# **Cisco Virtual Workspace (VXI) Smart Solution**

### Delivering the Next Generation Virtual Workspace

Cisco Virtual Workspace (VXI) Smart Solution accelerates virtual desktop adoption in a fully integrated, open, and validated end-to-end solution. It is flexible and highly secure, and delivers an uncompromised user experience and best in class ROI.

The solution addresses every dimension of planning, deploying, and supporting virtual desktops and applications across the organization by bringing together Cisco's data center, network, and communication and collaboration architectures. Cisco integrates technologies from ecosystem partners to create a comprehensive end to end solution.

This solution helps power the Unified Workspace. Cisco<sup>®</sup> Unified Workspace lets organizations support evolving processes and work styles so employees can be productive on any device wherever and whenever they want, without jeopardizing security or business goals. It delivers workspaces securely with the right applications, content, and services for an enhanced user experience. Employees can operate more efficiently and organizations can achieve maximum flexibility.

Cisco Smart Solutions are built on a common technology stack that addresses the full range of worker needs. They are fully integrated, validated, and supported by services from Cisco and our partners to offer customers a powerful workspace solution, and a trusted partner for peace of mind.



### Benefits

	Enables	Benefit
Service Velocity	Fast, simple provisioning of virtual applications, desk tops, and workspaces	Accelerates adoption of new service delivery models
Open Ecosystem	Broad range of choices for solution elements	Maximizes flexibility, simplifies deployment
Integrated Virtual Work Environment	Support for any user requirement on any device and any location	Improves user satisfaction
Centrally Managed Infrastructure	Deployment, operations, and support for new end user services	Reduces IT costs
Rich Media Support	Virtualized computing, communications, and collaboration on any device in any location	Superior end user experience
Data Confidentiality	Role and identity-based access control for sensitive data; encryption of data at rest and in motion	Improves compliance and protects intellectual property

## For More Information cisco.com/go/vxi

## **Virtualized Data Center**



### Industry Leading Virtualization Solutions

Cisco Unified Computing System™ (UCS) provides the ideal infrastructure for hosting small to very large provides session management, voice, video, virtual desktop deployments. The solution offers a choice of hypervisors– Vmware

vSphere<sup>™</sup>, Citrix XenServer<sup>®</sup>, Microsoft<sup>®</sup> Hyper-V<sup>™</sup>.

#### **Optimized Desktop Virtualization and** Communications

Cisco provides scalable, secure, and manageable infrastructure for hosting virtual desktops, shared desktops, and virtual applications with solutions such as Citrix<sup>®</sup> XenDesktop<sup>®</sup>, Citrix<sup>®</sup> XenApp<sup>™</sup>, and VMware® View™.

The solution combines desktop virtualization with Cisco Unified Communications applications that integrate voice, video, conferencing, instant messaging, presence, and directory lookup.

#### Service Aggregation

Cisco WAAS Central Manager controls WAAS devices throughout the network. Cisco Application Control Engine (ACE) provides load balancing and health monitoring for connection brokers. Cisco ASA concentrates VPN traffic and provides firewall services for the data center.

Cisco Identity Services Engine (ISE), a key component of Cisco TrustSec, provides consistent security policy enforcement and controls access for Vblock Type 1 and FlexPod solutions. BYOD environments. Cisco Mobility Services Engine (MSE) provides context-aware services for Unified Access infrastructures.

and networking.

Flexible Storage Options The solution supports Fibre Channel, iSCSI, and FCoE-based SANs, and Ethernet-based networkattached storage (NAS). Tier 1 storage partners include EMC and NetApp. Cisco has validated both The solution supports several local storage options,

and other countries. A listing of Cisco and the U.S. and other countries. All isting of Cisco and in other countries. All other third party trademarks of Citrix <sup>®</sup>, XenDesktop<sup>®</sup>, XenDe the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1007R)

#### **Collaboration Applications**

Cisco Unified Communications Manager messaging, mobility, and conferencing for platform communication.

Cisco Unified Contact Center Enterprise hosts agent desktops, secures data, and enhances business continuity for enterprise contact centers.

#### Virtualized Network Solutions

- Cisco Nexus 1000v for VMware vSphere or Microsoft Hyper-V hypervisors leverages Cisco
- VM-FEX virtualization technology to deliver policy-based VM connectivity, mobile VM security,
- Cisco Virtual Security Gateway (VSG) provides secure segmentation of Virtual Machines using granular, zone-based control and monitoring with context-aware security policies.
- Cisco Virtual WAAS (vWAAS) accelerates business applications using policy-based configuration in the Cisco Nexus 1000v switch.

including server on-board flash storage options such as the Cisco UCS Storage Accelerator.





#### **Unified Access Infrastructure**

The Cisco Unified Access infrastructure supports virtual desktop users, bring-your-own-device (BYOD) capabilities, and the Internet Cisco Network Analysis Module (NAM) and Cisco Netflow are used of Everything (IOE). Cisco Unified Access connects people, processes, data, and things with greater intelligence, security, and efficiency than ever before.

Cisco Unified Access leverages one policy, one management, and one network to deliver an integrated and simplified intelligent network platform that empowers users to work their way. Cisco Unified Access provides context-based central policy

comprehensive lifecycle management, performance assurance, and compliance for converged wired and wireless networks. Campus Access

802.1x authentication enables users and traffic types to be characterized according to login characteristics. Automatic port provisioning dynamically provisions clients based

on device identity. Cisco UPoE support simplifies deployment and reduces costs.

#### WAN

Cisco WAAS in data center and remote locations optimizes bandwidth and accelerates application performance across the WAN.

Cisco Performance Routing improves application performance by selecting the best path across the WAN based on network metrics. to monitor, manage, and troubleshoot network traffic flows.

### Branch Access

WAN optimization for print, data, and MMR traffic with either Cisco WAAS SRE or Cisco WAAS Express. Power over Ethernet support.

Quality of Service (QoS) for voice and data. throughout the network, with system wide visibility. It also provides Cisco Network Analysis Module (NAM) can be placed in branch to troubleshoot connectivity problems for a specific location. Cisco DMVPN solutions help branch devices communicate securely over untrusted links.

#### **Remote Access**

For fixed teleworkers, Cisco Virtual Office Solution enables secure access to virtual desktops from outside the corporate network, using IPsec VPN tunneling between the remote office and the head-end Cisco ASA.

For Mobile teleworkers, Cisco AnyConnect Client provides a secure VPN connection between a Windows-based laptop and a campus or Data Center-based Cisco ASA. Cisco WAAS Mobile optimizes traffic between mobile users and their virtual desktops in the data center.

### **Collaborative Workspace**



#### **Enhance Productivity**

Cisco Jabber lets users collaborate using presence, instant messaging (IM), voice, video, voice messaging, desktop sharing, and conferencing.

#### Any Device, Any OS

Cisco Jabber enables collaboration on any device. Support users on a broad range of industry-leading tablets, smart phones, laptops, and ultrabooks, whether mobile or desktop-bound.

#### Pervasive, Unified Communications

Enable pervasive unified communications with Cisco Jabber, which runs natively in end user devices, in virtualized desktops, or as a virtualized application.

#### Virtualization

Cisco Jabber in the hosted virtual desktop works with Cisco VXME in the local device to unify presence, instant messaging, voice, video, voice messaging, and conferencing.



#### Extend the Cisco Jabber Experience

extends the Cisco Jabber unified collaboration thin clients, and seamlessly integrates with experience to users in virtualized environments existing voice and video infrastructures. by enabling real-time intelligent processing of voice and video traffic on the local device.

#### Eliminate Hair-Pinning

Cisco VXME eliminates hair-pinning of traffic and user experience. through the data center; call traffic flows directly from endpoint to endpoint. This functionality increases server scalability and reduces network bandwidth requirements from megabytes to kilobytes.

#### Prioritize Voice and Video

Cisco VXME automatically prioritizes voice and video traffic through network-based Quality of Service (QoS) and integration with Cisco Medianet.

#### Seamless Integration

Cisco Virtual Experience Media Engine (VXME) Cisco VXME runs on Windows devices and

#### **Easy Provisioning**

Leverages the Cisco Client Services Framework to enable consistent provisioning

#### Integrated UC Accessories

Cisco VXME supports integrated UC accessories that include a headset, handset, speaker-phone, camera, keyboard, and mouse. For more information on supported accessories, visit cisco.com/go/ucaccessories.

Support Industry-Leading Solutions Cisco VXME is supported with Citrix XenDesktop, Citrix XenApp published desktops, and VMware View.