SOLUTION BRIEF

NetApp Virtual Desktop Service

Simplify and automate virtual desktop infrastructure (VDI) deployment, orchestration, and scaling through a SaaS-delivered global control plane, delivering enterprise class VDI solutions, in on-premises/hybrid, public, and multi-cloud environments.
The end-user computing shift

Businesses today realize that yesterday’s workforce solutions are at a critical point of evolution. The ‘new normal’ for the enterprise is a distributed/remote workforce that requires globally virtualized resources. “There’s pretty much uniform consensus now that the pandemic has permanently shifted the way we work,” says Nicholas Bloom, Economics Professor, Stanford University.1 Twitter, Facebook, and Microsoft have all announced that remote work will be a permanent option for most of their employees.1

With this shift, the technologies supporting the workforce must shift, as well; a key example of this is virtual desktop infrastructure (VDI) technology. VDI has historically been considered a second-tier, fallback option for employees with lower-level task-based workloads, temporary access, or as a support paradigm for mobile employees. However, due to workforce globalization, technology advancements, and today’s business continuity needs, VDI is evolving to a Tier-1, enterprise-class workload on par with SAP and Oracle. With its greater operational flexibility, increased security profile, when compared to traditional desktop approaches.

The Virtual Desktop Environment Challenge

As VDI evolves, however, businesses and IT teams are finding that providing VDI services on a global scale can be difficult at best. Provisioning, deployment, and orchestration can be time consuming and complex, especially when done in hybrid/multi-cloud environments driven by business or regional requirements and exemplified by disparate consoles addressing different environments. Research, from industry analyst firm ESG found that 93% of either current or planned VDI users needed third-party services to deploy and optimize their VDI environments.2

These challenges unfold in layers as VDI evolves beyond the brick-and-mortar datacenter:

- The new reality where the virtual/remote workforce is the new normal.
- The proliferation of devices enabling employees anytime, anywhere, always-on access.
- The complexities of procurement, deployment, management, and security across environments
- The overwhelming lack of IT resources/skillsets to address all these environments.

Today’s workforce is driven by speed, agility, and flexibility. Delivering the scalable, secure, and adaptable infrastructure to support them is no small challenge.

VDI today must be able to span multiple environments from on-premises HCI systems to different clouds in different regions. It must provide seamless access to high-performance resources and massive data stores. It must take security to new levels – far beyond traditional devices. And it must support this dynamic global workforce without a commensurate burden of cost and support resource.

That is VDI at enterprise scale.

NetApp Virtual Desktop Services: Global Control Plane for VDI at Enterprise Scale

NetApp Virtual Desktop Service (VDS) is a SaaS-delivered global control plane for virtual desktop management that functions as an extension of the cloud. With NetApp VDS, business anywhere in the world can deploy a validated solution to address today’s growing need for a long-term, permanent remote workforce solution.

NetApp VDS is NetApp’s SaaS enterprise solution to automatically provision, deploy, and manage virtual desktops in any cloud environment. VDS can also support private, on-premises VDI environments. VDS extends cloud capabilities by delivering a global control plane to manage virtual desktops through all phases of the desktop lifecycle, through a single pane of glass. VDS is a flexible solution, with open REST APIs, that is interoperable with your private, public, or hybrid cloud deployment strategy and your users’ chosen endpoint devices.

NetApp VDS supports Windows Remote Desktop Services (RDS) for virtual desktops across all major public cloud environments including Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform as well as on-premises environments enabled with VMware vSphere as the hypervisor platform. NetApp VDS also provides native support for Microsoft’s Windows Virtual Desktop (WVD) solution in Azure. Now businesses have an option to reduce the complexity of VDI provisioning, deployment, and management across the global landscape, regardless of platform.

VDI has emerged as a primary, tier-one workload that is critical to maintaining business continuity. Ensuring enterprise-class management for this expanding workload is critical to the success of deployments, and to the business. VDS provides a global control plane that leverages automation and machine logic to ensure scale, stability, and security for your virtual workspaces, as well as integrating with a wide range of other cloud-based products, including:

- **NetApp Cloud Volumes platform** for secure, scalable storage to optimize your virtual desktop/user performance and availability, protecting against the negative effects of boot storms, login storms, and resource contention.
- **NetApp SaaS Backup for Microsoft 365** offering a simple and secure solution to protect your users’ data against an array of threats, including user error, insider threat, administrative error, application corruption and ransomware threats.

![NetApp Virtual Desktop Services: Global Control Plane for VDI at Enterprise Scale](image-url)
Simplify the Virtual Desktop Deployment
The speed at which your business can accelerate time-to-productivity is critical. VDS is purpose-built to simplify the provisioning and deployment of virtualized desktop solutions. What differentiates VDS is its ability to serve as a unified global control plane spanning your entire virtual desktop footprint – across users, clouds, and business locations.

VDS is a SaaS-delivered solution that presents a simplified user interface (UI) and open REST APIs for flexibility and interoperability across cloud environments (private, public, hybrid) as well as on-premises HCI environments. Your IT teams can now unify virtual desktop provisioning across the employee base while providing streamlined, policy-based access to data and application resources through VDS. This saves significant operational time and costs incurred from manual configuration of individual workspaces across office locations, clouds, and even variability in types of desktop hardware models.

Automated Virtual Desktop Management
VDS empowers your IT teams to streamline and automate the ongoing management of the virtual desktop environment, enabling policy-based management of areas such as software updates for users and applications, no matter where they are located. This mitigates risk of application errors, server downtime, and security inconsistencies, when accessing critical services. Other management functions that can be automated and orchestrated through VDS include user identity refreshes, optimized authentication routines, migration of data files, storage assignments, and unique access configurations – whether by individual user or by department. This automated management further extends to self-service user support and automated resource provisioning, freeing your virtual desktop team for more critical functions.

Scale and Optimize Virtual Desktop Capacity
VDS empowers your business to scale and optimize your desktop resources to control costs while delivering the required performance across the enterprise. Our embedded Resource Scheduling Engine allows you to program resources to “dial up” or “dial down” based upon your usage patterns so that operating costs can be reduced. VDS also dynamically manages capacity planning of virtual desktops through intelligent resource scaling and load balancing of workspace resources. This can include increased processing power for graphic-intensive applications, sudden surges in virtual desktop users, or reduced work throughputs during holiday seasons. VDS’s LiveScaling feature optimizes cloud compute resources dynamically cutting cloud spend.

Through our streamlined administrative interface, VDS can easily be provisioned with NetApp’s Cloud Volumes platform for enterprise-class cloud storage to remove the resource contention issues normally associated with larger VDI environments, while including backup, snapshot, and compliance capabilities. Your VDS-enabled workspaces can take advantage of geographic-level scaling when combined with NetApp Global File Cache (GFC), allowing virtual desktop resources to remain close to regional user populations while leveraging centralized, consolidated storage.

Protect Your Users Mission-Critical Microsoft 365 Data
According to 451 Research, 52% of users do not backup their SaaS data such as Microsoft 365 accounts (Exchange Online, Teams, OneDrive, SharePoint, Groups, etc.) because they think their SaaS provider or hyperscaler does it for them. While Microsoft provides resiliencies against interruption of their service, protecting against user-induced data loss scenarios such as insider threats, administrative error, ransomware, or applications run amok remain the user’s responsibility. To ensure enterprise-class robustness for your end-user workloads, VDS integrates with NetApp’s SaaS Backup for Microsoft 365, automatically protecting this mission-critical data as per your pre-defined schedules.

With unlimited capacity and unlimited retention, this closes the loop in protecting you, your users, and your business from a variety of threats and errors.

VDS is your single pane of glass, global control plane, cross platform, VDI management solution for your enterprise-class EUC environment.

About NetApp
In a world full of generalists, NetApp is a specialist. We are focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world’s biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere. www.netapp.com