

# Cisco Virtual Desktop Infrastructure Solutions

## Provide mobility, security, efficiency and an amazing end-user experience with virtual desktops and applications

Users want access to their applications wherever they are. They want to access them from a variety of devices, and they want to use them whenever they want. It is in the organization's best interest to meet their requirements. It means a significant increase in user productivity. It means users can capture that "ah ha" moment while, for example, in line at the coffee shop.

An IT organization that provides desktops and application services via Virtual Desktop Infrastructure (VDI) can achieve lower CapEx and OpEx outlays to support mobility, efficiency, and powerful end-user experiences by deploying virtual services compared to typical full PC and application support. Access to the virtual desktop and virtual application infrastructure is via secure web services both internally and externally. Access is controlled by a policy set based on organizational requirements. All the organization's intellectual property is protected in the data center, greatly reducing the attack surface from malicious or accidental breach. Coupled with endpoint management tools, support for "Bring-Your-Own" (BYO) devices is possible.

It is possible to provide GPU-enhanced performance to virtual desktops and applications that can benefit from them. Modern desktop operating systems and applications are GPU-aware. GPUs and CPUs work synergistically to enhance the virtual desktop end-user experience. Cisco partners with AMD and NVIDIA to offer GPUs to meet customer requirements.

## Benefits

- **Reduce OpEx** by centralizing desktop and application patches and upgrades
- **Reduce CapEx** by utilizing lower-cost endpoint devices and enabling Bring-Your-Own (BYO) compute devices
- **Support secure mobility** by delivering desktops and applications on smart phones, tablets, Microsoft Windows, and Linux laptops and desktop computers
- **Increase user productivity** by reducing file load times, eliminating required update reboots during business hours
- **Secure intellectual property** by keeping data in the data center, controlled by policy
- **Increase workforce efficiency** by utilizing human resources to complete workflows regardless of their geographic location
- **Increase collaboration** by enabling up to five users to share and manipulate a single virtual desktop in real time

## Reduce CapEx and OpEx

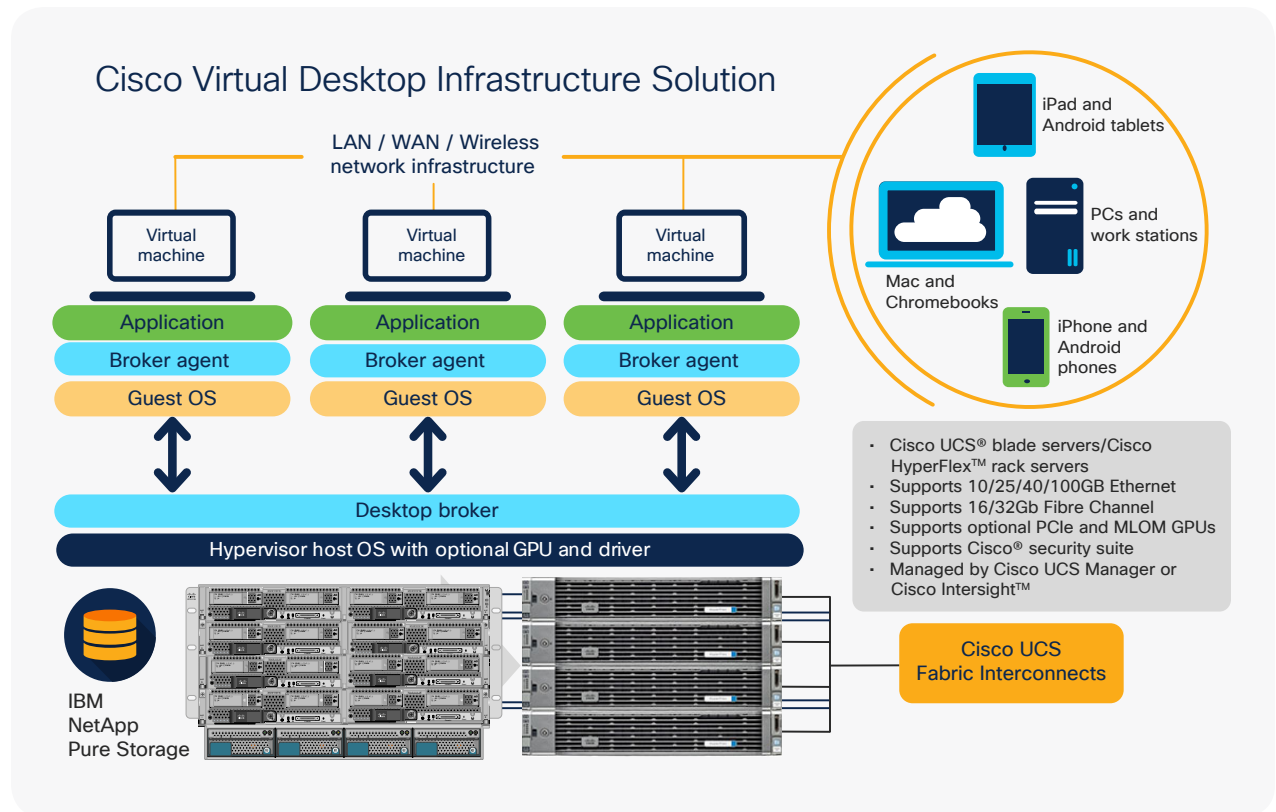
By centralizing the deployment and maintenance of your workforce desktop and application infrastructure in the data center, Capital Expenditure (CapEx) and Operating Expenditures (OpEx) can be reduced.

From the CapEx point of view, savings can be achieved by using lower-cost user endpoints, such as thin clients, tablet computers, and even smart phones. The life of existing endpoints can be extended, and organizations can begin or extend their use of Bring-Your-Own-Device (BYOD) strategies.

OpEx savings are achieved by central maintenance of desktop and application image files, reducing management of individual devices and reducing helpdesk calls from individual users.

Cisco UCS® and Cisco HyperFlex™ systems offer platform-choice flexibility to meet the specific requirements of any organization. The strength of our management foundation makes deploying and maintaining a virtual desktop and application infrastructure consistent, fast, repeatable, and reliable.

Cisco partners with the leading desktop and application virtualization software vendors, Citrix and VMware. Our technical marketing engineers publish Cisco Validated Designs (CVDs), which provide detailed guidance on how to deploy the solution from our partners, taking the risk out of the project.



## Start providing users the mobile, multidevice access they are demanding today.

Cisco® virtual desktop infrastructure solutions not only enable you to deliver the access today's workers want, but they do so while securing your intellectual property and saving the organization money. For additional information visit:

[Cisco VDI Landing Page](#)

[Cisco VDI with Citrix Landing Page](#)

[Cisco VDI with VMware Landing Page](#)

[Cisco Validated Design Navigator](#)

Or contact a Cisco or Cisco Partner account manager.

## Increase workforce efficiency, collaboration, and productivity

When workforces are temporarily out of balance geographically with workloads in a physical desktop environment, little can be done short of moving people to other locations to get those resources where they are needed. With virtual desktops and applications, those geographic boundaries are eliminated.

Virtual desktops and applications enable collaboration in real time between users in different geographic location. Applications and files associated with them are collocated in the data center and available to any user who is authorized to access them, making collaboration natural and efficient. No more sending files via email or sharing with external drives.

These key benefits make workers more productive. They have the applications and files in the data center, eliminating wait times for data access and reducing file load times, compared with downloading files from network shares and loading them locally.

## Support secure mobility and secure intellectual property

Today's workforce expects to access their data and applications wherever they are and on a variety of devices. Desktop and application virtualization facilitate meeting that expectation securely. Access to the virtual desktops and applications can support multifactor authentication and policy-based authorization and is delivered over Secure-Socket-Layer (SSL) connections from the endpoint to the system. Using endpoint management suites from Citrix or VMware, endpoints attempting to access the data center can be screened for policy compliance, remediated if they are out of compliance, or denied access entirely.

Collocating the virtual desktops, virtual applications, and data in the data center, and restricting the ability to download data to endpoints, are powerful tools in protecting an organization's intellectual property. This capability also reduces the potential for data loss caused by multiple users downloading and modifying files independent of one another and then uploading the files, potentially overwriting one of the user's changes.