READY YOUR INFRASTRUCTURE FOR EXTENDING TO PUBLIC CLOUD

How Modernization Sets You Up for Success

Easily Extend to Public Cloud With a Modern Infrastructure

Are you evaluating moving applications to public cloud, in the process of migrating apps, or already using the public cloud for some of your apps? You aren't alone. A recent survey shows 70% of companies have already moved at least one application or a portion of their infrastructure to the cloud.

One thing is clear: To fully realize the benefits of extending your data center to public cloud, IT needs to modernize its on-premises infrastructure to evolve to a software-defined approach, introduce private cloud capabilities, and create a hybrid environment that can span across private and public clouds.[1]

What is a modern infrastructure?

While traditional IT infrastructure relies on purpose-built hardware and point management tools, modern infrastructure takes a cohesive, software-defined approach. A modern infrastructure is built with virtualized compute, storage, and networking, with unified management for intelligent operations.

VMware® helps you modernize your infrastructure with solutions that let you respond to the dynamic needs of the business, support both legacy and new applications, and extend to public cloud.

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1 2016 Cloud Computing Survey, IDC Enterprise

An Infrastructure That Supports Business and IT Goals

Modernizing your infrastructure makes it easier to meet demands that drive business growth and innovation with the best TCO, maximum flexibility, and optimal choices for the best workload placement.

With a modern infrastructure, you'll benefit from:

- More agile, secure, and flexible IT resource delivery and management

- A common platform with unified management to run both traditional and cloud-native apps

- Advanced technologies that encourage innovation while leveraging the value of existing skill sets, tools, and people

"Having a dynamic, agile infrastructure supporting our compute, network, storage, and security services is a necessity in the hyper-competitive hospitality industry. The integrated VMware platform cost-effectively meets our current needs and offers the scalability to grow with us."

ALAN ROSA
SENIOR VICE PRESIDENT OF TECHNOLOGY DELIVERY AND IT SECURITY
MARRIOTT INTERNATIONAL

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Build a Solid Software-Defined Foundation

If you have an existing VMware vSphere® environment, you already have one of the essential elements of a modern infrastructure in place. By upgrading to the latest version of vSphere 6.5, you'll have a powerful, flexible, and secure compute foundation for private cloud and extending to public cloud.

You can continue your journey toward a Software-Defined Data Center (SDDC) by adding virtualized storage and networking to your vSphere compute foundation. The further addition of intelligent operations management enhances the ability to plan, manage, and scale your environment.

Using this approach, you can achieve:

Operational consistency

Ability to leverage existing skill sets and tools

Application compatibility

Consistency in how IT controls, manages, and secures environments

Consistent delivery of enterprise-class SLAs

By 2023, the programmatic capabilities of software-defined infrastructure (SDI) will be considered a requirement for 85% of the largest global enterprises, up from 40% today.[2]

2 Gartner, Market Trends: Software-Defined Infrastructure — Who Can Benefit?, June 14, 2017 ID: G00323878

Getting Ready to Modernize Your Infrastructure

Take advantage of your existing VMware vSphere®-based foundation by upgrading to the latest version, then extending virtualization to storage and networking, and enhancing with intelligent operations management. Build it yourself using individual components, or implement an integrated solution.

Core components include: compute virtualization, storage virtualization, and network virtualization.

Compute   **Storage**   **Network**

Core Component: Compute Virtualization

Take the first step to infrastructure modernization and upgrade to vSphere 6.5. With vSphere 6.5 you can run, manage, connect, and secure applications in a common operating environment, across clouds and devices.

vSphere 6.5 delivers:

- Simplified and streamlined operations with easy-to-use client interface

- Comprehensive built-in security for protecting data, infrastructure, and access

- Universal application platform for running any application, anywhere

- Proactive data center management to ensure application performance and availability, with predictive analytics and intelligent operations

"Exponential growth has placed huge demands on our data center, and vSphere 6.5 has delivered. We all will benefit from the built-in encryption, the improved management with the vCenter Appliance, and the user-friendly HTML5 Web client in vSphere 6.5."

RYAN FAY
GLOBAL CIO
ACI SPECIALTY BENEFITS

ACI
SPECIALTY
BENEFITS

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Core Component: Storage Virtualization

As you continue your journey, the natural next step is to virtualize your storage environment. As the only native-vSphere storage, VMware vSAN™ enables you to seamlessly extend virtualization to storage, creating a hyper-converged solution that simply works with your existing tools, skill sets, software solutions, and hardware platforms.

vSAN delivers:

- Rapid data placement decisions

- Advanced storage features, including deduplication, compression, and erasure coding (RAID 5/6)

- Distributed architecture that allows for grow-as-you-go, non-disruptive scaling from 2 to 64 hosts per cluster

- The industry's first native HCI security solution with data-at-rest encryption

"Storage was a big bottleneck before, and now that problem is eliminated. With the ability to apply storage policies in vSAN on a per-VM basis, we'll be able to maintain that performance as we grow without investing valuable engineering time."

BOB TESTER
ENTERPRISE ARCHITECT
CINGROUP

CINgroup

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Core Component: Network Virtualization

A key part of modernizing your infrastructure is virtualizing the network. VMware NSX® is the network virtualization and security platform that enables the creation of entire networks in software and embeds them in the hypervisor layer, abstracted from the underlying physical hardware.

Because NSX builds networks in software, you can achieve levels of agility, security, and economics that were previously unreachable with physical networks.

NSX delivers:

- Micro-segmentation and granular security delivered to the individual workload

- Reduced network provisioning time from days to seconds and improved operational efficiency through automation

- Workload mobility independent of physical network topology within and across data centers

- Enhanced security and advanced networking services through an ecosystem of leading third-party vendors

"At AeroData, we have adopted VMware NSX network virtualization to transform our data centers from 'hardware dependent' to 'software managed,' dramatically improving availability by eliminating single points of failure."

TERRY MCDONOUGH
PRESIDENT AND CEO
AERODATA INC.

AERODATA

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The Integrated Solution: VMware Cloud Foundation

The VMware Cloud Foundation™ is a unified SDDC platform that brings together VMware vSphere, vSAN, and NSX into a natively integrated software stack to deliver enterprise-ready cloud infrastructure for the private and public cloud.

It also includes SDDC Manager, which automates the entire system lifecycle—from initial bring-up, to configuration and provisioning, to upgrades and patching.

VMware Cloud Foundation drastically simplifies the path to the hybrid cloud.

VMware Cloud Foundation:

- Integrates compute, storage, and networking into a single layer of software, ensuring full interoperability of the entire software stack

- Extends the convergence of compute and storage by including network virtualization, enabling simpler network management and elastic scalability at data-center scale

- Simplifies the day 0 to day 2 operations of the entire infrastructure software stack, automating deployment, configuration, patching, and upgrading processes

CRN names VMware Cloud Foundation the 2016 Cloud Platform Product of the Year

THE**CHANNEL**CO.

CRN

Products of the **YEAR** 2016

OVERALL WINNER

Tie It All Together with Unified Management

Whatever path you take to modernize your infrastructure, you can enhance your ability to plan, manage, and scale it with the intelligent operations capabilities of VMware vRealize® Suite.[3]

vRealize Suite is designed to simplify the performance, troubleshooting, capacity, cost planning, and configuration management of applications and infrastructure across physical, virtual, and cloud environments.

With intelligent operations management, you'll be able to:

Centralize management and run production operations at scale

Troubleshoot smarter with unified visibility from applications to infrastructure and actionable insights combining metrics and logs

Automate performance management by proactively avoiding contention and automating workload balancing and placement

Optimize cost and resource usage through capacity management, reclamation, and rightsizing

Correlate operational and cost insights to accelerate cloud planning, forecasting, budgeting and procurement decisions, control costs, and reduce risk

Compare cost of deploying workloads in your data center with multiple public clouds to optimize placement decisions

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3 Intelligent operations capabilities in VMware vRealize Suite are delivered by VMware vRealize® Operations™ integrated with vRealize® Log Insight™ and vRealize® Business™ for Cloud.

Expand Your Knowledge About VMware Solutions

VMware provides hands-on education for you and your staff to help you gain valuable skills and expertise. With our training and certification programs, you can maximize the value of VMware technology in your modernized infrastructure environment.

Training makes a difference. IDC research confirms that adding just 1.5% to the project budget for training moves project success rate from 50% to 80%.[4] This is validated by VMware's own research. Surveys confirm that training from Education Services consistently results in faster adoption, improved business outcomes, and increased ROI.[5]

Featured training includes:

VMware vSphere 6.5 Training >

VMware NSX Training >

VMware vSAN: Deploy and Manage [V6.6] >

VMware Cloud Foundation Fundamentals >

VMware vRealize Suite Training >

Get certified to advance your knowledge and skill set and add more value to your organization:

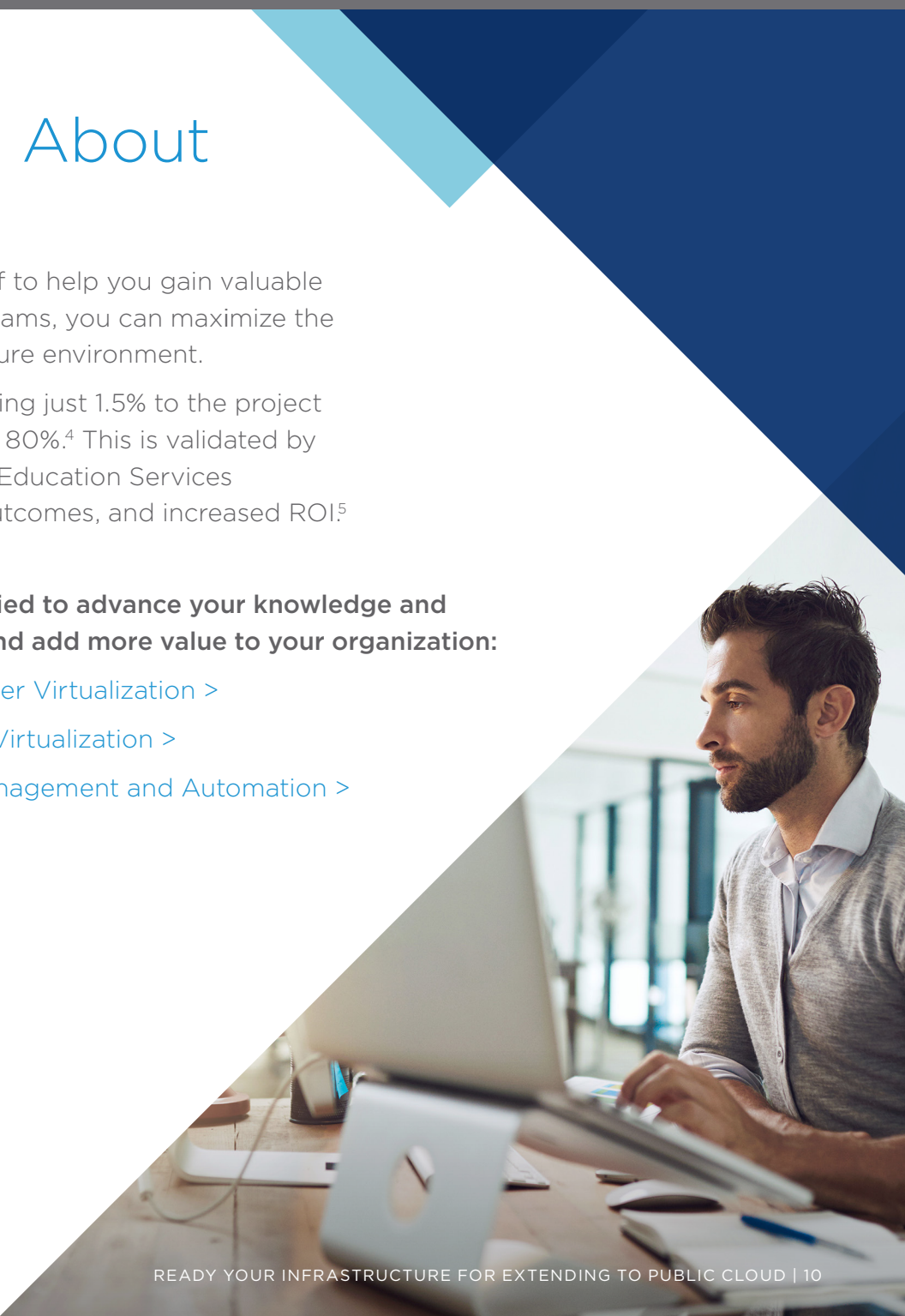Data Center Virtualization >

Network Virtualization >

Cloud Management and Automation >

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4 Market Analysis Perspective Worldwide IT Education and Certification Services, 2016; Sept 2016 Doc # US40639316, Cushing Anderson

5 Based on VMware customer survey results, September 2016

Get the Expertise You Need to Be Successful

If modernizing your infrastructure sounds like a daunting task, VMware can help get you there faster. VMware Professional Services consultants and solution architects take a holistic approach to help you with infrastructure modernization.

They help you unlock the power and potential of VMware solutions with services that include:

• Virtualizing compute, storage, and network assets

• Building basic templates for server deployment

• Implementing infrastructure monitoring for performance and capacity

• Providing automatic recovery from hardware failures

> *Technology Services Industry Association (TSIA) named VMware Professional Services as the 2016 STAR Award winner for Innovation in Enabling Customer Outcomes*

TSIA ANNOUNCES 2016 STAR WINNERS >

The Future Won't Wait

As a pioneer in virtualization and an innovator in cloud technologies, VMware provides an industry-leading software-defined approach to IT infrastructure. Trusted by companies around the world, VMware provides a modern foundation that enables you to confidently and securely run your applications across private and public clouds with hybrid cloud capabilities.

As you plan to leverage public cloud as part of your IT strategy, VMware can provide you with the modern infrastructure you need to grow, and the flexibility to adjust as your needs change.

PREPARE FOR THE FUTURE WITH VMWARE

Download the infographic *Top 10 Reasons to Upgrade to vSphere 6.5 >*
Read *Modernizing the Infrastructure For Dummies >*

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