Delivering a Seamless App Experience on ChromeOS

Your *Guide to Enabling a Native Experience for All Apps with PWAs and Virtual App Delivery*

"Since the beginning of 2021, desktop PWA installs have grown by 270%. This growth has also paired with increasing app usage on Chromebooks by over 190% in the same period. When you combine PWA growth with the increasing adoption of Chromebooks — which grew 92% YOY in 2020 to become the second-highest-selling desktop computer of the year — it has never been easier for developers to reach and engage users with amazing web experiences," says Google, in a recent announcement.

As the stats above illustrate, Chromebook adoption is on the rise as more organizations realize the benefits of ChromeOS as a faster, simpler, and far more secure platform. If you're considering ChromeOS in your organization, one question you may be asking is how you can ensure your people have access to all of the apps they need to be productive - including Windows apps - on Chromebooks. And, just as important - what will the application experience be like for your users?

We all know that if a user is required to learn a new behavior, that is going to impact their productivity. Which is why the combination of ChromeOS devices with Virtual App Delivery (VAD) solutions like Cameyo is so critical. Cameyo enables you to provide your people with a seamless, native app experience for ALL of the apps they need to be productive, directly from the Chrome OS taskbar.

With Cameyo and ChromeOS your users keep the familiar experience of simply clicking an app icon in their taskbar/tray and having the apps launch as if they were installed locally.

Which leads us to Progressive Web Apps (PWAs) and their explosive growth.

In This Paper

PWAs are web applications or websites that can be installed on users' devices regardless of operating system (ChromeOS, Microsoft Windows, MacOS, Linux – even mobile OS's like Android and iOS). Once PWAs are installed, these apps look and perform just like native applications that can be accessed in their taskbar, and they're easy to add to home screen/the user's shelf.

Here at Cameyo, we've always been committed to giving the end-user the most powerful, simple, and secure access to the apps & data they need from our ultra-secure Cloud Desktops. And to give Chromebook users the most native experience possible, we provide our Cameyo Progressive Web App (PWA) capabilities, enabling all users to access any Windows app on any device just as if it were installed locally. We've also integrated with Google Admin console, which enables IT to force install and pin apps to users' Chromebook taskbar. This enables users to simply click the app icon in their taskbar to launch an app in its own window, rather than launching the app in a browser tab.

Making Virtual App Delivery Invisible for Your End Users

"Virtual App Delivery (VAD) has already gained significant traction as a simpler, more secure, and less complicated way to deliver apps to people regardless of where they're located or what device they're using by making the full desktop version of any app available in the browser," said Mark Bowker, Senior Analyst at Enterprise Strategy Group (ESG). "Cameyo's ability to deliver any app as a PWA takes things one step further and makes VAD invisible to the end-user."

Cameyo pioneered Virtual App Delivery (VAD), which gives organizations the ability to deliver any Windows application to any device from the browser. The end user gets access to the full desktop version of their apps, and those apps simply run in a browser tab instead of needing to be installed on each user's device. Cameyo PWAs provide all the security and simplicity of delivering apps from the browser with Cameyo, but with the added benefit of making those apps seem native – as if they were installed on the device – to the end user.

Instead of opening a browser tab to access their apps, with Cameyo PWAs users can simply click the app icon from their ChromeOS shelf or Chromebook taskbar, and the app runs in its own window, just as a locally-installed app would. And with Cameyo, every Windows app can be delivered as a Cameyo PWA session – even if that app does not have a PWA version itself.

"Cameyo's ability to deliver any app as a PWA takes things one step further and makes VAD invisible to the end-user," said Mark Bowker, Senior Analyst at Enterprise Strategy Group (ESG).

Native File System Integration

Enabling your users to launch their apps from the taskbar as PWAs is just the beginning of offering a seamless user experience with Cameyo. Cameyo's file system integration with Chrome OS makes the app experience feel truly native by giving users direct access to their local folders and files from within virtual apps. This, combined with Cameyo PWAs, enables ChromeOS users to launch any Windows apps directly from their taskbar and open/edit/save files locally on their device - all without the apps being installed locally.

"Google and Cameyo have a long history of joint innovation aimed at enabling IT to adopt ChromeOS devices without having to sacrifice the business-critical Windows applications people still need to do their jobs," said Mark Bowker, Senior Analyst at Enterprise Strategy Group (ESG). "This level of integration shows Cameyo's commitment to delivering a seamless experience for Windows apps on Chromebooks, and removes a potential barrier for IT teams that have been considering ChromeOS but were concerned about enabling Windows apps."

Cutting Cost Without Compromise

Cameyo's native file system integration with ChromeOS delivers an experience where Chromebook users cannot tell whether or not a Windows app is installed locally on their device (even though Windows apps cannot be installed on ChromeOS). There is no difference in the user experience of the app, which eliminates the need to purchase, maintain, and refresh costly fleets of Windows PCs just to support the Windows apps users need to access. You're now empowered to reduce costs by switching to Chromebooks and Cameyo without sacrificing the user experience or their productivity.

"Cameyo's platform plays a critical role in enabling our digital workplace strategy by removing the legacy application roadblocks that were preventing widespread Chrome adoption here at Sanmina," said Mario Zúñiga, IT Director, Digital Workplace at Sanmina. "Now our employees can seamlessly access all of their business-critical applications – even our ERP apps that aren't compatible with Chrome devices – with Cameyo. Cameyo's Virtual App Delivery platform is the perfect blend of simplicity, a seamless user experience, and advanced security."

"Chrome adoption is rapidly increasing worldwide because of the extreme cost savings and security benefits, but for some organizations, the transition to ChromeOS is impeded because they are worried about disrupting their people's access to critical Windows apps," said Andrew Miller, Co-Founder & CEO at Cameyo. "This integration provides a truly seamless user experience for Windows apps on Chromebooks so that organizations can have the best of all worlds - cost savings, increased security, and improved productivity regardless of the apps they need to use on ChromeOS."

Pushing Apps to Users in Minutes

Cameyo's integration with Google Admin console enables IT teams to publish apps in Cameyo and then push those apps to users' ChromeOS devices – based on roles or groups profiles – within minutes. To see a real-time example of how an app can be pushed to user devices in just two minutes, see this video.

Superior User Experience Meets Simpler, More Powerful IT Control

Virtual App Delivery has long been the most secure way to give employees access to all of the apps and data they need to be productive, and VAD already eliminates the cost and complexity of traditional Windows virtual desktops. VAD has also provided SaaS access to any app – including legacy Windows apps – on any device, from the browser. Cameyo PWAs combine a seamless user experience with powerful IT management for a solution that simplifies everyone's lives.

"Our implementation of Cameyo PWAs and native file system integration with ChromeOS evolves the user experience from a SaaS-like experience to a native application experience – to the point that users wouldn't know that their apps aren't installed locally on their device. Better yet, this seamless user experience doesn't come at the expense of making IT's life more difficult. The natural user experience is matched by incredibly powerful IT management tools designed to put even more power and control into IT's hands," said Eyal Dotan, Founder and CTO at Cameyo.

Key Benefits of Cameyo PWAs

Cameyo PWAs provide organizations with the following benefits:

- **Ultimate Flexibility –** Apps delivered as Cameyo PWAs work for every user, and are responsive on any form factor (desktop, mobile, tablet, etc.).
- **Native App Experience –** Users interact with Cameyo PWA apps as if they were installed locally on their device, with nothing new to learn.
- **Ultra Secure –** Cameyo's Virtual App Delivery (VAD) platform is built with a Zero Trust security model at its core, reducing an organization's attack surface and protecting their network & data while providing seamless access to apps.
- **Powerful Simplicity –** IT can push apps to users' devices in a matter of minutes while having complete control over who has access. IT can also update apps from the Cameyo Admin console and know that the latest and greatest version is instantly available to all users (no more updating across all systems individually).

Step-by-Step Instructions

Within your browser of choice (Google Chrome, Chromium, Safari, Firefox, Edge, etc.), log into the Cameyo platform. (Or start by signing up for a free trial here).

First, within the Cameyo platform select the app you want to publish as a PWA, then copy the Cameyo URL for that published app.

Then, switch over to your Google Admin console and select: Devices > Chrome > Apps & Extensions > then Users & Browsers.

Under Users & Browsers you'll find Cameyo.com, then click the plus sign in the lower right corner.

Next, click on the Globe icon to "Add by URL", then paste in the Cameyo URL for the app.

In the drop-down menu below defining where the app should open, select "Separate Window", then hit "Save."

Back in Google Admin under "Installation policy", select "Force Install and Pin to Chrome OS Taskbar," then hit "Save" in the upper right.

Go to your ChromeOS shelf, and within a few seconds, you'll see your application arrive on the Shelf, and you'll also see it appear down in your Taskbar.

And just like that, you've pushed an app to your users' Taskbar!

Now, let's take a look at how easy it is for users to pin PWAs to the Chrome Taskbar themselves.

From within their Cameyo Cloud Desktop, they simply need to select the " i " button for the app they'd like to Pin.

After a moment a download icon will appear in their browser's address bar.

Simply click that icon, and select "Install."

A confirmation screen will appear, confirming that the app was installed. The user can then go to the Shelf to find the app.

Right click on the App, and select "Pin to Shelf", and the App now appears in the Taskbar.

From there, the user simply clicks the App icon to launch the app just as if it was installed locally, and it launches the full desktop version of the App in its own window, just like an installed app.

Cameyo's PWA capabilities and integration with Google Admin gives IT the power to simply & securely push apps to their users' Chromebooks within minutes, while also giving users the best possible experience by accessing any Windows app on their Chromebooks just as if it was installed locally.

NOTE: Apps are just as easy to uninstall, and users can even do that directly. PWAs do require connectivity, so not all features of every app will be available offline. Also, apps can be accessed on all mobile devices without requiring an Android app version and without requiring the Google Play store/app store.

"We've been a Cameyo VAD customer for a couple of years, and we didn't think it could be more simple to deploy apps to our users," said Jeremy Venlet, Network Engineer, Royal Technologies. "Not only does Cameyo PWA integrate seamlessly into Google Admin console to enable our team to deploy apps in minutes, but it makes it even easier for our users to find and launch their apps. Cameyo was already our secret weapon for enabling productive, secure access to any app on Chromebooks – and now it's even more powerful."

Cameyo is Chrome Enterprise Recommended

When it comes to expertise in Virtual App Delivery and enabling PWAs on Chrome, Google has certified Cameyo as just the third Chrome Enterprise Recommended partner for virtualization globally. Chrome Enterprise Recommended is Google's partner program for third-party solutions that are validated to meet technical and support standards for ChromeOS. To become a Chrome Enterprise Recommended partner, Cameyo worked extensively with Google to extend its solution's functionality, quality, security, and end-user experience.

Let Cameyo Help

Here at Cameyo, our team has years of experience helping organizations of all sizes - including Fortune 500s, multi-national financial institutions, healthcare organizations, school districts and everything in between - deliver all of their apps on Chromebooks. Our team is here to help you every step of the way. Schedule a demo below to discuss with one of our experts today.

Schedule a Demo

cameyo.com