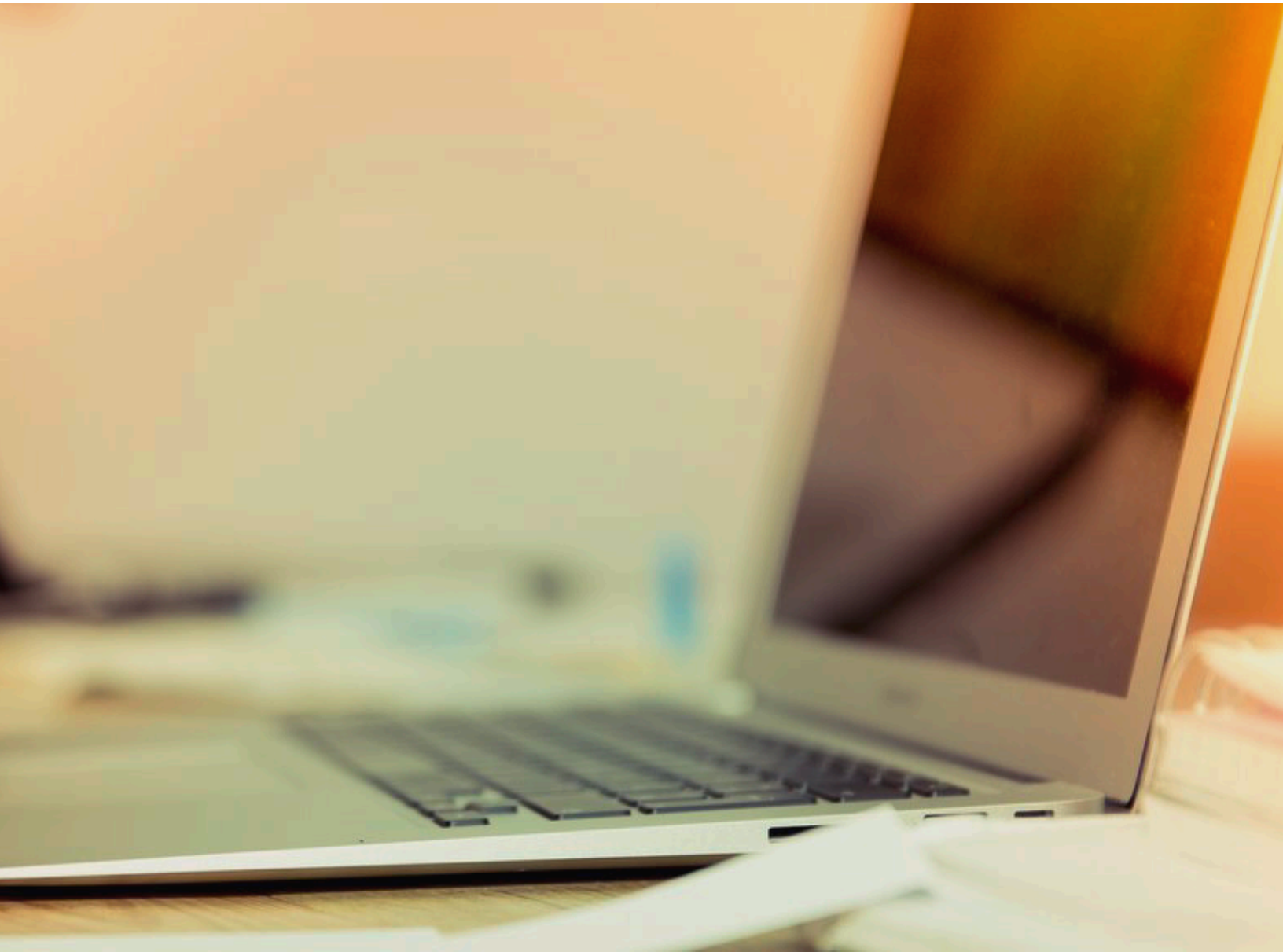


White Paper

# The Benefits of Desktop Virtualization



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It is obvious that we are in the center of a universal technology shift. With that being said, cloud computing, fueled by the move to 100% virtualized environments, represents an enormous platform change that is altering the current situation of IT. As this continues to gain momentum, IT strategies must be defined, planned against, and implemented in the context of this new world order versus continuing IT paradigms.

Desktop virtualization, or VDI, is a buzz word that has been floating around the IT community for quite a while now. A virtual solution is a cloud application that replaces physical resources with Web-based application interfaces. For example, VDI allows a user to log into their desktop (virtual, of course) via the Web browser or smart-device app and be able to access their files, documents, and whatever else is stored in their cloud-based desktop.





# The State of Virtual Desktops Today

Today, there is an increasing amount of diverse endpoint computing devices. These devices, paired with cloud computing and the overall consumerization of IT, has made desktop management even more important. According to RnR Market Research, the Virtual Desktop Infrastructure market is expected to grow at a CAGR of 27.35% between 2016 and 2020, largely due to the increasing adoption of BYOD. 451 Research analyst, John Abbot, also says that the growth is driven by the desire to reduce desktop management support. Let's review Desktop as a Service and its benefits, as well as what the future might hold for this technology.

## A Refresher

In recent years, end users have increasingly desired access to their data and applications without restriction to a specific location or device – and this isn't only on the consumer level. Users want this type of access to their business data. Virtual Desktop Infrastructure has been around for awhile, but IT teams realized that managing on-site VDI was both complicated and costly. That's when Desktop as a Service intervened and fulfilled the promise of offering virtual desktop environments on demand, through practically any Internet-capable device, without the high costs or hassles of managing your own infrastructure on-site. DaaS is truly a secure virtual desktop environment that provides users with access to their business data in any location, at any time, on any device. This is not a brand new concept, but like we've said before, it's becoming increasingly important.

More specifically, DaaS is a form of virtual desktop infrastructure (VDI) in which the VDI is outsourced and handled by a third party provider. Also called hosted desktop services, Desktop as a Service is frequently delivered as a cloud service along with the apps needed for use on the virtual desktop.

# What benefits does DaaS offer?

## BYOD

Virtualization is quickly changing and improving the way people are able to do business. The world has gone mobile, and businesses need to keep up. Solutions like Desktop as a Service allow for businesses to be more flexible in how they complete work. Users can access their applications and data on any computing device, in any location on the globe. All that's required is Internet access and you'll be up and running with the same ease you experience with your office computer. You don't need to be chained to the workplace anymore and you don't need to rely on flash drives and email to transfer your data from one place to another.

It's easier than ever to complete work away from the office, and businesses that are taking advantage of this are giving themselves a competitive edge. You can bring your familiar computer environment with you on your tablet, smartphone, desktop, Zero Client or any other device you can think of. Desktop virtualization is handing you the opportunity to be more flexible and productive, because now you can be mobile. Stay constantly connected to your data and coworkers while having the freedom to take advantage of business opportunities outside of the office. Your business will grow with the capabilities of virtualization.

## Cost Efficiency

Desktop virtualization is also contributing to major cost savings that businesses experience with cloud computing. Saving money is a plus to any company. With virtual cloud solutions, you move from a CapEx model to OpEx. What does this mean exactly? Simply, you eliminate upfront capital expenses for equipment, hardware, storage, maintenance, extra personnel...the list goes on and on. Rather, you experience a pay-as-you-go model that allows you to pay based on your usage of cloud resources. Think of it like paying your water bill. It's not the same amount every month. Instead, it's based on how much water you use. This is the same idea. You remain in control of your spending and you receive a solution customized to your ever-changing needs.

Additionally, when you work with a cloud provider, they purchase, install, store and maintain the resources necessary to run your network and applications. That eliminates those costs on your end. You simply purchase space on equipment that the provider owns, rather than buying it all yourself.



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## Security

There have been endless debates over security in the cloud, but recent studies are showing that the majority of fears are unfounded. Clutch found that 64% of enterprises agreed that cloud infrastructure is more secure than legacy systems. Gartner predicts that through 2020, 95% of cloud security failures will be the customer’s fault. And a Thales e-Security study indicated that the majority of organizations plan on transferring sensitive data to the cloud in the next few years. Think about it this way: cloud providers, like RapidScale, must invest seriously in security if they intend to hold customer data. That’s the only option! Human error is the top reason that security problems arise, not cloud infrastructure. Layers and layers of cloud safeguards exist to protect data and eliminate threats. DaaS offered by a reliable provider should actually provide greater security controls than an organization could put in place itself. When you decide to move into the cloud, your data is the most sensitive and important thing. With a reliable provider, your data is treated like it contains top-secret information. Because of this, DaaS offers the highest quality security, router, switches and monitoring to make sure your cloud remains your cloud.

## Management

Administrators of the cloud solution receive the ability to automate the humdrum tasks that they’ve traditionally spent the majority of their time on. Additionally, this team views DaaS as a more managed and consistent way to provide these desktop environments to users while fitting these users’ wants and needs. Desktop as a Service essentially centralizes management, including desktop control, security, data control, backup and disaster recovery. This makes operations more efficient and greatly decreases overall spending.



## Disaster Recovery

The cloud is also an amazing Disaster Recovery plan. Ask yourself this question: if a disaster hit your business right now, would you be able to recover? A recent study discovered that 90% of businesses could fail within five working days unless they are able to continue doing business after a disaster.

While we hope this never happens to you, it's something you need to plan for. Waiting too long means risking your business. Many organizations today are too vulnerable to disasters. With the full redundancy that virtualization solutions provide, you can protect yourself. Imagine that a major disaster occurs and one data center goes into the water. Other data centers pick up where it left off and continue running as normal thanks to virtualization, while you experience minimal downtime. In addition, with your information stored virtually in the cloud location, it cannot be harmed by the physical events your location is vulnerable to. A business can stay in touch with its clients, employees and data, which is essential for you to continue working in any situation.

## Environmentally Friendly

The nature of desktop virtualization increases an organization's ability to be green. With traditional computing, every business deals with its own hardware. This leads to wasted energy and equipment. With virtualization, on the other hand, businesses are reducing energy usage and the amount of equipment needed. As business information is virtualized, the need for the extra resources is reduced drastically. Virtual workspaces are accessed via the Internet and through data centers that operate efficiently due to multi-tenancy and the latest technology and equipment.

Additionally, virtualization leads to digital operations. As businesses embrace cloud computing and all of the capabilities it provides, things are quickly moving online. This ultimately saves energy, waste and space as telecommuting becomes possible and documents are stored electronically rather than printed on paper. A business can join the green movement with the help of desktop virtualization.



## Major Business Drivers

There are plenty of drivers that lead to Desktop as a Service adoption today, but some of the top ones include:

User desire for mobility

Rise of remote workforces

BYOD trend in the workplace

Desire to eliminate budget constraints

## The DaaS Market

Desktop as a Service has become a global market. In a Citrix survey conducted at the end of 2015, 49% of organizations stated they plan to add a Desktop as a Service model in the next 12 months in order to grow their business. The same survey revealed that the strongest DaaS growth will be within the financial services, healthcare and manufacturing markets. This demonstrates that businesses requiring high levels of reliability and securely delivered applications and data are gravitating towards DaaS. Additionally, the largest market for DaaS is organizations with fewer than 100 end users – to date, SMBs have been the largest adopters of this technology largely because they don't have the resources or expertise in-house.

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## About RapidScale

RapidScale, a managed cloud services provider, delivers world-class, secure, and reliable cloud computing solutions to companies of all sizes across the globe. Its state-of-the-art managed CloudDesktop platform and market-leading cloud solutions are the reasons why RapidScale is the provider of choice for leading MSOs, VARs, MSPs, Carriers and Master Agents throughout the United States. RapidScale is not only delivering a service but also innovating advanced solutions and applications for the cloud computing space. RapidScale's innovative solutions include CloudServer, CloudDesktop, CloudOffice, CloudMail, CloudRecovery, CloudApps, and more.

