SOLUTION BRIEF



Desktop Layering **for VDI**[™]



Nimble Storage and Unidesk[®] Bring Adaptive Storage and Management Simplicity to VDI

"Unidesk and Nimble have enabled us to deploy and manage over 400 virtual desktops with a small IT team. Unidesk lets us put more desktops on Nimble's easy-to-manage, flash-optimized storage, while making desktop and app delivery incredibly simple."

- Eric Doherty, Director Server & Virtualization Technology, Gateway Technical College



Combined Highlights

- Adaptive flash-optimized performance for a betterthan-PC user experience
- Efficient snapshots for instant backups and restores
- Automated, WANefficient, off-site disaster recovery
- Image management (one gold for all desktops)
- Application layering (package hard-tovirtualize apps as separate layers with ease)
- Desktop provisioning with fast point-and-click assignment of layers
- Full personalization, including User-installed applications
- Storage efficiency (70% capacity savings for persistent desktops, 90% for non-persistent)
- Layering increases IOPS because shared OS and App layers are "hot" and never leave Nimble flash

Two Best-in-Class VDI Solutions

Nimble Storage and Unidesk combine to deliver simple, efficient VDI storage and VDI management for businesses of all sizes. Whether your connection broker is Citrix XenDesktop® or VMware Horizon View™, Nimble and Unidesk will reduce storage and operational costs, enhance IO performance, and provide the pain-free desktop provisioning, application delivery, and image management needed for VDI success.





Overcoming the 2 Big VDI Challenges

Storage and manageability are the two big challenges that have hindered broad VDI adoption. Choosing the right storage can simplify management and improve the end user experience through better performance and greater uptime. However, even highperformance storage cannot guarantee VDI success if you're still dealing with gold image sprawl, application virtualization complexity, and user personalization demands. The limited use cases and high OpEx that result are just as likely to stall your VDI project.

Nimble Adaptive Storage

Nimble has developed the first hybrid storage architecture engineered from the ground up to seamlessly integrate flash and high-capacity drives. With Nimble's Cache-Accelerated Sequential Layout (CASL[™]) architecture, customers enjoy as much as 10 times faster desktop and application performance, enhanced backup and disaster recovery, and stress-free operations, all while reducing TCO.



Nimble enables server and desktop workloads to be consolidated on a single array for lower TCO

Unidesk Desktop Layering

Unidesk's patented Composite Virtualization® desktop layering technology creates storageefficient persistent or non-persistent desktops from a common gold image and reusable sets of application "layers." This new approach to VDI management offers a unified platform that eliminates the need for separate profile management, application virtualization, image management, and provisioning tools.

User	
Application N	
Application 2	
Application 1	
Windows	

By storing OS and application layers only once per host, Unidesk increases desktop density on Nimble Storage arrays by 3-4X

Cross-Industry Sample of Nimble Storage and Unidesk Customers

- City of Kent, Wash.
- City of Monterey, Calif.
- Gateway Technical College
- Guernsey Bank
- Murnane Brandt Attorneys at Law
- North Park University
- University of California Office of the President

"Unidesk and Nimble made our VDI initiative viable. They were the only way we could provide the costeffective, custom, high performance desktops needed by city workers without an army of consultants or big increases in IT staff."

> W. James Hettrick, Technical Services Manager, City of Kent, Washington

Shared Technical Capabilities

VDI Storage Performance and Efficiency

- Nimble Storage's CASL architecture delivers adaptive performance for desktop workloads including handling readintensive boot storms and write-intensive patching and OS updates.
- Nimble Storage is able to compress data using variable-sized blocks to provide 30-75% capacity savings; storing more user desktops in less space.
- Unidesk layering increases desktop density on Nimble Storage by eliminating redundant copies of Windows and common applications on each VDI host, for up to 70% capacity savings on persistent desktops, and up to 90% savings for nonpersistent desktops.
- Unidesk's shared layers optimize the performance of Nimble's cache architecture to maximize desktop IOPS. Since many virtual desktops access the same Windows OS and Application layers, the desktop data stays hot and never leaves Nimble's flash storage.

VDI Data Protection and Recovery

- Nimble Storage's highly efficient snapshots allow frequent backups of Undesk Application and User layers, as well as months' worth of data retention. Backups and restores take seconds and do not impact application or storage performance.
- Unidesk User layer snapshots enable service desks to "undo" damage caused by user customizations and repair desktops simply by rolling back to a previous snapshot. IT-delivered Windows patches and applications remain unaffected.
- Unidesk desktops can be fully recovered to other hosts using the backed up User layers and the centrally stored Windows OS and IT-packaged Application layers.
- Nimble's efficient replication ensures Unidesk layers are protected in the event of a site failure. This complements Nimble's and Unidesk's snapshot capabilities for higher uptime.

VDI Management Simplicity

- Nimble's intuitive management tools eliminate the complexity of provisioning and managing separate storage, backup, and disaster recovery devices.
- Unidesk all-in-one VDI management software eliminates the need for separate profile management, application virtualization, image management, desktop provisioning, and IO optimization tools.



Unidesk's easy-to-use console enables even junior PC administrators to become experts at virtual desktop provisioning, application packaging, Windows patching, and desktop break/fix.

- Nimble and Unidesk both integrate with VMware vCenter, VMware Horizon View, and Citrix XenDesktop to automate virtual desktop provisioning, replication, backup, monitoring and management.
- Nimble Storage's proactive support identifies potential failures before they occur and allows for non-disruptive upgrades to virtually eliminate downtime.

Partnering for Customer Success

Nimble Storage and Unidesk are both verified as Citrix Ready® to simplify and enhance Citrix XenDesktop implementations. Nimble and Unidesk are each Elite-level VMware Technology Alliance Partners, working with VMware to make VMware Horizon View deployments more successful.



More Information and Free Trial Contact a Nimble or Unidesk reseller today for a free trial, or visit <u>www.nimblestorage.com</u> and <u>www.unidesk.com</u> to learn more.

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