Parallels®

How to Use Line of Business Applications on Smartphones and Tablets

White Paper | Parallels Remote Application Server | 2017

Table of Contents

With the rise of mobile smartphones and tablets, employees no longer need to be at their desktop computer in order to access line-of-business (LOB) applications. Employees expect to be able to use corporate applications from anywhere, at any time and from any device.

While enabling a workforce transition from desktop to mobile opens a new world of opportunities for corporate offices, it also creates issues that the IT department must address. These issues include managing bring-your-own-device (BYOD) or choose-your-own-device (CYOD) policies and providing access to productivity applications on non-Windows® devices.

Implementing mobile-enabled business applications doesn't have to be challenging for the IT department. This paper covers how to use Parallels® Remote Application Server (RAS) to deliver corporate applications on mobile devices.

Converting Tailor-made Software for Mobile Use

When converting desktop LOB software for mobile use, there are three major paths companies have to choose from:

- Convert the LOB into an app—Refactor the code as a native mobile app for any operating system used
- Convert the LOB into a web application—Refactor the code to transform it into a web application
- Deliver a virtualized LOB—Provide remote access to virtualized software that is centrally hosted

Both of the first two methods require significant budgetary and time investments that may not be feasible for all organizations, depending on size, resources, and time constraints. The last, most streamlined method for converting a desktop-based LOB application for mobile use is to use virtualization application delivery to make the software instantly available across a wide range of mobile platforms via the cloud or a wide area network (WAN).

The term "refactoring" means taking an application intended for use with a large screen, keyboard, and mouse, and—using one technique or another—converting it into a native mobile or web app. Refactoring is necessary if organizations want to build a desktop application for native mobile or web use. There are many disadvantages of refactoring an application for mobile use, and we will cover them in the following section.

Application Refactoring and Modernization Challenges

Making the refactored desktop software work across multiple platforms will likely cause problems, such as the reduction of certain functionality. In addition, staff will probably need time to learn how to use the software on a mobile interface. In order for the refactored application to work as a native mobile app, it will most likely need to be sandboxed and tightly controlled, or there will be massive UI issues that arise. Moreover, as is always the case when dealing with code, small errors can occur that can be expensive and time consuming to address.

In addition, when organizations choose to refactor desktop LOB applications as native web apps, security issues can arise when server data is transferable and accessible through the open web. Malicious users can break into the application and obtain customer or employee information, with potentially dire implications for the company's reputation and financial situation.

Using Virtualization to Deliver Desktop Applications to Mobile Platforms

Another option for using corporate applications on mobile devices and web browsers is to implement an application delivery solution. In contrast to rebuilding the software from scratch, corporate applications will be available over a mobile network within a few hours. In addition, the applications will be automatically optimized for mobile use without needing any additional adjustments. Application delivery provides the most streamlined process for companies that want to improve employee agility by making their applications available on smartphones and tablets.

Key advantages of application virtualization:

- Increased flexibility and mobility options
- Stronger layers of security
- Smoother testing and deployment
- Lower maintenance costs
- Lower maintenance costs

With high-profile solutions, such as Parallels Remote Application Server, users enjoy the full-featured desktop application they know how to use with a native-like mobile experience, no matter what device or platform they're working with.

Application Delivery with Parallels Remote Application Server (RAS)

Parallels RAS is an easy-to-adopt application delivery solution. It allows corporations to instantly deliver Windows-based productivity applications to any mobile device, including iPhone®, iPad®, and Android™—without refactoring a single line of code. This cloud-ready, scalable product supports deployment through Microsoft Azure® and Amazon Web Services™. It also offers an impressive, native-like mobile experience on virtually any device.

Many businesses select Parallels RAS as their application virtualization solution because of its unique capability to provide native-like experiences on any device, impressive ROI offering, and ease of use.

Application Delivery with Parallels Remote Application Server (RAS)

Parallels RAS transforms iOS and Android devices into fully fledged workstations, allowing employees to perform the same tasks with the same productivity as if they were in front of their regular desktop computer.

Parallels RAS Client for iOS and Android offers, on top of the unique ApplificationTM technology, several features to make on-the-move use easy, secure, and productive:

- Printing redirection
- RemoteFX
- Audio redirection
- Bi-directional audio
- Standard RDP
- SSL connection
- Second-level authentication
- Drive redirection

While using Parallels RAS to access desktop applications, employees are able to print their documents from a local printer or access documents on a local drive. Communication and multimedia experience is seamless, thanks to the bi-directional audio redirection that, for example, allows users to receive and make Skype® calls. Data security is a concern for any organization, and providing access to corporate assets from a mobile device may create additional reasons for concern. However, Parallels RAS has a reinforced security framework, using a proprietary protocol based on the RDP protocol and SSL encryption. Furthermore, it is compatible with two-factor authentication setups.

- Healthcare: Parallels RAS allows a hospital nurse to check Electronic Health Records (EHR) directly in the ward. Healthcare professionals can easily access the medical equipment printer from any location, avoiding long walks through ward corridors.
- Retail: Parallels RAS allows a sales manager to use a personalized LOB application to order stock from the warehouse in real time. This increases productivity because the manager can place the order instantly while remaining on the sales floor to attend to customer needs.
- Education: Parallels RAS allows students to access learning material using a personalized application regardless of location. This gives them increased learning flexibility and offers access to school lessons even if they don't have immediate access to a desktop computer at home.

Easy to Deploy—Up and Running in No Time

Parallels RAS doesn't require a long period of development to deliver Windows-based applications on mobile devices. Using the guided wizards, RDS installation, application publishing, and client configuration is straightforward and will be over very quickly. Furthermore, there is no need to install additional components or add-ons. Important features such as load balancing and printer redirection come auto-configured by default, which results in reduced complexity, cost, and time to provide employees with a reliable and efficient virtual workspace.

Centralized Application Management

After a straightforward installation in a central management console, business-critical Windows applications will be available on any end-user device. The Windows applications are run on a centralized server and then remotely published to employees' mobile devices. After the applications have been published across employee devices, updates to the software are easy to accomplish, because IT staff only has to perform them once on the central console.

Strong Authentication Controls and Encryption

With Parallels RAS, corporate data never leaves the server, which means IT staff doesn't have to worry about data leakage. Furthermore, users are authenticated securely through an SSL-encrypted connection and two-factor authentication. When a session is created through a secure RDP connection, the end-user device receives only a projection of the application operation while data remains secure on the centrally protected server farm.

Cloud-ready Solution

Parallels RAS works on top of Microsoft Windows Server® and, therefore, takes full advantage of Microsoft's Windows Server 2016 updates. Organizations using Parallels RAS can enjoy optimized compatibility with Microsoft's cloud service offering, Azure. Parallels also works brilliantly with Amazon Web Services (AWS). This means corporate organizations can host applications on the cloud and deliver them to employees' mobile devices using Parallels RAS.

Conclusion

Businesses need to provide LOB applications across a variety of devices to meet employees' need to access these applications from their mobile devices. Corporate Windows-based applications need to be available on mobile platforms, as well as be optimized for mobile use. The rise of virtual offices means businesses need to realign strategies to empower the mobile workforce to use business productivity apps even when away from a desktop computer.

Parallels RAS provides an easy and comprehensive solution to effectively deliver and manage corporate applications. It allows organizations to effectively deliver Windows-based applications to any device. With the right technology in place, businesses can create new opportunities to make the most of the mobile workforce revolution.