SECURING REMOTE DESKTOPS:
DON’T FORGET THE DATA
As remote work requirements continue to expand worldwide, customers are seeing gaps in their technology and processes for managing end-user devices, data and applications. Driven in part by the global pandemic, growth in the desktop virtualization market is projected to exceed $43 billion by 2025.1

This paper looks at the market forces at work, how the shift to remote workforces impacts current and future IT infrastructure, and what enterprises should do now to prepare for an increasingly work-from-anywhere world.

THE REMOTE REVOLUTION

The nature of the workplace is changing daily. Once confined to physical locations and behind corporate firewalls, today’s workplace extends to anywhere connectivity exists. Fueled by the current global pandemic, customers, employees and business partners who used to access system resources locally have been forced to use remote work solutions.

Although some employees will return to their workplace after the pandemic passes, for many, working remotely is the new normal. Businesses of all sizes are readjusting their office configurations and rethinking their needs based on financial, ecological and employee demands. With this shift, many organizations are finding that a remote workforce has improved overall efficiency as well as work-life balance for employees. Everyone is experiencing change.

THREE STAGES OF REMOTE WORK

Typically, organizations fall into three broad categories when it comes to remote work development:

- **Rapid response**: These organizations are working to avoid the business disruption that can result from shifting to remote work by rapidly enabling new remote solutions for their constituents, whether employees, students, patients or customers. Often, they rely on the ready nature of the public cloud to spin up solutions quickly.

- **Recalibration**: Those organizations already enabling remote workforces often find the need to enhance or expand their existing remote work ecosystem and collaboration workloads to meet exploding demand. As the dust settles, many will need to adjust solutions, migrate workloads from or to cloud partners and reevaluate on a regular basis.

- **Innovation**: As enterprises plan for the long term, the ongoing challenges of the new normal will bubble to the surface. To mitigate these challenges, organizations in this category will need to consider new approaches to public safety for all constituents, uncover new ways to serve existing customers and increase scrutiny of remaining legacy paper processes to drive digital transformation.

---

1 "Desktop Virtualization Market—Forecasts from 2020 to 2025,” Research and Markets, March 2020
IT IMPACT: ON PREMISES, IN THE CLOUD

Providing support for a remote workforce is not a single challenge that is simple to solve. Different constituents may have vastly different requirements for processing power, storage and bandwidth to perform efficiently. The challenges extend from on-premises infrastructure into the cloud, although a few needs are universal:

1. **Productivity:** First is the need to empower productivity, regardless of where employees are working or how they connect. If workers cannot do their jobs, nothing else matters.

2. **Scalability:** Next is procuring or developing remote work solutions that are seamless and scalable. Solutions should require little or no additional training and meet rapidly fluctuating demand as new groups of workers join remotely.

3. **Security:** Security is always a major consideration. Enterprises need to extend security, compliance and governance mandates to all users and endpoints, including those in the home office.

TRADITIONAL IT CHALLENGES ABOUND

Regardless of where a workforce is located, enterprises face many of the challenges they have always dealt with, though perhaps amplified. Remote access or desktop-as-a-service licensing can be an unexpected addition to the IT budget as organizations look for the best way to connect enterprise applications to user devices. As the remote workforce evolves, so too does the need to keep up with the raft of changing technologies required to ensure business processes continue uninterrupted.

There are certain areas where higher procurement costs may emerge. Troubleshooting and help desk issues will require new methodologies, as IT resources are also distributed. In addition, security issues related to employee-owned devices such as smartphones, tablets and computers will increase the burden on support resources.

SOLVING REMOTE WORK CHALLENGES FOR ALL USERS

Regardless of location or connectivity, every remote solution must address certain issues. One is the variety of end users and devices—often multiple devices per user. Remote work solutions must also address security and identity and access management to ensure remote workers can access only those resources and applications needed to perform their job functions. Networking and connectivity are critical to every remote work function as well, and varying infrastructure demands will need to be met with any solution. This includes data protection, as every piece of enterprise-critical information must be backed up, regardless of where or how it was generated.
Organizations will find a full spectrum of Dell Technologies solutions to address these challenges, including:

- Dell Technologies Unified Workspace
- VMware Workspace One
- Virtual desktop infrastructure (VDI)
- Secure network access
- Software-defined WAN
- Unified endpoint management for all endpoints, whether local or remote

**WHAT IT WANTS FROM REMOTE SOLUTIONS**

Given the broad range of technology solutions, what capabilities should enterprises look for in their remote workplace platforms? A short list of items to consider when sourcing remote workforce solutions includes:

- An integrated solution stack that offers a single management platform for remote infrastructure, whether in the cloud, in an on-premises data center or at the edge.
- The ability to recover user-generated business data in the event of a malicious attack, inadvertent deletion or modification, or a natural or other disaster.
- Intelligent storage and data protection for every piece of business-critical information, including data on client devices, whether in the data center or in the cloud. The solution must also include enterprise-class security for every device and user, whether accessing corporate resources via PC, smartphone or thin client.
- Professional guidance and technology expertise to assist in remote work transformation.

**INTRODUCING DELL EMC VXRAIL**

Designed exclusively by Dell EMC and VMware, VxRail is the easiest and fastest way to implement a high-performance VDI solution. Based on hyperconverged infrastructure (HCI), which enables accelerated integration of remote workforce solutions, VxRail is built to handle VDI’s I/O-intensive workloads, including extreme burst conditions when users log on and off.

VxRail integrates market-leading second-generation Intel Xeon Scalable processors, Dell EMC PowerEdge servers, VMware vSAN software-defined storage, vSphere virtualization, and management software from Dell EMC and VMware, to provide a solid foundation for VDI.

The nature of Dell EMC VxRail HCI—which incorporates compute, storage, virtualization and management in one place—removes complexities and speeds VDI implementation, compared with traditional siloed IT infrastructure. In addition, VxRail HCI System Software automates lifecycle management and boosts infrastructure security.
VxRail infrastructure offers simplified remote management options and can be deployed to fit within a small footprint. That means organizations can reduce on-site IT staff by managing VDI clients remotely, making VxRail ideal for VDI at the edge and in remote or branch offices.

The consolidated VxRail infrastructure also reduces administrator burdens and shrinks ongoing operating costs by simplifying infrastructure, lowering energy consumption and reducing physical space and cabling requirements. VxRail Manager’s automation of routine management tasks frees up administrators, which allows them to dedicate resources to the adoption of emerging technologies rather than spend time on routine tasks.

Dell EMC VxRail also offers the latest in security to ensure that high-performing workloads keep running. With highly redundant architecture, integrated Dell EMC data protection software and nondisruptive upgrades, organizations can remain confident that users’ desktops will always be available—even during boot storms and patch updates. Additional comprehensive data protection options, including RecoverPoint for Virtual Machines, ensure quick operational recovery from disaster.

Dell Technologies and VMware deliver on the promise of remote workplaces and desktop virtualization today and can handle the needs of tomorrow.

**NEXT STEPS**

Click here to learn more about how Dell Technologies can help enable your remote work transformation or see Dell Technologies for VMware.

*This content was commissioned by Dell Technologies and produced by TechTarget Inc.*