

Cisco Virtualization Experience Infrastructure



Overview

The modern workplace continues to evolve, with demands for improved work mobility, new bring-your-own-device (BYOD) initiatives, and a need for an increasingly agile, productive, and collaborative workforce. IT needs to balance these requirements with ongoing concerns for data protection, compliance, and security, as well as lower total cost of ownership (TCO) and improved operation efficiency.

To address these needs and support the initiatives of the organization, IT must look at end-user computing and communications architectures in a new and broader way. IT needs to develop a workspace strategy that satisfies and balances the evolving, and sometimes contradictory, needs of the organization, IT, and end users. The [Cisco® Unified Workspace](#) provides solutions that help IT deliver appropriate access to applications, data, and communications services for a diverse and evolving user population. By adopting a unified workspace strategy, IT can liberate users from the confines of any single physical device or location and provide the security and control that IT requires.

The [Cisco Virtualization Experience Infrastructure \(Cisco VXI™\) Smart Solution](#) is a virtualized approach to deliver the unified workspace. Cisco VXI is a comprehensive desktop and application virtualization solution that supports the varied needs of different workgroups, while providing an uncompromised user experience that is collaborative, mobile, and secure.

Providing Better Desktop Virtualization and a Unified Workspace

Cisco VXI combines Cisco's industry-leading data center, networking, and collaboration technologies (Figure 1) with services, validated designs, and a robust partner ecosystem to help IT simplify deployment, reduce costs, and mitigate risk.

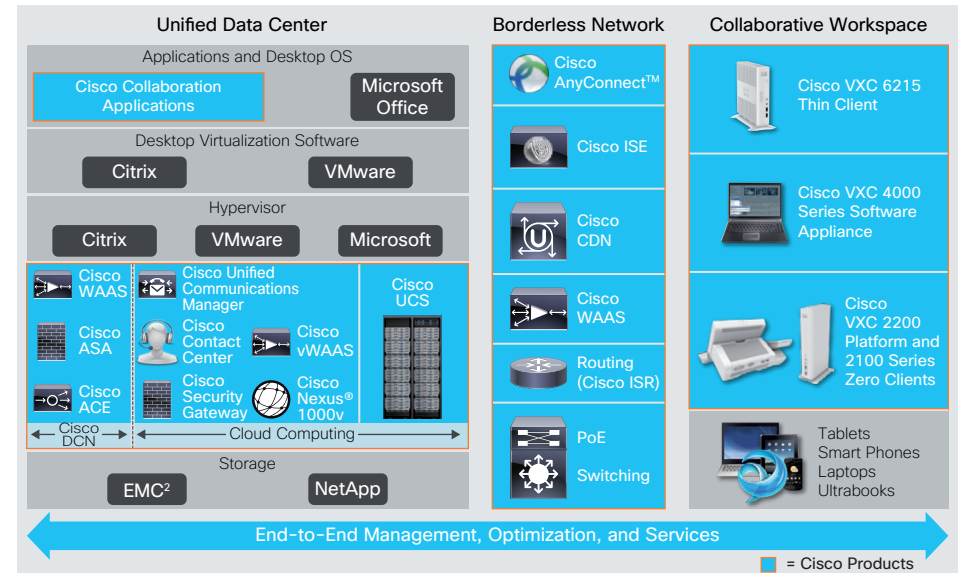
The core of Cisco VXI is the highly scalable [Cisco Unified Data Center](#), which securely and efficiently hosts virtual desktops and applications and dramatically simplifies deployment and management.

The centrally hosted virtual desktops are delivered to user devices at any location across a secure wired or wireless network infrastructure, optimized to deliver virtual desktop, communications, and collaboration services, based on the [Cisco Borderless Network Architecture](#).

The virtualized collaborative workspace can be delivered on a diverse range of company-issued and employee-owned devices that support virtual desktop clients and the [Cisco Collaboration Solutions](#), including Cisco Jabber™, to enable a consistent application, desktop, and communications experience anywhere.

These devices include thin clients, zero clients, smartphones, tablets, and innovative [Cisco Virtualization Experience Client \(VXC\)](#) endpoints, which combine virtual desktops with voice and video capabilities.

Figure 1. Cisco VXI Smart Solution



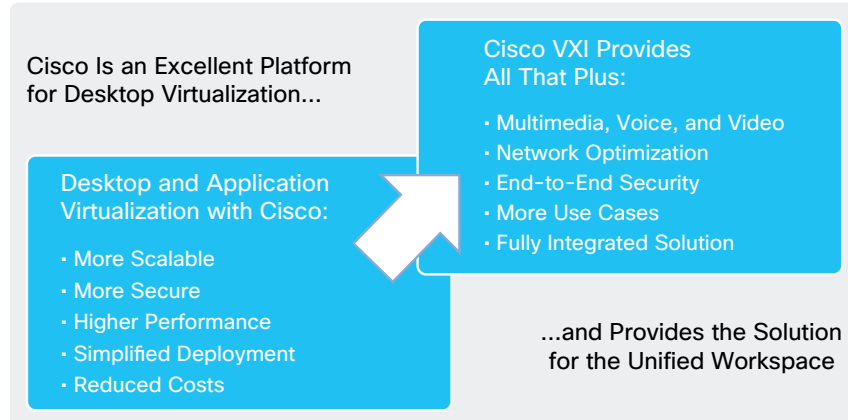
Cisco works with an ecosystem of industry-leading partners, including Citrix, VMware, NetApp, and EMC, to provide tested and validated Cisco VXI solutions that deliver:

- A validated end-to-end system and a roadmap that enables customers to evolve from virtual desktops to virtual workspaces that support voice and video, and to unified workspaces that combine virtual and native application delivery models
- Advanced data center fabric and computing platforms, based on the [Cisco Unified Computing System \(Cisco UCS®\)](#), optimized for virtualization and with the highest density of virtual machines per server blade
- Superior network infrastructure, providing secure, optimized virtual desktop, voice, and video delivery alongside traditional traffic types
- Multimedia capabilities and innovative endpoints that meet the productivity and collaboration needs of diverse end users, including task, mobile, and remote knowledge workers
- A robust portfolio of professional services and support to help accelerate deployment times while reducing costs and risk



The Cisco VXi architecture provides an excellent platform for traditional desktop virtualization and the new unified workspace. Desktop and application virtualization on Cisco Unified Data Center and Borderless Networks architectures is more scalable and secure and delivers higher performance, simplified deployment, and reduced costs compared to other architectures. Cisco VXi can go beyond traditional desktop virtualization and provide an integrated and optimized multimedia, voice, and video solution that addresses the complete workspace: computing, communications, and collaboration (Figure 2).

Figure 2. Cisco VXi – The Platform for Desktop Virtualization and the Unified Workspace



Benefits of Cisco VXi

Cisco VXi provides benefits for the entire organization and for a broad variety of organizations and different user types:

- For end users: A high quality user experience on any device from anywhere
- For IT: A scalable and secure infrastructure to deliver IT as a service (ITaaS)
- For the organization: Improved agility and productivity with lower operating costs
- For field teams that need a mobile workspace: Secure access to data, applications, and communications while at the office, in branch offices, engaging with customers, and on the road
- For remote and branch-office users: Access from their personal office spaces or shared flex-office spaces to the intranet, collaboration and enterprise systems, and shared resources

- For teleworkers: The same access at home as in the office to applications, desktops, and collaboration tools
- For knowledge workers: Nonstop access to their desktops, enterprise applications, and communications from a broad set of locations
- For campus and conference-room professionals: Portable voice, video, and data on laptops and tablets; onsite mobility is important to many workgroup types
- For temporary workers, contractors, and partners: Fast access from campus or their own offices to many of the same systems as permanent staff

Conclusion

The modern workplace is changing rapidly, bringing opportunities for end users, IT, and organizations that adopt and manage these changes. Project leaders should consider the following guidelines in exploring the implementation of new workspace solutions:

- Define the end-state workspace strategy. What will the required services look like in the future?
- Build a unified workspace team that will guide the end-to-end design and implementation of the strategy.
- Identify the primary business and IT priorities and benefits, such as user flexibility, data security, cost savings, and BYOD enablement.
- Develop a workspace use case and technology roadmap, engaging application, data center, network, and security stakeholders. Start with a few pilot use cases.
- Use the [Cisco Validated Designs for Cisco VXi](#) to help accelerate deployments.
- Engage your Cisco team and Cisco partners that support Cisco VXi, who can help accelerate your success.
- Use the [Cisco Desktop Virtualization Services](#) portfolio of advanced services, which cover all phases of the initiative: planning, designing, deployment, implementation, operation, and optimization.

Additional Resources

- [Cisco VXi website](#)
- [Cisco VXi design guides](#)
- [Cisco VXi Services](#)
- [Cisco VXi with Citrix](#)
- [Cisco VXi with VMware](#)