SOLUTION BRIEF

Tintri VMstore™ + VMware™ = Risk-Free VDI

VMstore

The Increased Adoption of Virtual Desktop Infrastructure

User desktop management has become very challenging for IT organizations. IT teams must support increasing numbers and types of end users, meet new regulatory compliance mandates, and defend against a wide spectrum of security threats – all while increasing operational efficiency. User expectations are also escalating, with the demand for responsive 24x7 access to all corporate applications and services from a variety of client devices.

IT organizations are now turning to virtual desktop infrastructure (VDI) to reduce the cost, complexity, and risk associated with desktop management. With more desktops moving into the data center, IT's focus now includes:

- Lowering the risk of deploying and scaling virtual desktop environments.
- Boosting storage performance to ensure an excellent and consistent end-user experience.
- Increasing operational efficiency and manageability to meet corporate mandates.
- Enhancing disaster recovery and security to ensure high availability.
- Improving the TCO and ROI of all virtual desktop deployments.

The Right VDI Software: VMware View

The key to success of any VDI initiative is choosing the right virtualization software. VMware Horizon™ Suite, and more specifically VMware View™, delivers a personalized high fidelity experience for end users across all sessions and devices. It enables higher availability and agility of desktop services unmatched by traditional PCs, while reducing the total cost of desktop ownership by up to 50%. VMware View end users achieve higher levels of productivity and the freedom to access desktops from more devices and locations.

Why Standard Infrastructure Is Inadequate for VDI

The choice of storage platform is vitally important for the success of any VDI initiative. Unfortunately, there is a significant mismatch between the capabilities of standard infrastructure and the demands of virtualization – especially desktop virtualization. The challenges include:

- Increased Complexity and Management. Virtualization has simplified management of the compute infrastructure, but has made storage management much more complex. The burden of managing virtual desktops further exacerbates the management problem.
- Poor Performance. Storage performance is essential to maintaining the end-user experience in VDI environments, including dealing with boot storms and updates. Some organizations have tried to improve performance by purchasing flash-only solutions or bolting flash onto their traditional storage systems. Unfortunately, these approaches are expensive and inefficient.

The Proven Solution for VDI

Intelligent Infrastructure is different from standard infrastructure as it is designed to address the mismatch between traditional storage solutions and the demands of virtualized environments. Built on the industry's only intelligent VM-aware storage architecture, Tintri VMstore™ has the intelligence to deliver unparalleled performance and efficiency, and end-to-end insights into the storage infrastructure for unmatched VM control.

With the high-performing, validated VMware® Horizon View™ and Tintri reference architecture, you can:

- Lower risk and cost-effectively deploy and scale desktop virtualization with as many as 1,000 end-users per VMstore;
- Deliver a high performing and consistent end-user experience with Ultrabook levels of performance;
- Keep end users connected and productive from a wide variety of clients with affordable easy to manage continuity.
- Avoid Long Deployment Cycles. The move to VDI is often hampered by the amount of time and effort it takes to deploy individual desktops. VMware Horizon View is able to simplify the process using linked clones, but this is ideally supported by integration between storage and the VDI broker.

Tintri VMstore: Intelligent Infrastructure for Desktop Virtualization

Tintri VMstore Intelligent Infrastructure enables enterprises to easily and cost-effectively maximize the benefits of their desktop virtualization deployments – all without having to manage the storage environment. Built on the industry's first and leading smart storage architecture, Tintri VMstore is easily deployed as a single datastore into VDI environments, delivering the superior predictable performance, density, and control virtualized desktops need from storage in a compact form factor.

VMstore features for VDI include:

- Patented Flash First Design ensures 99% of I/O transactions are served from flash, resulting in significantly higher predictable performance with sub-millisecond latencies in a fraction of the footprint of traditional storage. VMstore keeps users productive, effectively handling boot and login storms, desktop updates, virus scans, and performance-hungry applications.
- Virtualization-optimized storage lets IT work with VMs and not LUNS and volumes, consistently providing the best performance without requiring tuning or storage management. This allows for scalable shared deployments and eliminates the impact of noisy end-user and server VM neighbors.
- Single pane of glass interface provides end-to-end, VM-granular visibility into performance latency across compute, networking, and storage, enabling IT to proactively solve end-user experience issues.
- Direct provisioning of user desktops from VMware Horizon View using native VM-level cloning results in approximately 1,000 users provisioned per hour, leveraging the integration between VMware tools and CloneVM™.

Tintri
Intelligent Infrastructure

- VM-granular snapshots can be taken and replicated between two VMstore systems using VMstore SnapVM™ and ReplicateVM™. This ensures desktops are protected and available for end users.

ESG Labs Validated VDI Reference Architecture

Tintri and VMware have developed a high-performance reference architecture to help enterprises reduce risk and speed the deployment of their VMware Horizon View™ 5.2 and Tintri VMstore environments.

ESG Labs performed an independent validation of the joint solution, focused on performance in the context of the end-user experience in a 1,000 seat virtual desktop environment. The validation report included the observations:

- "Tintri VMstore is extremely easy to deploy in support of VMware Horizon View. All storage configuration complexity is eliminated using automatic internal tiering and tight integration with vSphere. Administrators don't need to deal with RAID, striping, or host path management. ESG Labs was able to configure a Tintri VMstore in ten clicks and, in less than eight minutes, had VMs up and running in a vSphere environment."
- "VMstore's 'performance reserves' and 'space' gauges proved especially useful, providing an at-a-glance overview of system loading and utilization."
- "Tintri VMstore offers predictable, excellent performance. Virtual desktop deploy and recompose operations were executed at up to 967 desktops per hour. Application access (end-user experience) for 1,000 virtual desktops was outstanding, with View Planner scores as low as .52 seconds, nearly a second faster than the passing score of 1.5, with very low vDisk response times showing plenty of headroom to spare in the VMstore."
- "Tintri VMstore can be implemented to support VMware Horizon View VDI with a lower initial cost per desktop than traditional storage and a lower total cost of ownership over time."

Get Started

If VDI is on your list of priorities or you are looking to expand your current environment, the validated joint VDI solution from Tintri and VMware can help you successfully and cost effectively deploy desktop virtualization. The joint solution takes the guesswork out of planning and gives you the confidence to effortlessly handle any virtualized end-user environment.

Experience Different! For more information on how Tintri VMstore can turbo-charge your business success through a simple, Intelligent Infrastructure, visit www.tintri.com/vmstore. Or better yet, contact your Tintri representative or infrastructure partner and request a demo of VMstore plus VMware View.