SOLUTION BRIEF

Virtual Desktop Solution with Citrix XenDesktop and XenApp

Simplify the delivery of virtual desktops and applications with Citrix® XenDesktop and XenApp, and empower users with simple-to-scale and always-on Cisco® validated FlashStack® solutions.

FLASHSTACK SOLUTION WITH CITRIX XENDESKTOP AND XENAPP

FlashStack virtual desktop infrastructure (VDI) solutions from Cisco and Pure Storage help you free IT staff by reducing the amount of time spent on desktop infrastructure and management. When it's time to scale your environment, our solution for up to 5000 users enables you to flexibly upgrade capacity and performance without downtime. Its cloud-like capabilities help you provide constant access to virtual desktops across your organization, even as you grow.

You will never have to rip out and replace existing computing or storage resources when you increase capacity. By standardizing on this integrated infrastructure platform, you can streamline operations with intuitive Cisco management tools. We pretested and validated the solution with a Cisco Validated Design that provides a comprehensive guide to help you accelerate and simplify your Citrix XenDesktop® rollout.

FLEXIBLE GROWTH
Scale up to and beyond 5000 users with a building-block approach

STREAMLINED OPERATIONS
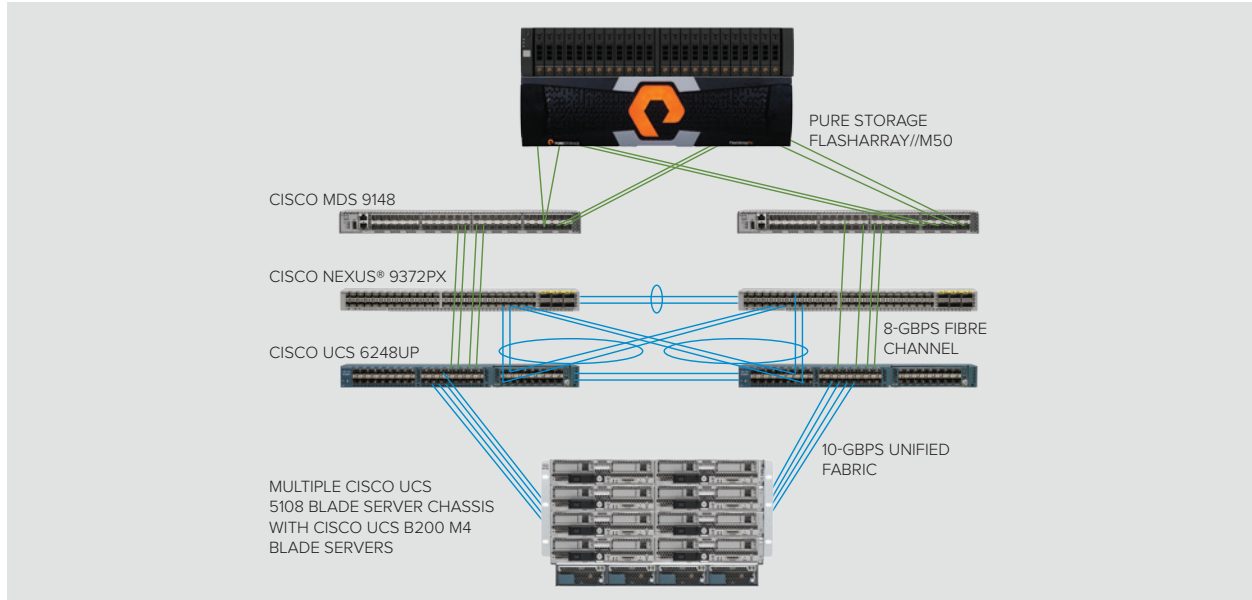*Easily deploy, manage, and scale with FlashStack.*

CHOICE AND TRANSFORMATION
Transform your business and increase productivity with centralized desktops and virtualized applications

REDUCED RISK
Cisco® Validated Designs reduce risk and speed deployment with a cookbook approach

Diagram labels:
- PURE STORAGE FLASHARRAY//M50
- CISCO MDS 9148
- CISCO NEXUS® 9372PX
- CISCO UCS 6248UP
- 8-GBPS FIBRE CHANNEL
- MULTIPLE CISCO UCS 5108 BLADE SERVER CHASSIS WITH CISCO UCS B200 M4 BLADE SERVERS
- 10-GBPS UNIFIED FABRIC

FLASHSTACK

FlashStack is enterprise-class integrated infrastructure from Cisco and Pure Storage. It is a tightly integrated combination of Cisco UCS® Integrated Infrastructure and Pure Storage® FlashArray storage.

Cisco Validated Design with FlashStack for Up to 5000 Citrix XenDesktop Users

The Cisco Validated Design for this solution specifies Cisco UCS B200 M4 Blade Servers and Pure Storage FlashArray//m Series

storage running Citrix XenDesktop 7.9 and Citrix Provisioning Services 7.9. It was tested with both persistent and nonpersistent virtual desktops running Microsoft® Windows® 8 and 10 desktops and shared Microsoft Windows Server 2008 R2 or Server 2012 R2 server desktops, providing exceptional scale and management simplicity to this environment. For this design Citrix XenDesktop pooled nonpersistent Window 10 desktops (1200), persistent Windows 10 desktops (1200) and Citrix

XenApp® Server 2012 R2 Remote Desktop Services (RDS) server-based desktop sessions (2600) on the Pure Storage array.

We tested a FlashStack solution that consisted of 28 Cisco UCS B200 M4 Blade Servers together with a Pure Storage FlashArray//m50 attached through a Fibre Channel SAN. VMware® vSphere® 6.0 Update 1 was the underlying virtualization platform (see figure). For an outstanding user experience, the blade servers can

be equipped with the NVIDIA Tesla M6 graphics processing unit (GPU) accelerator, which can be shared by multiple desktop users.

FLEXIBLE GROWTH
With FlashStack, you can increase storage, computing capacity, and network performance independently, in real time, without significant infrastructure change or disruption, by taking advantage of the FlashStack flexible upgrade approach. This approach allows you to start small and grow with confidence. This 5000-seat solution provides guidance about how to scale up to 5000 desktops in a single FlashStack instance, and how to use multiple FlashStack

instances to scale to tens of thousands of users.

STREAMLINED OPERATIONS
With FlashStack, you can reduce your staff's work effort while also protecting mission-critical data and infrastructure by using easy-to-use, familiar Cisco management tools such as Cisco UCS Director. By consolidating many virtual desktops on FlashStack, you can manage them in a unified and standardized way to automate and simplify your processes and workflows. With FlashStack, you can reduce risk and lower costs by eliminating manual configuration processes that can cause errors and downtime.

Scale to 5000 Citrix XenDesktop Users and Scale Beyond by Replicating the Solution Using a Building-Block Approach

SERVE EVEN MORE USERS BY REPLICATING THE SOLUTION

SOLUTION BRIEF *VIRTUAL DESKTOP SOLUTION WITH CITRIX XENDESKTOP AND XENAPP*

CHOICE AND TRANSFORMATION

You can empower your entire organization with cloud-like capabilities that also give you the control and security you require. With the power and flexibility of FlashStack, you can roll out the solution quickly and transform your end-user experiences with simple, fast, on-demand IT. Our solution supports high-productivity users—even those with the most aggressive desktop workloads. FlashStack supports these users with ease, building on the performance and scalability of Cisco UCS in combination with all-flash Pure Storage arrays.

DELIVER FLEXIBLE DESKTOPS TO YOUR USERS

Deliver mission-critical workloads and empower users by deploying the extensible, continuously available, validated and tested FlashStack solution from Cisco and Pure Storage. Upgrade capacity without downtime and deploy cloudlike capabilities to help ensure constant access to data across the organization. Free IT staff to innovate by reducing the amount of time spent on infrastructure management.

FOR MORE INFORMATION

- Read the *Cisco Validated Design*
- Visit *www.cisco.com/go/flashstack*
- Contact *flashstack@purestorage.com*

PURE STORAGE, INC. 650 CASTRO STREET, MOUNTAIN VIEW, CA 94041

flashstack@purestorage.com   *www.cisco.com/go/flashstack*

FlashStack

SOLUTION BRIEF