

Unlock the Power of Hybrid Cloud with Consistent Operations

4 use cases that improve service delivery and enhance business value



Introduction

Reduce the Complexity of Hybrid Cloud

Hybrid cloud creates new possibilities for IT organizations, opening the door to cost-effective scalability, flexibility and modernization.

But if your hybrid cloud is a web of disparate environments, tools and processes, this flexibility can become tangled in complexity. An ad-hoc approach can create more headaches than benefits, with interoperability and integration issues, skills gaps, mismatched procedures and a lack of visibility across networks making operations difficult.

How can you get the benefits of hyperscale, on-demand, pay-per-use cloud resources, without the risk of creating new silos, or burdening existing IT staff with having to learn new operational tools and processes?

Consistency is the Key to Hybrid Cloud Success

IT needs a hybrid cloud solution that taps into the capabilities and unique services of public cloud, but leverages existing investments in teams, tools, and policies that already deliver results.

With consistent infrastructure and consistent operations you can unlock the power of the hybrid cloud, and realize the benefits of simplicity, investment protection, and future-proofing for IT and business alike.

Consistent Infrastructure

Consistent infrastructure is achieved when compute, network and storage layers across two or more environments are software-defined and programmed for automated service delivery.

Consistent Operations

Consistent operations builds on the foundation of consistent infrastructure. It allows IT, DevOps, and site reliability engineers (SREs) to use the same set of tools, workflows, configurations, and policies to operate across the data center, cloud, and edge.



Consistent Operations Unlocks the Power of Hybrid Cloud

Inconsistent hybrid clouds increase operational complexity, risking a number of problems:

- New skills requirements
- Wasted infrastructure resources
- Unpredictable service delivery

- Poor visibility
- Slow remediation
- Uneven security and compliance

With a simplified hybrid cloud that allows for consistent operations, you will be able to:

Automate infrastructure and workload deployment processes and risky, error-prone IT tasks for fast and predictable IT service delivery in any environment.

Optimize performance, capacity and cost across hybrid infrastructure, and use predictive analytics with full stack visibility to quickly troubleshoot issues and monitor health.

Secure virtualized infrastructure and applications with a common operating model that builds security into key workloads.

IMPROVE EFFICIENCY AND LOWER COST

Hybrid Cloud can deliver:

78%

less downtime¹

47%

more efficiency in IT Teams¹

26%

lower infrastructure costs1



^{1.} IDC, The Business Value of Hybrid Cloud with VMware, 2019.

4 Hybrid Cloud Use Cases that Improve Service Delivery

The key to hybrid cloud success isn't simply building infrastructure, but in improving the management of your environments to ensure they deliver what your business needs. Consistency and simplicity can improve your management processes and help your IT team to work smarter and faster; streamlining operations, enhancing security, and delivering benefits to the bottom-line.

There are four powerful ways you can realize the benefits of a simplified, agile hybrid cloud operations strategy.



Scale on Demand



Migrate Seamlessly



Support Modern Apps



Modernize Your Data Center



1. Scale on Demand

With hybrid cloud, IT organizations can easily tap highly scalable and pay-per-use public cloud resources in many geographies to augment data center capacity for temporary needs.

In the past, inconsistencies between on-premises and cloud environments created silos that made it risky and costly to set up mechanisms for unplanned failover. Often, organizations had to invest in excess reserve capacity that was expensive to build and maintain in order to meet temporary, spikes in demand.

However, if you have the same tools and processes automating on top of software-defined infrastructure resources, both on-premises and across hyperscale cloud providers, then you have the ability to access a unified pool of resources and scale whenever the need arises. This makes it much easier to create temporary development and test environments, to scale production during spikes in demand, and to maintain uninterrupted service quality during disaster recovery scenarios.

Consistent operations across hybrid environments allows IT to scale on demand, and:

- Avoid the cost, effort or risk of building and maintaining "just in case" capacity.
- Minimize downtime during planned and unplanned outages by temporarily tapping cloud resource pools.
- Meet security and compliance standards with policies applied consistently across every environment.



2. Migrate Seamlessly

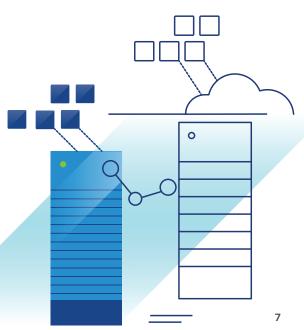
With hybrid cloud, IT organizations can easily manage a portfolio of applications and deploy or move workloads to the best-fit environment, based on cost, performance, service quality and geographic factors.

In the past, inconsistencies between on-premises and cloud environments made migration costly and time consuming. IT organizations had to refactor applications to fit the target cloud deployment environment. It was simply too hard for most organizations to migrate en masse across incompatible environments.

However, with consistent infrastructure, operations, and automation across environments, you can move single workloads or groups of applications without refactoring, and move virtual machines without converting image types. This means you can migrate with little or no downtime and build a cloud strategy that optimizes the cost, location, service and consumption model for legacy and cloud-native applications.

Consistent operations across hybrid environments allows IT to migrate seamlessly, and:

- Freely move existing data center workloads to the cloud, and back again or to another cloud if needed.
- Avoid the high cost, complexity and risk of refactoring each application before it is moved.
- Eliminate downtime, ensuring service continuity during and after migration.



3. Support Modern Apps

With hybrid cloud, IT organizations can easily support a changing mix of application types and technologies – from existing multi-tier applications to modern microservice architectures.

In the past, inconsistencies between on-premises and cloud environments limited the types of applications organizations could deploy in each environment. Today, developers are building a far more diverse range of applications, including cloud-native applications that utilize microservice architectures and containers. Organizations often use the de facto orchestration system Kubernetes to automate deployment, scalability and management of these applications.

With consistent infrastructure and operations from on-premises to cloud and edge, organizations can keep up with shifting developer demand and enhance IT service delivery. Now, IT organizations can deliver Kubernetes and VM-based services in both data center and cloud environments.

Consistent operations across hybrid environments allows IT to support modern apps, and:

- Use familiar tools to manage all of your Kubernetes clusters.
- Allow developers to focus on writing code, rather than the underlying infrastructure.
- Improve agility, supporting efforts to modernize existing applications on traditional infrastructure.



4. Modernize Your Data Center

With hybrid cloud, IT organizations can easily modernize the data center to deliver automated, on-demand services in the same way cloud services are delivered.

In the past, many IT organizations used virtualization to simplify compute tasks, but due to inconsistencies between environments these organizations still lacked virtualized storage and network capabilities. As a result, many turned to time-consuming help desk services, manual processes and specialists to deliver the capabilities they needed. Slow, manual service delivery on-premises has often caused delays to the delivery of critical infrastructure and applications – giving IT a bad reputation – in contrast to the performance of cloud services, which are automated, on-demand and provide self-service for rapid deployment.

With consistent infrastructure, operations and automation across a hybrid cloud, organizations can now deliver infrastructure and application services – consistently and predictably across every environment.

Consistent operations across hybrid environments allows IT to modernize the data center, and:

- Unlock greater agility and productivity and remove the operational bottlenecks of legacy infrastructure.
- Provide predictable service delivery to consumers no matter where workloads are deployed.
- Cut the operating costs for workloads deployed and managed on-premises by using automation and self-service consumption.





VMware Cloud Foundation

VMware Cloud Foundation™ provides a virtualized and automated infrastructure based on leading VMware compute, network and storage solutions. It also includes operations and automation tools that deliver consistent operations across all environments.

With simplicity at its core, VMware Cloud Foundation delivers the automation, cost management, compliance, resource governance, security and visibility you need to get the most out of hybrid cloud.

Find out how VMware Cloud Foundation can help you unlock the power of the hybrid cloud and simplify your IT operations.

Additional Resources

Self-Driving Cloud Operations Customer Stories >

The Total Economic Impact (TEI)™ of VMware vRealize Operations >

The Total Economic Impact (TEI)™ Of VMware vRealize Automation >

AVAILABLE WHERE YOU ARE

VMware offers a rapidly evolving mix of options to deploy VMware Cloud Foundation. It can be installed, it is available pre-installed on hyperconverged infrastructure, and it is compatible with all six hyperscale cloud providers and 4,300 VMware Cloud Provider Partners™. Some components are also available as SaaS solutions.

