VMware View 3
Take Control of Your Desktops and Applications
AGENDA

Enterprise Desktop Challenges
The VMware View 3 Solution
Customer Deployments
Next Steps
The Desktop Dilemma

User Requirements

- Personalized Desktops that follow them
- Flexible access anywhere using multiple devices
- Desktop Biz Continuity & Disaster Recovery
- Legacy, Win32, Web apps work well together
- Rich Application Interface

IT Requirements

- Manage disparate desktop images easily
- Manage explosion in multitude of devices
- Provide secure, continuous access to desktops, apps
- Manage Legacy, Win32 and Web apps
- Low management costs
Virtualization is the Solution

Virtualization enables Isolation, Encapsulation & Mobility

- Run different operating systems side-by-side
- Run legacy Win32 apps next to web 2.0 applications
- Move OS, apps, desktop to different devices
- Separate user data and settings into a universally accessible VM
Simplify by Centralizing Management

VMware decouples Desktop image from the PC  
Desktops run in secure datacenter  
Present Desktop into clients over Network
Meeting the Challenges of the Desktop

**Benefits**

- Streamlined and Simplified Desktop Management
- Reduced Desktop Maintenance and Support Costs
- Improved End User SLAs and Desktop Business Continuity
- Improved Security and Compliance

**Security**
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Components of VMware View

VMware View 3

- VMware Infrastructure Enterprise
- View Manager
- View Composer
- ThinApp
- Offline Desktop (Experimental)

- Proven Virtualization Platform
- Enterprise Desktop Manager
- Storage Optimization
- Application Virtualization
- Anywhere Mobility
VMware View is built on VI3: A Proven Platform

Powerful Mature and Proven
- Deployed in 100% of the Fortune 100
- Over 120,000 customers worldwide
- Complete solution from one vendor
- Extend powerful data center capabilities to the desktop:
  - Business Continuity/DR (HA, DRS, VMotion, Storage VMotion)
  - Simplify backups & disaster recovery
  - Scalable
  - Security and Reliability

APPROVED
View Manager: Enterprise Desktop Manager

- Seamlessly integrated with VI3
- Automated desktop provisioning
- Centralized management of desktops
- Scalable for any size organization
- Flexible, secure access to end user desktops
Pooled Desktops

- Automated provisioning from template
- On-demand provisioning
- A Desktop is always available
- Identical desktops in a pool
View Manager: Provisioning Non-Persistent Pools

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

VMware Desktop returned to pool after each use
Non-persistent Pool
User Group
Infrastructure
VMware
View Manager: Provisioning Non-Persistent Pools

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VMware Infrastructure
View Manager: Provisioning Persistent Pools

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

User Group

Persistent Pool

VMware Infrastructure
View Manager: Provisioning Persistent Pools

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- Automated connection
- Desktop assigned on first log-in
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User Group

Persistent Pool

VMware Infrastructure
View Manager: Built In Security

- SSL encrypted connection between clients and virtual desktops
- Secure Single sign-on for end users
- Runs within the DMZ for remote access users
- Optional integration with SecurID for two-factor authentication
- Smart Card authentication
View Manager: Enterprise Class Scalability and Reliability

- No single point of failure
- Ability to cluster both View Manager servers and ESX servers
- Fault Tolerance and High Availability of virtual desktops

[Diagram showing View Manager and related components]
View Manager: Integration with Existing Infrastructure

**Active Directory**
- Retain existing user accounts and policies
- Single sign on to virtual desktops
- Retain user-management processes and skills
- Do not need to modify existing Active Directory in any way
- No Schema Changes

**SecurID**
- Optional integration with SecurID for two-factor authentication

*These features are representative of feature areas under development. Feature commitments must not be included in contracts, purchase orders, or sales agreements of any kind. Technical feasibility and market demand will affect final delivery.*
Leverage View Manager’s secure connection brokering capability for other platforms accessible by RDP:
- Terminal Servers
- Blade PCs
- Physical PCs

Load Balancing of multiple Terminal Servers

Monitoring and auditing within View Manager
View Manager: Virtual Printing

- Driver Free Printing: No Installation and Maintenance of printer drivers
- All printers automatically available
- Minimize network utilization with advanced print stream compression
- High quality printing even over WAN connections
View Manager: Enhanced User Experience

- **Multimedia Redirection:**
  - Multimedia stream decoded at client
  - Better user experience
  - Min impact on servers, bandwidth consumed
  - Win XP, Win XPe clients supported

- **Support of critical codecs**
  - MPEG-1, MPEG-2, MPEG-4-part2
  - WMV 7/8/9, WMA, AC3, MP3

- **USB Redirection**
  - Provides support for local storage, scanners, printers
View Manager: Enterprise Desktop Manager

- Seamless Integration With VMware VI3
- Automated Provisioning and Desktop Management
- SSL Encrypted Connections, Single Sign On, Smart Card Authentication, DMZ deployment
- High Availability and Scalability
- Active Directory, SecurID Integration
- Unified Access
- Virtual Printing (Universal print driver)
- Multimedia Redirection
- USB Redirection (Supports Printers, Scanners, etc.)
View Composer: Storage Optimization, Simplified Management

Traditional VDI

VMware View + Clones
View Composer: Storage Optimization and Image Management

Lowering Overall Storage Costs
- Up to 90% reduction

Manage 1000s of desktops

Streamline Desktop Management
- Quick Provisioning
- Simplified updating, patching and upgrading while retaining user settings
- Guarantee updates applied to every desktop
View Composer Demo
ThinApp: Application Management through Virtualization

**Problem:**
Tightly coupled relationships between OS, Applications and Data.

**Symptoms:**
- Application conflicts and issues with “badly behaving applications”
- Inability to deploy all required applications to specific desktop image
- Expensive application compatibility testing with large testing matrix

**Solution:** VMware application virtualization to decouple applications and data from the OS
**ThinApp: Application Management through Virtualization**

**Features**
- Decouples applications & data from OS
- Agent-less architecture
- Wide platform and application support
- Plugs into existing Application Management tools

**Benefits**
- Reduces Storage Costs
- Minimizes desktop images to be managed
- Streamlines application patch updates
- Allows multiple versions of applications to be used
ThinApp Demo
Offline Desktop (Experimental): Anywhere Mobility

- Enables end-users to check-out their hosted Virtual Machines to a local physical computer for a full user experience.

- Enables administrators to extend security and encryption policies of the centralized virtual desktops to the end-user’s local computer.
Offline Desktop (Experimental): Anywhere Mobility

- When checked out – the virtual machine has a “heartbeat” back to the datacenter allow administrators to deactivate if necessary

- When the user checks-in, only the delta is checked in

![Diagram showing Offline Desktop architecture with Centralized Virtual Desktops, View Manager, and VMware Infrastructure 3.]
Offline Desktop Demo
Accessing VMware View Desktops

Native Windows Client
- Provides extended capabilities to access local printers and storage
- USB device support on Windows XP and Vista

Browser Access
- Windows, Linux and Mac

Thin-Client Support
- Broad industry support – over 45 devices
  - Linux, Win XPe, Win CE, and Proprietary
- VMware Thin Client Compatibility List
  http://www.vmware.com/resources/techresources/1053
Summary Overview for View 3

- Offline Desktop
- Virtual Desktops
- Unified Access
- Unified Desktop
- VMware Infrastructure 3
- View Manager
- ThinApp Applications
- View Composer
- Clients
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Next Steps
## Where Customers Use VMware View

### Desktop Replacement
Replace traditional PCs with centralized virtual desktops for better control and efficient management. End users have flexibility.

### Disaster Recovery and Business Continuity
Provide continuous availability of desktops by making high availability and disaster recovery solutions more cost-effective, simpler, and more reliable.

### Desktops as a Secure Service
Eliminate the need for moves, adds or changes. Allow third parties to access corporate applications in secure, controlled way.

### Focused Solutions
- Offshore development: giving developers control while keeping IP in data center.
- Platform migration: providing access to, e.g. from Vista to XP and vice versa.
- Application compatibility resolution.
- Mergers and acquisitions.
Case Study: NEC

Business Challenges

- Reduce operational costs
- Increase security
- Desktop tasks were time-consuming

Solution

- VMware View and NEC Virtual PC Center

Why VMware View

- 3 Support staff for 12,000 desktops
- TCO cut by 46%, admin tasks reduced by 1/3
- Software deployment time reduced from 3 months to few hours
- Zero data left on thin clients
- 20,000 desktops to be deployed by end of '08

“While it once took not only a substantial amount of effort but also two or three months to deploy new software, it is now possible for this to be accomplished in a matter of just a few hours.”

Susumu Shimano
Sr. Manager, MIS Division
Case Study: First Source

Business Challenges
- Time to market adding desktops for new customers
- Desktop tasks were time-consuming

Solution
- VMware View deployment using thin clients to access virtual desktops

Why VMware View
- Easier administration of desktops from a central location
- Reduced time to add new PC to <10 minutes
- End point security
- Shift operations re-use the same thin client
- Operational and hardware savings

“Any agent, any desk, anywhere.”

“We could provide a workstation to any client, in any seat, at any office in the world… in just 8 minutes.”

Shiva Kumar Ramamoorthy
Head IT
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Next Steps
# VMware View 3 Packaging

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* Experimental in View 3.0
Summary of Benefits

- Streamlined Desktop and Application Management
- Reduced Desktop Maintenance and Support Costs
- Improved End User SLAs and Desktop Business Continuity
- Improved Security and Compliance
Next Steps VMware View

More Information on VMware View:
http://www.vmware.com/products/view/

Download and Evaluate Solution:
www.vmware.com/download/view/

Use the VMware View TCO calculator:

Take advantage of VMware View Service Offerings to accelerate your deployments
Thank you