

Give your Google Chrome OS users fast and simple access to Windows apps with Parallels Desktop for Chrome OS

Integrated with the Google Admin console and easy to deploy

Organizations that use end-user Chrome OS devices may face a challenge: What happens when Chrome OS™ users need access to Windows apps? Some IT admins may think solving this challenge requires setting up virtual desktop infrastructure (VDI), but there's another way.

Parallels® Desktop for Chrome OS is a virtualization app that gives Chrome OS users access to fully featured Windows applications right from their desktop. At Principled Technologies, we set up Parallels Desktop for Chrome OS on four Chrome™ Enterprise devices. We found that the Parallels software was integrated with the Google™ Admin console, making it simple and quick for IT administrators to enroll devices and set up the app for users.

On each device, we also tested basic functionality in common Windows apps and confirmed several usability features of Parallels Desktop for Chrome OS. We completed basic tasks in each of the Windows apps we tested without issue. Parallels Desktop for Chrome OS also offered features that made switching between the two OSes a unified experience.

How we tested

We used the following devices:

- Lenovo® ThinkPad® C13 Yoga
 Gen 1 Chromebook
- HP Pro c640 G2 Chromebook Enterprise
- Google Pixelbook
- CTL Chromebox CBx2

These devices spanned a range of form factors and hardware specs, but we found that each ran Parallels

Desktop for Chrome OS in a consistent manner. For more detailed information on the devices we tested, see the science behind this report.

Parallels Desktop for Chrome OS is compatible with most Chrome Enterprise devices and non-Enterprise Chrome OS devices that meet the minimum system requirements (Intel Core i5/AMD Ryzen 5 processor or better and at least 8GB memory and 128GB storage). Organizations that wish to use Parallels Desktop with non-Enterprise devices will need to purchase Chrome Enterprise Upgrade for each device. For more information and a full list of compatible devices, visit https://www.parallels.com/products/desktop/chrome/resources/.

Our experience

After assessing the basic functionality of multiple Windows applications running within Parallels Desktop for Chrome OS, and after testing several useability features of the app itself, we came away with four key conclusions. Parallels Desktop for Chrome OS:

- Was simple and straightforward to set up on our end-user devices via the Google Admin console
- Ran a variety of full-featured Windows apps even when offline and did not require a second device or a VDI session
- Provided features that can help users maintain their productivity even when switching between Chrome OS and Windows
- Has a simple pricing structure

What about VDI?

Besides Parallels Desktop for Chrome OS, companies have long had another option for enabling users to access apps in different operating systems: virtual desktop infrastructure. With VDI, users can log into remote Windows desktops that contain any software the company chooses. Because of the relative complexity of VDI solutions, they require careful planning and research.

You'll first need to determine which VDI technology is best for your business, a process that involves several subdecisions along the way. You'll need to choose either the right hardware to run your on-premises VDI solution or the right cloud service provider to trust with a public cloud-based VDI solution. If you choose a solution that requires running physical hardware in a data center, you'll also need to determine which hypervisor you want to run and plan how to scale up to meet the needs of your organization's userbase. Because VDI requires an internet connection to work, you'll also need to select a security solution to defend your users' data while they connect to the virtual desktops.

Each of these decisions come with their own nuances and quirks. The research and selection process can take up significant administrator time—and even after you've selected the right tools, it can take more time and effort to ensure they work correctly with each other. Time and effort are not the only costs with VDI; server hardware, server upkeep, and licensing for software such as operating systems, hypervisors, and security solutions all come at a price. Additionally, users working from home may encounter connection/bandwidth issues with on-premises VDI.

Getting set up within the Google Admin console

Setting up Parallels Desktop for Chrome OS was a straightforward process made easier with helpful guides from both Google and Parallels. We found the guides easy to follow and had no trouble enrolling the four devices we tested within the Parallels Desktop for Chrome OS app. (We have compiled a step-by-step guide of our own in the How we tested section of the science behind this report.)

All in all, this process took us less than an hour—just under 46 minutes across 30 steps.

Parallels Desktop for Chrome OS installation

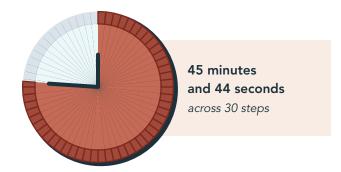
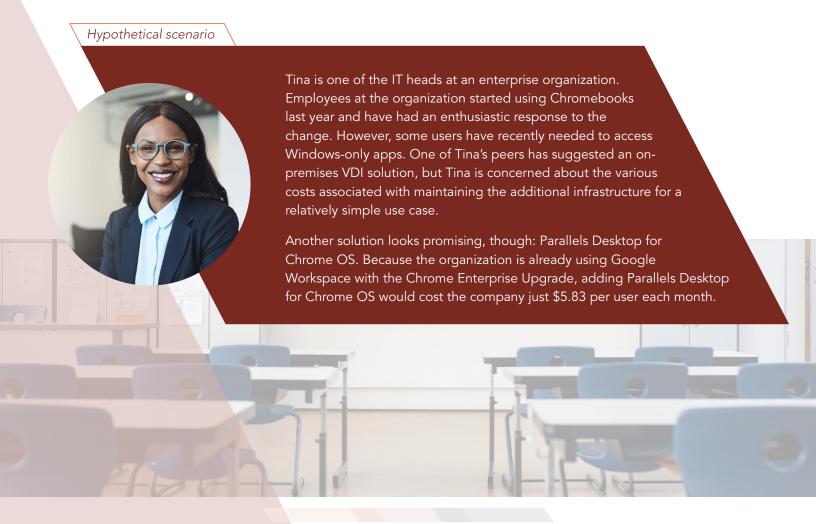


Figure 1: Total time and steps required to install Parallels Desktop for Chrome OS on four devices via the Google Admin console. Source: Principled Technologies.



Use familiar Windows apps

Parallels Desktop for Chrome OS enables users to access normally incompatible Windows software from their Chrome OS devices. To verify this, we assessed the basic functionality of multiple Windows applications using Parallels Desktop for Chrome OS on four Chrome Enterprise devices. These included apps from the Microsoft Office suite (Word, Excel, PowerPoint, and OneNote), certain Adobe® applications (Photoshop®, Lightroom®, and Premiere®), Microsoft Teams, and more.

Overall, the apps performed well on each of the four devices we tested. We performed simple tasks in each program (for example, opening large files and exporting images) and did not encounter any issues. For a detailed description of the tasks we tested, see the science behind this report.

Beneficial features of Chrome OS integration

Your users want a hassle-free experience when switching between operating systems. Parallels Desktop for Chrome OS provided a handful of simple features that made the overall experience feel unified. We tested the following features:

Moving files between Windows and Chrome OS

We found that users can move files from one OS to the other by simply dragging and dropping them.

Opening files in Windows from Chrome OS automatically

Users can configure Parallels Desktop for Chrome OS to open certain files in Windows automatically, regardless of which OS you open the file from.

Copying and pasting text

Parallels Desktop for Chrome OS connects the two operating systems' clipboard memory, enabling users to easily copy text in one OS and paste it to the other.

Sharing files and folders

Parallels Desktop for Chrome OS creates a shared network folder called "Windows Files." This folder enables users to share files between Chrome OS and the Windows VM.

Device passthrough

With Parallels Desktop for Chrome OS, your users can access many of their external devices from within the virtualized Windows environment with a feature called device passthrough. Parallels Desktop for Chrome OS seamlessly integrates device passthrough into its UI. In our hands-on testing, a few simple clicks was all it took to enable the Windows desktop to view and use accessories connected to the devices, including:

- Each device's built-in camera and microphone
- External cameras and microphones
- Printers
- External hard drives
- USB flash drives

Additionally, the Parallels website claims the Windows desktop would be able to access smart card readers.³ For full details on the exact accessories we used to test device passthrough, see the science behind this report.

Hypothetical scenario



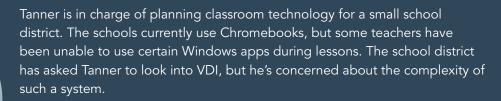
Cost

Pricing for a Parallels Desktop for Chrome OS solution has three main costs to consider:

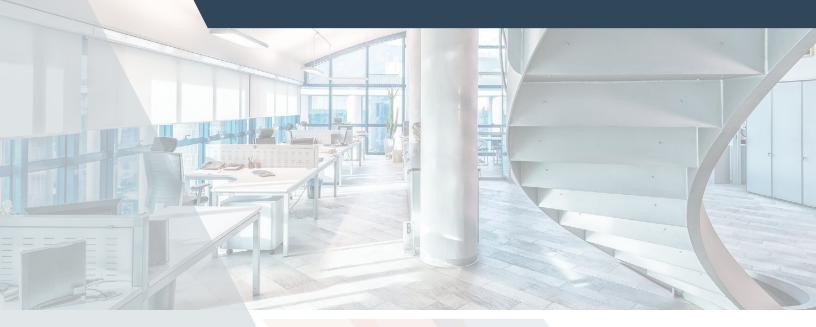
- A Google Workspace[™] plan: Between \$6 and \$18 per user per month for non-enterprise plans (Enterprise-level quotes require engaging with the Google sales team)⁴
- Chrome Enterprise Upgrade: \$50 per device per year⁵
- Parallels License: \$69.99 per user per year⁶

For businesses that already use Google Workspace and Chrome Enterprise devices, additional costs would total less than \$10 per user per month. Parallels Desktop for Chrome OS also requires each device to have a copy of Windows (this is also true for any VDI solution). Windows licensing starts at \$139 per user for individual licenses, though organizations may contact Microsoft sales for a specific quote. For details on how to determine which Windows licensing path is right for your organization, see https://www.parallels.com/blogs/licensing-microsoft-windows-parallels-desktop-for-chrome-os/. All of the above cost data and analysis are current as of December 6, 2021.





Fortunately, Tanner knows about Parallels Desktop for Chrome OS. Because Parallels Desktop is fully integrated within the Google Admin console, Tanner knows that each school's IT head will be able to easily update all classroom devices to use Windows apps when they need to.





Conclusion

Parallels Desktop for Chrome OS can be a simple way to give your organization's Chrome OS users access to Windows-only applications.

We tested Parallels Desktop for Chrome OS on four devices. We found that setup was simple and straightforward, as Parallels Desktop is integrated within the Google Admin console. We were able to use Parallels Desktop for Chrome OS to run a variety of Windows applications on each of the four devices we tested. Parallels Desktop for Chrome OS had a handful of usability features that enabled the Windows and Chrome operating systems to communicate with each other and share information, including the ability to drag and drop files between the OSes. Parallels Desktop for Chrome OS also included a simple UI for accessing external storage media and printers in addition to the built-in camera and microphone for each device. Finally, Parallels Desktop for Chrome OS has a straightforward pricing scheme that decision makers can use to plan and budget for their deployment.

For more about Parallels Desktop for Chrome OS, visit https://www.parallels.com/products/desktop/chrome/.

- "Set up Parallels Desktop for Chrome OS," accessed November 22, 2021, https://support.google.com/chrome/a/answer/10044480.
- 2 "Parallels Desktop for Chrome OS Documentation," accessed November 22, 2021, https://www.parallels.com/ products/desktop/chrome/resources/.
- 3 "Parallels Desktop for Chrome OS," accessed November 30, 2021, https://www.parallels.com/products/desktop/chrome/.
- 4 "Compare Flexible Pricing | Google Workspace (formerly G Suite)," accessed November 22, 2021, https://workspace.google.com/pricing.html.

- 5 "Set up Chrome Enterprise Upgrade free trial," accessed November 22, 2021, https://chromeenterprise.google/os/upgrade/.
- 6 "Parallels Desktop for Chrome OS Adds Support for AMD Ryzen 5 and Ryzen 7 Processors, and 12 New Chromebook and Chromebox Devices with Intel and AMD Chips," accessed November 22, 2021, https://www.parallels.com/news/press-releases/show/parallels-desktop-chrome-os/.
- 7 "Download Windows 10 Home," accessed November 30, 2021, https://www.microsoft.com/en-us/d/windows-10-home/d76qx4bznwk4/1nt3.

Read the science behind this report at https://facts.pt/fN0hKcf ▶



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This project was commissioned by Parallels Inc.