vmware®

VMware Hybrid Cloud
Accelerate Your Time to Value

Fulfilling the Promise of Hybrid Cloud Computing

Businesses are looking for a more flexible IT framework that can adapt to today's rapidly changing and global environment. Business teams striving to move quickly into new markets—and launch new products and services—are demanding more from IT organizations that have traditionally focused on avoiding downtime, ensuring security and compliance, and holding down costs. The need for faster, more cost-effective access to IT resources has created a healthy tension between business teams and IT, driving both to look for new and better solutions.

Two important trends are helping to bridge the gap between IT and the business. First, virtualization has improved the agility and efficiency of onsite data centers, while also providing a foundation for IT as a service and cloud computing. Second, public cloud services have emerged as a way to rapidly deliver IT resources at low cost.

However, moving existing workloads from the onsite data center to the offsite cloud service can be a complex, costly, and time-consuming process. Typically, IT organizations must modify or rewrite applications for portability to the cloud. And after these changes are made, IT and business teams can be locked in to the services of individual service providers.

New Generation of Hybrid Cloud Services

Now VMware and our partners are delivering a new generation of hybrid cloud services that seamlessly extend your onsite data center to the cloud. Hybrid cloud services from VMware vCloud® Air™ and VMware vCloud Air Network Service Provider partners enable you to deploy and manage applications between your onsite and offsite environments to best meet the needs of your business.

Now you can extend your data center to the cloud with confidence, preserving your investment in applications, infrastructure, networks, management, and IT training. You can improve IT agility and accelerate your time to value, all while maintaining the highest standards of performance, availability, security, and control. VMware and our partners are fulfilling the promise of hybrid cloud computing, enabling you to deploy and run all your applications onsite, offsite, or both—without compromise—and with greater choice and flexibility of cloud providers on a local basis.

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[1] Gartner, "Cloud Computing Innovation Key Initiative Overview," April 24, 2014.

Hybrid Clouds Built on a Trusted Foundation

Hybrid cloud services from VMware and VMware vCloud Air Network Service Provider partners are built on the trusted foundation of VMware vSphere®, the world's leading virtualization platform. You can write, deploy, and manage applications in the cloud the same way you do today, relying on the underlying vSphere platform to provide the same level of security, reliability, and performance you get from your current VMware infrastructure.

Seamless interoperability gives you the freedom to quickly deploy workloads to the cloud, with the flexibility to move them between your onsite and offsite environments as your requirements change. WIth this interoperability, you do not need to worry about application compatibility or service provider lock-in, often associated with other cloud services. Diverse cloud-service offerings are available from our global ecosystem, providing a faster path to cloud success and return on investment, while minimizing risk.

Unified Platform for Hybrid Cloud

vSphere provides the core of the software-defined data center: the unified VMware architecture that underlies VMware hybrid cloud solutions. The software-defined data center extends the cost and operational benefits of VMware virtualization to the entire data center infrastructure: compute, network, security, storage, and management. You can pool, automate, and manage this complete set of resources with intelligent, policy-driven software that spans your onsite and offsite environments. The resulting hybrid cloud solutions provide unmatched business agility, dramatically simpler operations, and lower costs.
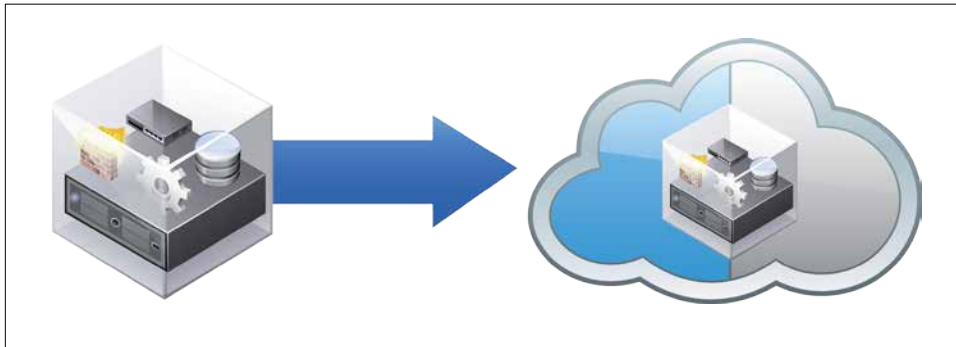
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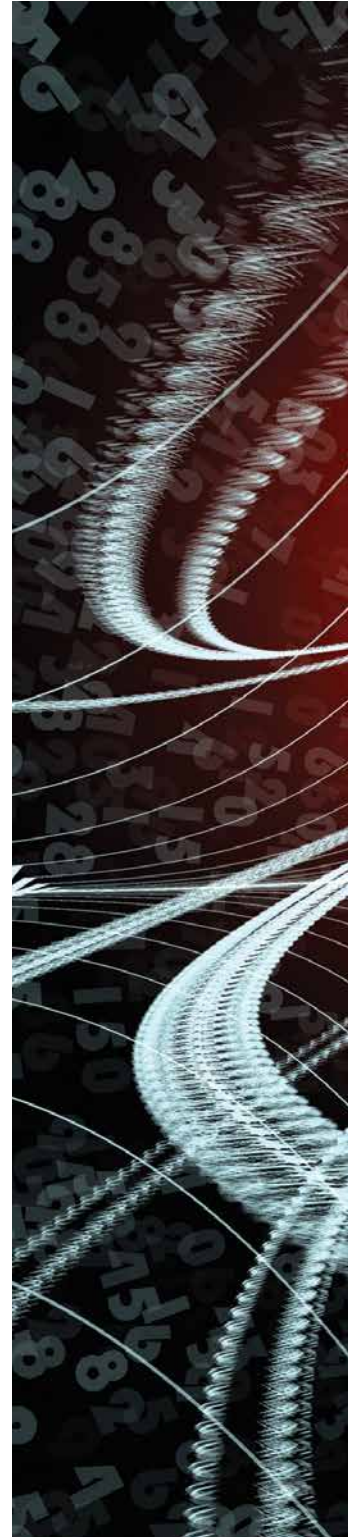
VMware vCloud Air

VMware vCloud Air is a family of cloud services owned and operated by VMware and built on the trusted foundation of vSphere and the software-defined data center architecture. The services support existing workloads and third-party applications, as well as new application development, with unified networking that spans your existing and new data center capacity. It also offers common management and security and the same reliability and performance you expect from your internal VMware infrastructure. And with vCloud Air, you have only one number to call for VMware support for both your onsite and offsite environments.

Broadest Operating System and Application Support
vCloud Air supports the thousands of applications and dozens of operating systems that are certified to run on vSphere, so you can run your applications in the cloud with no changes required. This support addresses a shortcoming of many other cloud providers' offerings: the complexity and effort required to rewrite applications for a specific cloud provider's platform.

Seamless Network Integration
vCloud Air is built on a virtualized network that is quickly customizable to support your application and security needs. You can stretch your Layer 2 and Layer 3 networks from your data center to vCloud Air without the need for manual configuration changes. Network virtualization enables you to configure your firewalls and network

as if they were in your own data center, so that you can replicate the network your applications need to operate. The service provides common identity and access management across your onsite and offsite environments.

High-Performance, Reliable Platform
vCloud Air includes automated replication, monitoring, and high availability of your applications at no additional cost, so you do not have to rewrite or rearchitect existing applications to ensure their availability. Leveraging the same platform you already run internally, you can extend your management tools into the cloud, gaining an integrated IT capability across your data center and the cloud. By utilizing your existing investments, processes, and expertise, you can lower your total cost of ownership.

Choice of Service Options
vCloud Air cloud services can be deployed individually or in combination, giving you the flexibility and scalability you need to meet your organization's requirements:

- Dedicated Cloud – A single-tenant cloud that provides physical isolation of dedicated resources

- Virtual Private Cloud – A multi tenant cloud with logically isolated infrastructure and fully private networking and resource pools

- Disaster Recovery – Native cloud-based recovery capabilities for vSphere environments

VMware vCloud Air Network

You can also advance your hybrid cloud strategies by working with a global ecosystem of over 3,800 VMware vCloud Air Network Service Providers operating in more than 100 countries who build clouds based on VMware technology. VMware vCloud Air Network Service Providers provide vertical market expertise, support multiple compliance certifications, and deliver infrastructure and application services in managed and self-service environments to address business requirements.

All vCloud Air Network services incorporate the multilevel, auditable security of VMware vSphere, plus a comprehensive security framework designed for compliance with your internal IT environment. In addition, VMware sets stringent standards for security, scale, and production readiness.

VMware vCloud Air Network Service Provider partners offer choice and flexibility of cloud services:

• VMware IaaS Powered Services are built on VMware vSphere, the world's leading server virtualization platform. IaaS Powered Services provide technology alignment with your onsite data center, enabling you to protect your current data center investments while fueling business innovation.

• VMware Hybrid Cloud Powered Services are built on the same proven VMware infrastructure, management, and security technology that more than 500,000 enterprises depend on in their data centers. This makes Hybrid Cloud Powered Services inherently and fully compatible with your internal environment, so you can deploy and scale new and legacy applications without recoding.

• VMware Horizon® DaaS® Powered Services provide a flexible, affordable, and streamlined way to transform end-user computing into next-generation workspaces and deliver a highly competitive differentiated solution to the marketplace, supporting users on any device, anywhere.

VMware Cloud Credits Purchasing Program

The VMware Cloud Credits Purchasing Program provides an easy on-ramp to the cloud, enabling you to maintain control and visibility of your cloud spend through your My VMware® account. VMware Cloud Credits enable budget flexibility for your public and hybrid cloud strategy by allowing prepayment and future redemption for cloud services as business demand dictates. In addition, VMware Cloud Credits ensure control over cloud spend with approved VMware vCloud Service Providers running the same trusted VMware technology offsite as you are running onsite.

"We have application portability between clouds and can expand or shrink resources as needed. That brings cost efficiencies, performance improvements, and the business scalability to meet growing demand from internal and external customers."

Kristen Hayes,
Director of Global Infrastructure, Consona Corporation

Hybrid Cloud Use Cases

Moving development and test workloads to hybrid cloud is a cost-effective way to get on-demand capacity for a limited time. Other workloads are also good candidates. Depending on your unique requirements, evaluate the following workloads to move to hybrid cloud.

Development/Testing

Examples: Application development and pre production testing

- Satisfy developers' need for an agile, dynamic environment to develop and test applications.

- Reduce test/QA environment cost to reflect its lower performance and availability requirements.

- Streamline application portability between test and production environments.

Extend Existing Applications

Examples: Email, collaboration software, data analytics, and business intelligence

- Migrate packaged applications to a hybrid cloud compatible with your data center, with no recoding or reconfigurations.

- Offload the hosting of packaged applications to refocus IT resources on projects with higher value and more complex needs.

- Free up existing on-premises resources and staff for more value-added projects.

Disaster Recovery

Examples: Secondary backup and archiving site

- Avoid the prohibitive expense of replicating a full production environment to a second site run by core IT.

- Preclude service disruption in a single-site IT deployment.

- Utilize a low-cost remote storage facility over a fully synchronized active/active site, to be leveraged in the event of service disruption.

Modernize Enterprise Applications

Examples: Traditional three-tier architecture applications such as Java

- Support mission-critical applications in a cloud environment with high levels of security, compliance, performance, and availability.

- Keep sensitive data onsite and move non sensitive data and application tiers to hybrid cloud.

- Host virtual desktops with desktop as a service to simplify delivery of Windows desktops and applications to any device, anywhere.

Create Next-Generation Applications

Examples: Cloud native and mobile applications based on development frameworks, such as Spring and Ruby on Rails

- Support new cloud and e-commerce applications that have variable resource requirements.

- Develop mobile applications that can be accessed from any device from anywhere with integration to onsite back-end systems.

- Deliver applications that can scale to meet demand and sudden or unpredictable spikes in traffic.

Why VMware for Hybrid Cloud?

VMware is the global leader in virtualization and cloud infrastructure software, the key enabling technologies for hybrid clouds. Named as a leader in Gartner's 2014 x86 Server Virtualization Magic Quadrant for the fifth consecutive year, VMware is cited by Gartner for its strength in providing a virtualization strategy that encompasses the data center and expansion to private and hybrid cloud computing.

Customer Proven

More than 500,000 customers, including 100 percent of Fortune 500 and 100 percent of Fortune Global 100 companies, use VMware technologies and services. Businesses worldwide run more than 80 percent of all virtualized workloads and a large percentage of business-critical applications on VMware technology. VMware is the common denominator among many of the most innovative organizations, successfully moving IT from rigid physical infrastructure to flexible, virtualized, and cloud environments.

Expertise with Cloud

VMware is behind some of the largest and most successful cloud environments in the world, providing unique insight into the ways IT and business teams are using cloud computing to deliver new services, enter into new markets, get closer to customers, and make mobile employees more productive. Using this knowledge and the proven foundation of vSphere and the software-defined data center architecture, VMware delivers the security, reliability, and performance you need from a hybrid cloud platform.

Expansive Partner Network

VMware and our network of more than 75,000 partners provide global coverage and deep domain expertise for IT strategies that span your data center and hybrid cloud solutions. Our partners include technology and consulting leaders, top distributors and resellers, system vendors, and integrators. Along with a global ecosystem of vCloud Air Network Service Provider partners, VMware enables businesses to deploy the right hybrid cloud solutions to meet their business needs.

Industry-Leading Vision and Innovation

VMware continues to pioneer the use of virtualization and cloud infrastructure technologies to radically simplify IT. By finding new ways to solve complex IT problems, we have helped businesses save billions of dollars, dramatically increase the agility of their IT environments while maintaining control, and significantly improve business outcomes.

Now, with hybrid cloud services from VMware vCloud Air and VMware vCloud Air Network Service Provider partners, your business can rapidly evolve the way it brings products and services to market and interacts with customers. Your IT team can transition from reacting to business needs to being a proactive partner in business strategy and planning. Working together, your IT organization and business teams can drive true innovation, creating the new services and opportunities that grow revenue and further strategic differentiation.

Extend your data center to the hybrid cloud today.

Visit http://www.vmware.com/go/hybridcloud.

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