

# VMware Horizon Suite

## The Platform for Workforce Mobility

Cristian RADU – System Engineer Ro, Bg, Md

# Agenda

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**New Era**

**New IT  
Approach**

**Validated  
Customer  
Solutions with  
VMware Horizon**

# The pace and rate of technology change is faster than ever

## Devices

**66%** use 2+ devices for work

**1/2** of all non-PC devices will be BYO by 2016

**2014** Android shipments will outstrip iOS

**Y/Y** steady PC shipment forecasts

## Apps

**300B** app downloads by 2016

**80%** of LOB apps are SaaS

## Access

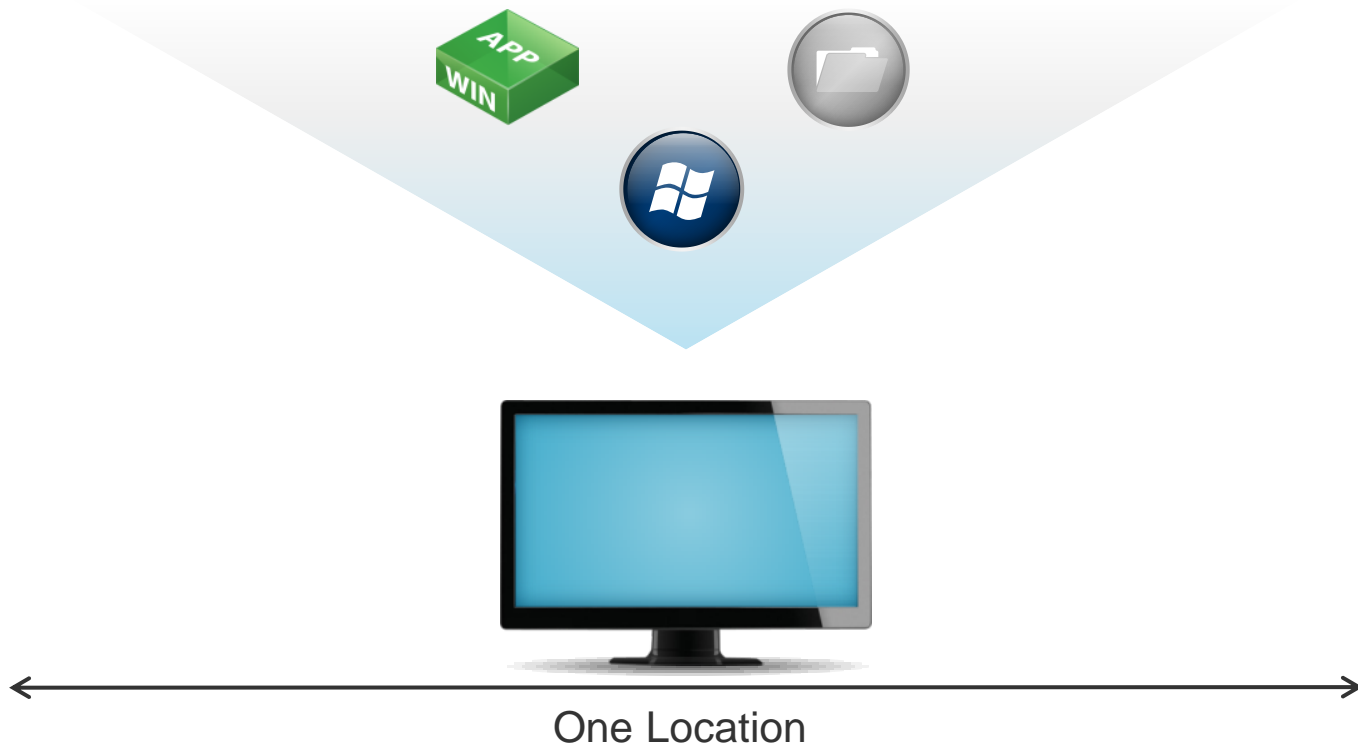
**52%** of companies support mobile/remote employees

**>30%** of the worldwide workforce is mobile

Sources: IDC 2012, Morgan Stanley 2011, Gartner 2012, Forrester 2012, Pew 2011

# So in addition to what you already own..

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# You are under pressure to make sense of the new

Diverse Apps



Data Everywhere



Diverse Platform



Diverse Devices



Mobile

Corporate Devices

Personal Devices

# Common responses only mask problem

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**Ignore It**

Poor IT Control  
Security and compliance risk

**Lock It Down**

Unhappy workforce  
IT is viewed the “bad guy”

**Buy a Point Solution**

Does not scale, increases cost  
Creates a management mess

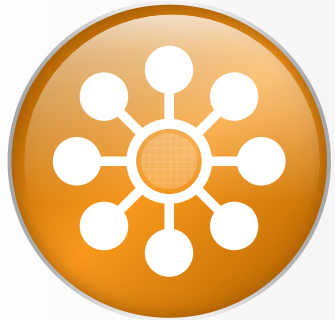
# What you need is a new approach

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## Transform

Assets Into Central Services



## Broker

Services Centrally by Policy



## Deliver

Multi-device Access

# VMware Uniquely Solves Customer Challenges



## Trusted and Reliable

- 100% of the Fortune 500 and global 100 use VMware
- Built on vSphere, the leading platform for the cloud era
- Integrated management, monitoring and security



## Easy to Manage

- Easy to deploy for fast ROI
- Management simplicity
- Lowest TCO



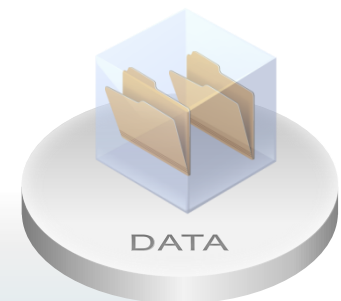
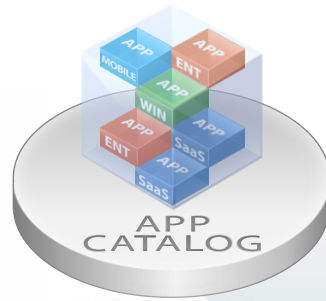
## Best End-User Experience

- Intelligent and adaptive to diverse end-user conditions
- Easy to use across diverse devices and locations



# VMware Horizon is the Platform for End-User Computing

**Transform:** Simplify desktops, diverse apps and data into centralized services



**Broker:** Manage & Secure centrally and broker services to your workforce by policy



**Deliver:** Empower your workforce with flexible access across devices, locations and connectivity



## HORIZON SUITE

### Horizon View

Desktop and  
application  
virtualization

### Horizon Mirage

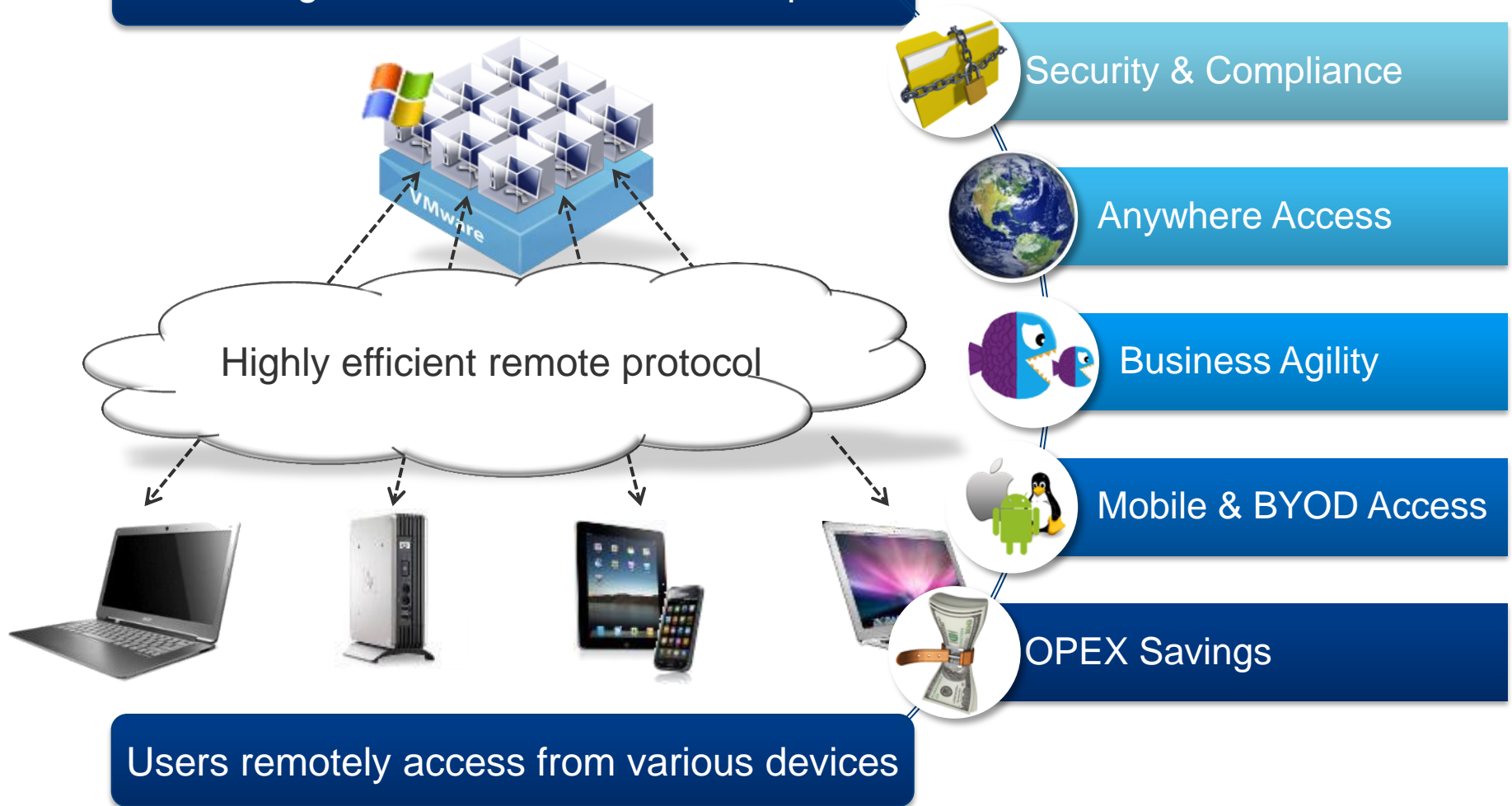
Centralized image  
management for  
local deployment

### Horizon Workspace

Multi-device access  
to applications,  
data and desktops

# Horizon View: Manage & Execute Centrally

Manage centralized virtual desktops



# Horizon Mirage: Manage Centrally, Execute Locally

Manage a single image



Highly efficient de-duplication & synchronization (even over WAN)



Business as usual for users



Automated Win7 Deploy.



Endpoint Backup & DR



PC Refresh \$ Savings



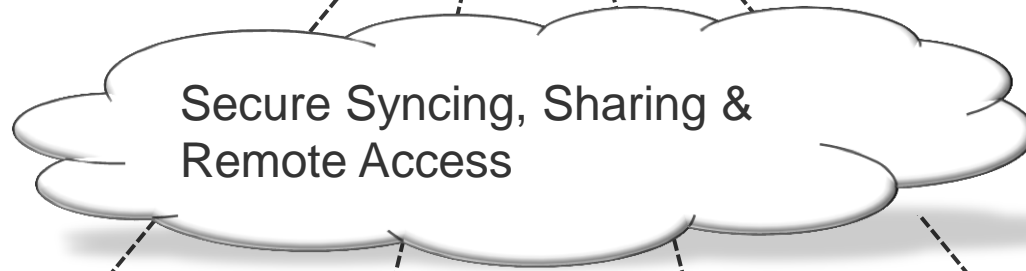
Break/Fix \$ Savings



Centralized Image Mgmt.

# Horizon Workspace: Manage Data & Application Access

Manage policies for apps, data & more



Security & Compliance



Anywhere Access



Multi-Device Access



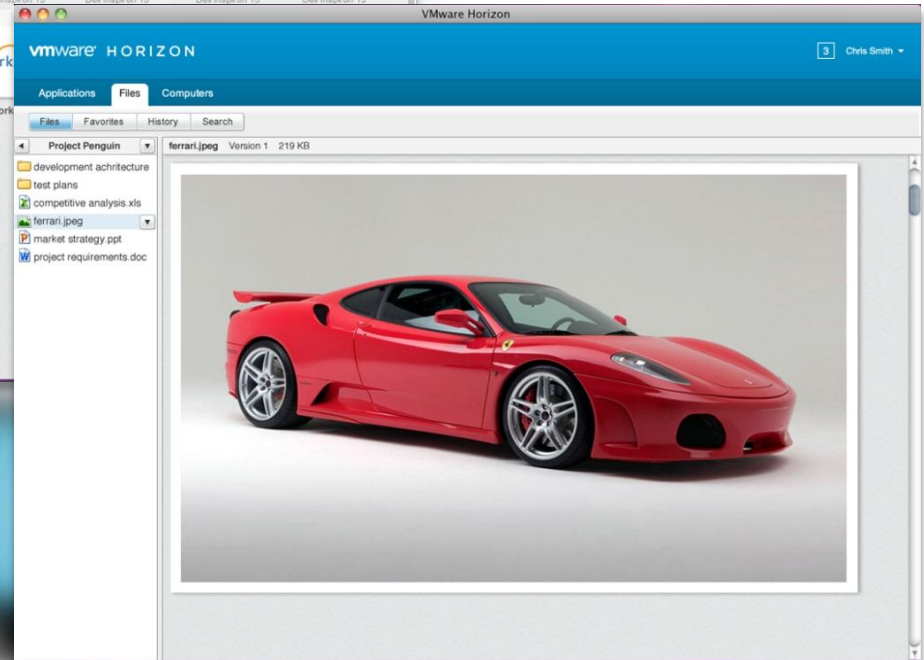
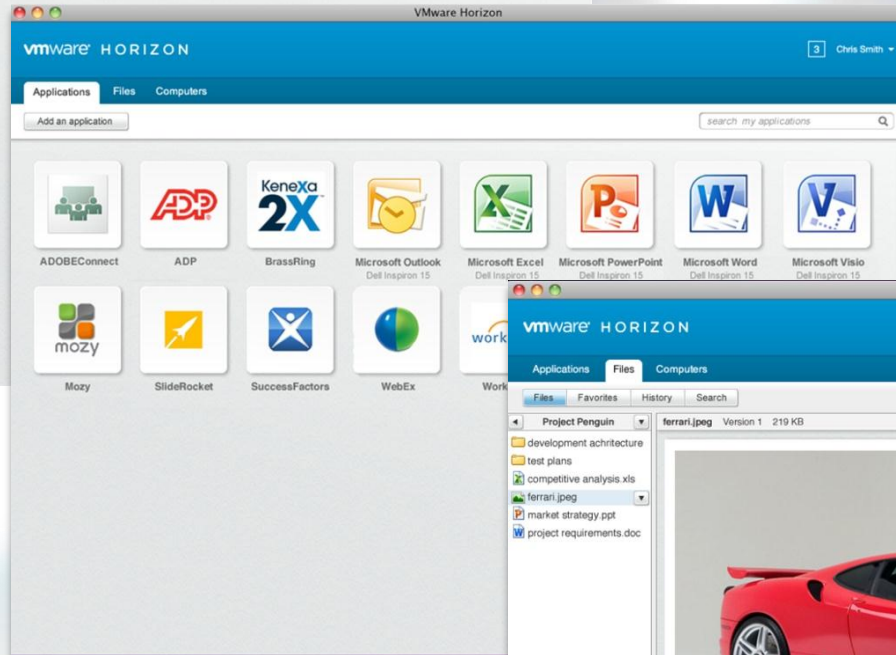
BYOD Mobile Mgmt.



Collaboration

Users access workloads across devices





Modules

★ Favorites & Recent Pages

Data →

34,232  
files in use

✓ Enabled 3 Alerts

Web Applications →

128  
web applications running

✓ Enabled

Mobile Applications →

10  
Mobile applications deployed

View →

742  
deployed pools

Windows Applications (ThinApp) →

32  
ThinApps running

✓ Enabled



# What's New in the Horizon Product Family?

## Horizon View 5.2

- Integration with Horizon Workspace for application entitlement and streamlined end-user access
- Client enhancements deliver native iPad experience of Windows desktops
- Media services improvements improves usability with Microsoft Lync, 3D graphics and multimedia support
- Scalability enhancements to deploy and manage larger virtual desktop deployments
- Lower TCO with greater storage efficiency

## Horizon Mirage 4.0

- Application layering enables applications to be grouped and deployed separately for more granular management while reducing the number of images
- ThinApp enables application virtualization to reduce app conflict
- Fusion Pro enables IT managed Windows images to run on non-Windows devices

## Horizon Workspace 1.0

- Manage and federate SaaS applications
- Deploy and manage ThinApp packaged applications
- Application manager and data have been combined into Horizon Workspace



# Horizon View 5.2 and Related Updates

## What's New with User Experience?

- Hardware Accelerated 3D Graphics
- Support for Microsoft Lync 2013 with Rich Media Services
- Support for Windows 8 based desktops & clients
- Streamlined access to View Desktops from Horizon Workspace
- Easily connect to desktops from any device with HTML Access
- Enhanced Experience for Touch Based Mobile Devices

## What's New with Ease of Management?

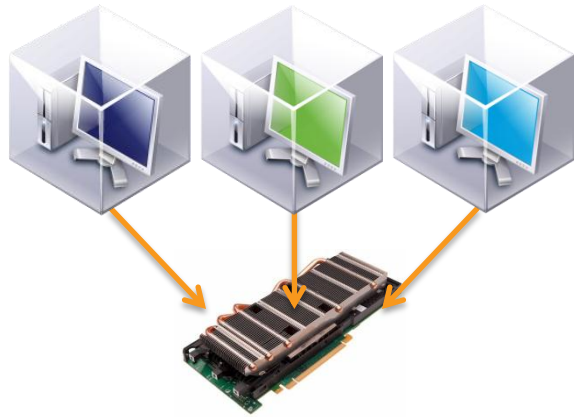
- Large Pool creation with elimination of 8 host limits, and multiple vLAN support
- View Administrator performance improvements with large numbers of desktops
- Accelerated provisioning, recompose and rebalance operations
- Support for VC Virtual Appliance based deployments
- Tech Preview of a new Integrated Service Console in the VC Web Client

## What's New with Total Cost of Ownership?

- Efficient Use of Storage Capacity w/Space Efficient Disks

# Horizon View Media Services for 3D Graphics (vSGA)

*Rich, workstation class user experience*



## Overview

- Leverages new vSphere 5.1 capability...
- Enables shared access to physical GPU hardware for 3D and high performance graphical workloads.
- Desktops still see abstracted VMware SVGA device for maximum compatibility & portability.

## Benefits

- Enables enhanced 3D workloads like CAD
- Maximize the value of GPU resources with multiple VMs sharing a GPU
- Full compatibility with hosts lacking physical GPUs (for vMotion, etc).

# Windows 8 Desktop Support

## *Get Ahead on Windows Upgrade Planning*



VMware View + vSphere



### Overview

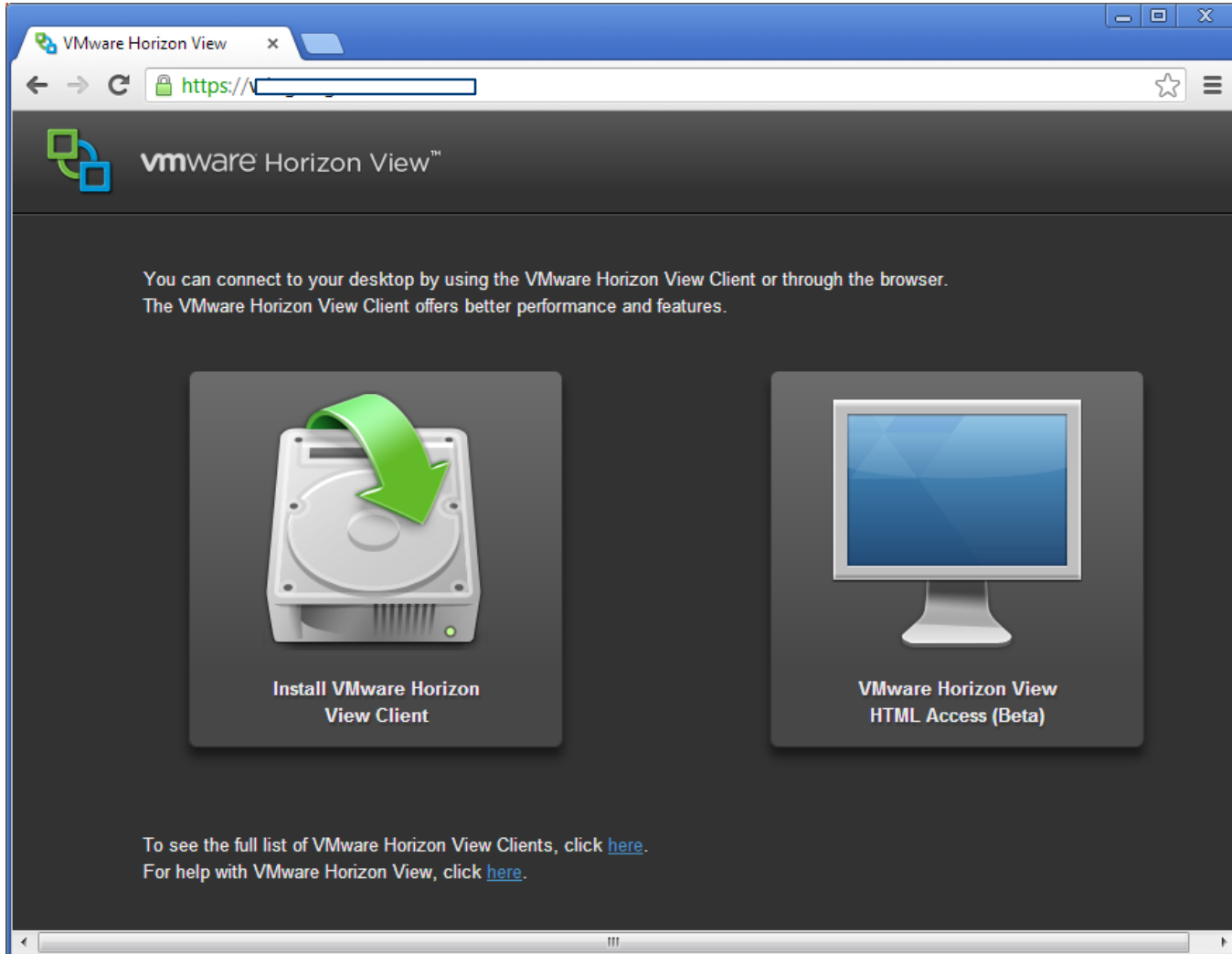
- Support for Windows 8 guests
- Aligned with Windows 8 Client Support
- Leverages vSphere 5.1 Win8 Enablement

### Benefits

- Smooth transition from POC to production roll-out of Windows 8
- Enables IT to leverage latest Windows capabilities in VDI

# HTML Access works with or without Horizon Workspace

- Optional Addition to View Connection Server as Web-Gateway



# Unity Touch: Mobile Clients User Interface Enhancements

Make using Windows applications easier on mobile devices



## Overview

- Focus on applications, not the desktop
- Easier to launch apps
- Easier to switch between running apps
- Easier to open/find files
- Easier to use minimize and quit apps
- Works on iOS and Android

## Benefits

- Makes using Windows apps on mobile much more usable and mobile centric
- Best-in-class Windows apps experience on the iOS & Android devices that are used by key decision makers

# Large Pool & Multi-Network Support

*OPEX Savings with fewer pools to manage*



## Overview

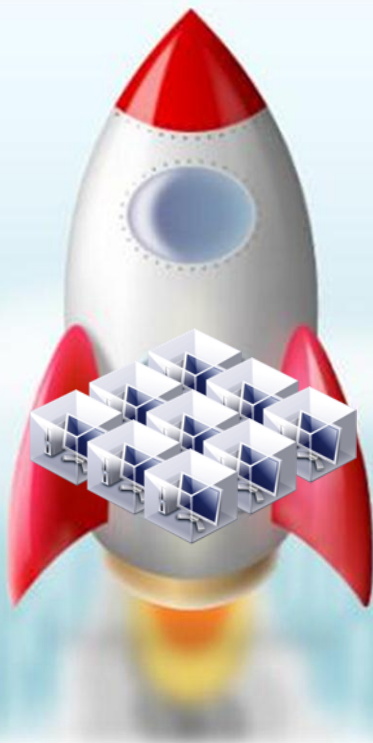
- **Large Pools:** Eliminate 8-host per pool limit – now 32 hosts with latest View and vSphere 5.1
- **Multi-Network:** Network within a pool can be split with multiple network labels. Initially offered via Powershell API.

## Benefits

- **OPEX savings** with fewer pools to manage in multi-thousand user deployments.
- No need to split pools on the basis of insufficient host density, or insufficient IP addresses in an address range.

# Accelerated Pool Management Operations

*BIG speed ups for long running management operations at scale*



## Overview

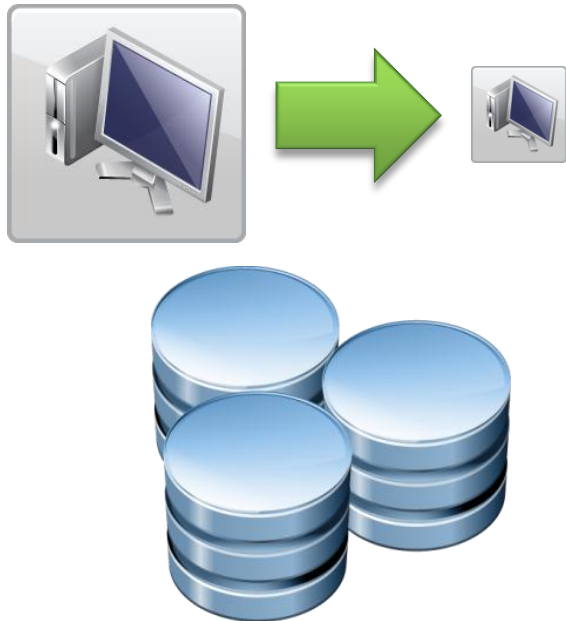
- **Faster Management Operations:** Over 2x improvement in end to end **provisioning, recompose** and **rebalance** times.
- Long running management operations for up to **2k desktops** can now complete in a **single shift!**

## Benefits

- **OPEX savings** with shorter maintenance windows for operations like recompose and rebalance.
- **Increased business agility** with faster time to desktop deployment.

# Space Efficient Disk Utilization

*More efficient use of storage capacity*



## Overview

- Leverages new vSphere 5.1 capability...
- A new disk format for VMs on VMFS.
- Reduces grain size & more efficiently utilize every allocated block by filling it with real data.
- Unused space is reclaimed and View Composer desktops stay small.

## Benefits

- Reduced storage capacity requirements (lower CAPEX) for Persistent Desktops, even on lower-tier hardware.
- View Composer can be used for provisioning simplicity, even if recompose is never used (e.g. knowledge workers).



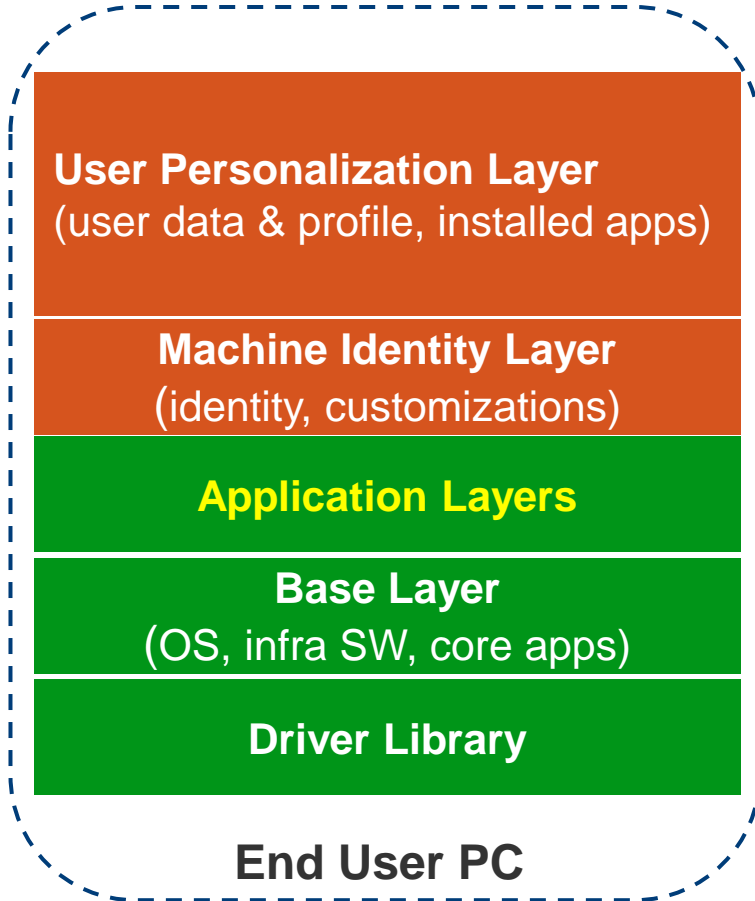
# Horizon Mirage

# Mirage Capabilities

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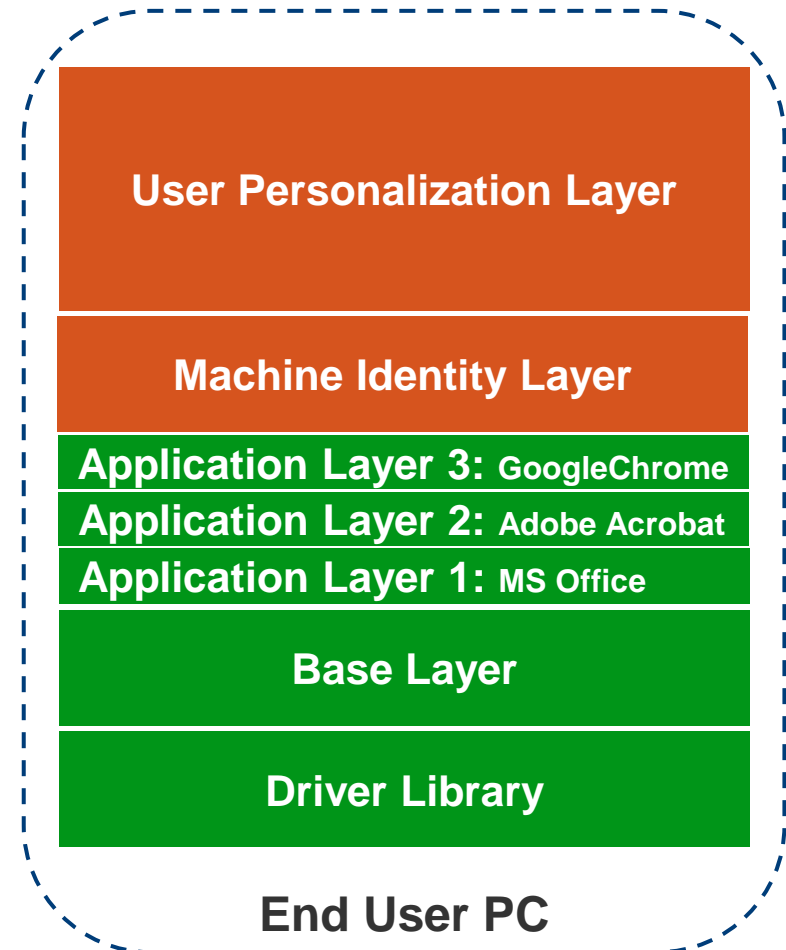
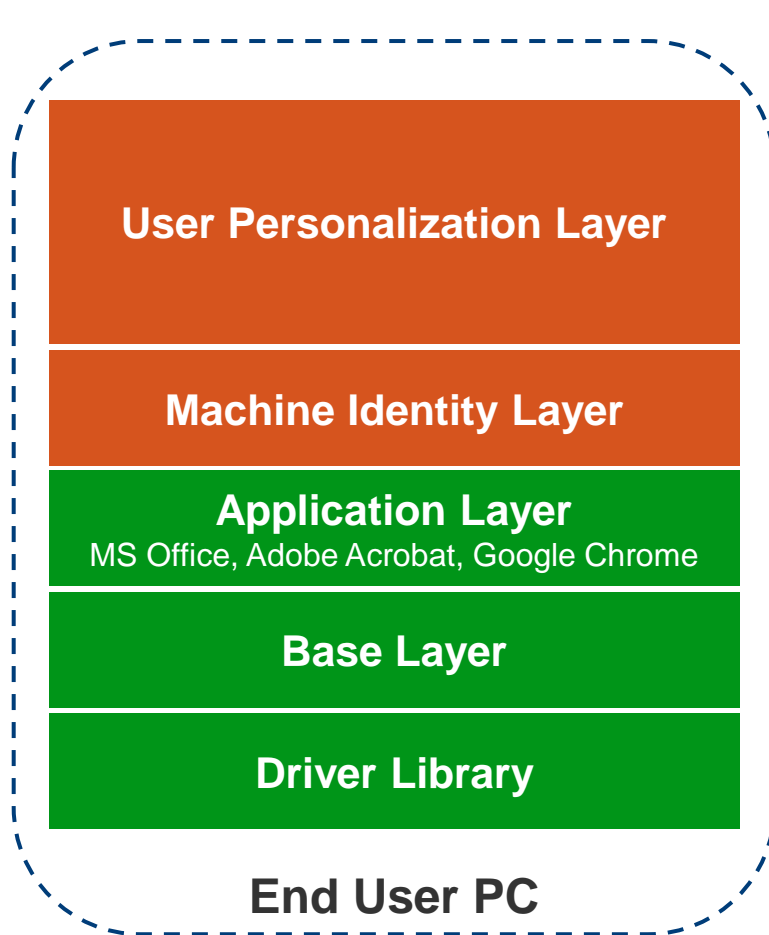
# Application Layers



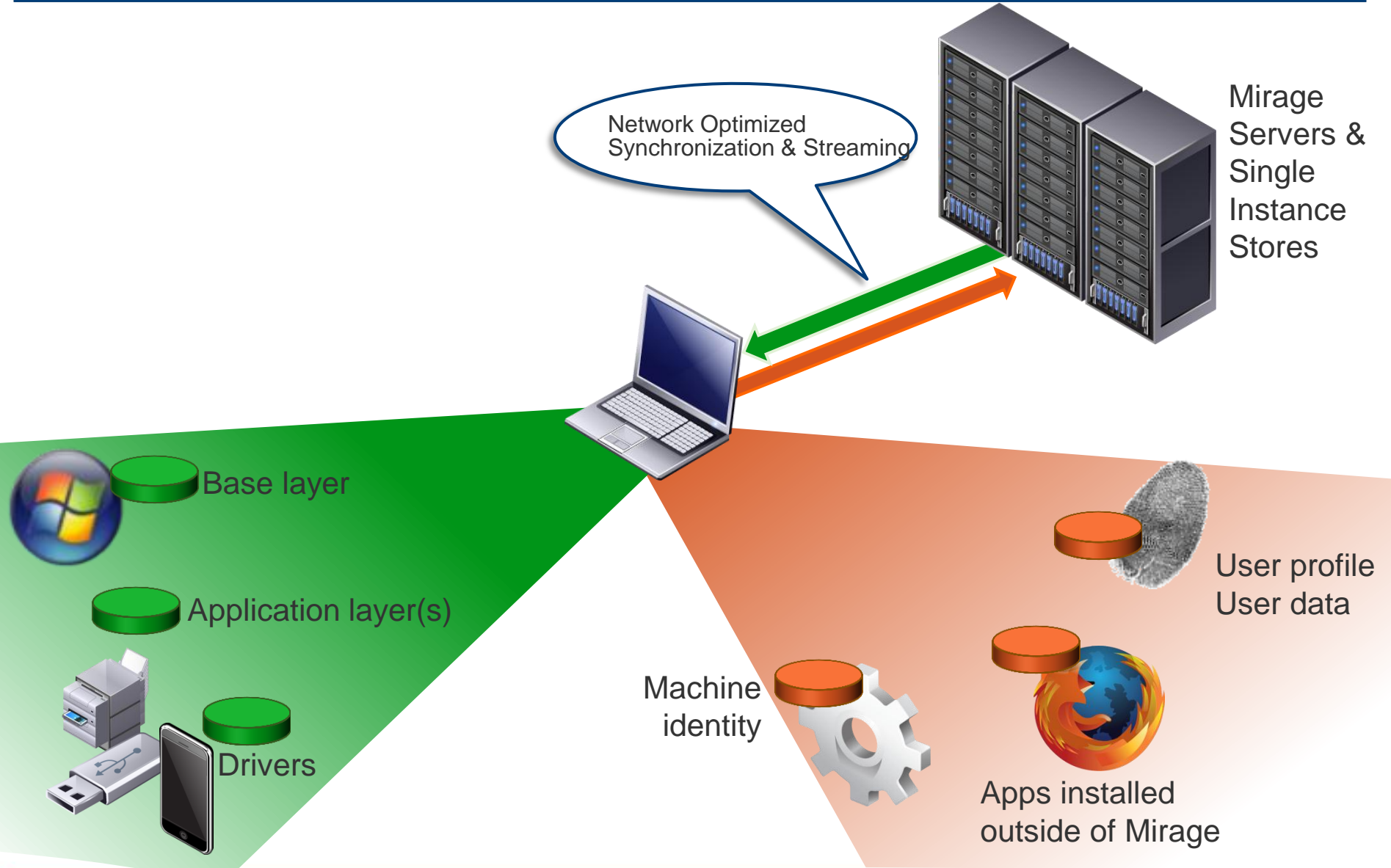
## Application Layers

- New in Mirage 4.0
- Traditional Windows apps and ThinApps
- Windows apps need to be captured
  - Similar to ThinApp capture process
- Applications are “updated” (assigned) to CVDs and CVD Collections
- App Layer deployment uses same mechanism as Base Layer assignment
- Requires Base Layer to have been previously deployed or deployed with App Layer

# Options: Multiple Applications per Layer and Multiple Layers

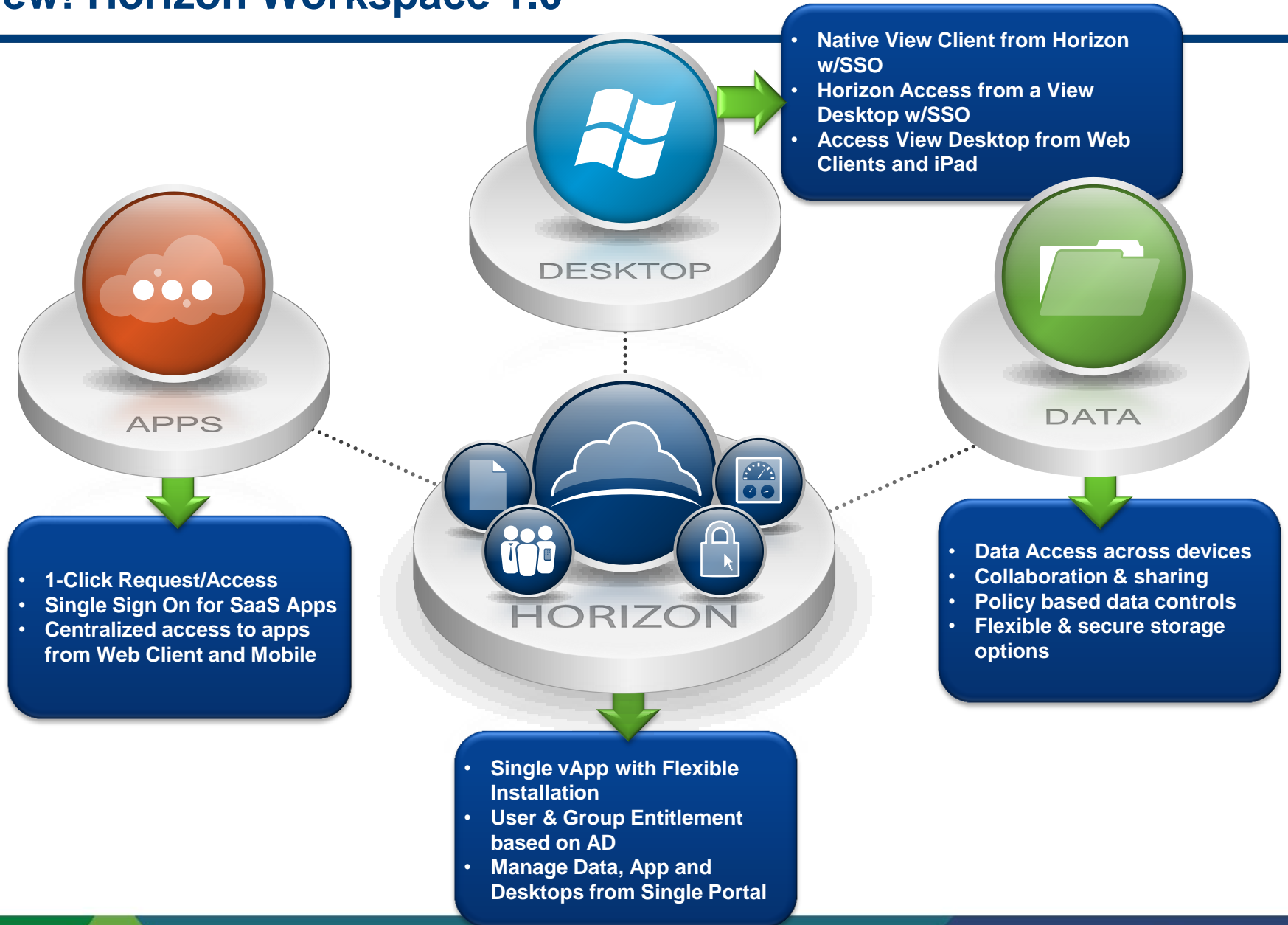


# Core Technology



# Horizon Workspace

# New! Horizon Workspace 1.0



# VMware Horizon Workspace at a Glance

## END USERS



Single workspace for accessing data, apps, desktops  
Delivered on any device

## IT ADMINS



Single management console for administration, managing security and user entitlement policies





# File Collaboration with Colleagues, Customers and Partners

## Challenge

- Users introduce consumer devices and apps into corporate environment to collaborate

## Solution

- Anytime, anywhere access
- Offline & online data access
- High-fidelity doc previews
- Document versioning, commenting and auditing



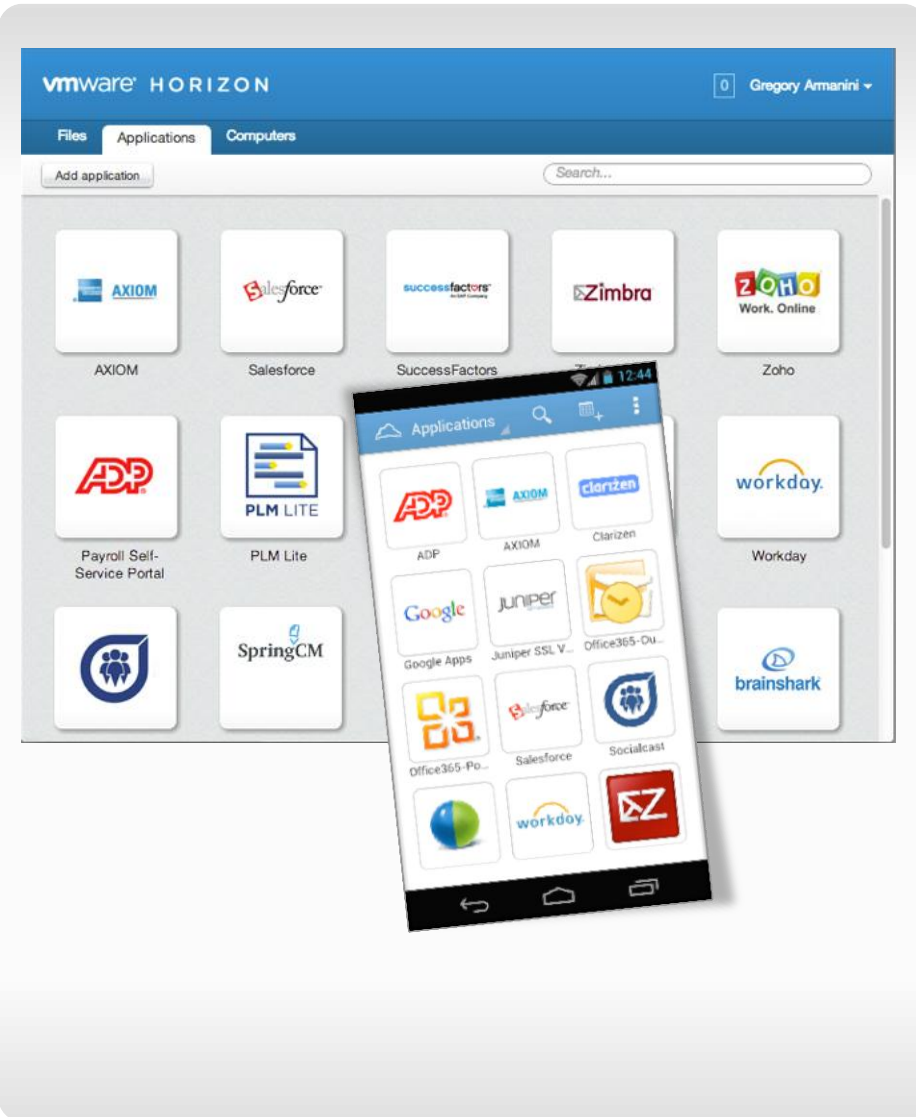
# Easy Access to Enterprise Applications & Services

## Challenge

- Access apps from every device
- Multiple logins increases support costs
- Provisioning applications is costly

## Solution

- Single context-based catalog
  - Data, Apps, Services, Virtual Desktops
- Single Sign On
- One-click access to activate / download app



# Access to Virtual Desktops Has Never Been Easier

## Challenge

- Multiple logins
- Another client is cumbersome
- Installing View client devices

## Solution

- SSO brokering user to available desktops based on entitlement policy
- Leverage Blast protocol to access View from any HTML5 browser



# VMware Horizon Workspace

## END USERS



Single workspace for accessing  
data, apps, desktops  
Delivered on any device

## IT ADMINS



Single management console for  
administration, managing security  
and user entitlement policies



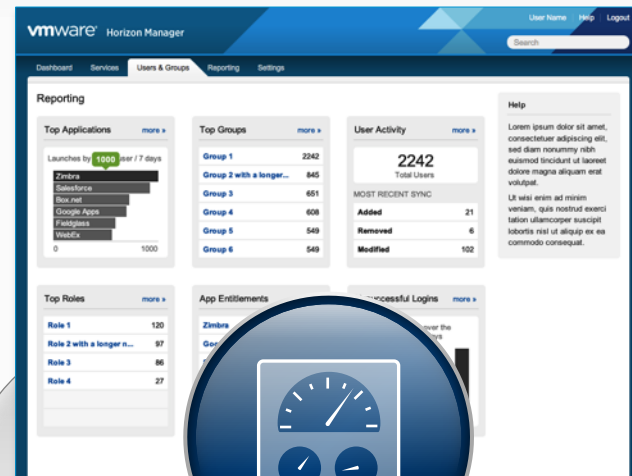
# Unified Management and Policies

## Challenge

- Increased costs: too many non-integrated tools
- Confusing access policies hard to manage and audit
- Device-centric management does not scale
- Lax policy enforcement

## Solution

- Unified User / Identity Management
- Centralized Entitlement Management
- Unified Policies Management
- Context Management



# Enterprise-Grade Security

## Challenge

- Data security on remote devices
- Authentication on personal device creates usability issues
- Compliance requires strong authentication

## Solution

- Endpoint registration & wipe
- Document sandbox
- Encryption on mobile devices
- App passcode policy
- 2-factor authentication



# Secure Mobile Workspace Management

## Challenge

- Users want mobile device
- Keep personal data private
- IT doesn't want to be liable for personal content
- Protect sensitive corporate data and take control of mobile apps and updates

## Solution

- A mobile workspace that is completely enterprise-owned and controlled
- Provision, manage and remove corporate data and applications on employee devices



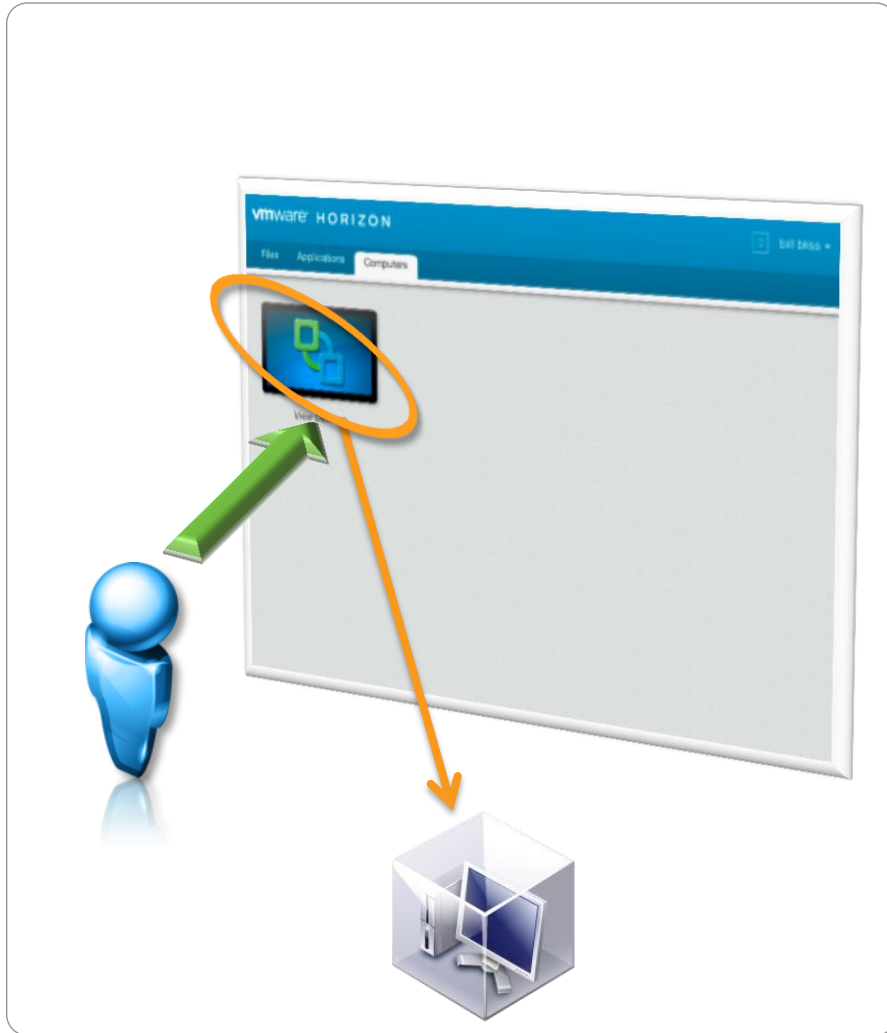
# HORIZON SUITE

The platform for workforce mobility



# Horizon Brokering of View Desktops

## *Horizon Supports User Entitlement to Desktops and SSO*



### Overview

- View Desktop pools are connected into Horizon after they are provisioned
- Horizon provides single point of access for end users to desktops, data and apps.
- Horizon supports SSO brokering user to available desktops based on entitlement policy

### Benefits

- **Enhanced Usability:** One stop shopping for end user access to all their corporate workloads.

# HTML Access to View Desktops

*Access your desktop and apps via Horizon from ANY modern device*



## Overview

- Remote protocol delivered through any HTML5 capable web-browser
- Access through View Portal or Horizon UI
- Routes to existing View desktop
- Leverages View Security Server for network routing when available

## Benefits

- **Install-Free** access to Desktops
- Clean, integrated, browser-based experience
- Access View Desktops from device platforms where no native client is available

# Entitlement Management

## *Centrally Entitle all Resources*



### Overview

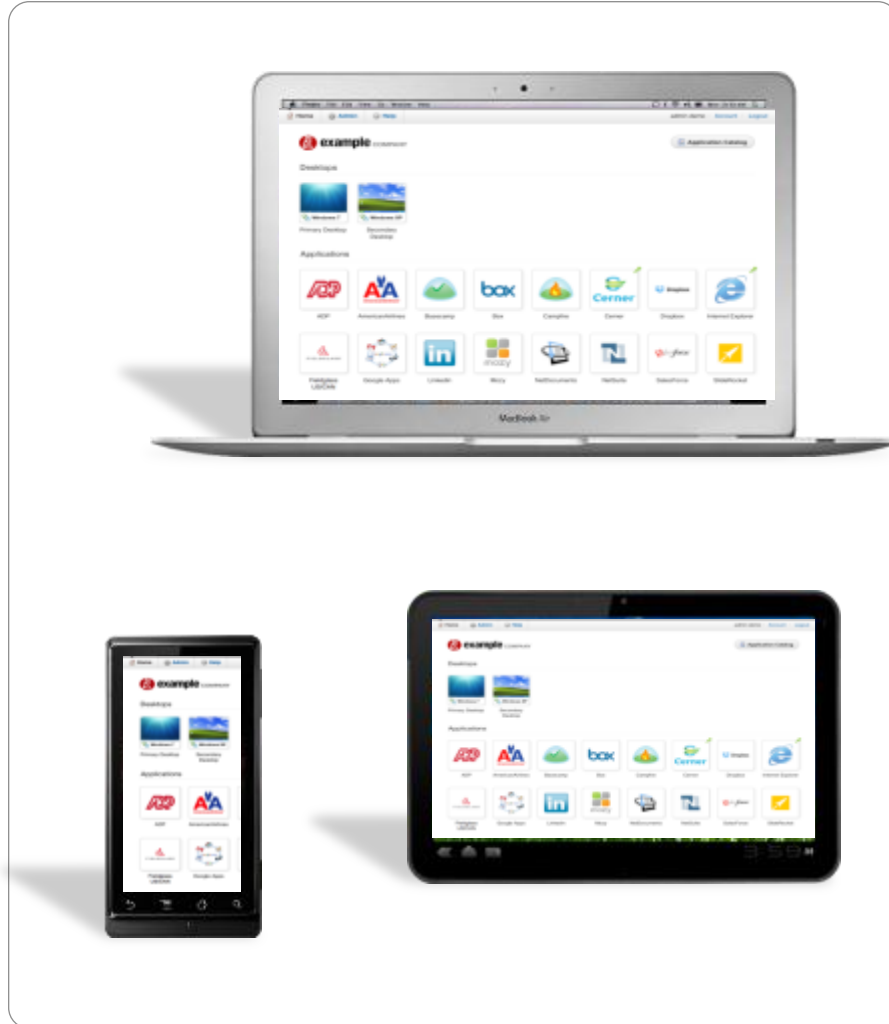
- Simplified entitlements for all users centrally and efficiently
- Extensibility to integrate with existing tools for entitlement approval and tracking
- View all entitlements for a given user or group

### Benefits

- Admins can efficiently entitle Horizon resources to users and groups
- Admins can leverage existing tools and processes for approving entitlements and tracking licenses

# Unified End User Experience

*Single access experience for users across all devices*



## Overview

- Horizon Workspace is device aware, and optimized for the correct form factor
- Only displays supported application and resource types
- Directs user to install appropriate Horizon Clients

## Benefits

- Simplified user experience for accessing applications and services
- Users able to walk through easy agent deployment and update processes.
- Secure, fast access to applications

# Horizon Family Pricing & Packaging Overview

# Horizon Family Pricing & Packaging



## VMware Horizon Suite \$300 / Named User

### Horizon View \$250 / CC User

View  
ThinApp  
vSphere  
vCenter

### Horizon Mirage \$150 / Named User

Mirage  
Fusion Pro  
ThinApp

### Horizon Workspace \$150 / Named User

Workspace  
ThinApp

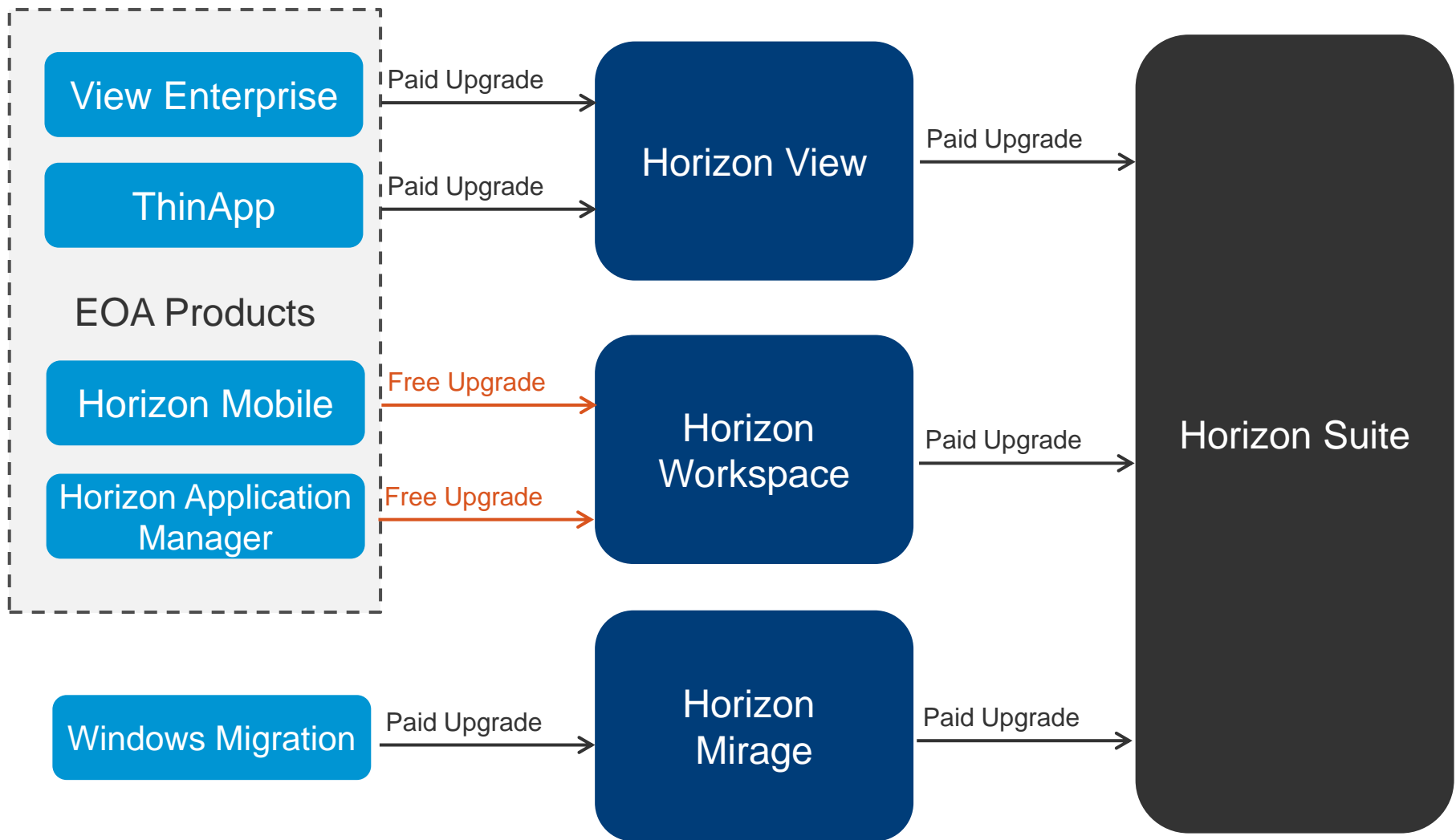
Horizon View  
Add- On \$190

Mirage Windows Migration  
6 mo. Term \$80

# Horizon Family Pricing & Packaging Overview

	Horizon			
	View	Mirage	Workspace	Suite
vSphere Desktop	✓			✓
vCenter Standard Desktop	✓			✓
View Manager & Composer	✓			✓
ThinApp & ThinApp Packager	✓	✓	✓	✓
Fusion		✓		✓
Physical Desktop Management		✓		✓
Mobile Workspace Mgmt			✓	✓
Application catalog and SSO			✓	✓
Enterprise File Sharing			✓	✓
Workstation (Admin License)	✓	✓	✓	✓
<b>Pricing</b>	<b>\$250 / CC User</b>	<b>\$150 / Named User</b>	<b>\$150 / Named User</b>	<b>\$300 / Named User</b>

# Upgrade Paths Summary





# Thank You !

# Validated Customer Solutions Solve Business Issues

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MOBILE  
SECURE  
WORKPLACE



BUSINESS  
PROCESS  
DESKTOP



ALWAYS-ON  
DESKTOP



BRANCH  
OFFICE  
DESKTOP

# Foley & Lardner delivers desktops to personal devices while reducing overall IT costs and improving productivity

## Needs

Desire to enable BYOD to reduce hardware costs and stop managing hardware

Needed to find a way to maintain high levels of IT service in light of IT staff reductions

## VMware Solution

Deployed the Mobile Secure Workplace solution with Horizon View

Foley & Lardner chose VMware due to their strong virtualization relationship and for VMware's depth of knowledge and clear, articulate vision for end-user computing.

## Benefits

- Reduced number of "tech touches"
- Reduced provisioning times from four hours to ten minutes
- Improved uptime and availability for billable attorneys
- Cut mobile device costs by 22 percent



*"VMware View let us move to desktop-as-a-service, which is easier for IT to manage. And our lawyers have more flexible access to the desktops. Anywhere in the country or globally, and no matter where they are, they get the exact desktop they have in the office."*

*Doug Caddell  
CIO, Foley & Lardner LLP*

# Virtual desktops at Amway go the distance to deliver high performance to streamline operations

## Needs

Offshore financial operations to Costa Rica without building any local infrastructure or data

Deliver a high performance desktop experience to employees in a different country

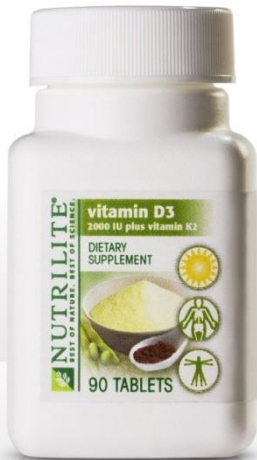
## VMware Solution

Deployed the Business Process Desktop solution with Horizon View on zero clients

Amway chose View due to the existing success with VMware for datacenter virtualization.

## Benefits

- Lower financial OPEX costs and Costa Rica project is the model for worldwide Amway operations
- End-users cannot tell the desktops are remote
- Eliminate data security challenges
- Eliminate spyware and blue screens of death



*“We’ve been able to build a system that is completely dynamic, manageable and scalable and deliver it thousands of miles away... You can’t tell that it’s not running locally...”*

*Josiah Becker  
Systems Support Analyst, Amway*



# DER takes flight with virtual desktops to save IT time, money while improving end-user experience and increasing security

## Needs

Poor control of a fleet of 4 generations of PCs that crashed regularly with no backups resulting in massive data loss

These issues taxed their helpdesk during business hours and was driving up their costs

## VMware Solution

Deployed the Branch Office Desktop solution with Horizon View to over 2,300 desktops across 580 offices

DER chose VMware as it was the only solution to meet all of their requirements and supports their mission critical reservation application

## Benefits

- Achieved 90% savings on power alone by switching to zero clients
- 50% reduction in help desk costs
- Lockdown endpoints and secure data in the datacenter
- Mission critical app, Amadeus, performs better in virtual desktop



*“It seems utterly absurd when you first hear that only three employees are supposed to manage 2,300 live desktops workplaces distributed across the country. But it’s true! Our experience with View has made me completely confident in the solution we have selected.”*

*Michael Klein*

IT manager, DER Deutsches Reisebüro GmbH & Co. OHG



# Southeast Financial Credit Union delivers a familiar desktop at lower costs with better security

## Needs

Existing app presentation solution on thin clients was difficult to configure, support and experienced daily failures.

Needed a more stable end-user environment to manage costs.

## VMware Solution

Deployed the Branch Office Desktop solution with Horizon View across 17 branch offices

Southeast Financial chose View because it cost less, used less RAM and delivered a more stable desktop

## Benefits

- Easy roll out due to familiar desktop experience
- Ability to deliver training videos across sites
- Quickly fix security issues and viruses
- Reduce IT time spent on provisioning and updates



*“The VMware View solution is like a breath of fresh air. It works like it’s supposed to... We have time to focus on enhancing the network and supporting the business strategically instead of holding it back.”*

*David Didlay*  
IT Specialist



# VMware Horizon Delivers Desktop Services Worldwide

