



Future Ready with SaaS Management

5 Ways VMware vRealize Cloud Management Accelerates Your Organization's Evolution to Cloud





Is Your Organization Future Ready?

Applications have increasingly been driving digital business success. When the world unexpectedly changed, online business initiatives accelerated with enterprises and government agencies quickly implementing capabilities to support remote engagement. Now, they have turned their attention to widespread optimization and revenue generation opportunities.¹ Yet more than 87 percent of organizations recently surveyed reveal they have encountered roadblocks on their organization's digital transformation journey.²

In uncertain times, one thing is certain: organizations must continually reshape strategies and reprioritize investments to respond to crises, adapt to new realities, and accelerate innovation. In short, be future ready for whatever comes next. The question for many organizations is how. Yet IT infrastructure and operations professionals may already have the answer at their fingertips for how to ensure not just a few but the hundreds, even thousands, of applications critical to your organization have the optimal resources required to perform reliably and deliver exceptional experiences.

In partnership, IT and cloud teams can begin to unlock the power of cloud, breaking down silos while reducing IT complexity and cost to deliver benefits to your enterprise ranging from zero downtime to enhanced agility to greater developer productivity that drives application modernization. Ensure your enterprise isn't left behind as another recent report³ of the organizations surveyed found:



This guide is designed to help you accelerate cloud adoption in your organization—whether cloud is a new directive or your current migration initiative has stalled. It describes how even enterprises with the most stringent oversight, such as financial services and healthcare, can boost innovation while still maintaining control over their environments. Future ready with SaaS management for better IT alignment and improved business outcomes.

1. CIO. "5 Conversations CIOs Must Have to Advance Digital Business," August 26, 2020.
2. Vanson Bourne survey, commissioned by VMware, of 5,000 app developers, business decision makers and IT decision makers from March-April 2020 across 17 countries globally, "Successful Digital Transformation: Apps at the Ready," May 2020.
3. Management Insight Technologies, commissioned by VMware. "The State of Application Modernization and Hybrid Cloud Computing. North America," February 2020.



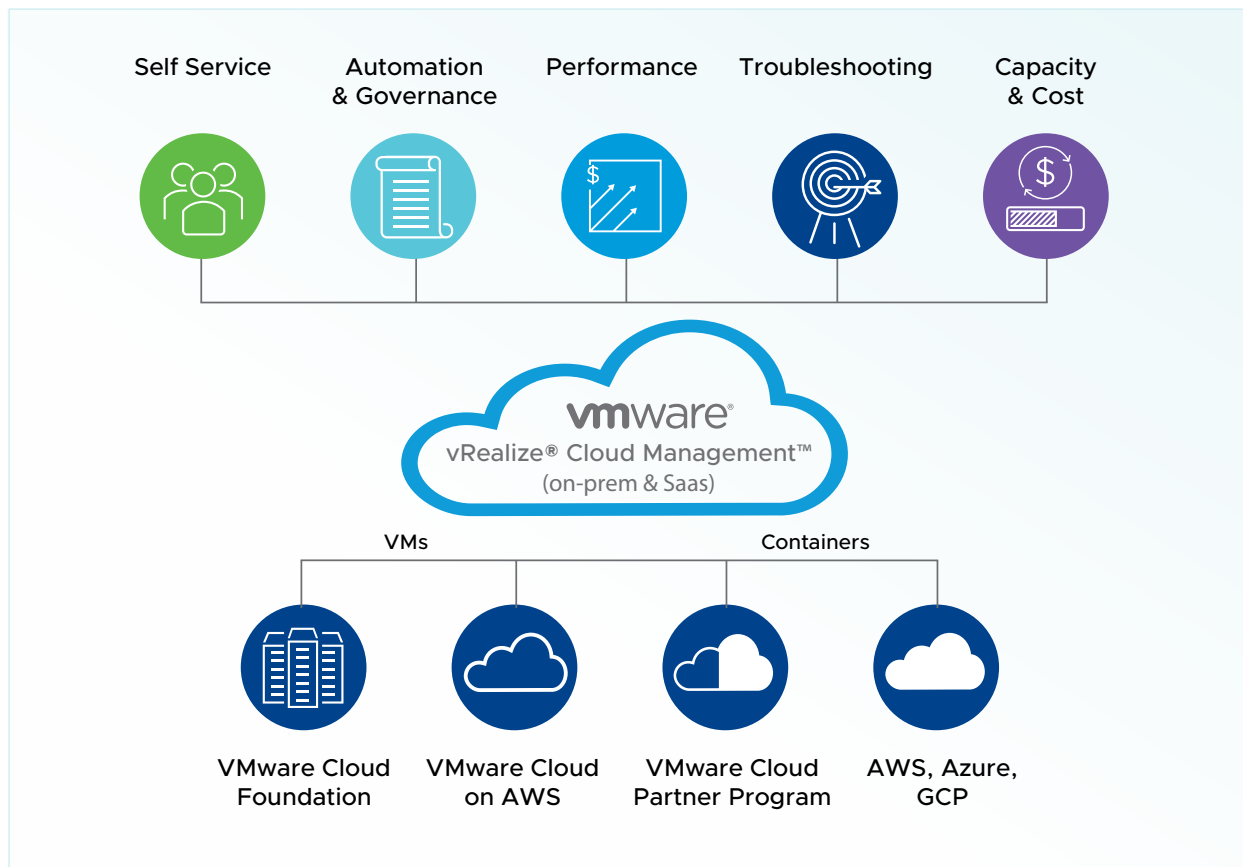
Your Sure Advantage

Today, you successfully optimize on-premises workload management, performance, and cost with one or more VMware vRealize® technologies working in collaboration with the VMware Cloud Foundation™ platform. Now, you have an opportunity to boost your return on that current investment while aligning infrastructure and cloud team goals with VMware vRealize® Cloud Management™. If you are looking for the fastest and most effective way to add cloud operating capabilities, this solution delivers through the consumption of vRealize SaaS, so that your resources can focus on building and brokering a consistent set of quality services across multiple clouds and not on managing the maintenance and management of the underlying components.

vRealize Cloud Management is an intelligent hybrid cloud management solution that empowers you to consistently deploy and operate apps, infrastructure, and platform services from the data center to the cloud to the edge. Its consistent cloud operations with management and automation capabilities truly give infrastructure, cloud, and operational teams a proven way to *make cloud your business*.

No matter where you run your workloads, vRealize Cloud Management enables you to achieve these key benefits:

- Accelerate innovation with quick and easy access to services
- Increase efficiency by improving visibility and automation
- Improve control and mitigate risk through unified operations and governance





Why SaaS for Your IT Management?

vRealize Cloud Management is modern and flexible. It uniquely delivers the same consistent management across on-premises and cloud infrastructure in a software-as-a-service (SaaS) model so you can manage all your workloads everywhere they run.

These are just some of the advantages of SaaS for your IT operations:

	Business Challenge	Solution	Value
Agility	Have limited IT staff	Shift routine IT tasks such as maintenance and upgrades to cloud providers	Reduce operational burdens, creating time to support business goals
Scalability	Need to meet rising customer demands	Increase infrastructure on-demand, dynamically and reliably	Move at your own pace, paying only for what you use
Speed/Innovation	Required to grow to better compete	Quicker deployments with current features and instant updates	Enjoy faster time to market by accelerating innovation
Flexibility	Need to quickly adapt in a changing market	Gain unprecedented control and federation to simplify distributed environments. Implement changes with minimal risk, less complexity, and reduced commitment	Lower risk with a flexible deployment model and flexible licensing

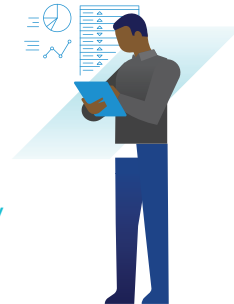




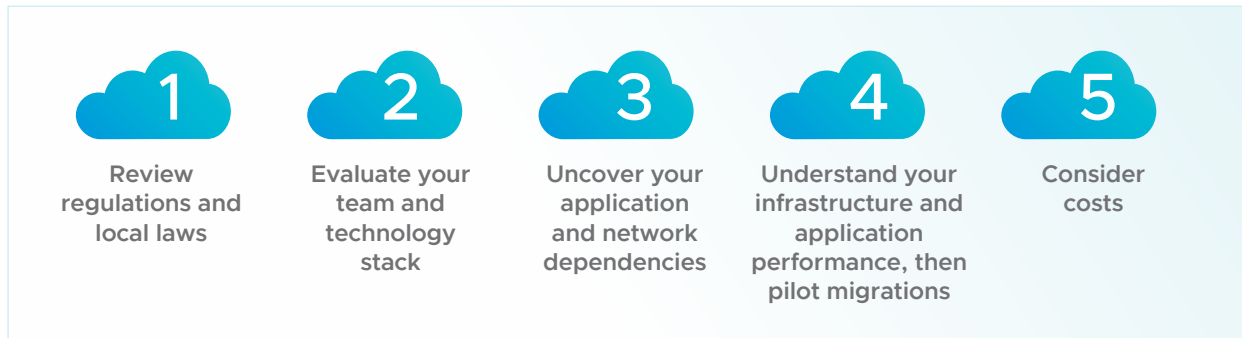
Overcoming Obstacles to Cloud Adoption

Cloud is an operating model that can be applied to all of your workloads no matter where they live—data center, public cloud, and edge environments. Yet migration to the cloud can be challenging, primarily due to the following:

- Interoperability between the environments—silos
- Incompatible skills, tools and processes
- Management of disparate infrastructures
- Complex and costly bi-directional application mobility
- Inconsistent governance procedures and tools



Organizations like yours looking to accelerate cloud adoption and management have choices to make depending on your business environment, company maturity level, staff skill sets, and technology preferences. These five recommendations can help your team overcome key obstacles and jumpstart your cloud migration initiative:



“It’s intimidating for many teams to think about putting high-value workloads in the cloud, especially in financial services which has a high bar when it comes to meeting compliance requirements, but adopting cloud is both necessary and practical today to achieve not only IT but your business goals.”

NÉSTOR F RODRÍGUEZ RICO
IT AND CHANGE DIRECTOR
PROVIDENT MÉXICO

1

Review Regulations and Local Laws



Although company leaders may now be openly mandating cloud-first operations to meet business continuity and resilience objectives, IT teams cannot confidently implement cloud visions without first reviewing and fully understanding government regulations and industry requirements.

There are local, national, international, and industry-specific governing rules to consider. For example, compliance with personal data protection and privacy laws such as these:

- General Data Protection Regulation (GDPR) for organizations transacting with European Union (EU) citizens
- The California Consumer Privacy Act (CCPA) with citizen rights about data collection
- U.S. Health Insurance Portability and Accountability Act (HIPAA) with standards for electronic healthcare patient and billing records
- Children's Online Privacy and Protection Act (COPPA) that regulates information collected from people under the age of 13
- Japan's Act on the Protection of Personal Information (APPI) requiring businesses handling personal information to specify the purpose of personal information use
- China's PRC Cybersecurity Law addressing cybersecurity and data privacy protection
- Australia's Privacy Act 1988 with expansions and New Zealand's Privacy Act 2020

Knowledge of global and local regulations help you know what you can and can't do with respect to data in transit and data at rest, encryption, and more. This knowledge will help inform your decision making about infrastructure locations and engage with the right service provider or providers as you develop your cloud migration plan.

vRealize Cloud Management features a single pane of glass console for complete visibility into all workloads and it has integrated compliance. You can streamline your requirements to secure environments using industry-standard compliance benchmarks for hybrid clouds. You also can automate the remediation of compliance drift.

Checklist:



Research data sovereignty



Understand compliance obligations



Set benchmarks

2

Evaluate Your Team and Technology Stack



Migrating workloads to the cloud can be a complex and time-consuming endeavor. If your ultimate goal is a multi-cloud architecture, untrained staff and an outdated on-premises technology infrastructure with many legacy applications and a large data footprint can hinder rapid public cloud adoption. A better approach may be to begin with a private cloud and evolve to hybrid cloud so that you enjoy a smoother journey to embracing multiple public clouds.

Regardless of your approach and pace, you will need to address varying team member skills, virtual machine (VM) formats, disparate hardware, network connectivity, and application dependencies—all while keeping downtime to a minimum.

These are key considerations when migrating to cloud:

- **Map Dependencies** – Determine the scope of your migration and the size of the environment you need by understanding your application dependencies. As a best practice, analyze traffic patterns and interview application owners to discover unique constraints before cloud migration to avoid surprises. More detail about this in recommendation #3.
- **Design Requirements** – Build a cross-functional migration team consisting of infrastructure administrators and architects, network and security, support and operations, application owners and other stakeholders to determine the availability (or service-level agreement) requirements for the workloads to be migrated.



- **Size Your Environment** – Create an inventory of the workloads you planned to migrate to the cloud after completing your initial design and application dependency mapping phases. If there are specific software package or SaaS app licensing requirements that might require special clusters or isolated environments, do not include those workloads in your size planning.

Checklist:



Understand your application dependencies



Build your migration team



Establish workload SLAs to size your environment

3

Uncover Your Application and Network Dependencies

Successful migration to the cloud also depends on having high levels of confidence in both your data and network architecture. Although your IT organizations may do its best to keep networking diagrams and maps up to date, an urgent request sometimes comes in and is quickly fixed yet documentation lags or is simply missed. This information gap can create huge challenges, preventing successful cloud migration.

46%

of enterprises struggle to identify interdependent services and how they interact ⁴



Recently, an IT organization moving its workloads to the cloud was well into phase 1 when it discovered it had a number of vLANs. This was a configuration its network did not permit and that was using additional, unknown ports. That discovery forced IT to roll back everything and start over—a frustrating and time-consuming experience for all.

You can easily avoid this scenario and other cloud migration pitfalls using vRealize Cloud Management to visualize data flows across hybrid cloud infrastructure, which accelerates decision making and execution—from planning to deployment to ongoing management. The solution works around the world and across clouds, providing comprehensive application and networking visibility with security that can help your migration team avoid application refactoring and risk.

As your organization makes cloud application migration decisions, vRealize Cloud Management helps ensure these [key network considerations](#) are top of mind:

- Customer experience optimization
- Cloud scale and performance limits
- Cloud security planning
- Dependency mapping
- Post-migration plan verification and validation

Purpose-built for software-defined data centers, branches, and public clouds, key capabilities of vRealize Cloud Management include comprehensive network visibility and granular understanding of network traffic flows between applications to enable cloud security planning and network troubleshooting. Best practice checks, an intuitive UI, and search that simplifies network and security operations make it easier for cloud administrators to manage and troubleshoot application deployments at scale.

Checklist:



Evaluate network traffic and determine dependencies



Optimize for customer experience while doing cloud security planning



Conduct post-migration plan verification and validation

4. Dynatrace. "Top Challenges for CIOs in a Software-Driven, Hybrid, Multi-Cloud World," 2019.

4

Understand Your Infrastructure Performance, Then Pilot Migrations

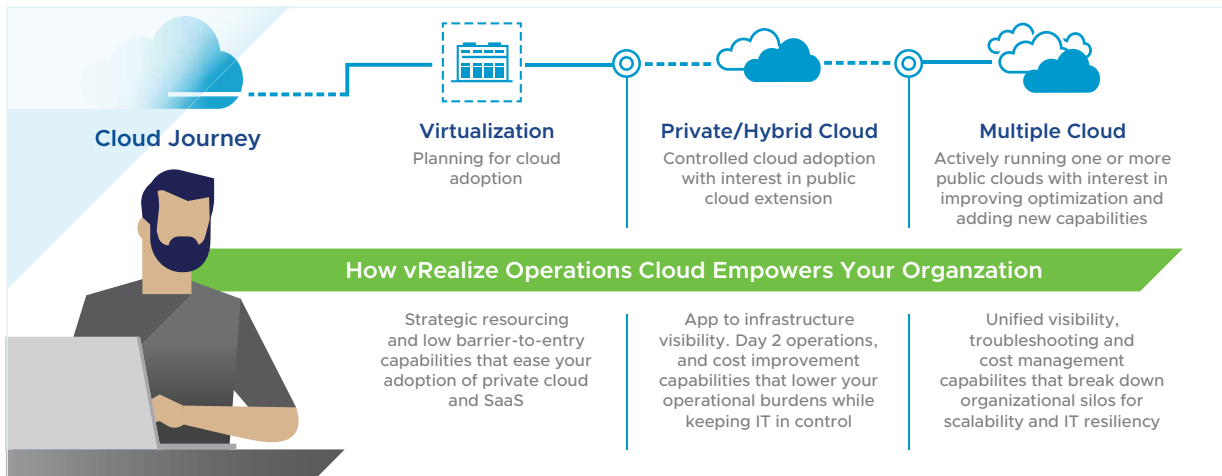


Despite careful planning, unknown application latency can kill a successful cloud migration strategy. That's why it's imperative to know the state of all of your infrastructure and how applications perform on it.

For one organization, existing client/server applications caused an up to 16 milliseconds delay that would negatively impact its users so much that rethinking the migration strategy and timing was required. Concurrently, the IT team recognized virtualization had an accelerating effect on cloud migration—to private, public, hybrid and even multi-clouds—ensuring the enterprise's more than 80 percent of virtualized applications could quickly transition to cloud without issue.

If more was virtualized, IT leadership realized, the team could speed subsequent migration phases. Revealing capacity consumption metrics using capabilities in vRealize Cloud Management that connected everything the organization ran on-premises and in the cloud enabled accurate comparison of disk, CPU, and other component usage across the environment. This ultimately enabled nearly push-button migration of apps to the cloud environment. The impact: migration of mission-critical apps without costly refactoring or negative impact to performance.

Virtualized components are easier to migrate than installing physical servers. Yet your organization must plan a migration strategy that works best for you—a task made easier by vRealize Cloud Management. Know for sure if your *IT operations is ready for cloud*, ultimately not only easing your organization's journey from virtualization to private/hybrid cloud to multi-cloud but adding value of each stage of your cloud journey:



Then quickly pilot your migrations leveraging your familiar and proven VMware skills, tools and processes in the cloud—all without needing to learn new skills or acquire new tools.

Checklist:

- Know the state of your infrastructure**
- Review consumption metrics**
- Virtualize workloads to migrate**
- Begin phased migrations without further skill or tool training**

5

Consider Costs



With accurate information from vRealize Cloud Management about how all of your on-premises IT infrastructure components, connectivity, and applications are performing and interacting, you can begin to more fully understand and evaluate infrastructure and application costs including total cost of ownership.

IT teams are
47%
more efficient on
average with hybrid
cloud platforms⁵



In addition to continuous performance optimization, vRealize Cloud Management gives your IT staff capacity and cost management visibility. Reduce your costs and improve efficiency with real-time machine learning-based capacity analytics correlated with cost analytics—all of which improve utilization and consolidation while empowering your team to proactively plan for the future. Even run “what-if” scenarios to better understand your options.

Moreover, capabilities built into vRealize Cloud Management can help you and your cloud migration team evaluate configurations and then align on blueprints that automate workload placement, further speeding cloud migration—at lower cost.

“With VMware vRealize Operations Cloud, we were able to gain full visibility across our environment—which we didn’t have previously. The insight delivered by the SaaS service led us to immediately reduce our hosts by 20 percent—saving us thousands of dollars in the process. In less than a week, we were able to right-size our environment, optimize our performance, and see what we needed for capacity planning.”

FUAT ULUGAY
SAAS OPERATIONS MANAGER
TRILOGY

Checklist:



Optimize workload placement



Run “what-if” scenarios



Lower costs

5. IDC. “The Business Value of Hybrid Cloud with VMware,” August 2019.



Become a Cloud Hero

Successfully doing the hard, heroic work of cloud migration is easier when you have a single cloud management platform. *VMware vRealize Cloud Universal* gives your organization a flexible deployment model with flexible licensing to deploy vRealize Cloud Management on premises or as SaaS.

You can move at your own pace, using one license interchangeably and without the need to repurchase, for a consistent hybrid and multi-cloud management experience. That way, you leverage your existing IT investment while giving you and your cloud team the best way to seamlessly move workloads to cloud based on business demands.

With vRealize Cloud Universal, you gain:

Super flexibility for maximum choice	Super efficiency as you shift to a subscription model	Super agility for aligned IT and business goals	Super scalability, on demand	Super speed with enhanced corporate governance



Team with VMware to Accelerate Your Cloud Evolution

You already have the skills and technology at your fingertips to ease your organization's cloud migration. Take another step—aligning IT and cloud architects and strategists to help your organization improve the speed and accuracy of your cloud migration initiatives using vRealize Cloud Management.

One organization estimates it took half the time it expected to complete its cloud migration because the IT team had complete visibility through the easy-to-navigate management console for technical adjustments and patching. It also benefitted from enabling all of its engineering staff to support hundreds or thousands of virtualized and physical servers onsite and off-site, as needed, not just specialists.

The true integrated hybrid cloud is possible today. Evolve your cloud strategy and align your teams today with the comprehensive vRealize Cloud Management from VMware:

- **Integrate** – Prioritize infrastructure consistency, seamlessly integrating on-premises, colocation, and public cloud environments and having a consistent, unified way to manage across them.
- **Manage disruption** – Leverage existing tools, skills, and technologies where appropriate to help reduce costs, time, and make for a smoother transition.
- **Optimize application placement** – Minimize costs and meet technical and business requirements by intelligently placing workloads to the most suitable environment.

“ Depending on the maturity of the company, I recommend spending maybe 3-4x the time on cloud migration preparation versus implementation. Both are easily accomplished with VMware vRealize Cloud Management. It used to take me around a year and a half just to place an application in production. With VMware, I now do it within months: It's a game changer.”

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