



Advantages of Virtual Desktop Infrastructure (VDI) for Businesses

White Paper | Parallels Remote Application Server

Executive Summary

Enterprises currently face a radically different business and economic landscape than they did a decade ago. Along with technological advances in the digital era, new challenges have come into play for business organizations.

Corporate leaders now need to deal with key issues such as finding growth opportunities, cybersecurity, talent retention in the modern workplace and even environmental initiatives—or they risk getting left behind by competition. However, executives have also realized that they can harness new technologies to tackle these challenges. One such technology is virtual desktop infrastructure (VDI).

This white paper expounds on each of the problems mentioned above; briefly explains what VDI is and how it works; and discusses the business benefits of VDI that address the issues. With a better understanding of this technology, business leaders can evaluate the impact on costs, convenience and overall efficiency that VDI can bring to their organization.

Introduction

In today's era of unprecedented disruption, organizations face many challenges that have compelled them to rethink their conventional business practices and processes. Technology is pervasive in almost every capacity of the enterprise, and corporate leaders have realized that leveraging these digital technologies is the only way to gain competitive advantage.

Business Challenges for 2020 and Beyond

The good news is that companies that embrace technology and effectively integrate it into their business environments can find success in disruption. Every challenge can be turned into an opportunity for innovation.

Finding new opportunities for growth – In the Gartner 2019 CEO Survey, respondents ranked the need for growth—greater revenue, increased sales and bigger market share—as a top business priority. This concern was mentioned by 53% of the CEOs surveyed, up from 40% the previous year.

However, with traditional markets reaching saturation and/or facing stronger competition, many leaders also realize that one of the more effective ways to make the business grow is to expand to other geographical locations. To ensure success, these expansions must be carried out quickly and efficiently.

Changing political climates and government policies, as well as incoming competition, quickly erode prospective new markets. Fast time-to-market is crucial. Once growth opportunities are discovered, it's important to establish a foothold in as little time as possible.

Companies also need to minimize risk. Despite extensive due diligence, expansions involve a lot of uncertainties. It's important to avoid unnecessary expenses and secure cash flow.

Establishing cybersecurity and compliance – Owing to its potential value to an enterprise, Kevin Plank, the CEO of Under Armour, once said that data is the new oil. But the shift to a data-driven culture also comes with the great responsibility of keeping it secure. A lot of that responsibility lies with C-level executives who are held accountable in the aftermath of a data breach.

Unfortunately, only 51% of CEOs believe that they are “well-prepared for a cyber attack.” Adding to that pressure are various data protection laws such as GDPR, PCI-DSS and HIPAA that impose severe penalties for noncompliance.

Talent acquisition and retention – There's no arguing that the modern workplace sports a much different look than it did ten years ago. Add to that the influx of Millennials and Gen-Z workers, and businesses find themselves faced with the problem of finding, hiring and retaining the right people.

Aside from the tight labor market, much of the concern lies in making the workplace conducive for these new generations of employees. Millennials and Gen Z prefer a flexible, less-structured working environment, and have no qualms changing jobs if they are unhappy with their current one. This can put a huge burden on most companies, who are already facing massive skill gaps in various positions.

Going green – The increasing calls for environmental preservation have prompted businesses to put significant effort into their environmental and sustainability reporting. They evaluate their practices to determine their carbon footprint and then put carbon management initiatives in place.

An organization's decision to implement green innovations requires changes in products, services and/or business strategies. This is easier said than done, as corporate executives also need to balance the environmental impact of going green with the costs for doing so.

All these challenges can be addressed through VDI adoption.

What Is VDI?

Virtual desktop infrastructure (VDI) is a way of delivering virtual desktops and applications remotely to endpoint devices. You can use VDI to install Windows 10 and Microsoft Office in a central location—like an on-premises datacenter or a cloud infrastructure—and then deliver them to devices in your organization.

Most VDI solutions can deliver to a wide range of devices, including laptops, PCs, tablets, thin clients, smartphones or even Raspberry Pis. End users can then use the virtualized software as if it were running locally on those devices.

This basic VDI function alone can provide several advantages for businesses.

Business Advantages

Rapid, cost-effective expansions – VDI is the perfect solution for companies seeking rapid and cost-effective expansions. VDI desktops can be tested and deployed to endpoint devices within hours. This is much faster than traditional deployment times that normally take days or even weeks. As a result, newly established offices/teams can become operational almost immediately.

Once deployed, VDI desktops require much lower administrative overhead. Most management tasks (such as maintenance, monitoring and troubleshooting) are performed in a central location. This can reduce costs and free up cash flow.

Simplifies information security implementation – In a VDI environment, not only desktops and applications are stored in a central location; data is as well. This has significant implications from a security standpoint. Even if a device is lost or stolen, corporate data will not be compromised.

In addition, this centralized architecture makes it much easier for system administrators to apply security controls on digital assets. For example, software patches, antivirus installations and security configurations can all be done in one place instead of on each individual device.

The ease of securing devices and digital assets in a VDI environment can help businesses not only achieve compliance but also significantly reduce the chances of a data breach.

Talent acquisition and retention – Contrary to popular opinion, Millennials and Gen-Z employees are typically productive, innovative and committed team members. In a survey conducted by employment website Monster.com, 58% of Gen-Z respondents said they were “willing to work nights and weekends for higher pay” compared to only 40% of Baby Boomers.

The key is to provide these employees with enough flexibility through non-traditional practices like telecommuting and remote work. However, these practices normally entail bringing sensitive data out of the corporate firewall, putting them at risk.

VDI is perfect for these types of use cases. Not only does it enable access to the same desktop and applications from any device, anywhere, VDI environments are also inherently secure. Because applications and data are hosted in a central location, they remain protected even if they're accessed from a coffee shop, hotel or home.

Reduced carbon footprint – Organizations that conduct carbon emissions reporting will want to consider using VDI to achieve lower carbon footprints. VDI's ability to deliver desktops and applications to less computationally demanding devices has given rise to thin clients. These are stripped-down, PC-like devices that rely on hosted virtual desktops instead of locally installed software. Thin clients consume very little electricity compared to traditional desktops. They also produce less heat, resulting in lower carbon emissions from air-conditioning systems.

Parallels RAS – A VDI Solution with a Low TCO

One VDI solution that stands out is Parallels® Remote Application Server (RAS). Unlike most VDI products, Parallels RAS has an uncomplicated infrastructure that's easy to install, configure and manage. That means organizations don't need to hire expensive "certified experts" to get a VDI environment up and running. Its straightforward architecture also makes it easy to troubleshoot, thereby reducing tech support costs.

In addition, Parallels RAS supports a wide range of deployment options, including on-premises, public clouds—including Amazon Web Services™ (AWS), Microsoft Azure and Google Cloud Platform—hybrid and multi-cloud environments and even hyperconverged infrastructures like Nutanix and Scale Computing HC3. This versatility allows companies to choose the deployment option that best suits their organization without breaking the bank.

Parallels RAS also supports REST and PowerShell APIs, which allow it to be easily integrated with other business software. This streamlines business processes and improves overall efficiency.