

# VMware vSphere the Best Platform for Cloud Infrastructures

#### **Agenda**

Who We Are

**Our Vision** 

vSphere 4



**VMware: Who We Are** 

# World's leading provider of virtualization solutions

Founded 1998, IPO August 2007

100,000+ customers worldwide—All sizes and industries; 100% of Fortune 100

Vision: Transform computing through virtualization

Products: reliable, award-winning, most-deployed

Headquarters in Palo Alto, CA, with 40+ offices worldwide



#### **Industry Recognized Product Excellence...**



**Most Reliable:** VMware ESX (#2: IBM Mainframe)

**Best Breakout Technology:** VMware

**Easiest to Use/Manage:** VMware Workstation

Biggest "Wow" in an IT Product: VMware Fusion

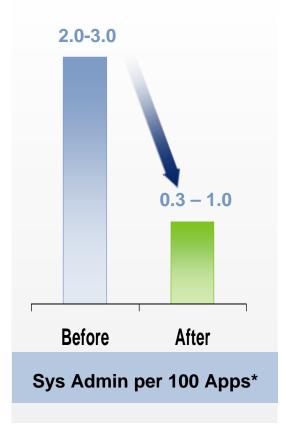


#### ...Delivering Transformative Benefits...

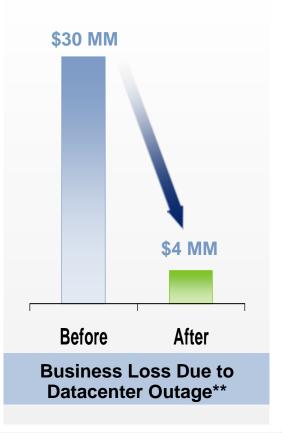
# Reduction in Datacenter Capital Expense



#### Reduction in Datacenter Operating Expense



#### **Reduction in Risk**



<sup>\*</sup>Source: IDC and VMware TAM program

<sup>\*\*</sup> Source: VMware customer – a \$2bn insurance company. Estimates based on 40 hrs needed to recover before virtualizing and 4.5 hrs needed to recover before virtualizing and 4.5 hrs needed to recover before virtualization.

#### ...To the World's Most Successful Companies

#### 140,000+ VMware customers

- 100% of Fortune 100
- 100% of Fortune Global 100
- 96% of Fortune 1000
- 95% of Fortune Global 500

94% use VMware in production\*

65% run VMware as the default application platform\*



























#### ...and Public Sector Organizations...

# Intelligence





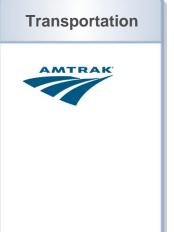














#### **Agenda**

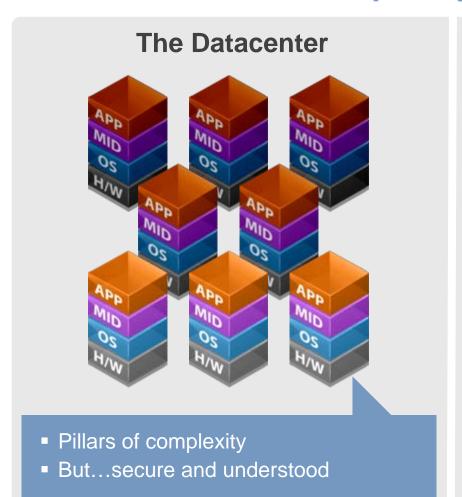
Who We Are

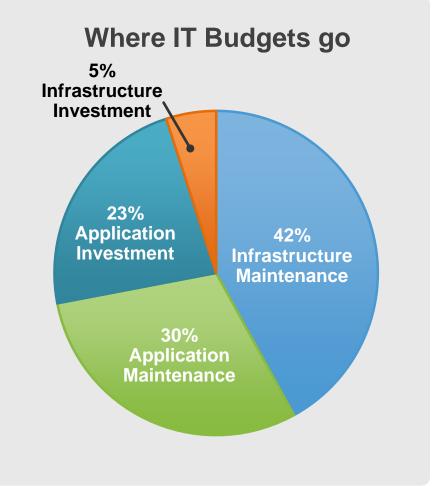
**Our Vision** 

vSphere 4



#### The Problem - Complexity, Inefficiency, Rigidity

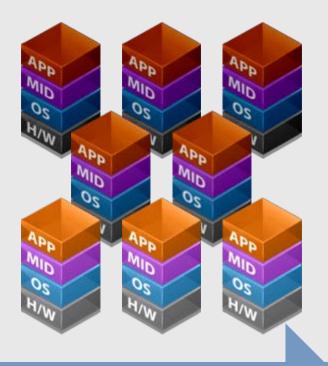






#### The Goal - Simplify the Complexity

#### The Datacenter



- Pillars of complexity
- But...secure and understood

#### IT as a Service



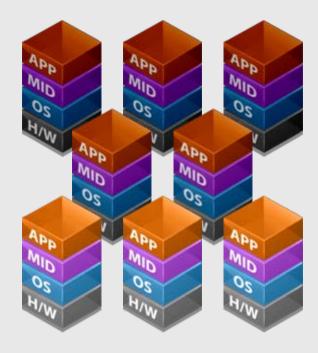


- Inexpensive, pay as you go
- Ubiquitously available
- Reliable
- Choice of providers



#### The Cloud: Means to Delivering IT as a Service

#### **The Datacenter**



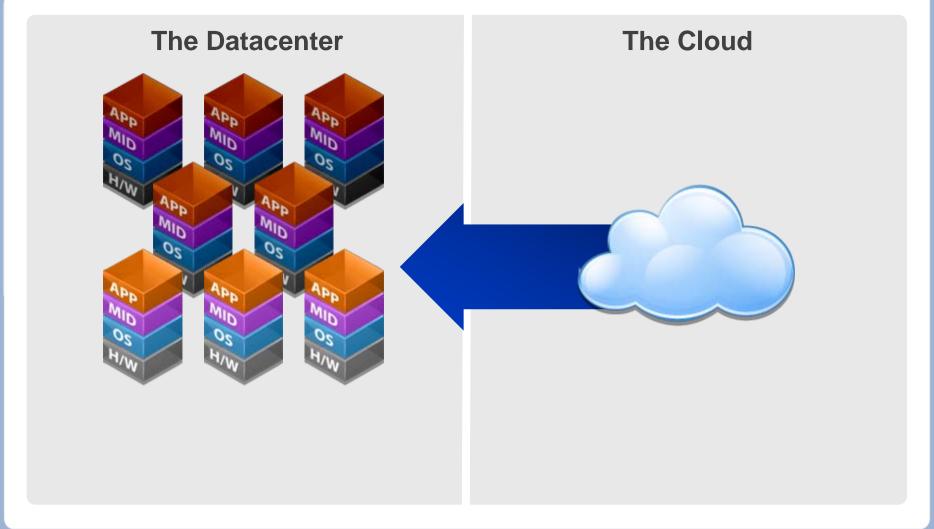
#### The Cloud



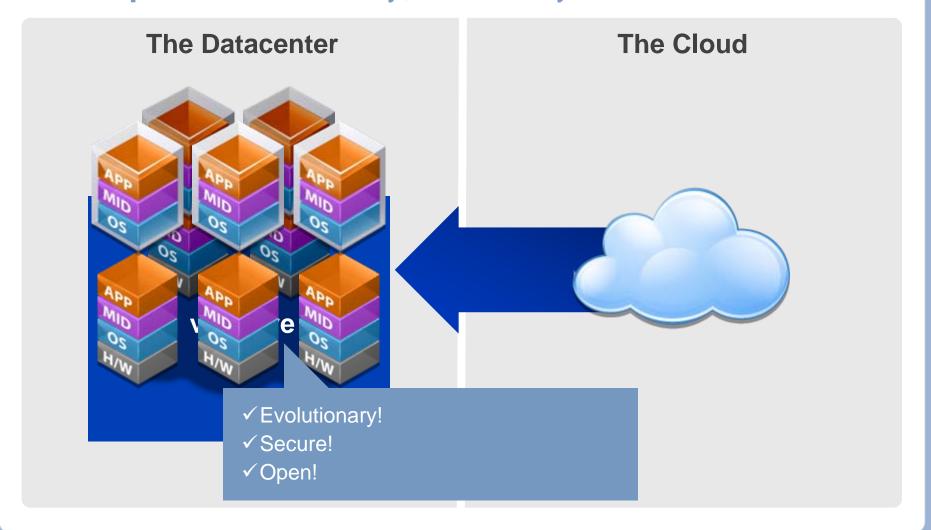
- Scalable, on-demand
- Flexible, self-managing, lights-out operation
- Pay-as-you-go



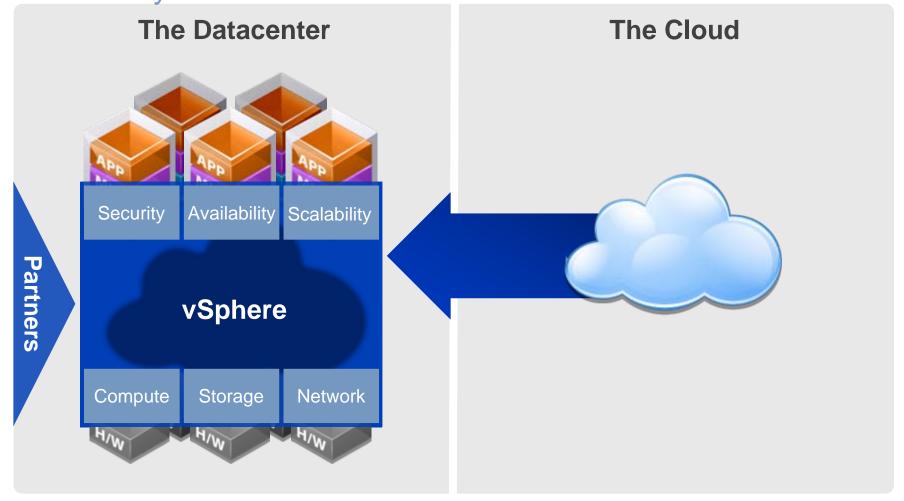
#### The Cloud: Means to Delivering IT as a Service



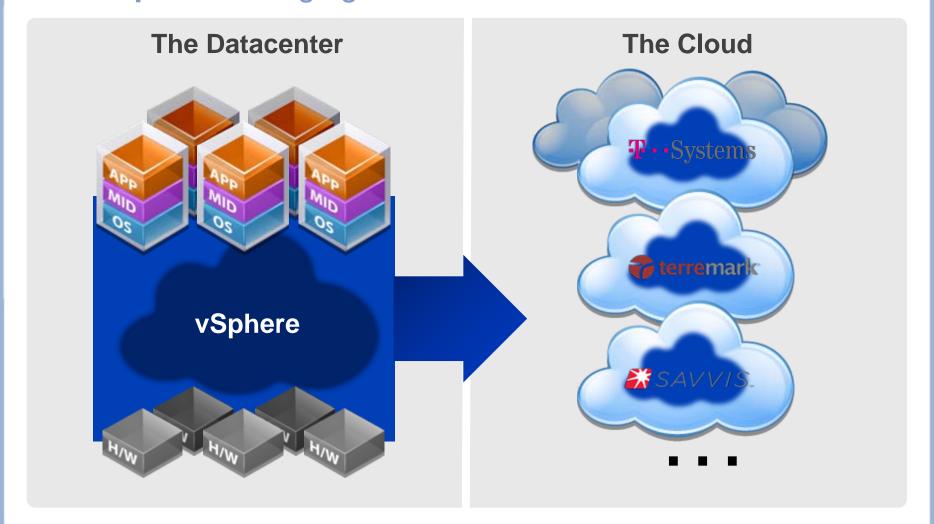
#### vSphere: A New Way, a New Layer



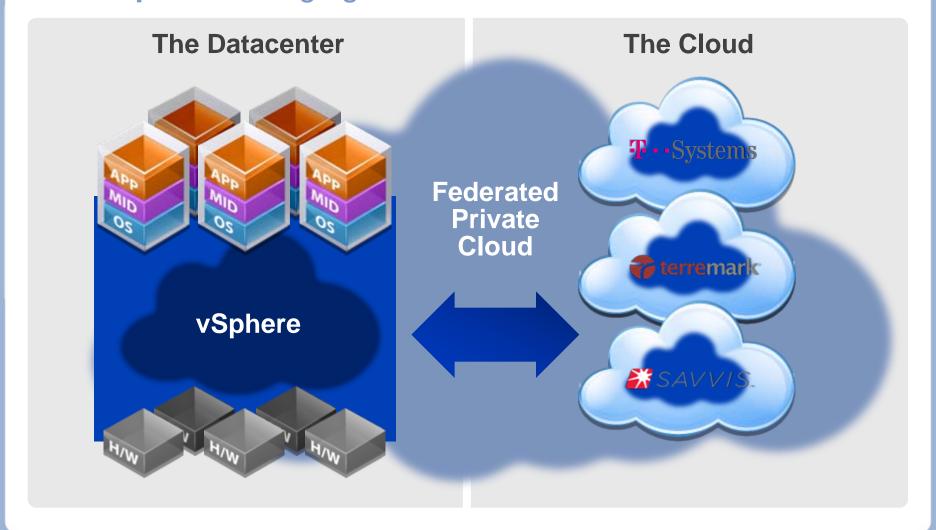
# **vSphere:** A True Hardware and Software Ecosystem



#### vSphere: Bridging the Datacenter to the Cloud

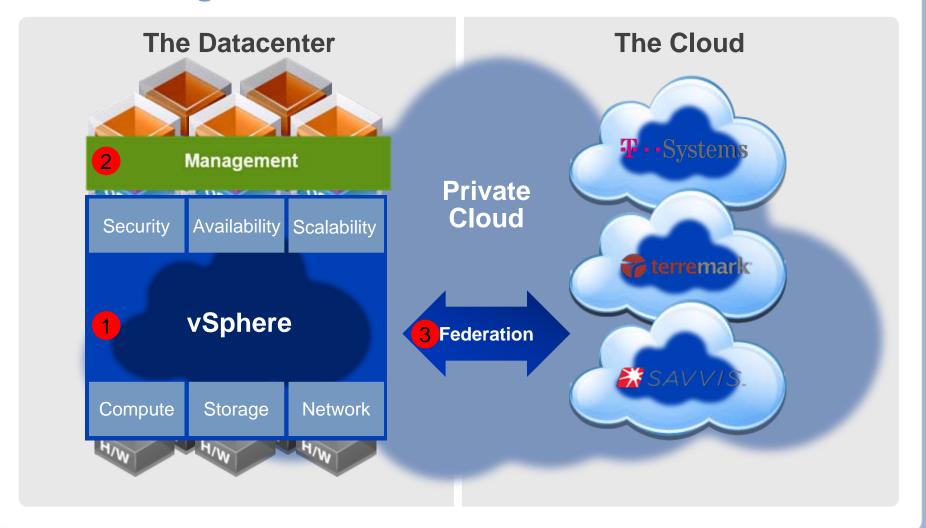


#### vSphere: Bridging the Datacenter to the Cloud





#### **Building Blocks for the Private Cloud**





#### **Agenda**

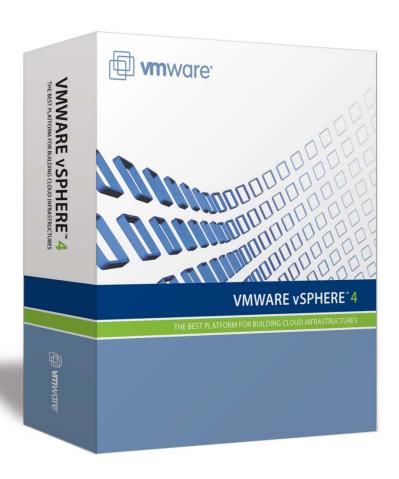
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#### Introducing...



### VMware vSphere<sup>™</sup> 4

THE BEST PLATFORM FOR BUILDING CLOUD INFRASTRUCTURES

General availability is expected by the end of Q2



#### **VMware vSphere 4 Delivers**

#### **EFFICIENCY**

Cut capital and operational costs by over 50% for all applications...

#### CONTROL

...while automating quality of service...

#### CHOICE

...and remaining independent of hardware, operating system, application stack, and service providers



#### **VMware vSphere**

#### Powerful enough for business critical apps

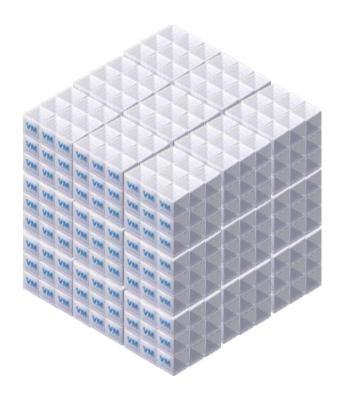
95% of Apps **VMware VMware** Require vSphere 4 Infrastructure 3 1 to 2 CPUs 4 VCPUs 8 VCPUs **CPU** < 4 MB at peak 64 GB per VM 256 GB per VM % of Applications Memory < 2.4 Mb/s 9 Gb/s Network 30 Gb/s < 10,000 100,000 300,000+ **IOPS** 



#### **Single VM Database Performance**



#### **Building the Giant Computer**



32 hosts

2,048 processor cores

1,280 virtual machines

3 Million IOPs

32TB of RAM

16PB of storage



#### **vStorage Thin Provisioning**

#### Make the Giant Computer Storage Efficient Saves Up to vSphere **50%** on Storage **20GB 10GB** 40GB **Virtual Disks 20GB 40GB** 100GB Data **Storage** 10GB 40GB



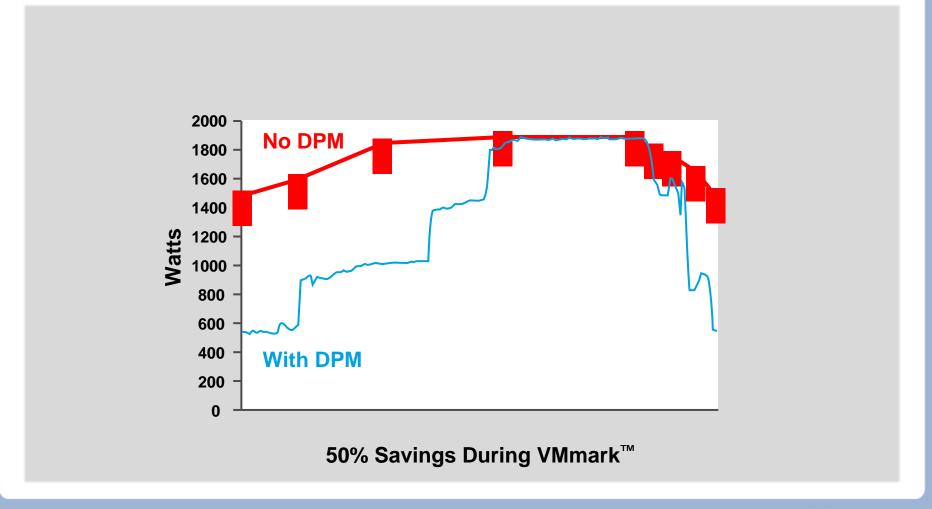
#### **vStorage Thin Provisioning Savings**







#### **Distributed Power Management**



#### **vNetwork Distributed Switch**

#### Make networking in the giant computer easy to configure App App App os os os **Net State Net State Net State** Nexus 1000V CISCO



#### **vCenter Host Profiles**

# Make the Giant Computer Easy to Extend/Scale

#### **VMware vSphere**

#### **EFFICIENCY**

Cut capital and operational costs by over 50% for all applications...

#### CONTROL

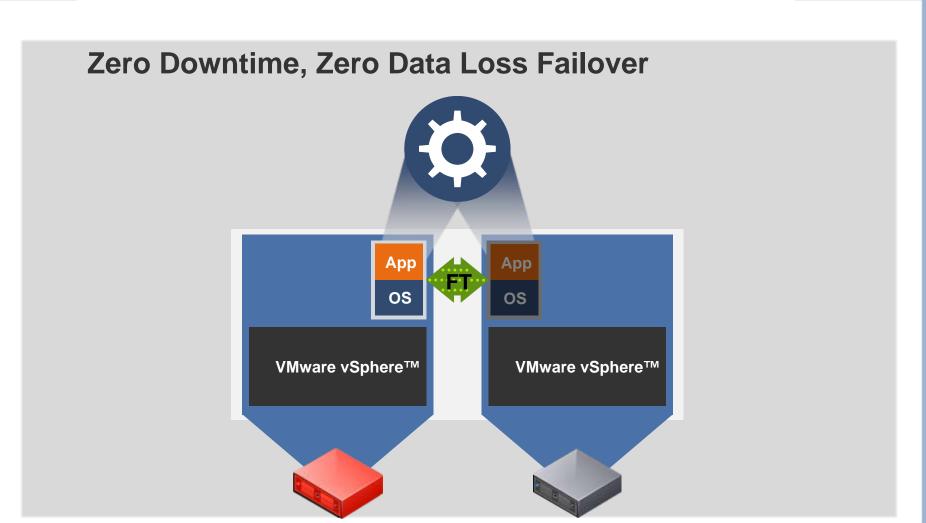
...while automating quality of service...

#### CHOICE

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#### **VMware Fault Tolerance**





#### **VMware vSphere**

#### **EFFICIENCY**

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#### CONTROL

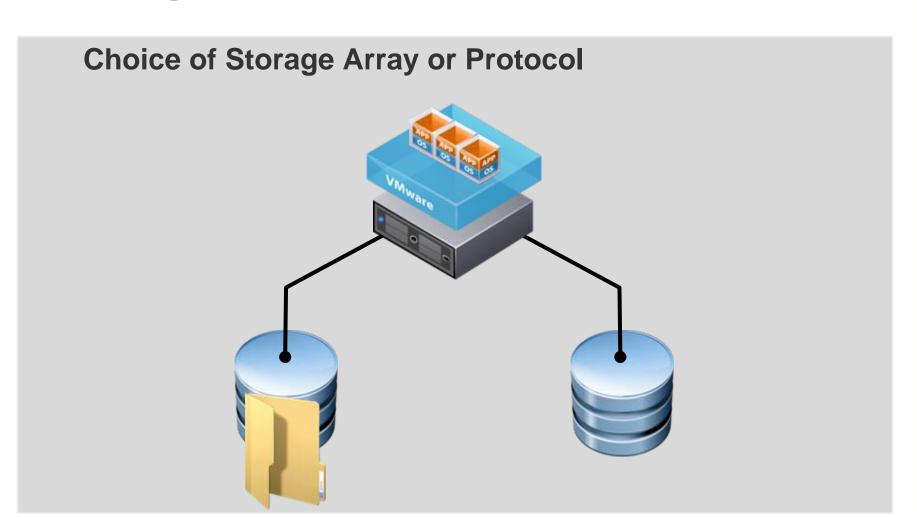
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#### **Storage VMotion**



#### **VMware vSphere 4 Delivers**

#### **EFFICIENCY**

Cut capital and operational costs by over 50% for all applications...

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#### CHOICE

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#### A Customer with 100 Virtualized Hosts...

**Higher Consolidation Ratio** 

= \$216,194

**Power Savings** 

= \$15,840

**Storage Savings** 

= \$99,750

**Configuration Efficiency** 

= \$87,293

**Avoided downtime** 

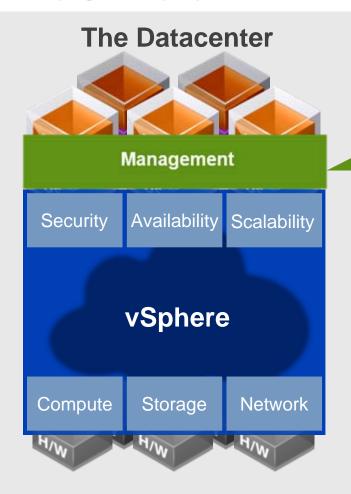
= \$188,062

By upgrading to VMware vSphere 4 this customer will:

- Save additional \$607,138 annually or \$1,821,414 over 3 years
- •Free up more than half person/year in sys admin time
- •Reduce business downtime by additional 30 min a year



## vCenter: Get Out of the Plumbing, Manage at the SLA level



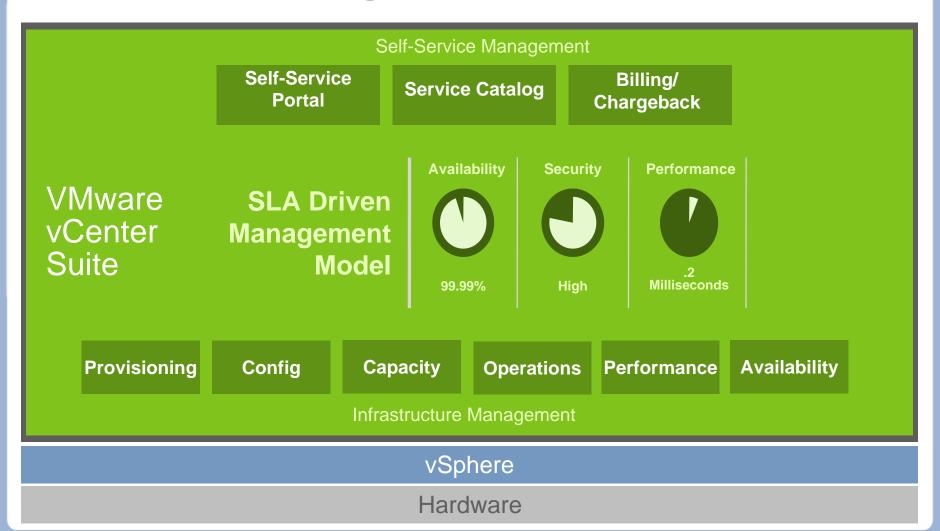
#### The Cloud

#### **SLA Driven Management**

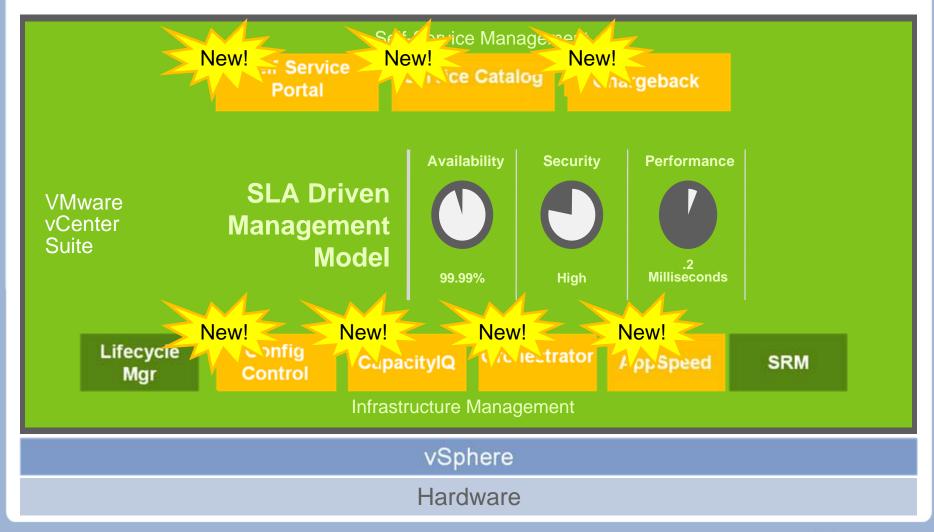
- Provisioning
- Configuration
- Disaster recovery
- Security and policy enforcement
- Optimized resource management
- Automated app management
- Self Service



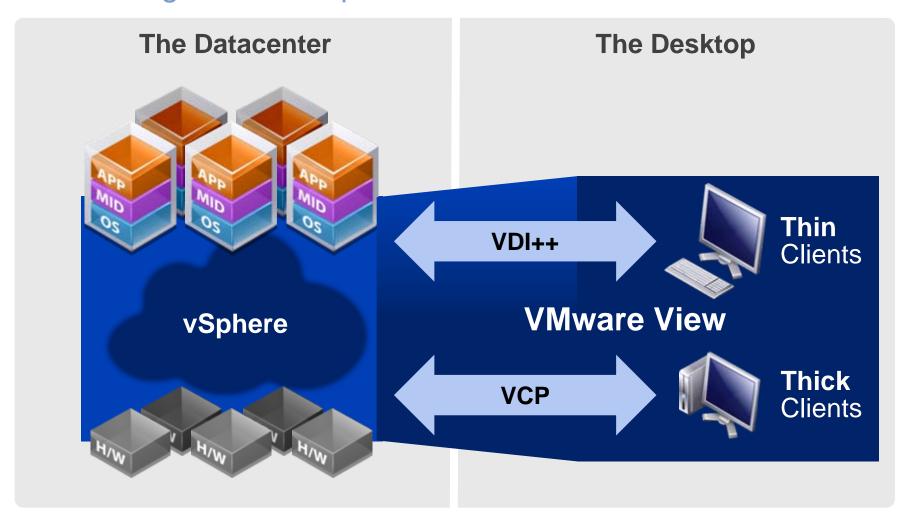
#### **SLA Driven Management**



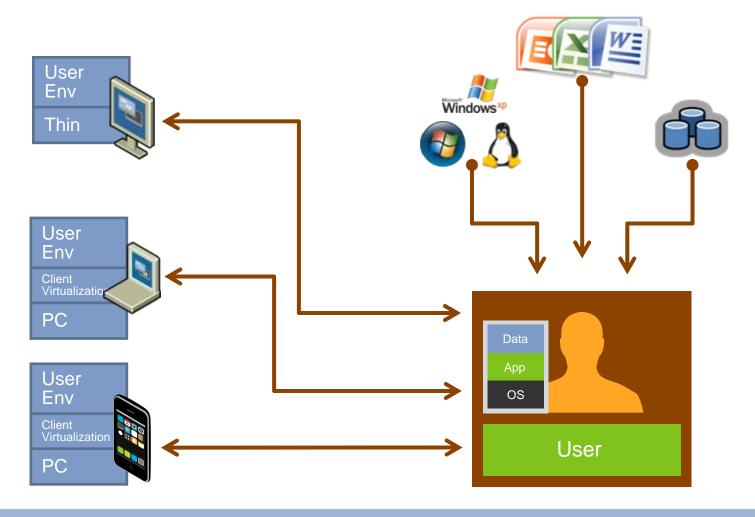
#### **SLA Driven Management**



#### Taking the Desktop to the Cloud



# **Desktops That Follow the User:** From VDI to VMware View





#### 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





#### **Summary**

- Private Cloud the Benefits Of Cloud Computing without the Disruption
- vSphere is the Foundation for the Private Cloud
- > vSphere Delivers:
  - Efficiency: More Cost Savings
  - **Control**: Better SLAs for Applications
  - Choice: Future Proof Infrastructure

