Cloud Computing – Private Cloud

**Amplifying Business Value thru IT**

*Ivo Sladoljev, Territory Manager, Adriatic Region*

*December, 2010.*
Agenda

- Company Facts
- VMware Focus
  - Amplifying Business Value thru IT
- VMware Solution Strategy
  - Embracing Open Cloud Computing to Deliver ITaaS
- The Journey to ITaaS
  - Evolutionary Approach to Amplified Business Value
VMware is the Customer Proven Market Leader

**Company Overview**
- > $2.6 billion trailing 4 qtr revenue
- Over $2.9 billion in cash
- 28%+ operating margins
- ~8,000 employees worldwide
- 5th largest infrastructure software company in the world

**Proven in the Trenches**
- 190,000+ VMware customers
- 100% of Fortune 100
- 100% of Fortune Global 100
- 97% of Fortune 1000
- 94% of Fortune Global 500
VMware is the Customer Proven Market Leader

- **Company Overview**
  - > $2.6 billion trailing 4 qtr revenue
  - Over $2.9 billion in cash
  - 28%+ operating margins
  - ~8,000 employees worldwide
  - 5th largest infrastructure software company in the world

- **Proven in the Trenches**
  - 190,000+ VMware customers
  - 100% of Fortune 100
  - 100% of Fortune Global 100
  - 100% of Fortune Global 100
  - 97% of Fortune 1000
  - 94% of Fortune Global 500

84% of all virtualized applications in the world run on VMware.

*Gartner, December 2009*

Source: *Server Virtualization: From Virtual Machines to Clouds*, Gartner IT Infrastructure, Operations and Management Summit, June 2010, Thomas Bittman

This Magic Quadrant graphic was published by Gartner, Inc. as part of a larger research note and should be evaluated in the context of the entire report. The Gartner report is available upon request from VMware.

The Magic Quadrant is copyrighted 2010 by Gartner, Inc. and is reused with permission. The Magic Quadrant is a graphical representation of a marketplace at and for a specific time period. It depicts Gartner’s analysis of how certain vendors measure against criteria for that marketplace, as defined by Gartner. Gartner does not endorse any vendor, product or service depicted in the Magic Quadrant, and does not advise technology users to select only those vendors placed in the “Leaders” quadrant. The Magic Quadrant is intended solely as a research tool, and is not meant to be a specific guide to action. Gartner disclaims all warranties, express or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.
Extensive Global Partner Ecosystem

1,300+ Technology and Consulting Partners

- AMD
- CISCO
- Dell
- EMC
- Fujitsu
- HP
- IBM
- Intel
- NEC
- NetApp
- Novell
- SAP
- Symantec

~ 25,000 Channel Partners
Top Distributors, Resellers, System Vendors and Integrators

2,600+ vCloud Service Provider Partners

- at&t
- BT
- Savvis
- Sungard
- Terremark
- T-Systems
- Verizon

51,000 VMware Certified Professionals
VMware Focus

Amplifying Business Value thru IT
IT is Traditionally Forced to Focus on Non Value-Add Activity

Overwhelming complexity

+ Brittle infrastructure

= < 30% of IT budgets goes to innovation and competitive advantage

IT Agility Drives Business Value

Source: VMware Fortune 100 Customers
Shifting Focus to Create Opportunity

1. Reduce the Complexity
   *to simplify operations and maintenance*

2. Dramatically Lower Costs
   *to redirect investment into value-add opportunities*

3. Enable Flexible, Agile IT Service Delivery
   *to meet and anticipate the needs of the business*

*Drive IT Agility to Increase Business Value*
Virtualization is Key to This Shift in Focus

Source: IDC

Cost per VM hour (2GB instance)

Utilization

VM Cross Over

Physical Hosts  Virtual Machines

Source: IDC
Virtualization Paves the Way to a New Era in IT

Cloud Computing will transform the delivery and consumption of IT services
Cloud Computing is an approach to computing that leverages the efficient pooling of on-demand, self-managed virtual infrastructure, consumed as a service.
IT as a Service = Optimizing IT production for business consumption

Instantly Available, Instantly Responsive, Always Reliable
VMware Solution Strategy

Embracing Open Cloud Computing to Deliver ITaaS
The New IT Landscape

Existing Apps

New Enterprise Apps

SaaS Apps

Existing Datacenters

Public Cloud Services
The New IT Landscape

The Challenge for IT:

Weave all this together into a cohesive, secure, compliant whole
Three Core Focus Areas

Re-think End-User Computing

The Challenge for IT: Weave all this together into a cohesive, secure, compliant whole

Modernize Application Development

Evolve the Infrastructure
Bring Cloud Architecture to Existing Datacenters

✓ Leverage virtualization to transform physical silos into elastic, virtual capacity
✓ Increase automation thru built-in policy-driven management
Bring Cloud Architecture to Existing Datacenters

- Leverage virtualization to transform physical silos into elastic, virtual capacity
- Increase automation thru built-in policy-driven management
- Move from static, physical security to dynamic, embedded security
Bring Cloud Architecture to Existing Datacenters

- Leverage virtualization to transform physical silos into elastic, virtual capacity
- Increase automation thru built-in policy-driven management
- Move from static, physical security to dynamic, embedded security
- Enable secure, self-service to pre-defined IT services, with pay-for-use

Organization: Marketing

- Users & Policies
- Organization VDCs
- Catalogs

Organization: Finance

- Users & Policies
- Organization VDCs
- Catalogs

Compute

Storage

Network

$75
Private Cloud = Decreased Costs, Increased Agility
Open Cloud Computing thru Hybrid Cloud Model

VMware vCloud Datacenter Service
- Common platform
- Common management
- Common security

Cloud Computing Moves from a Technology Discussion to a Business Decision
Three Core Focus Areas

- **Re-think End-User Computing**
- **Modernize Application Development**
- **Cloud Infrastructure & Management**

Existing Datacenters

Public Cloud Services

Existing Apps

New Enterprise Apps

SaaS Apps
New Applications – New Approach

Modern Frameworks and Tools

Cloud Application Platform

Modern Platform Services
VMware’s Cloud Application Platform

Common Platform Services
- Application Management
- Data Management
- Messaging
- Dynamic Load Balancing
- App Server

Frameworks and Tools
- Rich Web
- Integration
- Batch
- Data Access
- Social Media
- Cloud APIs

VMware vFabric

Optimized Runtime
Accelerated Deployment
Modern Platform Services
- Dynamic Load Balancing
- Application Management
- Data Access
- Messaging
- Social Media
- Cloud APIs

Rich Web
Integration
Batch
Data Access
Social Media
Cloud APIs
Portable Across Clouds

VMware vFabric

Frameworks and Tools
- Rich Web
- Integration
- Batch
- Data Access
- Social Media
- Cloud APIs

Common Platform Services
- Application Management
- Data Management
- Messaging
- Dynamic Load Balancing
- App Server

Private Cloud

vmforce

Google App Engine
Smarter on VMware Clouds

VMware vFabric

Common Platform Services
- Application Management
- Data Management
- Messaging
- Dynamic Load Balancing
- App Server

Frameworks and Tools
- Rich Web
- Integration
- Batch
- Data Access
- Social Media
- Cloud APIs

Intelligence Sharing

VMware Cloud Infrastructure & Management
- Auto-Provisioning
- Auto-Scaling
- Increased Visibility
Three Core Focus Areas

- **Re-think End-User Computing**
- **Cloud Application Platform**
- **Cloud Infrastructure & Management**
Traditional View of Desktop Computing

VS.
End User Perspective

SaaS Apps

Enterprise Apps

Windows Apps
End User Perspective

SaaS Apps

Enterprise Apps

Windows Apps
End-User Computing = User Centricity

SaaS Apps

Enterprise Apps

Windows Apps

Native from Any Device

Secure Access to All Applications
End-User Computing Emanates from the Cloud

- Image & Persona Mgmt
- Storage Optimization
- Application Virtualization
- Authentication Services

SaaS Apps

Enterprise Apps

Windows Apps
Three Core Focus Areas

- End-User Computing
- Cloud Application Platform
- Cloud Infrastructure & Management
VMware Solutions for ITaaS

Secure, Manageable, Cohesive

Secure Private Cloud

End-User Computing
- Modular Desktops
- Unified User Management
- Cloud-Ready Appliances

VMware Enabled Public Clouds
- SaaS Applications
- Other SaaS Providers

Independent Public Clouds

Cloud Application Platform
- Cloud-Scale
- Open
- Self-Managed

vmForce
- Other PaaS Partners

Google App Engine
- Other cloud infrastructure providers

Cloud Infrastructure & Management
- Efficiency Through Automation
- Agility with Control
- Freedom of Choice

vCloud Datacenter
vCloud Express

Application Mobility
- VMware vSphere: Foundation for Cloud Computing
The Journey to ITaaS

Evolutionary Approach to Amplified Business Value
The Journey to ITaaS

COST EFFICIENCY

IT Production

Get the Most Out of Your Infrastructure
The Journey to ITaaS

COST EFFICIENCY

Get the Most Out of Your Infrastructure

QUALITY OF SERVICE

Achieve Unprecedented Reliability
The Journey to ITaaS

COST EFFICIENCY

IT Production

Get the Most Out of Your Infrastructure

QUALITY OF SERVICE

Business Production

Achieve Unprecedented Reliability

BUSINESS AGILITY

IT as a Service

Enable Agility via Cloud Computing Architecture
The Journey to ITaaS

COST EFFICIENCY

QUALITY OF SERVICE

BUSINESS AGILITY

Optimizing Production of IT Services

- Efficient Pooling
- Elastic Resource Scheduling
- Automation Thru Policy
- Open & Interoperable

Enable Agility via Cloud Computing Architecture
The Results are Transformational

- **Financial**: Capital and datacenter costs
- **Human**: Time spent on routine admin tasks
- **Earth’s**: Average power, cooling and real estate needs
"The draw is saving money, but after a year or so, surveys show that adopters believe the key is agility."

Tom Bittman, Gartner

- Capital costs reduced by 50% - 60%
- Delayed data center expansion
- Operational costs reduced by 25%+
- Average of 33% reduction in routine admin time
- E.g. provision a server in minutes
- Up to 80% reduction in datacenter energy costs
The Journey to ITaaS

COST EFFICIENCY

QUALITY OF SERVICE

BUSINESS AGILITY

IT Production

Business Production

IT as a Service

Optimizing Production of IT Services

- Efficient Pooling
- Elastic Resource Scheduling
- Automation Thru Policy
- Open & Interoperable

Optimizing Business Consumption

- Secure Self-Service
- Business Driven SLAs
- Pay for Use
IT as a Service = Optimizing IT production for business consumption

Instantly Available, Instantly Responsive, Always Reliable
What is this *Cloud* Thing?

*Cloud Computing* is an *approach to computing* that leverages the efficient pooling of on-demand, self-managed virtual infrastructure, consumed as a service.
In Summary, Only VMware …

is the world’s most trusted virtualization platform for cloud computing

virtualizes the entire fabric of the datacenter, while securely extending to public cloud infrastructure

delivers an evolutionary path to cloud computing, while preserving freedom of choice

brings the broadest set of ecosystem partners, extending the value of existing investments
Hvala

Ivo Sladoljev, Territory Manager, Adriatic Region