Achieving workplace simplicity and agility with secure, high-performance alternative clients

How Intel-powered Chrome OS Devices are enabling simplicity and choice for “anywhere work” through Atos Digital Workplace services
Many enterprises are revisiting their workplace platform strategies in light of the revolution triggered by the pandemic response of 2020.

While some organizations are still looking to grow their remote capabilities as part of their business continuity plan, others are embracing the remote work scenarios as a new high-value element of their employee engagement strategy. It’s no surprise to say that many organizations will come out of this pandemic response looking very different from a real estate and work style point of view.

Atos recognizes this shift in work styles as part of a new normal. While different from a real estate and work style point of view, organizations will come out of this pandemic response looking very different from a traditional point of view.

Atos recognizes the shift in work styles as part of a new normal. While employers look at ways to keep productivity high and employees safe, remote options are critical. What many companies realized was that the design can be maintained with updates for the given period lifecycle.

Mike Harm
Chief Technology Officer, Digital Workplace
Atos

Contributors

Diego Bailon Humpert
Global Business Development and Marketing Manager, Chrome OS - Intel Corporation

Rhett Livengood
Worldwide Business Client Enabling - Intel Corporation

Zack Lapelina
Strategic Partner Manager, Chrome OS - Google

The Chrome Enterprise Marketing Team - Google

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A new choice emerges

One way that flexibility has enabled tomorrow’s workplace experience is through the increasing use of cloud services to deliver employee productivity and collaboration solutions.

These services have borne a new demand to work, not only from anywhere, but from any device. This began as a move toward flexibility when accessing work tools and data from personal Windows and macOS PCs, and proliferated when Android and iOS mobile devices put communications, collaboration and even company applications in the palm of your hand.

Around that same time (2011 to be specific), Google released something completely new. Inspired by the simplicity of the mobile device experience, leveraging the underpinnings of the Linux kernel, and banking on the ubiquity and extensibility of their Chrome web browser, Google introduced Chrome OS.

At first, Chrome OS wasn’t viewed as a serious contender for enterprise use, but Google found a market in organizations that leverage a heavy complement of web-based applications, and for personal use. That market grew largely because Chrome OS requires far fewer system resources than Windows, and can deliver a great user experience on hardware at lower price points. OEMs such as HP, Acer and Dell quickly produced devices for the consumer market and the Chromebook and Chromeboks were born. Google also maintained Chrome OS as an open-source project under the same moniker as its browser derivative, Chromium OS. This allowed for community input on the project of hobbyists, enthusiasts and developers sprang up, and it allowed for technology partner integration at the development team level.

Even from the early days, Google took steps to create a new kind of governance around the approved devices that would work with Chrome OS. Since the new operating system was based on open source Linux in the form of the Chromium OS project, compatibility existed for a wide range of x86, x64, and ARM device platforms. This diversity would come to be a strength for the platform, allowing it to flourish on many form factors and device types. However, Google had the foresight to recognize that it could also be a point of risk, both from a security and experience perspective.

A certification program was developed to counter this risk, ensuring that every Chrome OS device created, developed and released would be based on an approved, certified design with Google controlling not only the Chrome OS experience, but the software feature set and update lifecycle.

Every OEM interested in creating a Chrome OS device would need to certify the device with Google to receive Chrome OS-specific EFI flashes and Chrome OS factory installation ability. This ensured that the Linux underpinnings of Chrome OS have the right compiled drivers for a given hardware design, including the appropriate Wi-Fi, mobile broadband and chipset-specific features. It also guarantees that the design can be maintained with updates for the given period of guaranteed updates to Chrome OS on a device.
Solving the IT needs of large enterprises

As the Chrome Enterprise platform makes its way into larger enterprises, new requirements emerge.

While end users have been disrupting the workplace with personal, consumer-grade devices for years, in order to ensure serviceability and maintenance costs, IT organizations in medium to large enterprises need a solution that offers both high performance and high serviceability. In the past year, devices that meet durability standards and have high reparability have appeared on the market from the most major hardware manufacturers. These new enterprise-grade devices are largely based on the Intel Core platform and are derivative of their existing Windows-based counterparts. There are several reasons why this commonality should exist.

Peripheral commonality

The ability to share existing investments in adapters, power cords, docking station, and other device-specific accessories with the existing estate.

Repairability

The modular nature of enterprise desktops and laptops allows for in-field repair and refurbishment as part of a device's standard duty cycle, without costly or non-sustainable practices like shipping and exchange services.

Proven performance

The Intel Core platform and the existing stable of OEM hardware on the market is proven from a stability and performance point-of-view. Intel has been a large contributor to the Chrome Enterprise and Chromium projects, working closely with hardware OEMs on the certification process and working with Google to ensure that trusted device designs are certified and standardized where possible. In addition, Intel's Intel® Virtualization-Enhanced Technology (VT-x and VT-d) extends built into the Core platform are prepared for this new capability, and Chromebooks based on 8th or 10th generation Core platform have the performance and features set to securely deliver an excellent experience with this new capability.

The performance of these new Core platform-based Chromebooks is unprecedented. With the growing capabilities of Chrome OS, additional demands can be put on a device if a user wishes to run Chrome browser-based applications, Android apps from the Play Store and Linux. With growing capabilities of Chrome OS, additional demands can be put on a device if a user wishes to run Chrome browser-based applications, Android apps from the Play Store and Linux. With each generation, the Core platform continues to improve compute and media performance, battery life and security.

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New products helping meet new demand

As mentioned above, enterprises are seeing constant demand from business teams seeking new ways of working, and IT organizations are investigating alternative platforms to meet this demand.

Atos is helping clients move their workplace experience almost entirely to the cloud, through Software-as-a-Service (SaaS) tools for productivity, communication, real-time collaboration and even business applications. As companies make the move to next-generation productivity platforms, many have chosen to try a more progressive approach with Google Workspace (formerly G Suite). Centered around simplicity and always-connected design, Google Workspace provides the tools necessary for medium and large enterprises to create a culture of collaboration. With the web-centric design of Google Workspace and the integrations between Google Workspace and Chrome Enterprise, Chrome OS devices are a natural fit for these organizations to investigate as part of their device strategy.

Chrome OS has mastered productivity use cases with Google Workspace, but also supports creative and developer workflows when bundled with either local or streaming application and desktop virtualization. As of November 2020, Chrome OS supports full integration with Parallels Desktop for local application and full-on device desktop virtualization for Windows 10 or Linux. In short, the VDI and VTY extensions built into the Core platform are prepared for this new capability, and Chromebooks based on 8th or 10th generation Core platform have the performance and feature set to securely deliver an excellent experience with this new capability.

Microsoft has pushed for a similar always-connected, cloud-first productivity approach with Microsoft 365, formerly Office 365 and offers both web-based and full client versions of most of its products for Windows and macOS. Client software for Chrome OS is limited to the web versions of these applications and services as well as Android versions of certain Office applications. However, Microsoft continues to focus on their browser-based M365 experience and the ability to be productive in browser or mobile app-only scenarios.

Some Atos clients are taking the Microsoft 365 journey, but are interested in the simplicity of Chrome OS as a managed platform for certain use cases, including:

- Kiosks and shared devices for frontline workers or B2C customers
- Non-PC users that need access to basic productivityapps throughout the day from shared devices
- Alternatives for thin client devices which require separate management and licensing and significant configuration
- Secondary devices for desktop-based users for use as a productivity console or a remote terminal for their in-office desktop

These are just a few examples of how even non-Google workspace clients are looking to take advantage of the high security and low maintenance design of Chrome OS to create great end user experiences.

Where do we go from here?

Atos and Maven Wave are dedicated to integrating technology that transforms the employee experience for your organization. We offer specialized solutions that leverage our capabilities based on your organizational, security and user persona requirements. We can work with your stakeholders to develop an integration strategy that includes:

- The right devices for your users based on persona
- The right productivity platform and the means to move your organization to new ways of working
- Support services that transform employee engagement with IT

Find more information about Atos [here](#).
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About Atos

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Let’s start a discussion together

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