



**NetApp™**

Go further, faster™

# From Virtualization to Flexible IT: Transforming the Datacenter to Meet Business Needs

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# NetApp at a Glance

“Our talented employees are united in one goal: helping our customers succeed.”

- Broad solutions portfolio
- Comprehensive professional services
- Global support
- Industry-leading partners
- 140+ offices around the world
- ~9000 employees
- 20% 5-year CAGR
- Fortune 1000, S&P 500, NASDAQ 100



# Leaders Rely on NetApp

## Mission Critical



Catholic Healthcare West

## Enterprise Scale



▶ 18+ PB



▶ 6.5+ PB



▶ 6.5+ PB

## Demanding Workloads



▶ 350M email inboxes on 80+ PB



▶ 1.3 million email accounts



▶ 290M transaction per month

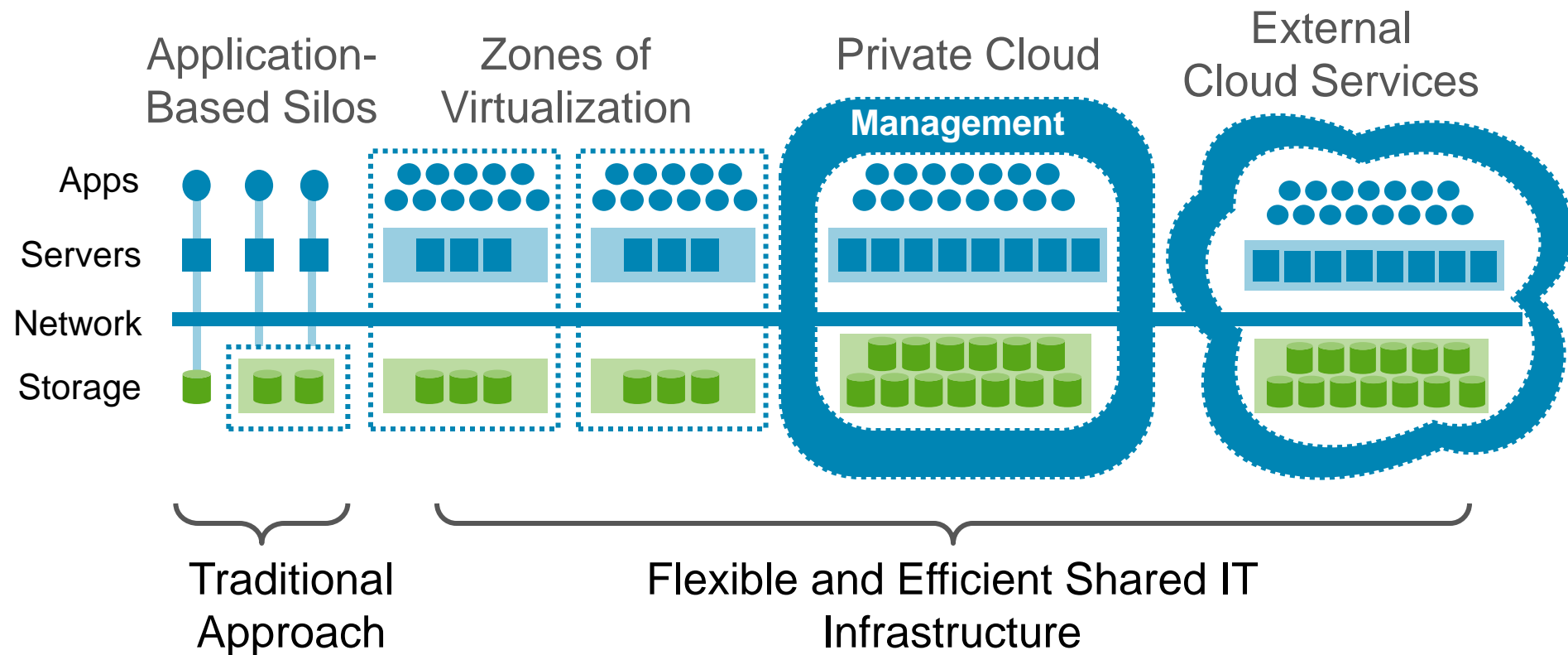
# Growth Companies of Scale



Customer Success Is Fueling Our Growth

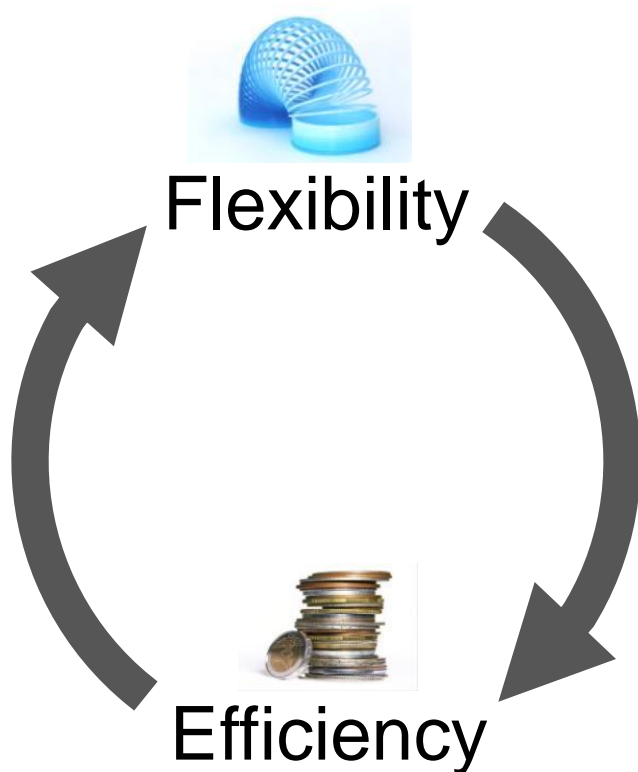
Fortune 1000 + Global 500 High Tech Companies with \$4B+ revenues and 20%+ five year organic CAGR

# Our Customers' Data Centers are Evolving



Multiple tenants and workloads are now sharing a single IT infrastructure

# The Power of Shared Infrastructure



## Flexibility to Accelerate Business

- Capitalize on new opportunities
- Dynamically add capacity and rebalance workloads to meet cloud requirements

## Sustained Efficiency to Drive Business Productivity

- Maximize efficiency while delivering predictable performance levels
- Leverage automation to deliver on promise of cloud

Maximizes IT flexibility & efficiency

# What If You Could . . .

- Backup and restore your VMs instantaneously
- Easily protect all your virtualized data with DR
- Save 50% on your storage, power, cooling, and space
- Deduplicate virtual server and virtual desktop data, enabling 50% space savings, or more
- Automate your most labor-intensive data management tasks
- Clone and provision storage as quickly as your VMs
- Do all of this with one architecture in any environment





# Flexible IT Delivers Measureable Results

|                        | Typical       | Possible with NetApp                          |
|------------------------|---------------|---|
| Management             | 250TB per FTE | Up to 2PB per FTE                             |
| Provisioning           | Weeks         | Minutes                                       |
| Application Deployment | Months        | Days  |
| Utilization            | 30%-40%       | Data: 100%-2000%<br>Storage: 75% or greater   |
| Storage Efficiency     | 35%           | Guaranteed 50%* less<br>Up to 85% less for VI |
| Backup and Recovery    | Hours         | Minutes                                       |
| Clones                 | Hours         | Minutes                                       |
| Power                  | 10% reduction | Up to 50% reduction                           |

\*<http://www.netapp.com/us/solutions/infrastructure/virtualization/guarantee.html>

Source: Oliver Wyman: Sensis Case Study



# NetApp Infrastructure Partners



## Technology Partners



## Delivery Partners



## Service Providers



**TATA CONSULTANCY SERVICES**



# Virtualization Solutions for Microsoft



Lower  
Costs

Increased  
server  
efficiency

Flexibility

Rapidly  
provision  
and redeploy  
servers

Improved  
Management

End-to-end  
management  
for servers

Business  
Continuity

Continuous  
server  
availability

Use 50%  
less storage

Provision  
servers  
plus storage  
even faster

Manage entire  
heterogeneous  
environment

Continuous  
storage  
availability

Flexible IT Powered by Microsoft  
and NetApp



# NetApp Integration with Hyper-V

## NetApp SnapManager for Hyper-V

- Automated, policy-based backup and restore for Hyper-V VMs
- Certified for Windows Server 2008 R2 with Hyper-V
- Create application-consistent backups of VMs

## Windows-Based SnapManagers supported on Hyper-V

- Data protection for virtualized Microsoft Enterprise Applications
- Support for direct connected and pass-through disks (FC & iSCSI)

## NetApp ApplianceWatch PRO

- Rapid VM Provisioning from SCVMM Templates with FlexClone
- Virtual Machine Manager integration with PRO Tips
- VM storage monitoring via System Center Operations Manager

# Single Pane of Glass Management



Centralized storage monitoring  
for physical and virtual servers

- Automatic NetApp system discovery
- Availability/capacity monitoring
- Alerts and consolidated reporting

Centralized storage management  
for virtual environments

- Storage provisioning
- Instant VM cloning
- Data deduplication
- Thin provisioning
- DR Failover & Testing



# NetApp Partnership with VMware

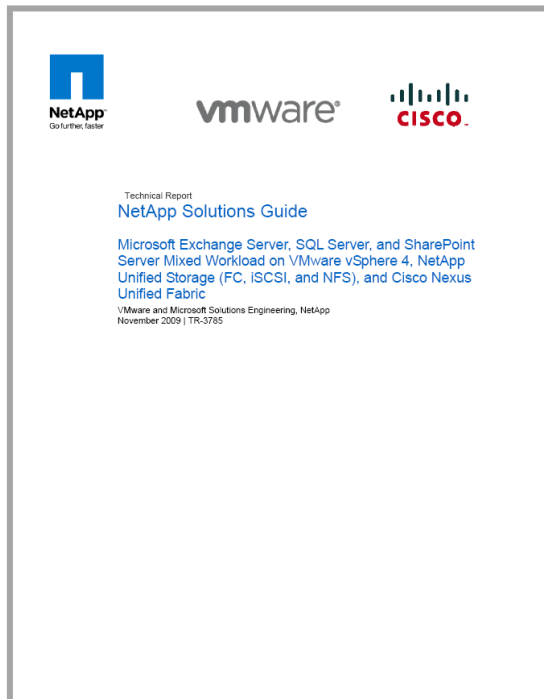
vmware



- Mutual Global Alliance Partners
- Over 10,000 joint enterprise installations
- Strong engagement at all business levels
- All NetApp products are VMware certified
- Reference platforms for View, vSphere & vCloud
- Deep engineering-level collaboration
- Joint support for escalations

Flexible IT for Servers and Desktops

# Best Practices for Microsoft on VMware



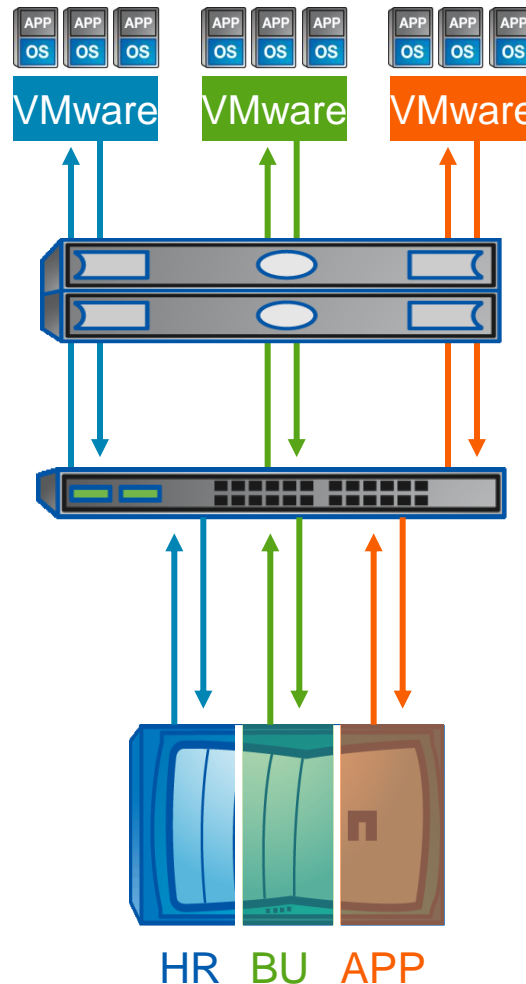
- Mixed workload solution guide
- Reduce costs in silos
  - Consolidate enterprise applications
  - Virtualize 100%
- Increase application service delivery
  - Application-consistent backup and recovery
  - Integrated disaster recovery

# Secure Multi-tenant Solutions

vmware®

  
CISCO

  
NetApp™



## Overview

- The only validated design for end-to-end secure multi-tenancy
- Data is securely isolated from virtual server, network, to storage

## Benefits

- Address end user security concerns
- Meet regulatory and compliance requirements
- Gain economies of scale, higher utilization, and better SLAs

# Flexible IT with NetApp Virtualization Solutions





# Business Benefits of Flexible IT



Provisions IT resources within hours instead of weeks

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Generates \$5M in annual revenue, gets to market 12 months faster

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Grows hosting revenues by 500% over 4 years using virtualization and NetApp shared storage

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Achieves 166% ROI, reclaims 75% of data center space and reduces energy costs by 70%

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# Avanade Speeds Test and Development



Avanade helps its customers maximize their IT investments through comprehensive solutions that drive business results.

## Business Impact

- Speeds test and development of custom Microsoft projects for Avanade clients

## Increased IT Flexibility

- Automation and centralized management with minimal administration
- Turnkey provisioning of new environments, with build-out or break-down in minutes
- Rapid scaling of server and storage resources

## Increased IT Efficiency

- Reduced server/storage footprints by 50%
- Reclaims over 50% of storage space

# New Business Opportunity for SAP



SAP is the world's largest business software company with 95,000 customers and €10.6B in revenues serving 50+ countries.

## Business Impact

- NetApp powers all new on-demand lines of business to serve new customer segments

## Increased IT Flexibility

- 83% higher productivity
- 10 PB installed, supports all SAP On-Demand offerings

## Increased IT Efficiency

- 650 terabytes managed by one person
- 33% lower hardware & software costs
- 36% lower per terabyte costs
- 49% lower IT costs
- 4 year savings estimate of €5-10M

# TEP Accelerates New Applications



A UniSource Energy Company

Tucson Electric Power (TEP) Company, the principle subsidiary of UniSource Energy, is an electric utility with more than 2,000 megawatts of generating capacity serving more than 397,000 customers in southern Arizona.

## Business Impact

- Accelerated development for new Meter Data Management application
- 140% average annual ROI over six years

## Increased IT Flexibility

- Server provisioning time reduced by 80%
- User-initiated failover and failback operations
- Self-provisioning of virtual desktops

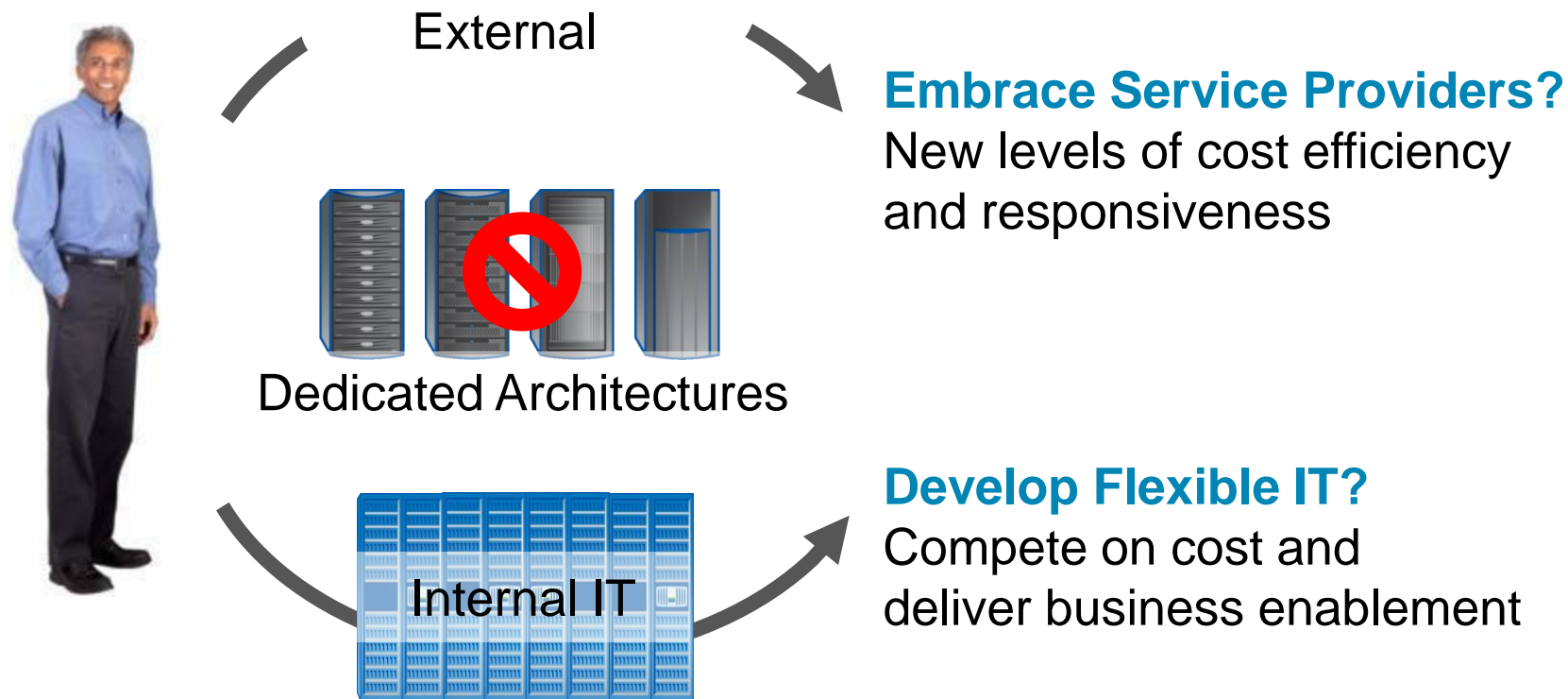
## Increased IT Efficiency

- Over \$1M in average annual savings
- Increased resource utilization by 400%
- Reclaims over 60% of storage space with de-duplication and cloning



## What's Next?

# The New Benchmark for IT is the Cloud



Maintaining the status quo is not an option

# NetApp Shared Infrastructure at Scale

StaaS

IaaS

SaaS/PaaS

photobucket

T-Systems

BT

YAHOO! MAIL

IRON MOUNTAIN DIGITAL™

at&t

Joyent  
Cloud Computing

SAP

france telecom

rackspace

intuit

perotsystems®

IBM

CSC

TATA

ORACLE®  
ON DEMAND

EDS  
an HP company

UNISYS

Telstra

azaleos™

terremark®

NAVITAIRE

Companies building services on NetApp storage

# Cloud-Based SAP Services at T-Systems

## T-Systems

A division of Deutsche Telekom, T-Systems operates information and communication technology (ICT) systems for multinational corporations and public sector institutions.

### Business Impact

- T-Systems is the largest SAP outsourcing company in Europe, serving 100 companies like Porsche, Shell & Airbus and 1.8M live users
- 30% lower cost offering than on-premise IT

### Increased IT Flexibility

- Dynamically scales, now with 80+ PBs
- New customer environments in 1 day
- Dynamically migrate to meet changing needs

### Increased IT Efficiency

- 50% increased in server and storage utilization
- 80%+ reduction in disaster recovery costs
- Self-service recovering in minutes, not hours



# Cloud-Based Microsoft Services at nGenX



nGenX provides Cloud Computing and Infrastructure as a Service (IaaS) solutions from high-availability data centers located in the Midwestern U.S.

## Business Impact

- Rapid deployment of replication and disaster recovery (DR) services across geo-diverse data centers
- Enabled annual growth > 30%

## Increased IT Flexibility

- Easy and cost-effective scalability supports growth of SMB services for Microsoft apps
- Rapid, long-distance failover of Hyper-V VMs

## Increased IT Efficiency

- Reduced customer support costs up to 40%
- Reduced storage needs by 50 to 60%



# Maximizing Value Requires New Thinking



## Shared IT Infrastructure Purchase Criteria

|   |  |
|---|--|
| <input checked="" type="checkbox"/> <b>Scale Up and Scale Out</b>           | Scale performance & capacity on-demand       |
| <input checked="" type="checkbox"/> <b>Storage Efficiency</b>               | Build-in efficiency at every step            |
| <input checked="" type="checkbox"/> <b>Intelligent Caching</b>              | Optimize cost-performance by workload        |
| <input checked="" type="checkbox"/> <b>Unified Architecture</b>             | One architecture for many workloads          |
| <input checked="" type="checkbox"/> <b>Integrated Data Protection</b>       | Seamless protection for backups & DR         |
| <input checked="" type="checkbox"/> <b>Non-stop Operations</b>              | Continuous data availability for all tenants |
| <input checked="" type="checkbox"/> <b>Secure Multi-tenancy</b>             | Securely isolate shared storage resources    |
| <input checked="" type="checkbox"/> <b>Service Automation and Analytics</b> | Reduce cost, complexity & enable ITaaS       |



# Thank You

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