Accelerate VDI Deployment with Cisco, Citrix, and Nimble Storage

Roger Lu
Global Strategic Alliances
VDI: Business Drivers and Industry Adoption

- What’s driving desktop virtualization adoption?
  - Centralized deployment and management
  - Security and compliance
  - Business continuity
  - Mobile users and BYOD

- Key industries adopting desktop virtualization
  - Education
  - Healthcare
  - Government
  - Financial
Layers of Virtual Desktop Infrastructure

- **Users / Clients – Devices (BYOD)**
- **Desktop Virtualization Software** (e.g., Citrix XenDesktop & more)
- **Virtual Machines + Hypervisors**
- **Compute & Network**
- **Storage**

Diagram showing layers of virtual desktop infrastructure:

1. **Users / Clients – Devices (BYOD)**
2. **Desktop Virtualization Software** (e.g., Citrix XenDesktop & more)
3. **Virtual Machines + Hypervisors**
4. **Compute & Network**
5. **Storage**

Diagram includes illustrations of devices, virtualization software, hypervisors, and storage components.
### What keeps VDI Projects from Succeeding

- Cost of deploying VDI
- Performance - under sizing for handling peak performance (e.g., boot/login storms)
- Ignoring end-user experience
- Inadequate infrastructure adding management complexity
- Lack of scaling, resiliency, and business continuity features
“Our average client spends anywhere from 40-60% of their desktop virtualization budget on storage.”

– Gartner

“Storage costs can consume 40% to 50% of a virtual desktop infrastructure (VDI) project's overall costs.”

– Jeff Byrne, Taneja Group

Datacenter IT infrastructure on average makes up 50% of TCO per desktop

Source: Morgan Stanley Desktop Survey
VDI Demands Responsive Storage

- VDI IOPS requirements
  - Read requirements
  - Write requirements
  - Balancing overall IOPS
What If … ?

- You could handle workload spikes and scale with ease?
- You could protect your virtual desktop infrastructure almost instantly?
- You could monitor your deployment and understand performance issues at the click of a button?
- You had pre-validated architectures from best-of-breed vendors to guide deployment?
- You didn’t need a separate storage silo just for VDI?

Nimble Storage delivers a next-generation storage platform for desktop virtualization
Nimble’s Next-Generation Storage Platform for VDI

**CASL™**
Flash- and HDD-optimized file system

**InfoSight**
Cloud-based management

**Efficiency**
2-5x better performance/$ and capacity/$

**Scale-to-Fit**
Non-disruptive, flexible scaling to massive scale

**Integrated Protection**
Instantaneous backup and rapid recovery

**Ease of Operations**
Predictive support and operational simplicity

CASL™ Flash- and HDD-optimized file system

InfoSight Cloud-based management
Nimble Storage SmartStack for VDI with Cisco and Citrix

Pre-validated Reference Architecture
Combines best of breed technology
Reduces risk and deployment time

- Rapid provisioning
- Rapid response time even during peak IO’s (such as during a boot storm)
- High density of virtual desktops per unit of rack space
- Seamless scalability

Nimble Storage delivers the foundation for simple, cost effective and scalable VDI – support for 1000’s of users in a single 3U storage system.
Case Study: SmartStack with Cisco, Citrix, and Nimble Storage

ENVIRONMENT
- Support Citrix based server & desktop virtualization environment for classroom, educators and administration

CHALLENGES
- Aging server and storage environment
- Problematic storage latencies
- Improve access for growing student population

BENEFITS
- Increased storage performance by 3X
- Provided high performance storage at 1/5 price of flash-only alternatives
- Decreased application login times by a third
- Enhanced data protection through the use of snapshots
- Provided easier remote access to all campus applications and services

“We were able to get the high-performance Nimble storage arrays for just one-fifth of the price of all of the alternatives! Nimble Storage offers a converged solution that delivers all of the performance we need, at a price we love, all contained in one box.”
Visit us at Booth #405

- Demo or eval unit: sales@nimblestorage.com