



# **5 Reasons to Choose Parallels RAS Over Citrix Solutions**

**White Paper** | Parallels Remote Application Server

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## Introduction

The Internet and modern computing have empowered businesses to be more productive and reach new horizons. For your business to be competitive today, you have to improve the efficiency of all your IT assets and make them available 24/7. You can do so by using virtualization technology to support user mobility and bring-your-own-device (BYOD) policies so all of your employees and business partners can access their data, applications and virtual desktops from any type of modern mobile device, anywhere, anytime.

Virtualization technology is the obvious solution for building efficient and cost-effective IT and cloud solutions that allow all of your employees to access their data and virtual desktops securely. Citrix, in particular, has led the field of virtualization and application and virtual desktop delivery. However, Citrix solutions tend to:

- Be very expensive, therefore businesses cannot afford to use them.
- Be overly complex to implement and use, which means businesses that do not have their own specialized team have to recruit expensive third-party help.
- Strongly support their proprietary technology, pushing users to purchase only their technology and not letting them take advantage of the benefits of other solutions.
- Not provide a solution to manage end user devices.

This paper explores how choosing Parallels® Remote Application Server (RAS) allows businesses to build a fully scalable, secure and high-availability application and virtual desktop solution without having to deal with any of Citrix's low points.

## Parallels Helps Businesses Keep IT Infrastructure Costs Down

Pricing and licensing can make or break a project. There have been many projects that have been scrapped or stalled because the licensing and pricing of the software caught the client by surprise. Using Citrix's licensing scheme, you may hold back and purchase a lower-end edition without all the required features, due to the high price imposed. Alternatively, you might purchase a superior edition only to use one or two extra features, which results in the organization spending extra money with no actual return on investment (ROI).

## Parallels Affordable One-Stop Solution

Parallels understands that businesses invest in virtualization to reduce overhead costs and simplify matters. To help businesses keep costs down, we only have one edition of Parallels RAS, and it is available at a per-user price. Parallels RAS is a one-stop solution; you do not need to purchase a number of different software solutions to build a fully scalable, high-availability application and virtual desktop delivery solution. It also has out-of-the-box full BYOD support, so you can allow your employees to access their applications and virtual desktops from their mobile devices within a few minutes. There are no hidden costs or surprises.

## Citrix Licensing Is Complex and Expensive

Citrix licensing has always been complex. For example, when purchasing a product, you first need to decide which edition of the product you want to use. In order to choose the edition and decide which features you want, or which features you think you might need, you have to refer to a plethora of matrices and documentation.

Once you choose your edition, you then have to purchase a license for each piece of software and every user that will be accessing the environment. If you want to add new users to the system, you need to generate a new license, replace the old license on the dedicated license server and rerun the service. You then have to make sure that the license is properly activated on the Citrix Studio management console. This is a very time-consuming process, so it can be a while before new users can access the desktops and applications.

## Citrix Licensing Is Just the Beginning

The licensing is just the first step. If you need to build a complete virtual desktop and application solution, you have to buy multiple products. Citrix Virtual Apps and Desktops (formerly XenDesktop) is the umbrella over many products which fall beneath it, including Citrix Virtual Apps (formerly XenApp),

Provisioning Services, Citrix Hypervisor (formerly XenServer). In the Platinum (PLT) Edition, there's also CloudBridge, SSO and AppDNA.

If you want to scale up to a high-availability and load-balancing solution, you need other products such as NetScaler, making the Citrix solution very expensive to maintain.

## **Parallels Allows Businesses to Easily Implement Their Own Secure IT Solutions**

A solution that is not easy to use increases the total cost of ownership (TCO) because the business has to invest in training and things will take much longer to complete. A system that is difficult to use also hinders business operations because when new functionality is needed, the team cannot implement it straightaway—and in most cases has to wait for help from an expensive third-party professional.

## **Get Started within a Few Minutes with Parallels RAS**

Most of the existing enterprise and virtualization software is very complex to set up and use. At Parallels, we wanted to develop a solution that allows businesses to build their own IT solution without having to rely on expensive third-party professional help. We invested a lot of resources in making sure we did not build another complex piece of software. It paid off, because Parallels RAS is known for its ease of use, from the early stages of the installation to scaling up the whole setup. Parallels RAS can be installed by nonspecialized team members within just a few minutes, using a simple wizard-driven installation.

Once the software is installed, everything can be done easily via wizards in the central management console. You can publish applications or virtual desktops and configure permissions with just a few clicks. All incoming connections are automatically load balanced without requiring you to configure anything. Parallels RAS allows you to set up a secure private cloud and permit users to connect to the farm remotely via a secure encrypted connection in a matter of minutes.

When running Parallels RAS, you can push out the gateway, Microsoft Remote Desktop Services (RDS) and other agents through the central management console. There's no more fumbling and updating through the golden image, which in turn means that you can pass the scaling-up tasks to your helpdesk or first-level support team while you focus on managing global operations.

## **Citrix Solution Complexity Kills Productivity and Costs Businesses a Fortune**

Citrix might be known for its mature Independent Computing Architecture (ICA) protocol, but one thing it is not known for is an easy setup and easy handoff to engineers or first-line support. Most companies have to bring in outside consultants that are subject-matter experts on the Citrix solution. The install can be so tediously complex that it blows a company's timetable for its VDI and published application solution roll out. And to make matters worse, unless the Citrix solution is installed using professional assistance, the setup can be completely wrong, in which case it needs to be redone.

When installing a solution such as Citrix Virtual Apps and Desktops, the foundation needs to be solid—or the end user experience will suffer and the project will fail. Creating a desktop and publishing an application catalog in Citrix Studio can be an experience, to put it lightly. Not to mention that if you are using Machine Creation Service (MCS) or Provisioning Services (PVS), it will add even more complexity to the environment.

So while Citrix solutions might be known as leaders in the Connection Broker space, they have not made it any easier for your IT staff to deploy and administer the product.

## **Parallels Helps Businesses Scale Up and Meet Demands Without Breaking Their Bank Accounts or Requiring Outside Help**

In today's cloud environment, virtualization, hybrid datacenters and scalability are considerations for many companies. Businesses have to make sure they have enough resources to cater for the high season. Additionally, the IT department has to efficiently absorb new employees and get them up and running within just a few minutes, using the fewest possible resources.

## **Scaling Up? Parallels RAS Does the Dirty Work for You**

Thanks to the ability to install any type of server agent right from the management console and to the simplicity of a Parallels farm and its components, you can easily add servers and desktops to your resource pool when there is demand for more resources or when your business recruits new employees.

Scaling up a Parallels RAS setup is also easy because when you add new servers or gateways for users to connect to, you do not have to manually add them to some sort of pool or manually reconfigure components such as the load balancer. Parallels RAS does all the dirty work for you automatically, and your IT department does not need to pay for expensive specialized help from third parties. Need a new RDS server for more resources? Log in to the management console, install the agent on the server remotely via a wizard and the load balancer in Parallels RAS will automatically start assigning new connections to it.

## **You Do Not Have to Pay for Additional Components**

When you purchase a Parallels RAS license, you are paying for every component you might need. You can build a high-availability IT infrastructure with load balancers, SSL offloaders and multiple sites in different physical locations without having to pay for additional software licenses. Parallels RAS is a one-stop solution.

## **Parallels RAS Supports Major Cloud Service Providers**

You cannot talk about scalability without mentioning cloud service providers. Many businesses are migrating their IT solutions to the cloud in order to reduce their hardware and maintenance costs. The good news is that Parallels has made it easy for you. Parallels RAS has out-of-the-box support and can be set up on leading cloud solutions such as Nutanix and Microsoft Azure.

## **Scaling up a Citrix Solution Is Complex and Requires Additional Licenses, Financial Resources and Technical Expertise**

Citrix has not really built anything into their solutions that allows for quick deployment of servers, desktops and applications. They do have PVS and MCS that can push out master image templates, but they are very difficult and time-consuming to set up. In most cases, you need the right technical expertise to set these up, not to mention that there are a lot of different network prerequisites in order for these options to work.

But it is not just the ease of use that hinders users scaling up with Citrix; it is also the additional licensing costs and the complex software architecture. Unlike Parallels RAS, unless the Citrix infrastructure's growth is properly planned, there are many things that can go wrong—and when things go wrong, employees and end users are usually the ones most affected.

## **Businesses Can Build More Advanced VDI Solutions with Less Money Using Parallels RAS**

This might sound contradictory - how can you build a more advanced and flexible VDI solution with less money? It's possible because when it comes to VDI solutions, Parallels RAS can interop with hypervisor solutions from leading vendors including Microsoft, VMware, Oracle and even Citrix.

With Parallels RAS, you are not restricted to using a specific hypervisor or proprietary technology, like you are when using a Citrix solution. The availability of different solutions means you can build your VDI solution with different hypervisors and use the features that apply to you most from every server. You are not restricted to using a specific brand, helping to keep the costs down.

A practical example of this is a Parallels RAS setup in an educational institution. You can set up the virtual desktops for the students' labs using the free version of VMware ESXi, because these virtual desktops are just used for experimenting and are not permanent. Therefore, you do not need any advanced virtualization or management features. On the other hand, the teaching staff's virtual desktops are more permanent and might require a bit more management, so you can set up their virtual desktops on Microsoft's Hyper-V hypervisor solution.

## **Parallels Provides Businesses with Superior User Management Tools**

From customizable invites to a desktop replacement solution that can extend the life of your business's hardware, Parallels makes the end user experience and user management a priority.

Parallels RAS is a dedicated user-device management solution that allows you to configure policies for end users' terminals, schedule remote power ups, shutdowns and reboots, provide remote control assistance and lock down desktops with modern yet lightweight desktop replacement software. And last but not least, the Parallels RAS client software can run on most modern desktop and mobile operating systems including Windows, Linux, macOS, Android, iOS and several others. It is also available as a Chrome extension, making it hassle-free to implement a BYOD policy.

## Where Citrix Falls Short

End user experience and management is something that Citrix has struggled with since the introduction of WinFrame (now Citrix Virtual Apps) many years ago. They have acquired companies to help them with monitoring and reporting and developed Citrix Director, which is supposed to be aimed at helpdesk and first-level support engineers. However, it does not have the functions and features you would expect from a product that is replacing the full-featured EdgeSight.

## Conclusion

Citrix solutions might be more mature and have an edge on the technology side of things, mostly with the ICA protocol. However, business software should be a means to automate and ease business operations rather than a means to introduce new, complex operations and costs. And that is exactly where Parallels has the edge on Citrix: Parallels RAS is a solution that checks all the right boxes.

Parallels Remote Application Server is a cost-effective, all-in-one application and virtual desktop delivery solution that is easy to use and manage. It allows you to concentrate your efforts on the line of business rather than on the IT solution to run the business, without breaking your bank account.

Feature/Capability	Parallels RAS	Citrix Solution
Easy to use	Yes	No
One-stop solution	Yes	No, needs additional components to scale up
Proprietary protocol	No	Yes, ICA
Desktop replacement features	Yes	No