

Regain Control of the Desktop: Cisco Desktop Virtualization Solution with VMware View 4.6



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Today's Agenda

- Cisco + VMware: Better Together
- Modernizing the Desktop
- Cisco Desktop Virtualization Solution with VMware View
- Customer Use Case Example
- Getting Started

Cisco and VMware

Leaders in Enterprise Networking, Computing and Virtualization



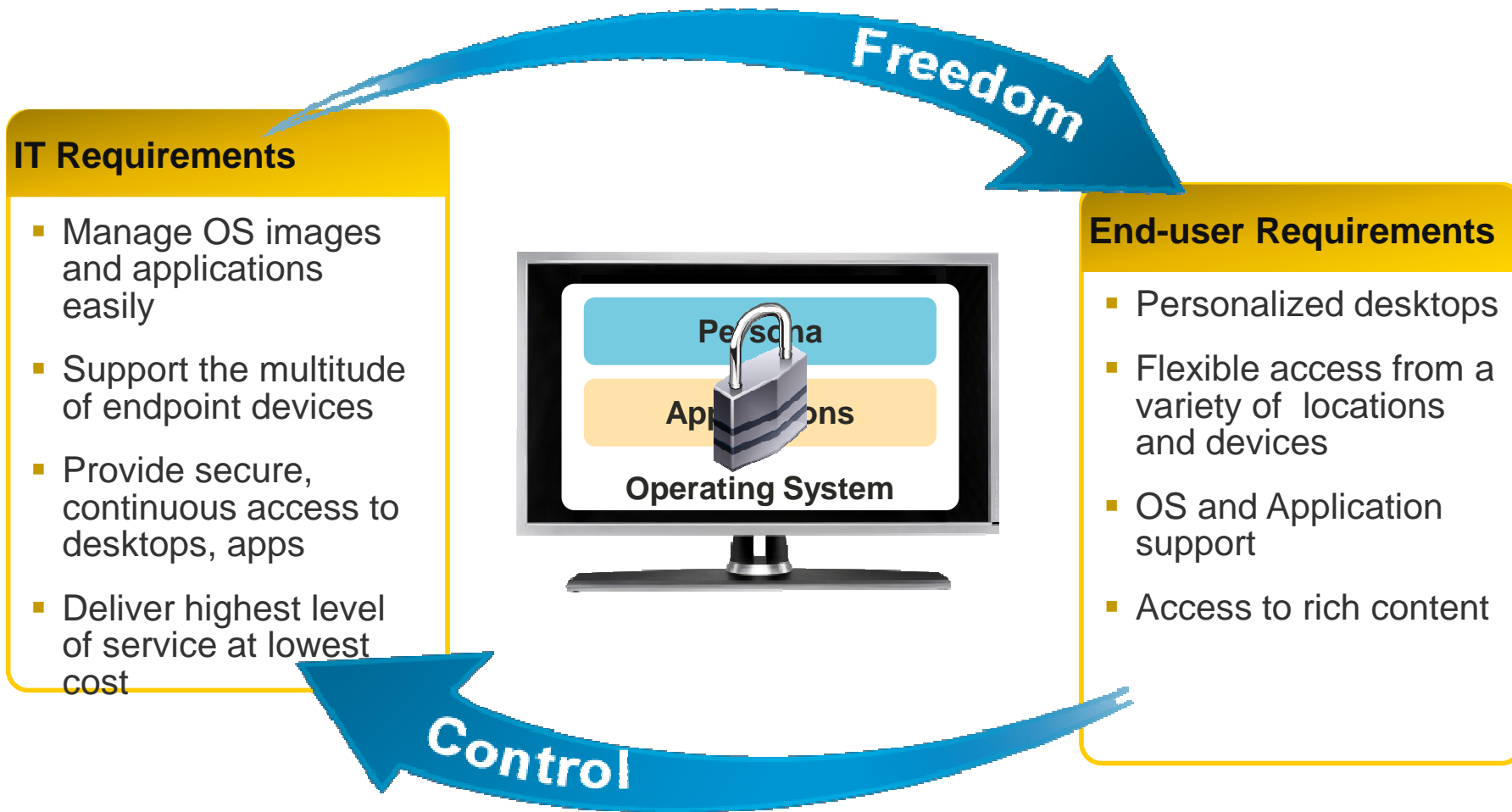
- Leader in networking from desktop to data center
- First virtualization-optimized compute solution
- 10 World Record Benchmarks including Highest VMware VMmark performance with Intel Xeon processors
- Cisco Unified Computing System™ deployed in over 2,800 enterprises in first year

- End-to-end solution optimized to deliver virtual desktops
- First to deliver a purpose built display protocol for desktop virtualization
- First to integrate online and offline capabilities for desktop virtualization
- Over 10,000 customers

Together, delivering a hardware and software solution that meets customer needs for simplicity, scalability, and lowest cost

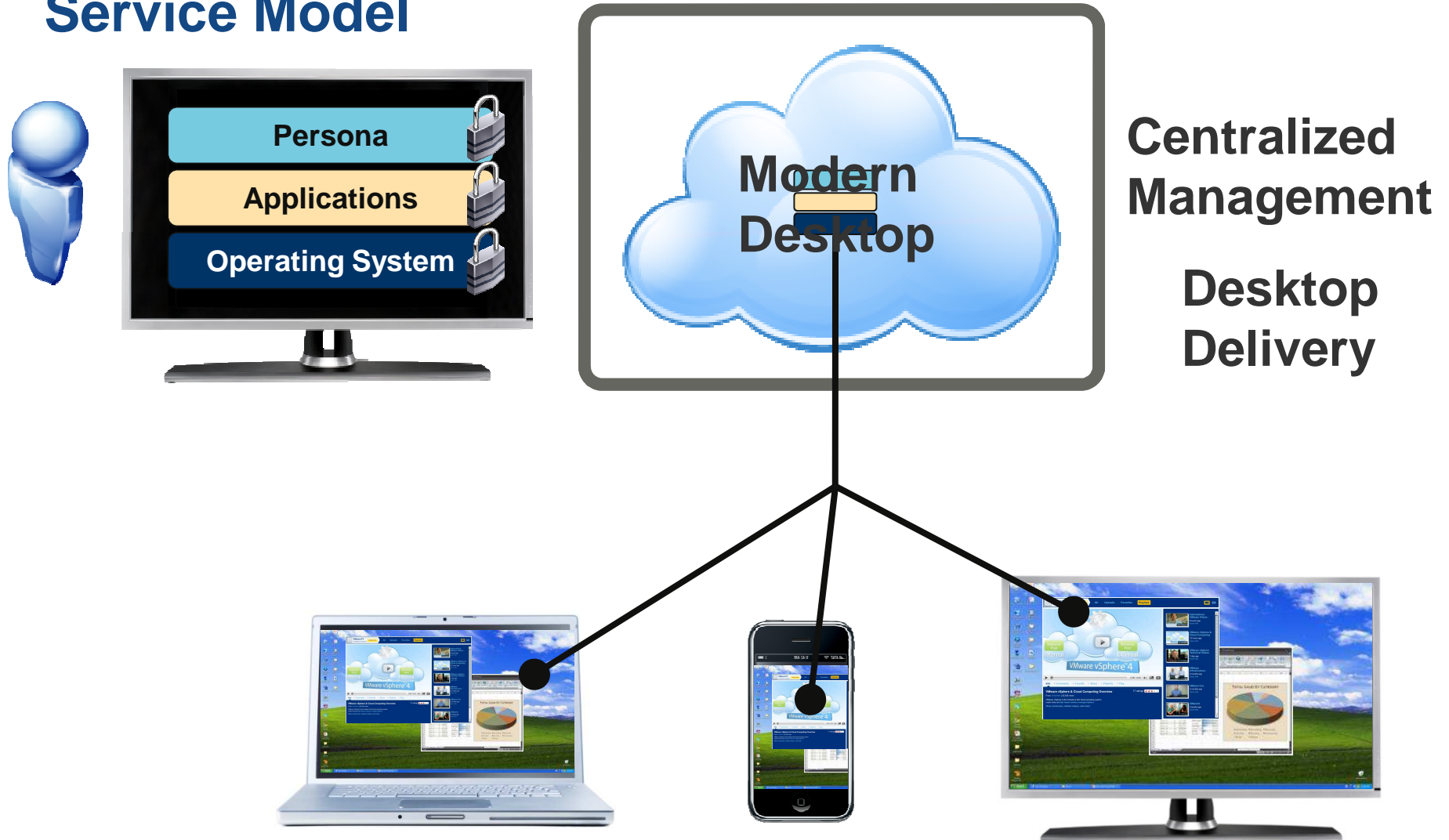


The Desktop Dilemma – Freedom or Control?



How do you solve the desktop dilemma while providing the best solution at the lowest cost?

Modernizing the Desktop – A Managed Service Model



Wide Range of Customer Use Cases

Windows 7 Migration



- Reduce migration costs
- Minimize application incompatibility
- Extend life of existing desktop software

Business Process Outsourcing



- Reduce costs by managing desktop applications and users centrally
- Centrally control sensitive data
- Streamline desktop and application deployment

Remote Office/Branch Office



- Reduce costs by managing desktops and users centrally
- Centrally control sensitive data
- Streamline desktop and application deployment

Mobile Users



- Enable desktop access regardless of network connection
- Extend security and control of offline users
- Leverage local device resources

Contractors/EOIT/BYOPC



- Deploy and manage a desktop image on employee owned assets
- Centrally control desktops and data
- Separation between corporate and personal desktop

Business Continuity/Disaster Recovery



- Support end-users working from remote locations
- Ensure desktops are available 24 x 7
- Quickly provision new desktops

Solution Components

vmware™



User Experience

- View Client
- PCoIP Protocol
- Local Mode

- **Usability**
- **Flexibility**

- Cius
- VXC 2100
- VXC 2200

Management

- View Administrator
- View Composer
- ThinApp

- **Simplicity**
- **Efficiency**
- **Security**

- Virtual Security Gateway
- UCS Manager
- ASA / AnyConnect

Platform

- vSphere for Desktops

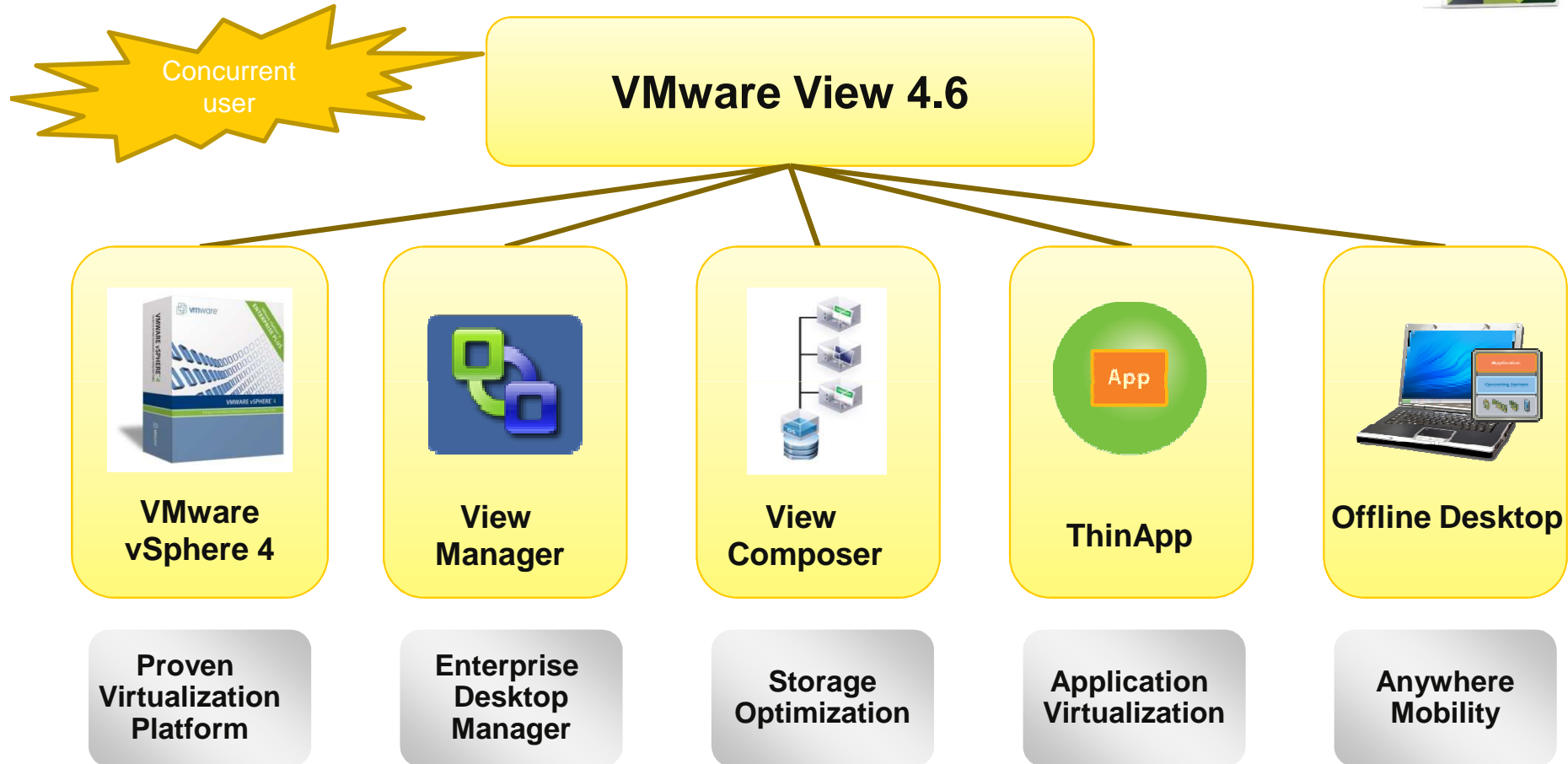
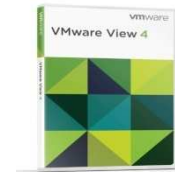
- **Availability**
- **Reliability**
- **Scalability**

- Nexus 1000v / VNLINK
- UCS B/C-Series
- WAAS, ACE



vmware™

Components of VMware View 4.6



Cisco Desktop Virtualization with VMware View

- Best user experience
- 60% Higher density without performance impact
- 20% Lower infrastructure costs
- Simple operation – start in minutes, scale in seconds

User Experience

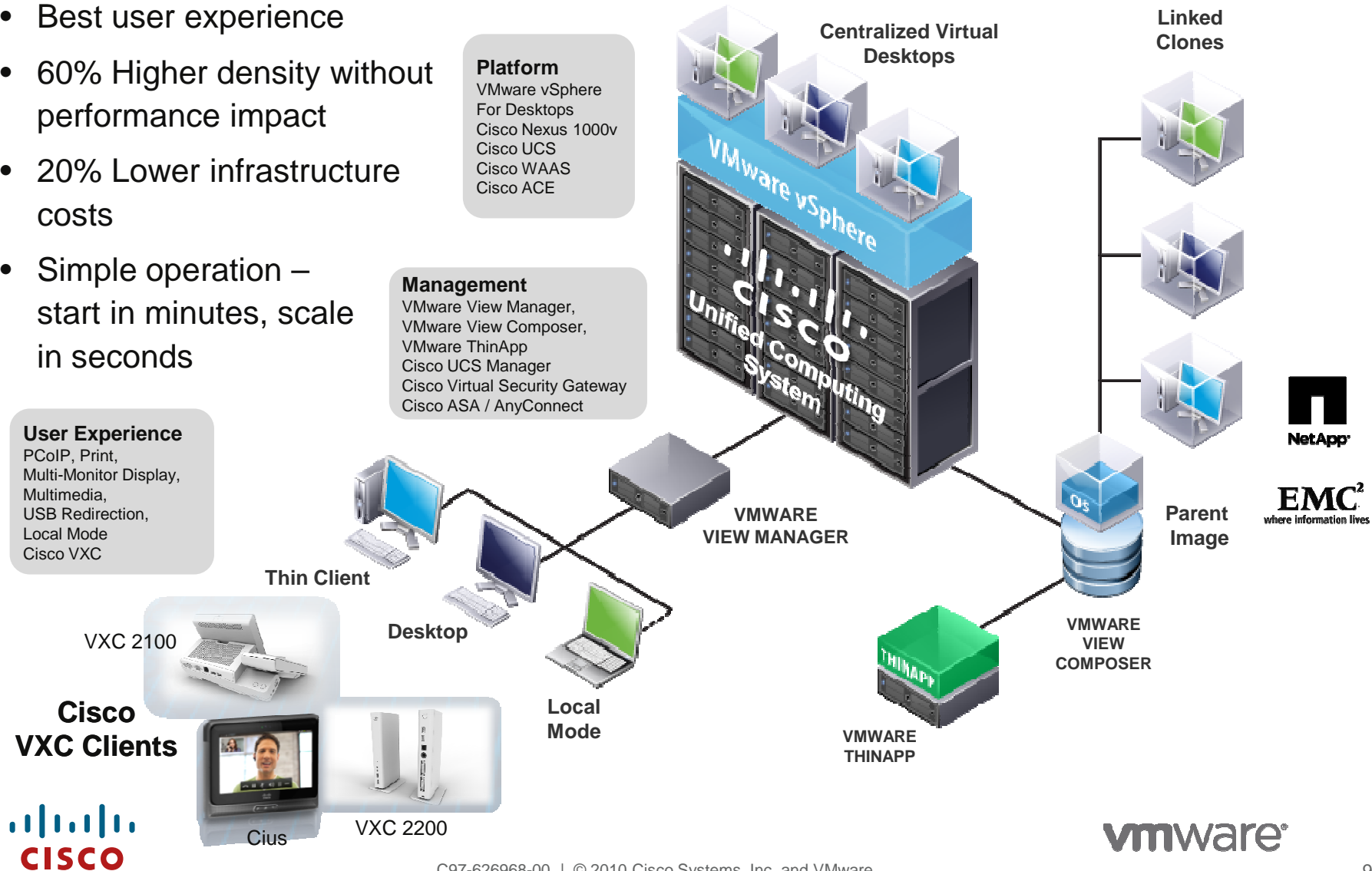
PCoIP, Print, Multi-Monitor Display, Multimedia, USB Redirection, Local Mode, Cisco VXC

Platform

VMware vSphere For Desktops
Cisco Nexus 1000v
Cisco UCS
Cisco WAAS
Cisco ACE

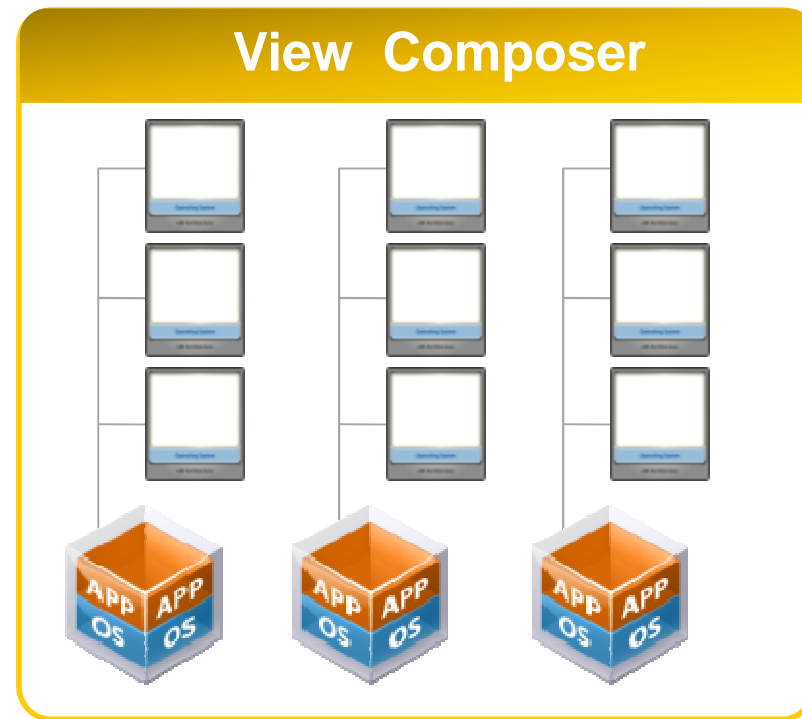
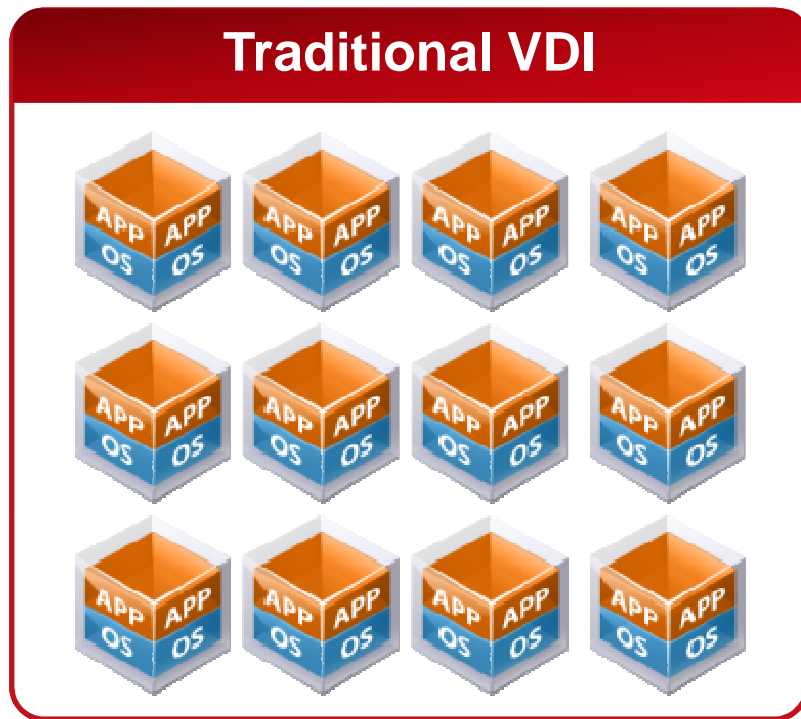
Management

VMware View Manager, VMware View Composer, VMware ThinApp, Cisco UCS Manager, Cisco Virtual Security Gateway, Cisco ASA / AnyConnect



Optimize storage with View Composer

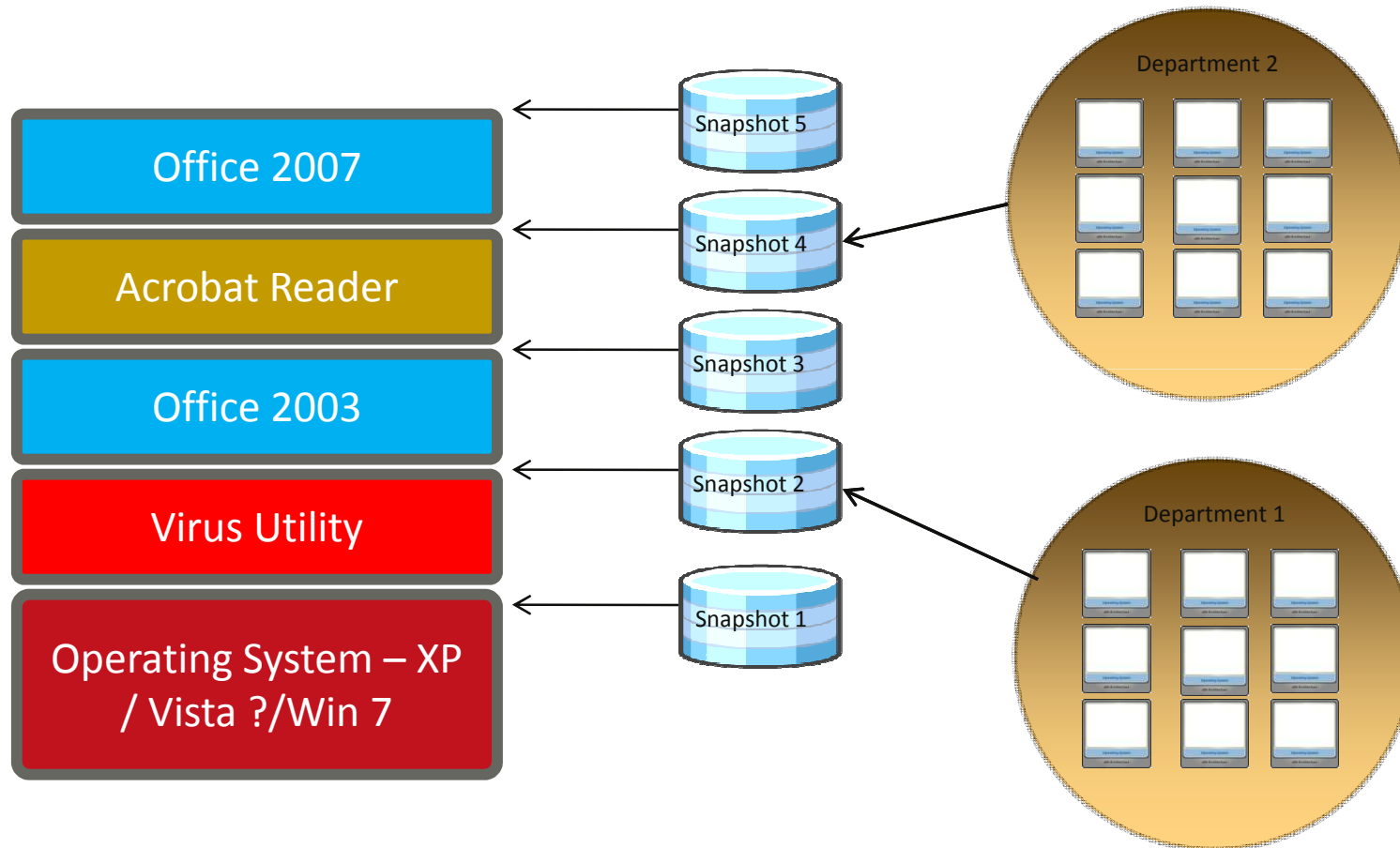
Single Image Management



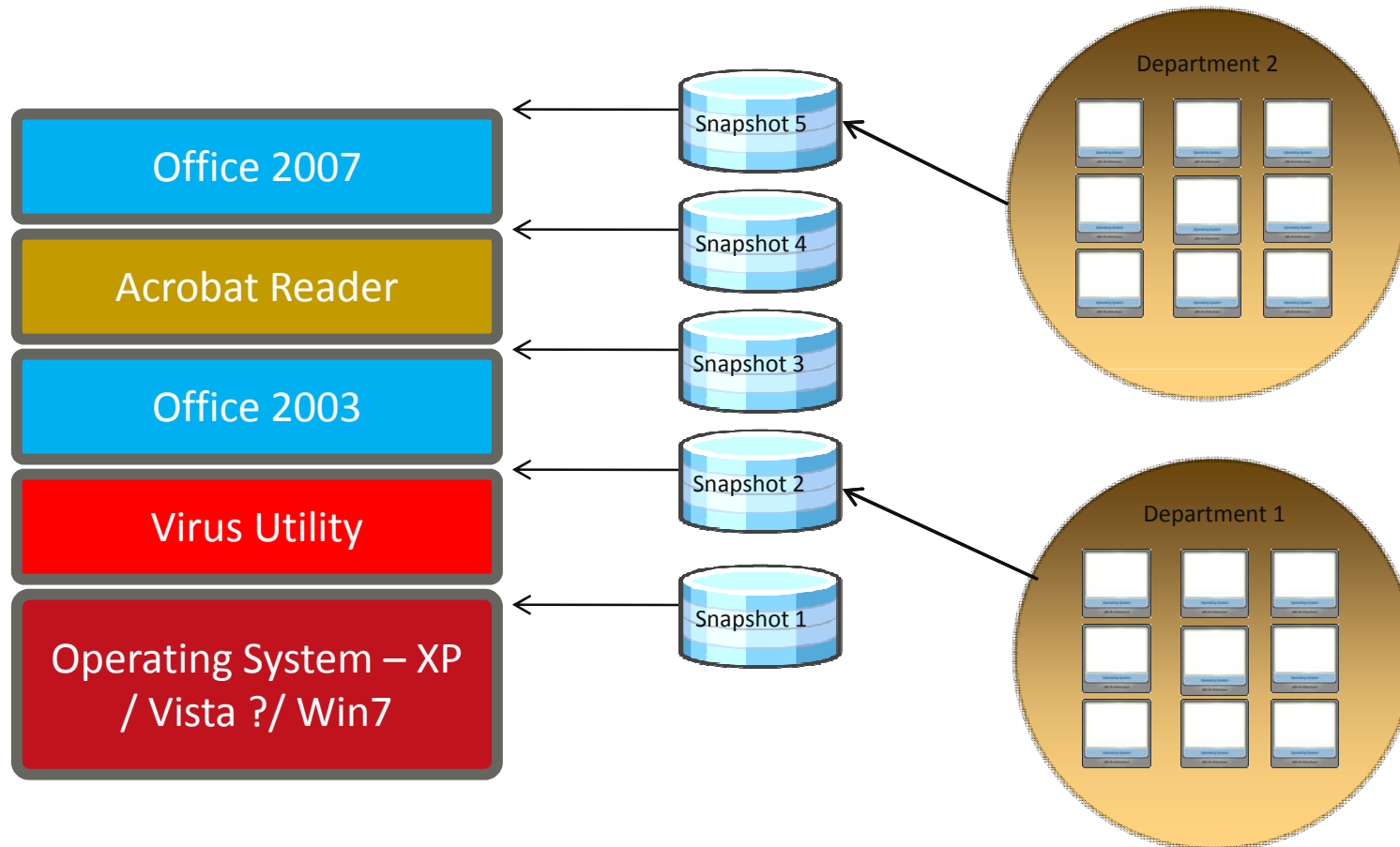
VMware View helps reduce storage costs by 70%



Optimize desktop image management with View Composer



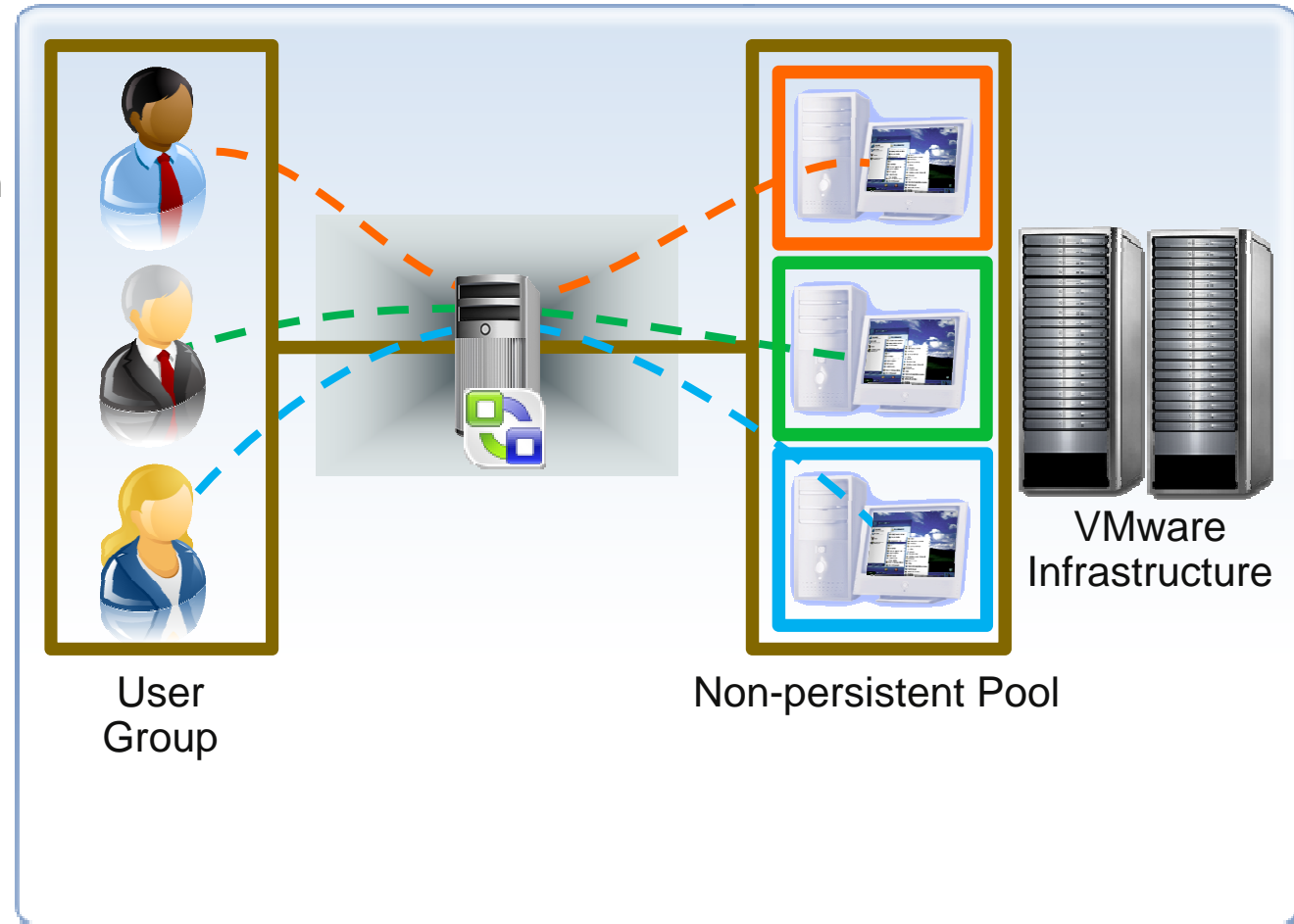
Optimize desktop image management with View Composer



View Manager: Provisioning Floating Pools

Pools

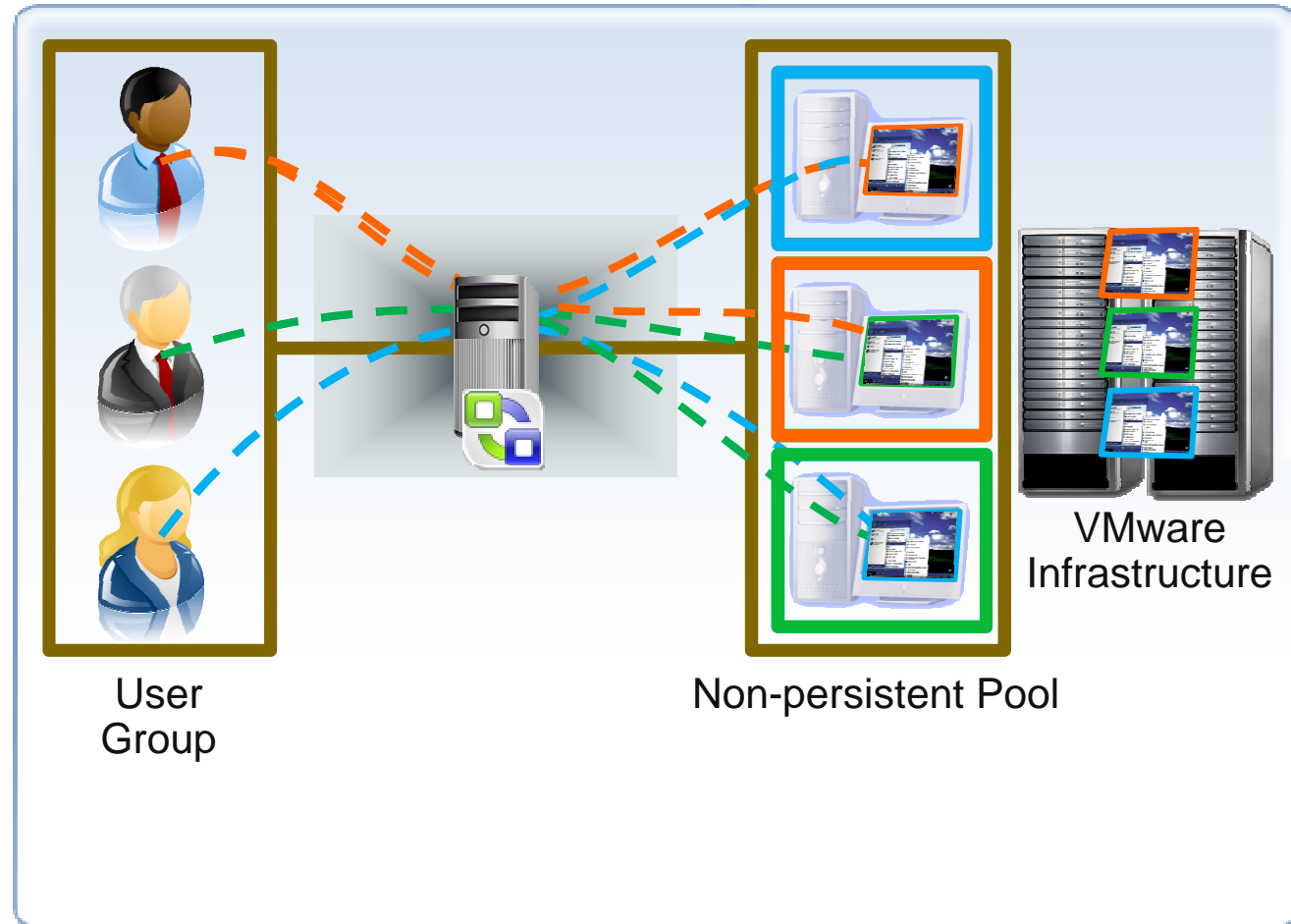
- Provisioning from template
- Automated connection
- Desktop returned to pool after each use
- Reverts to pre-determined state for future use
- For factory workers, kiosks, transaction workers



View Manager: Provisioning Floating Pools

Pools

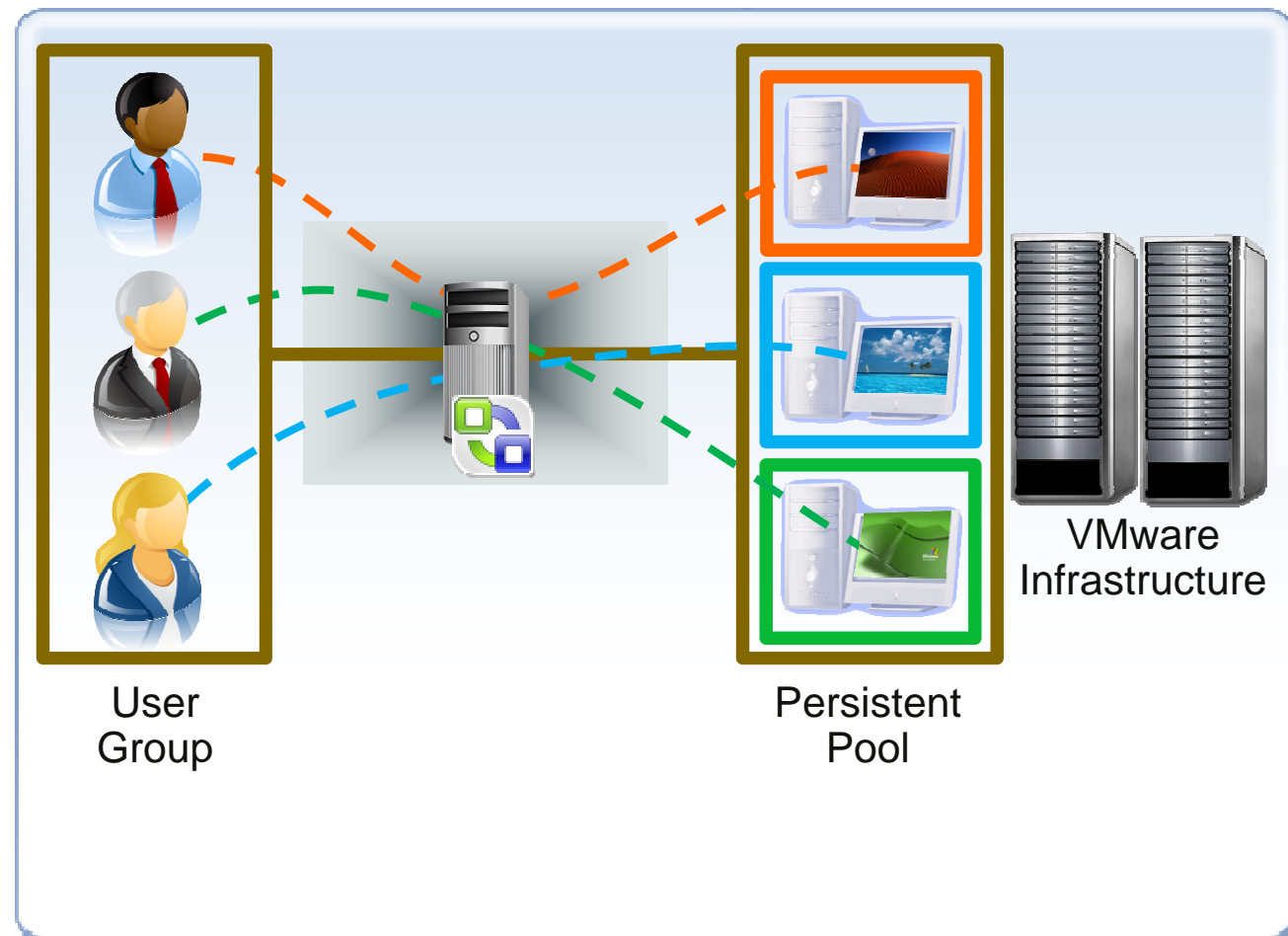
- Provisioning from template
- Automated connection
- Desktop returned to pool after each use
- Reverts to pre-determined state for future use
- For factory workers, kiosks, transaction workers
- **PERSISTENT Pools** also available



View Manager: Provisioning Dedicated Pools

Pools

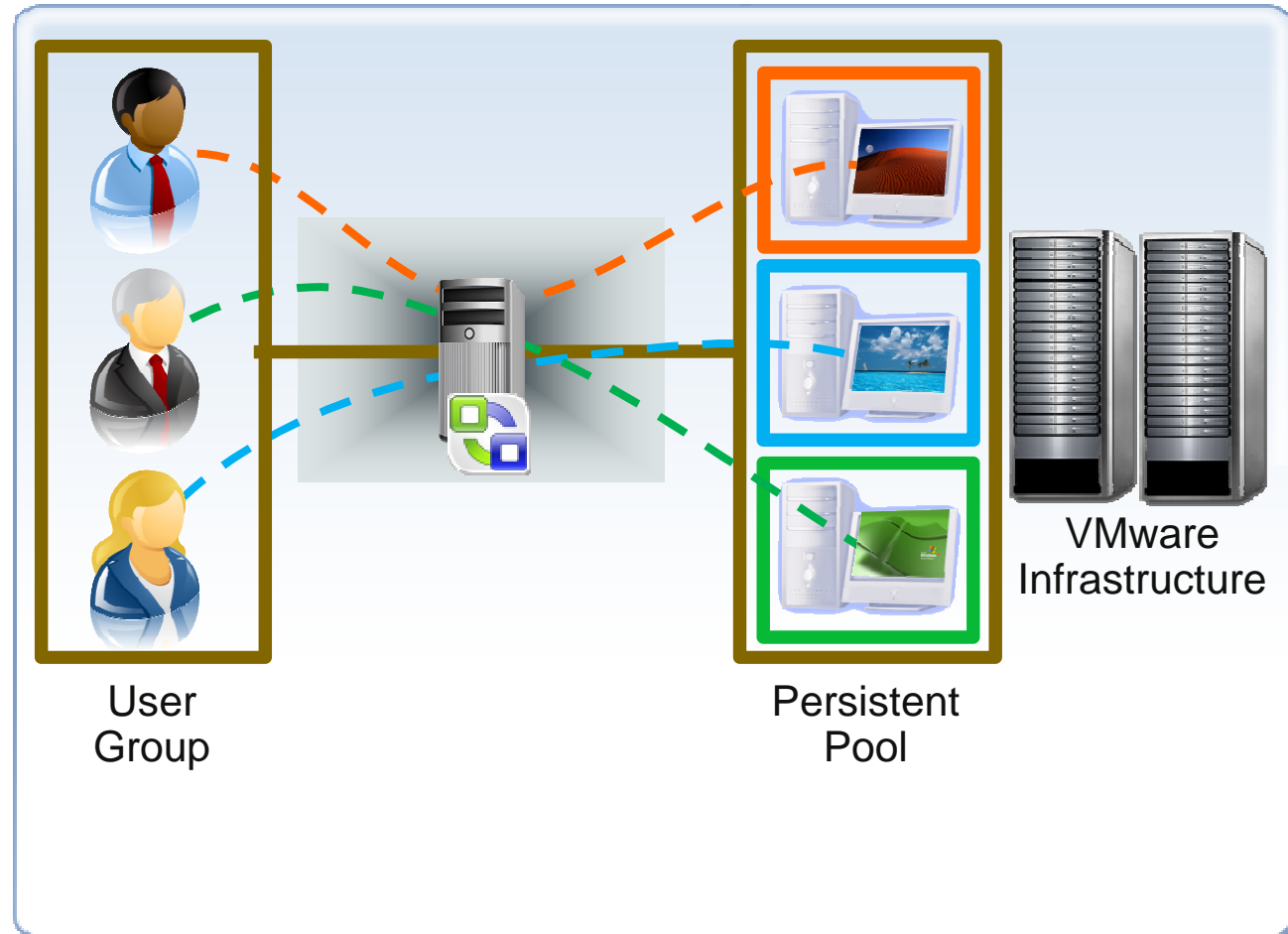
- > Provisioning from template
- > Automated connection
- > Desktop assigned on first log-in
- > Remains associated with user & can be personalized
- > Ideal for knowledge workers



View Manager: Provisioning Dedicated Pools

Pools

- > Provisioning from template
- > Automated connection
- > Desktop assigned on first log-in
- > Remains associated with user & can be personalized
- > Ideal for knowledge workers



Provide a superior experience from LAN to WAN using PCoIP

Display Protocol

- Built for desktops
- Designed for the LAN or WAN
- Uses end-to-end software implementation
- Superior desktop experience from task worker to power user
- Flexibility to address the widest variety of use cases

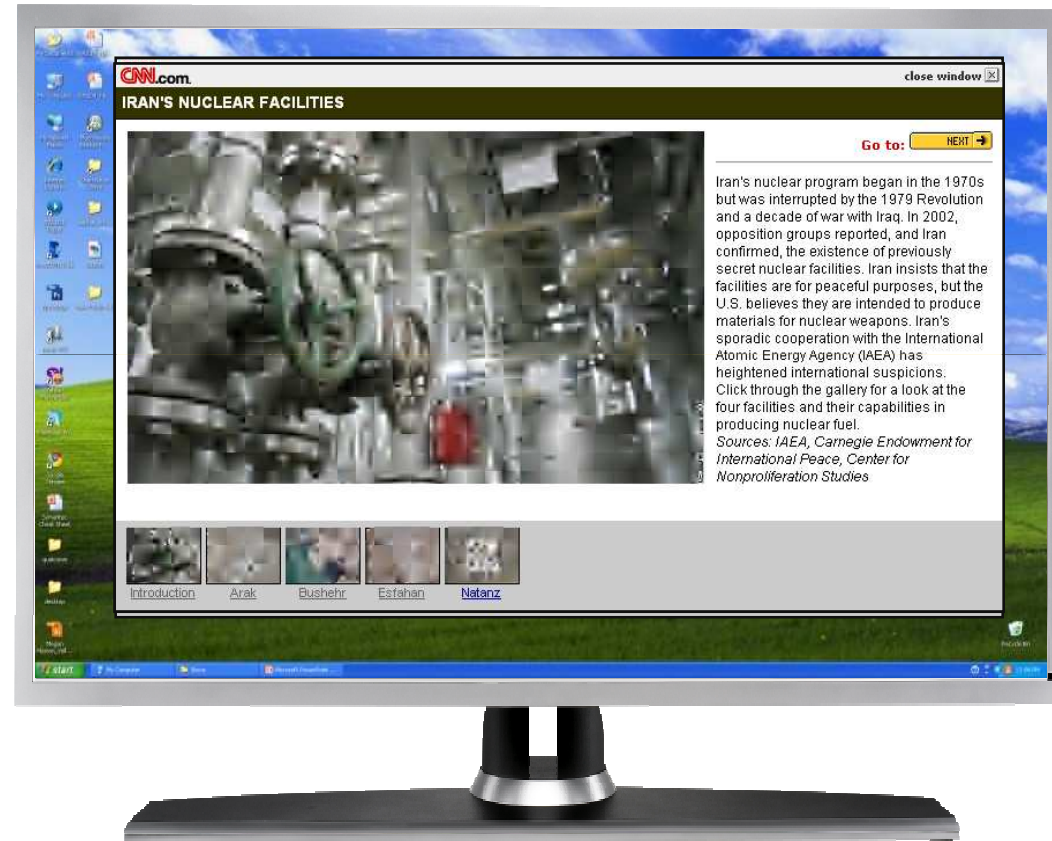


 PCoIP

Seamless Desktop
Experience

Progressive Build Example

- Low Resolution
- Initial Image
- Low bandwidth & resolution
- High resolution text



Use ThinApp for application virtualization

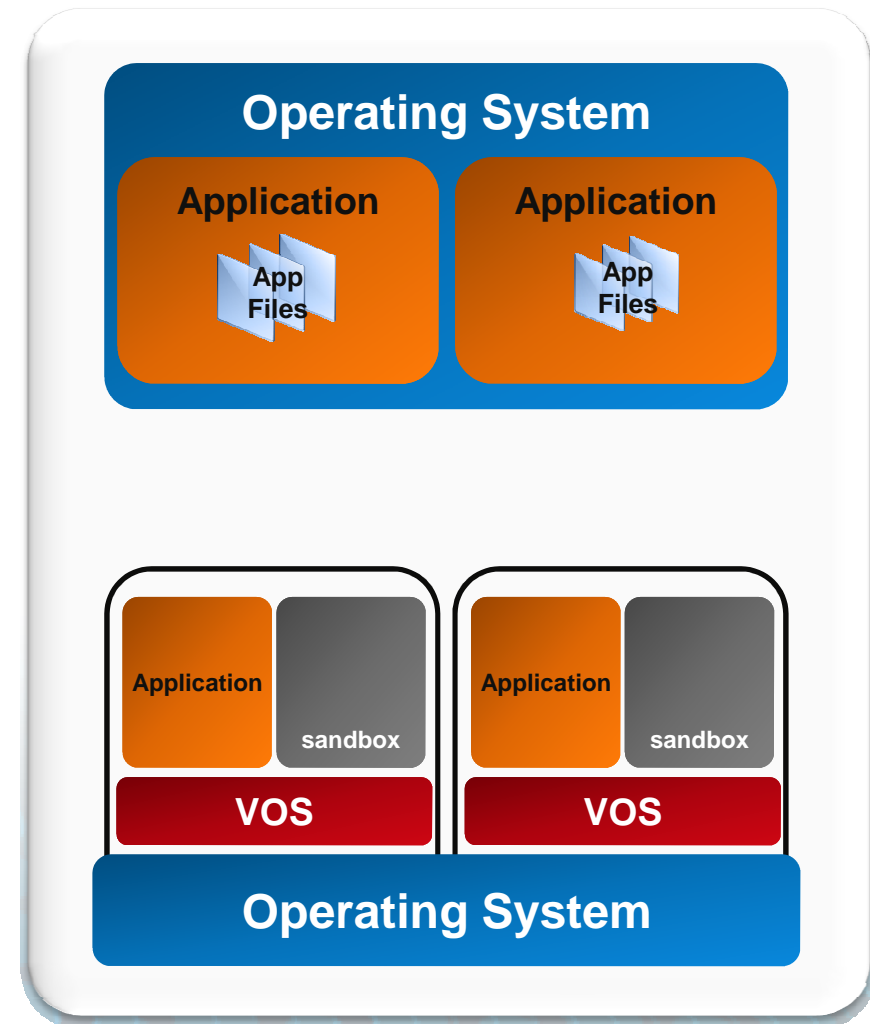
Application
Virtualization

Features

- Decouples applications and data from OS
- Uses agent-less architecture
- Provides wide platform and application support
- Plugs into existing application management tools

Benefits

- Minimizes the number of desktop images managed
- Streamlines application patch updates
- Allows the use of multiple versions of applications



View 4.6 & ThinApp 4.6 – New Feature Overview



Windows 7 Support

Local Mode

- Encryption
- Smart Card Support
- Replication & Policy Controls

PCoIP Improvements

- Protocol Enhancements – WAN performance
- SmartCard Support with PCoIP
- FIPS Compliance

Enterprise Ready

- Role-Based Delegated Administration
- Brokering Architecture for 10,000 VM pod
- Scalable Admin UI in Flex
- Full logging through Events Database
- Thin Provisioning Support with vSphere

ThinApp 4.6

- Integrated ThinApp Assignment in View
- Templating
- IE6 Virtualisation Support
- MSI Converter

View Composer Enhancements

- Support for SysPrep
- Refresh, Recompose & Rebalance for Non-Persistent Pools
- Tiered Storage Support
- Persistent Disk Management Detach/Reattach/Archive
- local storage support, temp file/page file redirection
- Semi-Automatic Pools

Management Improvements

- Kiosk Mode (MAC-based client authentication)
- Automated USB Redirection
- Location-based Printing
- Real-time SmartCard Cert Revocation

Extensibility

- Automation and Integration with Powershell
- SCOM Support
- Reporting and Auditing Enablement

System and User Diagnostics

- Dashboard and System Monitoring
- User Troubleshooting
- System Troubleshooting

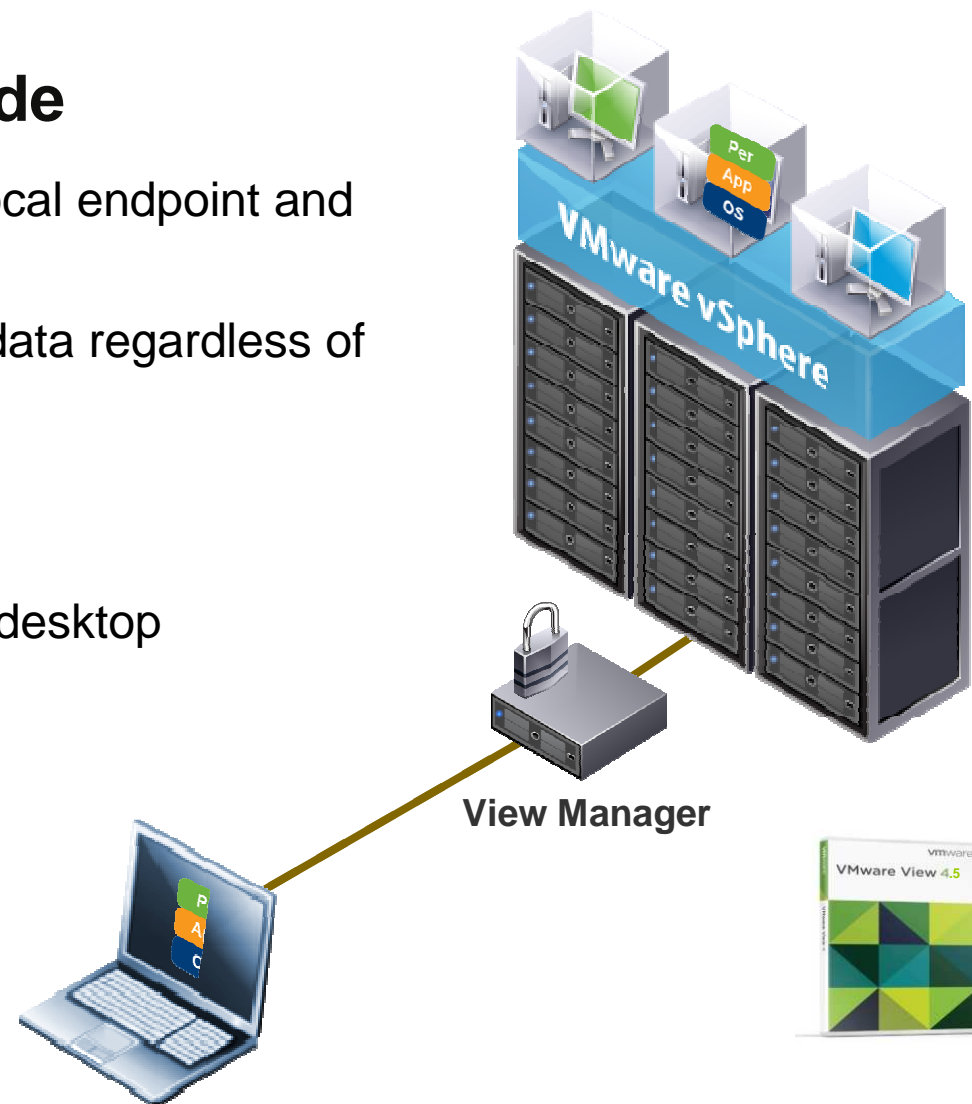
Client Localization

German, Japanese, French, and Simplified Chinese

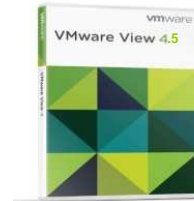
Local Mode: Mobility & Bring Your Own Computer

View Client with Local Mode

- Virtual desktop is checked-out to local endpoint and encrypted
- Access desktop, applications and data regardless of network availability
- Changes are checked in to the datacenter when online
- Extend IT security policies to local desktop



Enterprise Ready Features

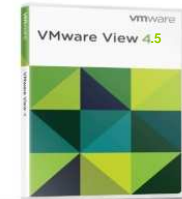


New Improved GUI

- Scalable Adobe Flex UI based
- Full event logging through New Events Database (supports SQL and Oracle)
- Detailed logging for all user logons and operations performed in View by administrators.
- Event information exportable to .CSV format.

User	Severity	Time	Module	Message	Objects
VBC\administrator	Audit success	8/11/10 6:59:50 PM	Administrator Console	User VBC\administrator has logged in to View Administrator	
	Info	8/11/10 5:49:39 PM	Connection Server	Successfully configured video settings for Machine VM waikoloa-1 in Pool waikoloa-dt	1
	Info	8/11/10 5:49:02 PM	Agent	The agent on machine WAIKOLOA-1 sent a resume message	2
	Info	8/11/10 5:39:50 PM	Connection Server	Successfully configured video settings for Machine VM waikoloa-1 in Pool waikoloa-dt	1
	Info	8/11/10 5:39:03 PM	Agent	The agent on machine WAIKOLOA-1 sent a resume message	2
VBC\administrator	Audit success	8/11/10 3:07:43 PM	Administrator Console	VBC\administrator added folder TestOnly	
VBC\administrator	Audit success	8/11/10 3:07:09 PM	Administrator Console	User VBC\administrator has logged in to View Administrator	
VBC\administrator	Audit success	8/11/10 3:03:03 PM	Administrator Console	VBC\administrator has added database configuration	

Enterprise Ready Features



Delegated Administration

- Full Role Based Delegation
- Separate Roles Database in View to vCenter. (Helps Separate out Desktop and Server team functions)
- Based on Active Directory Users and Groups
- Logical grouping via Folders unique to View

The screenshot shows the VMware View Administrator interface with three overlapping dialog boxes:

- Add Role:** The 'Name' field contains 'Help Desk User'.
- Add Permission:** A table showing permissions for the role:

Role	Applies to a folder
Administrators	Yes
- Find User or Group:** A search dialog with the following fields:
 - Type: Users, Groups
 - Domain: homead.localdomain
 - Name/User name: Starts with help
 - Description: Starts with
 Below the search fields is a table with the following data:

Name	User Name	Email	Description	In Folder
Help Desk Users	Help Desk Users/homead.localdomain			homead.local



Enterprise Ready Features

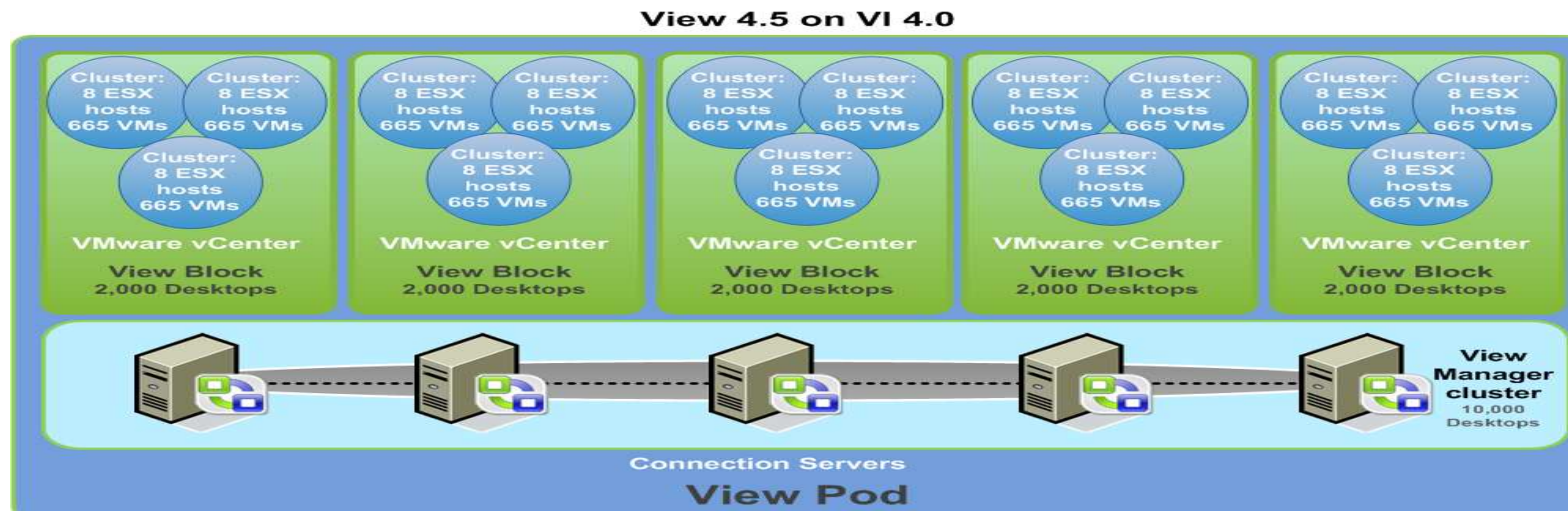
Increasing Scale and Efficiency

- New Reference Architecture for 10,000 VM pod
- Total number of VMs can be architected by View Manager(s) up to 10,000 (per pod design)
- Number of brokers: 5 + 2 (redundancy)
- DMZ Security server: 1 + 1 (redundancy)
- Maximum sustained rate of logons: 5 per second across all brokers

Federated Pool Management:

Concepts Behind the Feature

- Management was the big cost when scaling.
- Each VM managed by one broker only
- Adding brokers does not increase management load



ThinApp 4.6 What's New



ThinApp SDK

Public release of ThinApp SDK to allow published API integration of ThinApp with third party software

ThinApp Converter

Silently convert multiple app installers simultaneously into ThinApp packages by use of VMware vSphere VMs and vSphere API calls.

ThinDirect

Redirect native to virtual browsing based upon URL and vice versa.

Full IE6 Support

Virtualize legacy IE6 web apps on Win XP and deploy to Windows 7 and 2008 R2.

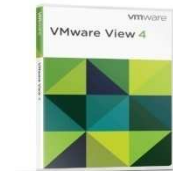
AppLink Enhancement

Enable AppLink between ThinApp 4.6 and older ThinApp packages.

Support Startup Services

Easily allow virtualized services to run as natively installed services on system startup.

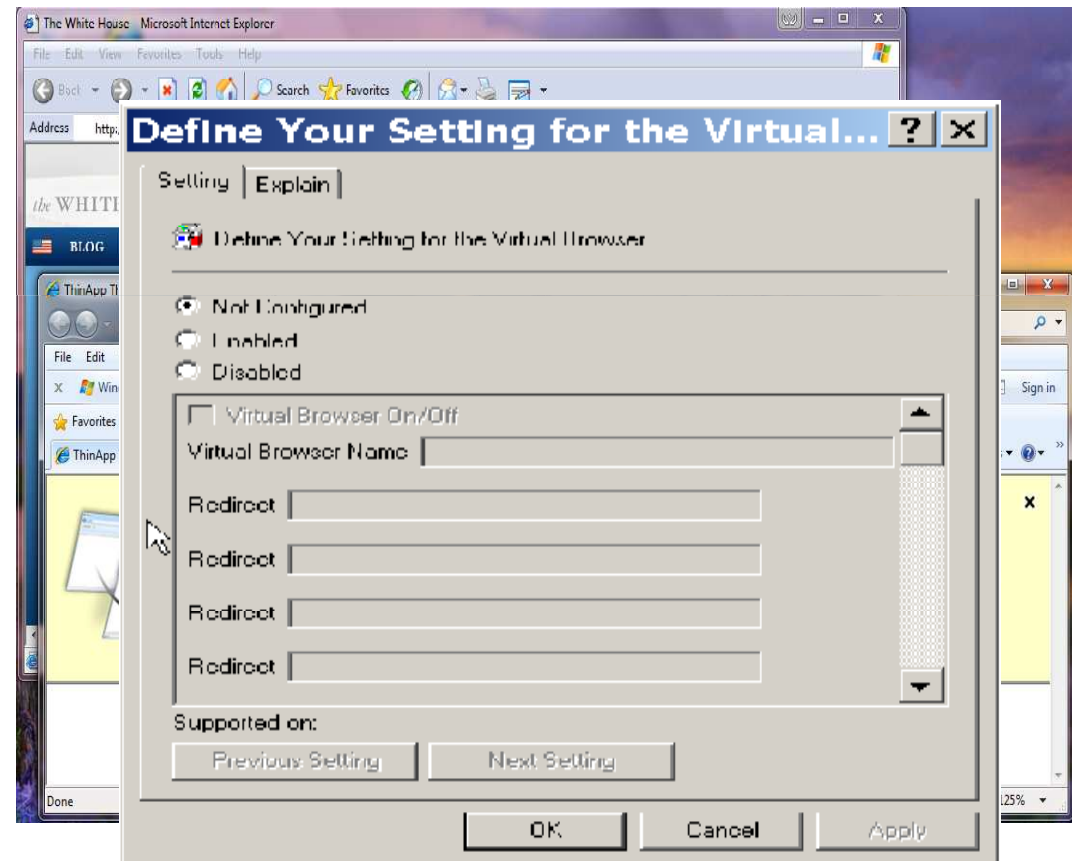
Full IE6 Support on Win 7 and 2008 R2



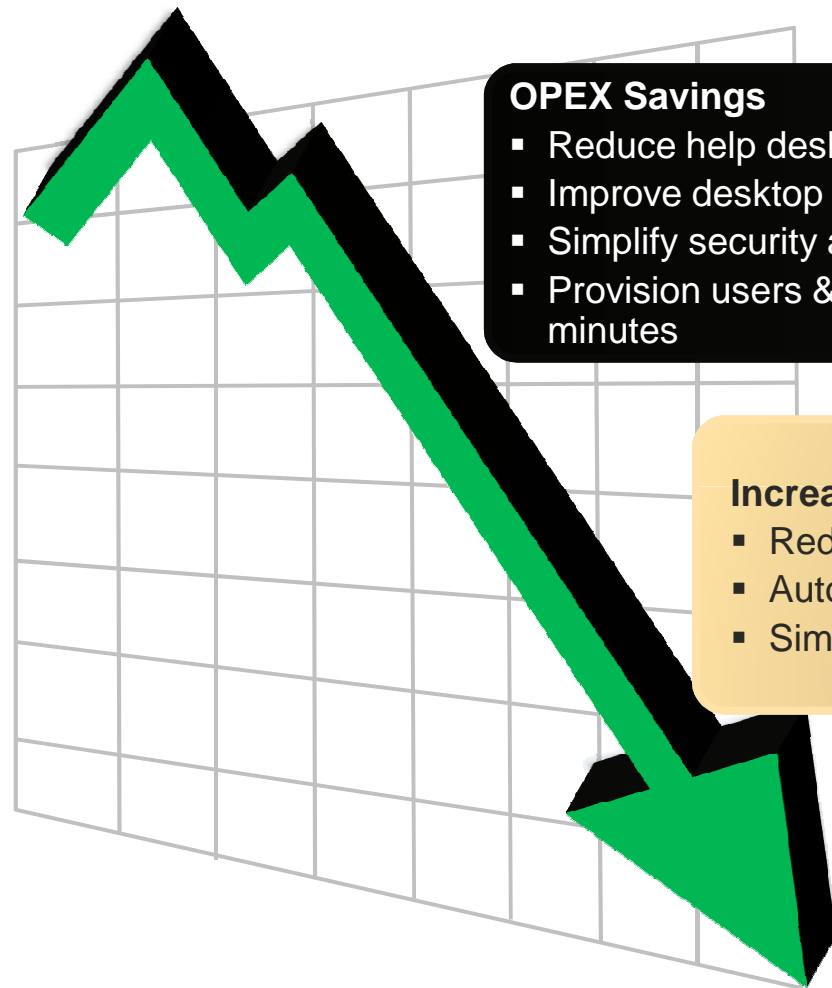
- Easily Create IE6 packages
- No “install capture” - Harvest of IE6 from XP SP3
- Easy deployment into newer operating systems
- Run IE6 on both 32-bit and 64-bit systems.
- Run IE6 side-by-side with native IE
- Run different versions of components (Java, .NET/ActiveX, Flash, etc.) in separate IE6 packages on same Win 7 system.
- No more “Web App Hell”!
- Thindirect allows seamless user experience between browsers
- GPO policy based administration of URL's associated with different browser versions

For more info..

<http://blogs.vmware.com/thinapp/2010/06/internet-explorer-6on-windows-7.html>



How Cisco UCS + VMware View Helps Reduce IT Costs



OPEX Savings

- Reduce help desk calls
- Improve desktop management efficiency
- Simplify security and compliance
- Provision users & deploy desktops in minutes

**VMware View
reduces desktop
TCO by up to 50%**

Source: IDC White Paper, 2009

Increased Productivity

- Reduce end-user downtime
- Automate desktop and data backup
- Simplify desktop for end-users

CAPEX Savings

- Delay hardware refreshes
- Reduce storage requirements
- Improve desktop consolidation ratios
- Improve backend user density

Take the Risk Out of Getting Started

Cisco Desktop Virtualization Solution with VMware View



Cisco Validated Design[®] Reference Architecture

- Predefined system and network configurations
- Joint testing at scale
- 100+ virtual desktops per server



Proof of concept

- Technical support



Financial analysis

- ROI and TCO calculator



Cisco Professional Services

- Planning, Design & Strategy, Implementation



For More Info...

- **Deep-Dive Webcast on View 4.6 Validated Design:**
 - <http://tinyurl.com/4guwx6x>
- **Cisco + VMware View Validated Designs:**
 - With NetApp: <http://tinyurl.com/5s7hb57>
 - With EMC: <http://tinyurl.com/64I35Ik>
- **Try it out FREE!:**
 - <http://www.vmware.com/go/tryvmwareview>
- **TCO Calculator**
 - <http://vmware.com/products/view/tco.html>

Cisco: www.cisco.com/go/vdi

VMware: www.vmware.com/view

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