jobs. The service host can be any workstation on the network that will be powered on during regular printing hours. All processes are handled silently on the workstation.

First, log into the PrinterLogic SaaS admin console. While in the tree view, select the parent folder for the service host. Click "New > Service Host" and give the service host a name. Enter the IP address of the workstation you have chosen to act as the service host. Then click "Add Service Host".

The screenshot shows the 'Add TCP/IP Printer' dialog box. It has the following fields and options:

- Printer Name:** [Text input field]
- Location:** [Text input field]
- IP Address or Hostname:** [Text input field]
- Comment:** [Text input field, containing 'Pull Printer Universal Driver']
- Make Pull Printer**
- 32-bit drivers:**
 - Windows 7: [Dropdown menu] [Upload New Driver]
 - Windows 8/8.1/10: [Dropdown menu] [Upload New Driver]
 - Linux 32-bit: [Dropdown menu] [Upload New Driver]
 - Citrix drivers: [Dropdown menu] [Upload New Driver]
- 64-bit drivers:**
 - Windows 7 & 2008R2: [Dropdown menu] [Upload New Driver]
 - Windows 8/10/2012/2016: [Dropdown menu] [Upload New Driver]
 - Mac OS X 10.9-10.13: [Dropdown menu] [Upload New Driver]
 - Linux 64-bit: [Dropdown menu] [Upload New Driver]
- Buttons:** [Add] [Cancel]

Step 2: Create a Pull Printer

Create a pull printer in the PrinterLogic SaaS interface. To do this, select “New > TCP/IP Printer” and select the “Make Pull Printer” checkbox. Then assign universal printer drivers.

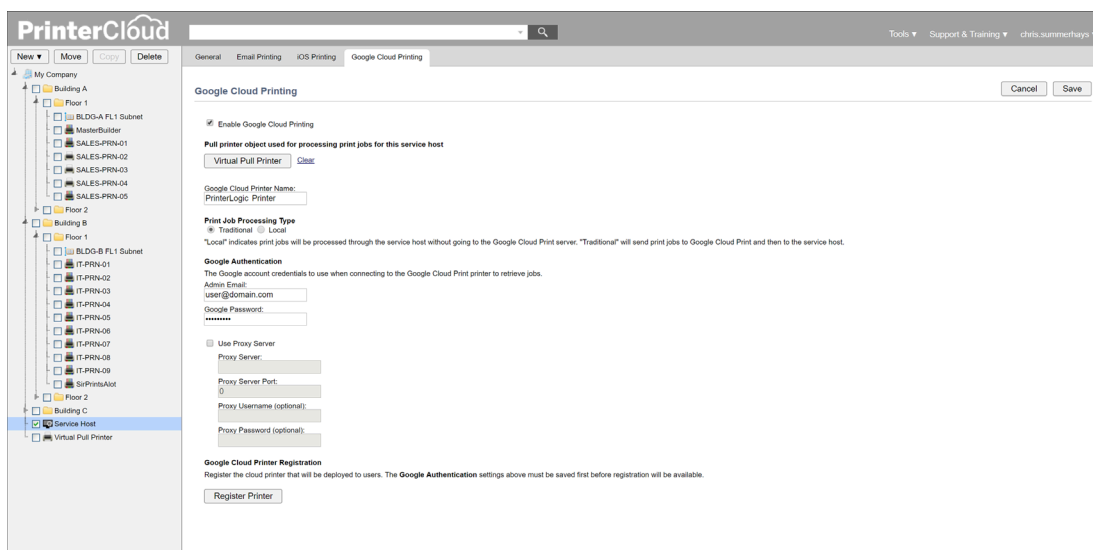
Step 3: Configure User Authentication

The next step is to set up authentication to LDAP. This will verify if end users have permissions to print through the Google Cloud printer. This is done by adding the appropriate LDAP settings in the “Tools > Settings > General > LDAP Authentication Settings” section and making sure that you have added the correct e-mail attribute that is being used in your instance of Active Directory for your bind user.

Step 4: Create the Virtual Google Cloud Printer

Now you can enable mobile printing and Google Cloud printing. This will create the virtual printer in Google Cloud Print from within PrinterLogic SaaS. Click the service host in the folder tree and then choose the “Google Cloud Printing” tab. Check the box next to “Enable Google Cloud Printing”. Click the “Pull Printer” button and then select the newly created pull printer. Then enter a name for the Google Cloud printer in the corresponding field.

Under the “Google Authentication” section, enter the credentials for the admin account for the Google Cloud printer registration. Finally, click the “Register Printer” button and follow the steps in the Google Administration window to complete the registration and share the printer to



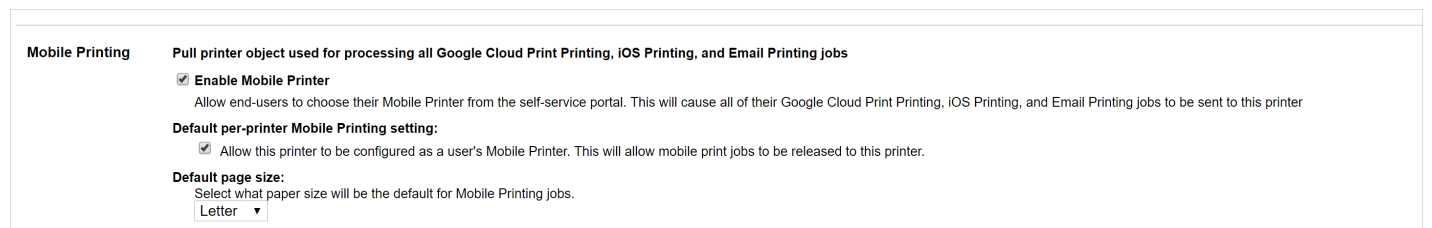
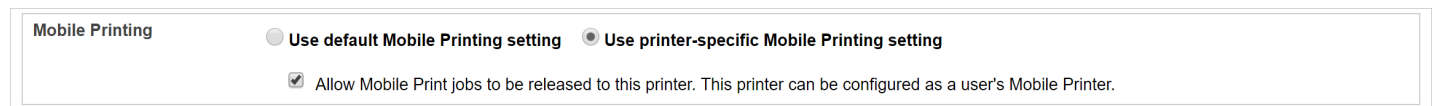
users. At this point, a virtual printer called “PrinterLogic Printer” (or any other name of your choosing) will be created in Google Cloud Print.

Step 5: Share the Virtual Google Cloud Printer

The virtual printer created by PrinterLogic SaaS must now be made available to the end users. Using Google Apps Directory Sync, share the “PrinterLogic Printer” with users and groups or limit it based on any criteria you choose.

Step 6: Routing Google Cloud Print Jobs to Local Printers

The last step is to tell PrinterLogic SaaS which printers should be allowed to have Chromebook print jobs directed to them. Two different options are offered for this. The first configures every printer globally. To allow all your printers to print from Chromebooks, use the global settings under “Tools > Settings > Printing”.



The second option allows you to choose which printers are used by Chromebooks. For each of these printers, select the “Printing” tab, then click on “Use printer-specific Mobile Printing setting” and check “Allow Mobile Print jobs to be released to this printer. This printer can be configured as a user’s Mobile Printer”.

Further Information

For even more information on configuring PrinterLogic SaaS in your Chromebook environment, please consult our [Chromebook Printing section](#) in the PrinterLogic Documentation Portal. You will find comprehensive step-by-step instructions along with detailed visual guides.

The Chromebook Printing Experience

Now that you have PrinterLogic SaaS configured to use Google Cloud Print and have set up the virtual printer, your end users are ready to print from their Chromebooks. This will mirror the

native printing experience with an optional extra step to release the document to their chosen printer.

End users will initiate printing from their Chromebook device by simply clicking “Print”. They then choose the “PrinterLogic Printer” in Google Cloud Print as their desired output device. After the print job is sent, they will open the PrinterLogic Release Portal in a Web browser or use the Chromebook app. Here they will simply select their print job, an available printer and then release (i.e., execute) the print job. This provides them with the opportunity to choose the closest printer or one that is more convenient, such as their next classroom. End users also have the option to release their jobs at the printer itself through the embedded control panel app on the printer’s LCD screen or by scanning an ID badge through the optional pull printing module from PrinterLogic.

Of course, end users can opt to skip the second step by always printing to a Mobile Defined Printer by default. To do this, they will open PrinterLogic’s self-service installation portal in Chrome, select “Mobile Printing > Set Mobile Printer” in the menu, and then assign the default printer. Once this is set, the end user will always receive their print jobs on the specified printer.

Conclusion

Chromebook devices provide a cost-effective means to equip end users with capable, ultra-portable computers in educational settings as well as many other industries. Yet the minimalism that makes them so affordable also limits their ability to integrate quickly and conveniently with most existing print environments, potentially driving up the costs of IT and print management.

PrinterLogic allows IT staff to easily set up and administer Chromebook printing throughout their print environment and make any printer a Chromebook-compatible printer. This ease of administration along with its rapid deployment, infinite scalability and low overhead make it possible for any organization to achieve enterprise-level print management with a single solution.

With PrinterLogic’s next-generation print-management solution, IT environments in any sector, education being chief among them, can therefore reap the benefits of the inexpensive Chromebook computing platform while solving its inherent printing challenges.

Footnotes

* <http://www.theverge.com/2016/5/19/11711714/chromebooks-outsold-macs-us-idc-figures>

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