



IUG 24.

TOGETHER WE DRIVE INNOVATION

March 25 - 27, 2024 | Detroit, Michigan

Transitioning to the Google Cloud: A multi-phased journey to bid farewell to Windows

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110,000

Service Population

79,883

Cardholders (2023)

421,646

Annual Visitors (2023)

1,557,534

Circulation (2023)

150

Google Accounts (2023)

75/64

Staff/Public Stations

Polaris Standalone Library

Polaris 7.5 (Self-hosted for now)

Polaris PAC Customized

Polaris Self Check Stations

Localhop Calendar

Localhop Room Reservation

Vega Hosted Products

Vega Discover (Premium)

LX Starter / SMS (Beta)

Vega Promote

Vega Guide

Vega Promote Web (Beta)

Derek Brown

Director of IT @ RHPL

IUG Steering Committee Member-at-Large

Why leave what we all know? Transition from Microsoft to Google

Ease of Use:

Simplified management
Intuitive interface for users
Seamless integration with Google

Cost-effectiveness:

Lower licensing fees (often free)
Reduced hardware requirements
Minimal third-party costs

Security:

Built-in malware protection
Sandboxing of applications
Verified boot ensures system integrity

Google Workspace tends to be more popular among businesses, holding 50% of the market compared to Microsoft 365's 45% market share. Companies like Facebook, YouTube, and Twitter use Google Workspace. - NinjaOne (2023)

*Application sandboxing
Automatic updates (non-intrusive)
Hardware based Verified boot
Hardware based Data encryption
Easy recovery through powerwash*



Google Workspace has more than 3 billion users

Nearly 15 million websites use Google Workspace

Google Drive has more than 2 billion users

Ease of Implementation for Staff (RHPL Example)

Phase 1:

Migration from on-premise Microsoft Exchange to Google Workspace (Gmail)

Benefits: *Cloud-based hosting and migrating the majority of security concerns to Google.*

Phase 2:

Deployment of Google Credential for Windows & Google Drive for Windows

Benefits: *Simplified Google login with single sign-on and multi-factor authentication. Google application integration within Windows desktop including cloud-based file integration with Google Drive for Windows removing on-premise file servers. Slowly developing users interaction with Google Drive file structure but through a Windows UX.*

Phase 3:

Migration from Windows desktop to Google Chrome OS (Flex & Enterprise)

Benefits: *Extending the life of physical devices with Chrome OS Flex, easy to manage device and domain controls both on-premise and remotely, and a simple user interface for employees that focus primarily on a browser.*

Benefits of GCPW on Windows

Single Sign-On (SSO) Integration:

- Seamlessly sign in to Windows desktops using Google Workspace credentials
- Helps smooth the confusion of domain logins versus email address logins in a mixed environment

Enhanced Security:

- Utilizes Google's robust security measures for authentication
- Two-factor authentication (2FA) support for added security layers with direct integration to token devices or phones

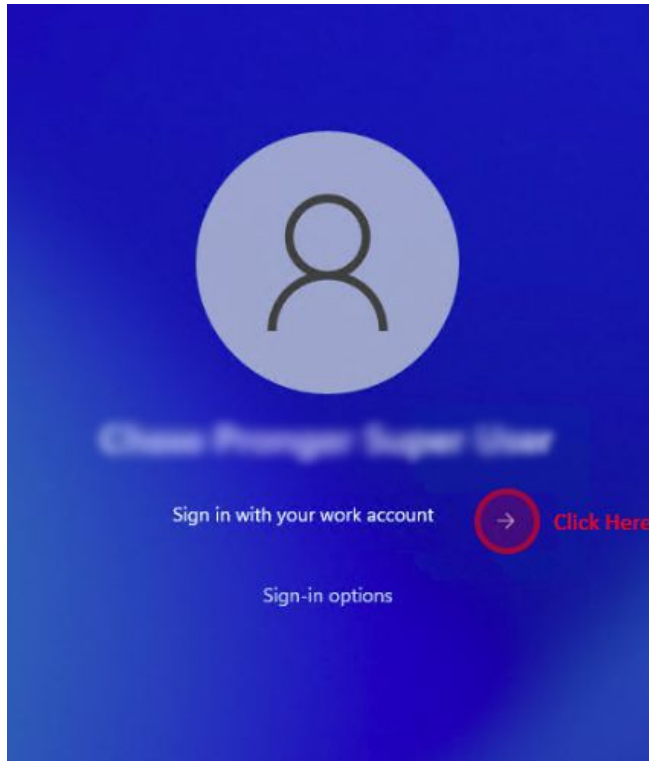
Centralized User Management:

- Simplifies user provisioning and deprovisioning through Google Admin Console and/or Microsoft Active Directory
- Ensures consistent access control across all devices

Improved User Experience:

- Seamless transition between Google Workspace and Windows environment
- Automatic login for web applications that launch through the Chrome browser

Google Credential Provider for Windows - Login workflow



Google

Sign in

Use your work account

Enter your email

[Forgot email?](#)

Next

Google

2-Step Verification

To help keep your account safe, Google wants to make sure it's really you trying to sign in

chase.pronger@rhpl.org

Choose how you want to sign in:

- Tap **Yes** on your phone or tablet
- Use your phone or tablet to get a security code (even if it's offline)
- Get a verification code from the **Google Authenticator** app
- Get a verification code at (•••) •••••00
Standard rates apply

Or try [account recovery](#) instead



Google for Nonprofit Pricing Overview

NONPROFIT-ONLY OFFER

Google Workspace for
Nonprofits

\$0 USD

/ user / month

- ✓ Professional email addresses at your nonprofit's domain
- ✓ 100 participant video meetings
- ✓ 100 TB shared across all users
- ✓ Security and management controls
- ✓ Standard support



Email/Productivity applications are included in the **Google Workspace for Nonprofit** free pricing model. Backups for 25 days.


Chrome Enterprise for Nonprofits' (Chrome OS/Flex) management tools and support one-time pricing per device. 75 devices = \$2500

Third-party backup solutions vs. Google Business. *Ex: Kaseya Spanning* Google Workspace daily backups. 150 licenses = \$4000 (annual)

 chromeOS

Chrome Enterprise
Upgrade | Non-Profit

Secure, cloud-based management
with 24/7 support from Google

 Lifetime subscription

\$32.21

Michigan Master Computing-MiDEAL

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Chrome OS Applications for Enhanced Productivity



PaperCut is a free print management application for Chrome OS. It helps users manage and control printing activities efficiently.

Auto-installers for Chromebooks, Chrome OS Flex, iOS, Android, and Windows devices.

Native UI printing

Cloud printing from remote devices

Google LLC utilizes PaperCut



Remmina is a free remote desktop client for Chrome OS, allowing users to connect to Windows machines and servers.

RDP, VNC, SPICE, NX, XDMCP, SSH, and EXEC support

Secure connections using SSH tunneling

Clipboard sharing and file transfer capabilities

Additional software that RHPL leverages



Kaseya Spanning offers a comprehensive and user-friendly backup solution specifically designed for safeguarding Google Workspace data, ensuring seamless business continuity and compliance for public libraries.

- Automated Daily Backups
- Granular Recovery Options
- Secure Storage
- User-Friendly Interface
- Compliance Assurance
- Seamless Integration
- Scalable Solution
- FOIA retrieval and archiving



Mitel Connect for Chrome offers unified communication and collaboration features directly accessible from the Chrome browser, enhancing productivity, flexibility, and efficiency for users across devices and work environments.

- Browser-based Chrome extension
- Adaptable to diverse work environments and preferences
- Minimal setup for IT
- User-friendly interface
- Large support and adoption

Additional software that RHPL plans to evaluate



LibData provides patron management, session control, and print management across devices with a variety of operating systems. Direct replacement for Envisionware & Comprise.

- Add LibData App to Chrome devices via Google Chrome Management Console.
- Works with Chromeboxes, Chromebooks, Windows, & Macs.
- Authenticate patrons, control session duration and frequency.
- Print to staff release queue or LibData Release station with vending system.
- Print from anywhere, send job to LibData staff queue or station.



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THANK YOU

Questions?