Deploy a simple and flexible virtual desktop infrastructure solution with Cisco HyperFlex VDI for Citrix. The combination of Cisco HyperFlex Systems with Citrix XenApp and XenDesktop solves the toughest digital workplace issues. Securely deliver virtual apps and desktops anytime, anywhere, on any device.

Overcoming today’s IT challenges
Fast-paced markets require businesses to be more agile than even before. This presents several challenges for IT leaders and organizations. They must:

- Increase business and IT flexibility.
- Manage costs more effectively.
- Improve application availability.
- Reduce IT complexity.
- Simplify infrastructure management.

Combining hyperconverged systems with application and desktop virtualization and delivery technologies can help you transform your IT infrastructure to overcome these challenges. Based on Cisco HyperFlex Systems and Citrix XenApp, XenDesktop, and NetScaler, Citrix and Cisco offer innovative virtual desktop infrastructure (VDI) solutions that combine worker mobility, video and collaboration tools, broad device support, and secure access to applications and content.

Cisco HyperFlex VDI for Citrix
Together, Citrix and Cisco provide simplified management and lower total cost of ownership (TCO) through a fully certified, turn-key solution for application and desktop virtualization and software-defined application delivery with a broad, validated architecture that scales as you grow.

The Cisco HyperFlex VDI for Citrix solution consists of the following components:
- Cisco HyperFlex Systems
- Cisco UCS fabric interconnects
- Cisco UCS Manager
- Cisco Nexus platform switches
- Cisco HX Data Platform
- Citrix XenDesktop (including XenApp)
- Citrix NetScaler
- VMware EXSi hypervisor

Cisco HyperFlex Systems deliver complete hyperconvergence, combining software-defined networking and computing with the next-generation Cisco HX Data Platform. Citrix XenDesktop provides comprehensive application and desktop virtualization on the unified architecture. Citrix NetScaler supplies advanced, software-defined application delivery control and load balancing.

This solution focuses on simplicity of deployment and operation. It features a hyperconverged platform that allows you to start small and grow incrementally without the need for expensive storage devices connected to computing resources by either storage area network (SAN) or network-attached storage (NAS) methods. Cisco HyperFlex deployment spans three or more HX-Series nodes to create a highly available cluster. Cisco HyperFlex also provides the flexibility to independently
scale capacity or compute resources according to application needs. To increase capacity, simply add more drives to existing nodes. To scale compute resources, connect compute-only blades or racks to the cluster.

The Cisco HyperFlex solution includes storage efficiency features like thin provisioning, data deduplication, and compression for greater capacity utilization. Native and space-efficient clones and snapshot capabilities let you instantly deploy and protect virtual machines.

The combination of Cisco HyperFlex Systems and Citrix XenApp, XenDesktop, and NetScaler solves the toughest workforce mobility problems with simplicity, efficiency, and flexibility.

**Deploy faster**

Citrix and Cisco's validated, pre-packaged solution helps you deploy your VDI environment more quickly. Provision your environment in less than one hour using automatic server configuration through Cisco UCS service profile templates. Improve automation and scalability with UCS Manager and XenDesktop user profile templates that pre-define detailed user access policies. Reduce deployment risk with a certified solution that is part of the tried, tested, and validated Cisco UCS architecture in use by more than 50,000 customers.

**Streamline management**

The Cisco HyperFlex VDI for Citrix solution unifies management using a single set of tools to speed changes and increase reliability. Decrease administrative overhead with a single point of control for all system hardware and software. Cisco UCS management handles all of a cluster’s hardware management functions and is accessible through a VMware vSphere plug-in. Simplify operations and allow staff to continue using the mechanisms they already know via integration with hypervisor tools. Cut application management costs by as much as 90% using XenDesktop to securely deliver virtual desktops on any cloud, public or private. Increase virtualization flexibility with support for existing and new cloud-native data types through HyperFlex’s open, API-based architecture. Analyze system data to optimize cluster and resource expansions using HX Data Platform.

**Manage and protect data more easily**

The Citrix and Cisco solution centralizes data and eliminates separately attached storage to better protect your business. You can keep data safe and contained in the data center with a desktop virtualization solution that is secure by design. Centralize backup facilities, streamline storage management, and consolidate storage resources to reduce complexity.
The Cisco HX Data Platform also includes enterprise-class data management features to further enhance data protection.

**Deliver a better user experience**

The Cisco HyperFlex VDI for Citrix solution lets you deliver a high-quality experience to both end users and employees. Give your employees the freedom to work from anywhere with universal access to virtual apps, desktops, and data from any device. Provide reliable, instant desktop responsiveness to user interactions using Citrix HDX to adaptively compress and deduplicate network traffic. Offer fast and intuitive self-service access to desktop applications and collaborative tools through integration with Citrix StoreFront. Improve user privacy by partitioning work and personal information on end-user devices. Maintain consistent performance—even as demand increases—with dynamically scalable compute, storage and network resources.

**Optimize infrastructure and reduce costs**

This solution adjusts resources independently to optimize your infrastructure and trim costs. Increase storage efficiency and resource utilization with inline deduplication and compression. Use Citrix HDX to raise host server user density by redirecting end-point processing power. Employ thin provisioning to deploy services using less storage. Reduce storage costs by up to 80% with Cisco HyperFlex storage optimization. Deliver services faster over an integrated low-latency, high-bandwidth network fabric and streamline hyper-converged network management through integration with Citrix NetScaler.

**Secure end-points**

Citrix XenDesktop gives you a single, unified solution for delivering services over any network and cloud. Ensure secure connectivity and compliance for all users with granular access control policies and separation of work and personal information. Further enhance protection and reliability by using Cisco HyperFlex to implement virtual network links with physical cable security.

With an independently scalable, optimized infrastructure, the Cisco HyperFlex VDI for Citrix solution lets you deliver high-definition apps and desktops to any device.
Make the most of end-user devices
Citrix and Cisco help you take advantage of end-user devices, including BYOD and mobile devices. Deliver reliable desktop and application access to any device over any connection with XenDesktop's Windows Virtual Desktop Infrastructure. Provide end-user choice with support for both application and desktop virtualization. Enable new operating systems and new versions of existing operating systems—without impacting end-user devices.

Scale while maintaining business control
The Cisco HyperFlex VDI for Citrix solution lets you scale incrementally. Gain immediate functionality from pre-integrated Cisco HyperFlex servers that come with pre-installed hypervisor software. Add compute and storage capacity as needed with an independently scalable, pay-as-you-grow model that enhances business agility.

Prepare your business for the future
Citrix and Cisco help you ready your business for the future through virtual delivery. Deploy new applications and services instantly using space-efficient cloning to provision hundreds of virtual machines from existing templates in seconds. Increase application flexibility by running Citrix NetScaler with Cisco HyperFlex to provision and run services more efficiently. Enable DevOps through integration with third-party provisioning, configuration, and orchestration tools.

Transform your IT infrastructure today
To be successful in fast-paced markets, you need to transform your IT infrastructure. Using industry-leading, proven components, Citrix and Cisco offer complete solutions that deliver the simplicity, efficiency, and flexibility you need to meet fast-changing business needs. Visit www.citrix.com/cisco and www.cisco.com/go/citrix to learn more about Citrix and Cisco's innovative virtual workspace solutions.