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Cloud Adoption Essentials Guide

With VMware vRealize Cloud Universal, you can go easily from cloud curious to cloud first

GET STARTED

Cloud is Critical to Business
The Need to be Future Ready
The Benefits of vRealize Cloud Universal
Cloud is not a One-Size-Fits-All Journey
Get Started with the ROI Calculator
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Cloud is Critical to Business, But Not Yet Everything to Everybody

The trend of organizations moving more and more workloads to the cloud has been evident for some time, but it's now visibly accelerating. COVID-19 is a catalyst, requiring businesses to work effectively in a distributed model and at the same time, monitor cash flows. Transitioning to cloud supports both goals. It allows employees to access applications and data from anywhere, and the OpEx model is especially attractive in times of economic uncertainty.

But your organization likely can't move all workloads overnight. Even if all cloud is your eventual goal, there will be a time when you must successfully manage applications, data, and infrastructure across on-premises and cloud—no matter how much is on either side of the equation.

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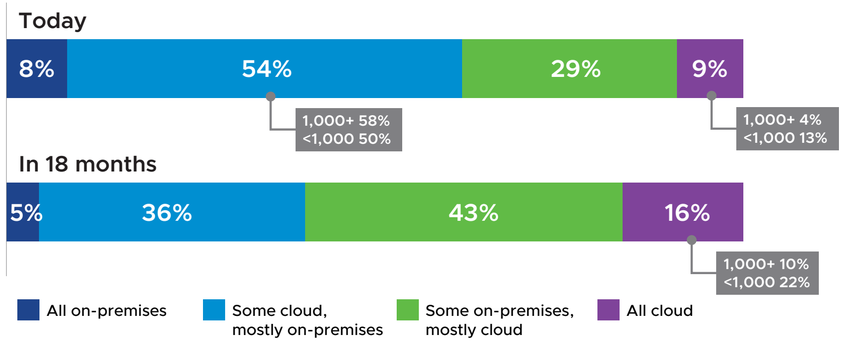
According to the *2020 IDG Cloud Computing Survey*, the proportions of on-premises to cloud environments within businesses will shift dramatically in the next 18 months, as organizations move from some-cloud-mostly-on-premises models to some-on-premises-mostly-cloud ones. And the number of companies that go to cloud-only will double over that same time period.

Questions: Which statement below best describes your organization's total IT environment (infrastructure, applications, data analytics, etc.) today? / Which statement best describes your organization's total IT environment 18 months from now?



SOURCE: InfoWorld. "The 2020 IDG Cloud Computing Survey," June 8, 2020.

Cloud management, if not carefully planned for in advance, can introduce new risks during your cloud adoption journey. Although many cloud-first organizations intend, ultimately, to run most workloads in the cloud, how do they manage infrastructure during the transition? Today, inflexible, siloed management tools designed for either on-premises or cloud infrastructure but not both, are making the transition difficult. And as businesses gradually change the infrastructure "mix" over time, it's not economically feasible to continually purchase and install new tools.

Moving cloud management to software as a service (SaaS) is one way to go, but still, ripping and replacing your current management solution inevitably disrupts operations and requires costly retraining of your staff. But what if there was a solution that would give you the benefits of both on-premises and SaaS management—without retooling or retraining?

Finally, there is. And that IT management solution is VMware vRealize Cloud Universal™.

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VMware vRealize Cloud Universal accelerates cloud adoption by combining SaaS and on-premises capabilities for automation, operations, and log analytics in a single license. Flexible licensing and delivery enables you to deploy cloud management on premises or as SaaS. And it gives you freedom to move between the two as required. By preserving your existing investments, vRealize Cloud Universal is a pragmatic way to transition to the cloud, helping unlock the agility, efficiency, and scale you need while delivering a common operating model across on-premises data center and cloud environments.

Getting to Future Ready

This ebook explores reasons your organization needs to be "future ready," and why that matters to your ongoing cloud journey. It outlines three key phases of cloud readiness—exploratory, cloud curious, and cloud first—highlighting the challenges of each stage as well as solutions. And it provides real-world examples of how companies have used VMware vRealize Cloud Universal to make their cloud journeys easier.

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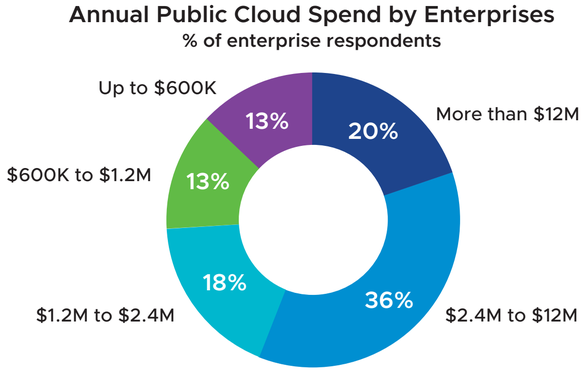
The Need to be Future Ready

As annual spend on cloud rises—with 56 percent of organizations recently surveyed now spending more than $2.4 million annually on cloud, according to the *2020 State of the Cloud Report*—companies need a way to accommodate their ever-shifting infrastructures. They need to be future ready. This means possessing the ability to respond quickly to crises and adapt to new realities, all while accelerating innovation.



SOURCE: Flexera, "Cloud Computing Trends: 2020 State of the Cloud Report, May 21, 2020.

As the pandemic crossed the globe, McKinsey estimated that businesses advanced five years on their digital maturity in just eight weeks.[1] As would be expected, organizations already well-advanced on their digital transformations were better positioned to both protect their businesses and emerge even more competitive despite the rapid changes that were required due to work-from-home directives, supply chain disruptions, and the wholesale move to digital sales channels.

Future Ready Cloud

The success of some IT teams during the early days of the pandemic had less successful IT organizations asking questions about how they, too, could become future ready. VMware provided answers with Future Ready Cloud. Future Ready Cloud makes it possible for enterprises across industries to unlock the power of the cloud and swiftly respond to new infrastructure demands without losing the value of prior investments. It enables organizations to move ahead with a proven, trusted platform for business continuity while taking advantage of cloud scale and economics.

Moreover, as enterprises adapt to new conditions, Future Ready Cloud enables them to establish a consistent architectural model with consistent operations that extend from on-premises data centers to public clouds and edge environments. IT teams can reduce the complexity and costs of multi-cloud management. And gain the flexibility to deliver applications across any cloud—tapping into innovative cloud services from Amazon Web Services (AWS), Microsoft Azure, and Google Cloud as well as IBM, Oracle, Alibaba Cloud, and more than 150 additional cloud providers.

1. McKinsey, "The COVID-19 recovery will be digital: A plan for the first 90 days," 14 May 2020)

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Future Ready Cloud's Connection to vRealize

Organizations close to or moving quickly to become future ready and using vRealize to manage on-premises technology have an added advantage with the introduction of vRealize Cloud Universal. The solution's flexible licensing model makes it easier to scale rapidly within the data center and expand easily into the cloud. And as VMware Future Ready Cloud solutions streamline management—supporting automation across hybrid cloud environments and automation drives improved IT efficiency across on-premises data center and the cloud, as well as the edge—vRealize Cloud Universal serves as a single pane of glass management, providing complete visibility across the entire environment.

"The Governor of the State of Arizona instructed all state agencies to consider SaaS and public cloud services over on-premises solutions. With vRealize Cloud Universal, we have the flexibility to continue using our on-premises solutions while planning and executing our SaaS and public cloud migrations without the need to change how we operate and evaluate our environment."

CHARLES BUCKLEY
DEPUTY CIO, CHIEF OF IT OPERATIONS
ARIZONA DEPARTMENT OF ECONOMIC SECURITY

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The Benefits of vRealize Cloud Universal

Organizations like yours can experience many benefits with a single IT management solution spanning core, cloud, and edge, including the following:

- **Flexible consumption** – vRealize Cloud Universal allows you to consume cloud management as SaaS, or deploy cloud management on premises, while getting the same user experience across platforms.
- **Predictable budgeting** – You can transform the way you pay for cloud services from a capital expense (CapEx) to operating expense (OpEx) model.
- **Consistent operating model** – The strategic alignment between VMware's on-premises and cloud management tools enables you to seamlessly move workloads to cloud as your business demands it.
- **Accelerate your move to the cloud** – vRealize Cloud Universal's self-service federated catalog and unified analytical view of workloads across hybrid and multi-cloud environments help accelerate your transition to the cloud.
- **Agility, efficiency, and scalability** – The comprehensive solution gives you the agility and efficiency of cloud infrastructure at scale. By leveraging the latest artificial intelligence and machine learning (AI/ML) technologies, you can easily provision, optimize, and govern hybrid- and multi-cloud environments.

vRealize Cloud Universal delivers additional value above and beyond these core benefits. If you are involved in merger and acquisition (M&A) activities, it eases integration of two (or more) IT environments. Finally, you streamline the meeting of compliance mandates, even in the most regulated industries like finance and healthcare.

vRealize Cloud Universal includes capabilities and enhancements that encompass the following products:

- *VMware vRealize Automation* and *VMware vRealize Automation Cloud*
- *VMware vRealize Operations* and *VMware vRealize Operations Cloud*
- *VMware vRealize Log Insight* and *VMware vRealize Log Insight Cloud*
- *vRealize AI Cloud*
- *VMware Skyline*

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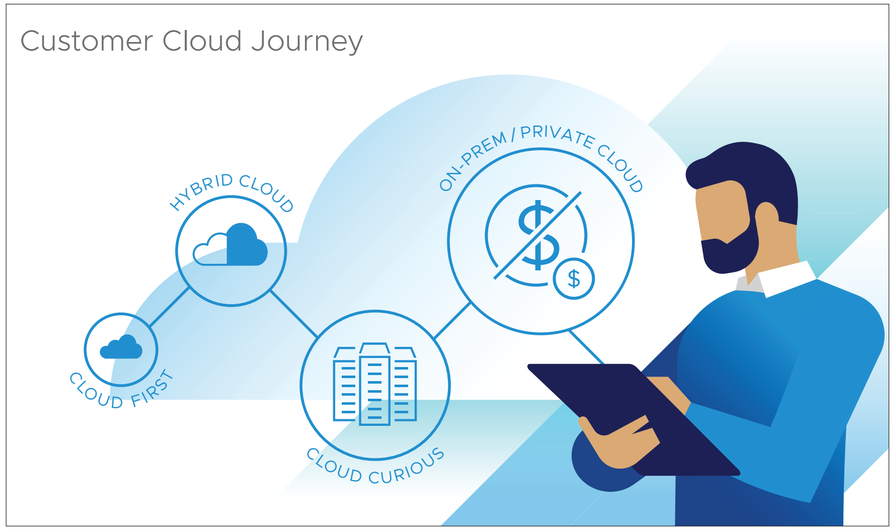
Cloud Is Not a One-Size-Fits-All Journey

Few organizations are starting their cloud migration from point zero. Many have already transitioned at least some workloads to the cloud or adopted SaaS applications. But each company is different. Because of this, it's important to understand that moving from mostly on-premises to a cloud-first stance is a journey. A unique journey. The path you take ultimately depends on the particular needs of your business.

We have identified three stages to this journey: exploratory, cloud curious, and cloud first. No matter where you are in your cloud journey, vRealize Cloud Universal will help you realize your goals.

For example, you could be a cloud-first business that has committed completely to cloud. In that case, the SaaS management capabilities of vRealize Cloud Universal will completely align with your cloud-first initiatives. Or, you could be a more cautious, cloud-curious organization where you have formulated a multi-year strategy to get to cloud. That means you're still thinking about it, and that you still have on-premises resources to manage. vRealize Cloud Universal will be a critical tool to possess as you make that transition. Or, you could be an exploratory business that plans to keep most of your workloads on premises for the foreseeable future, but you like the idea of the cloud operating model and want to move some data or apps to the cloud to gain the financial benefits of shifting from CapEx to OpEx.

There is no right or wrong answer. You can begin the journey to cloud from wherever your organization is now.



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Stage 1: Exploratory

In this stage, organizations are approximately 70 percent on premises and 30 percent cloud/SaaS. These businesses possess workloads likely to stay on premises for now, but want to begin moving some apps to the cloud to test it out. The flexibility of vRealize Cloud Universal works very well for organizations in this stage.

Challenges Exploratory Organizations Commonly Face

- **Spending too much capital budget on on-premises infrastructure.** Data center hardware and software is costly, and requires major commitment of capital budgetary funds, which means that making a mistake in overbuilding capacity can be catastrophically expensive. And no organization wants to be stuck with unused IT infrastructure that might be impossible to repurpose.
- **Finding it difficult to deploy and scale on-premises capacity.** Many organizations experience long procurement lead times to get the equipment they need to build out their on-premises data centers. This makes scaling to meet business demands an exercise in frustration.
- **Having trouble hiring—and retaining—needed expertise.** The IT labor market is tight right now. With an on-premises environment, you need dedicated, knowledgeable personnel on hand to support and manage potential reliability and software support issues.
- **Possessing slow app delivery processes.** Developers need resources to do their jobs, and if they have to wait until compute or storage capacity is provisioned, app delivery will slow and fall behind.

Impact of vRealize Cloud Universal on Exploratory Organizations

If you use vRealize Cloud Universal in this stage, your organization can deploy workloads on premises or in SaaS interchangeably and without the need to repurchase licenses, for a consistent management experience. You can adopt cloud at your own pace and combine private, public, and hybrid cloud metrics to predict your future needs.

vRealize Cloud Universal also allows you to seamlessly move workloads to cloud based on business demands. And you can simplify developers' requests for services across locations and departments with a SaaS-based, self-service catalog of approved resources for developers while reducing downtime.

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Benefits of vRealize Cloud Universal include:

- Lower CapEx and associated maintenance costs related to purchasing, supporting, and upgrading on-premises infrastructure
- Transfer technical and financial risks of investing in leading-edge infrastructure as well as maintenance responsibilities to VMware
- Reduce implementation times related to installing servers and related devices

A large healthcare organization had a largely on-premises IT environment. Attempting to keep up with expanding capacity needs due to the COVID-19 pandemic meant it was burning through its capital budget to provision new on-premises hardware and software, and revenues were down due to elective surgeries no longer being scheduled. As a result, the healthcare organization projected that it would suffer a $1 billion loss due to COVID-19, a shortfall it doesn't expect to recover from until 2023.

By adopting vRealize Cloud Universal, it began moving workloads to the cloud, and shifting from traditional on-premises to consumption-based licensing, which resulted in significant capital savings. And by using cloud-native app development models, it was able to accelerate delivery of new or updated apps much more swiftly.

Stage 2: Cloud Curious

At this stage, organizations are approximately 50 percent on premises and 50 percent cloud/SaaS. The goal of organizations in this stage is to establish a hybrid cloud operating model, and accelerate the ability to deliver new services. Cloud-curious organizations tend to have a many phased roadmap to get to cloud, and thus still have a significant amount of on-premises resources. vRealize Cloud Universal is a critical tool as these businesses continue on their cloud transition journeys.

Challenges that Cloud-Curious Organizations Commonly Face

- **Possessing a plethora of aging, legacy systems and processes.** Too many employees are tethered to on-premises applications, the task of managing employee laptops and tablets is too complex, and manual support processes slow down the organization's ability to fix issues in a timely manner.
- **Struggling to support a distributed workforce.** In addition to capacity problems, there's the challenge of remote employees securely getting access to the applications and data that they need.
- **Fighting data center and cloud silos.** These silos limit the enterprise's ability to scale and interoperate when migrating more workloads to the cloud.

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Impact of vRealize Cloud Universal on Cloud-Curious Organizations

If you deploy vRealize Cloud Universal at this stage of cloud-readiness, you can boost your staff productivity by simplifying your path to cloud with consistent management and reporting in a single suite. This allows your IT professionals to holistically view services, apps, infrastructure, and workloads across environments, comparing not only performance and capacity but also compliance, cost, and utilization. And vRealize Cloud Universal helps your organization maintain strategic alignment—across technology, business, and support teams—as you provision, optimize, and govern your clouds.

The transition to cloud doesn't happen overnight. That's why you want to have the flexibility to deploy both on-premises and cloud-based applications to ease the transition. During this stage of transformation, you should be looking for a flexible solution that will ensure that management is aligned with whatever your current state of infrastructure is, so you don't take unnecessary risks or introduce complexities.

At VMware, we believe in the concept of "embrace not replace." Even though you might be thinking of establishing a cloud-first mandate, you probably find the idea of ripping and replacing your existing management solution a daunting one. vRealize Cloud Universal helps you have your cake and eat it too via a common operating model across on-premises data centers and cloud environments.

In an attempt to modernize in support of the governor's mandate, the technology office of a southwest U.S. state signed a statewide cloud-first policy for new server, infrastructure, and software investments to optimize efficiencies and improve business continuity.

By deploying vRealize Cloud Universal, the state technology office was able to:

- Establish a hybrid cloud model for the state with vRealize Cloud Universal's flexible deployment options
- Continue to use existing infrastructure while planning and executing cloud modernization
- Accelerate efforts to modernize its data center and reduce its infrastructure footprint

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Stage 3: Cloud First

At this point, organizations are mostly cloud, with just 30 percent of on-premises infrastructure. They need agility, efficiency, and scalability to gain the full advantage of cloud infrastructure at scale, leveraging the latest AI and ML technologies to provision, optimize, and govern their hybrid and multi-cloud environments.

These organizations are completely committed to the cloud and the SaaS management capabilities of vRealize Cloud Universal are completely aligned with cloud-first initiatives.

Challenges that Cloud-First Organizations Commonly Face

- **Getting the final mission-critical workloads to cloud.** Lines-of-business owners are often reticent about moving their most mission-critical apps to the cloud for fear of losing or corrupting data that can impact customer experience.
- **Fighting increased cyber threats.** Enterprises want to be sure more cloud workloads won't compromise the organization's security posture.

Impact of vRealize Cloud Universal on Cloud-First Organizations

If you deploy vRealize Cloud Universal at this stage—the highest level of cloud-readiness—you can move to standardized infrastructure and app services delivery with access rights while gaining supply-and-demand insights.

And by combining SaaS and on-premises capabilities for automation, operations, and log analytics into one license, your organization can not only adopt cloud faster but more consistently.

The federated components of vRealize Cloud Universal come strongly into play during this stage, as they provide the automation that will free up resources so you can innovate and scale your business. Additionally, the agility and efficiencies you gain by combining cloud infrastructure at scale with the power of vRealize AI Cloud and its reinforcement learning technology—a subset of machine learning—help you better govern and optimize your hybrid and multi-cloud environments alike.

A large, international infrastructure management organization deployed vRealize Cloud Universal to reduce operational activities and drive innovation as part of its cloud-first program. The move to SaaS has given the IT division the opportunity to refocus its efforts from keeping the lights on to supporting business growth.

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Get Started With the ROI Calculator

The best way to determine the stage of your organization on your cloud journey and the benefits you can expect from vRealize Cloud Universal is to visit the VMware vRealize Cloud Universal ROI calculator. It's easy to get started—just enter the following information in a few simple clicks to complete it:

- Estimate your cloud journey timeframe
- Enter details about your current deployment (e.g., products, workloads)
- Assess your team's expertise
- Estimate the number of integrations

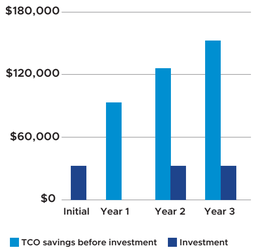
With this information, the tool will estimate your ROI and provide your organization with a personalized assessment report.

ROI Analysis
The estimated cash flows for your analysis

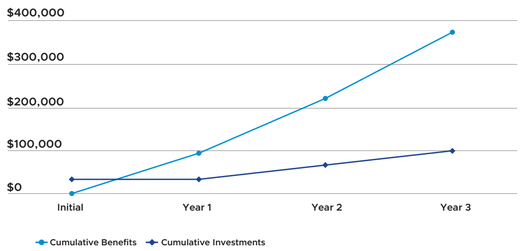
380% ROI — **< 5 months** Payback Period

	Initial	Year 1	Year 2	Year 3
VMware cost of ownership before investment	$0	$530,767	$497,447	$470,791
TCO savings before investment	$0	$93,708	$127,028	$153,684
Investment	$32,850	$0	$32,850	$32,850
Net cash flows	**$32,850**	**$93,708**	**$94,178**	**$120,834**
Cumulative net cash flows	**$32,850**	**$60,858**	**$155,036**	**$275,871**

TCO Savings vs. Investment



Breakeven

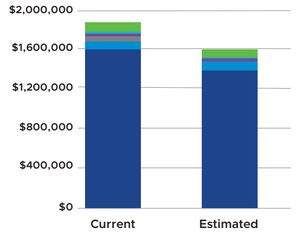


Disclaimer: Estimated savings are based on list price and are not a guarantee. Actual results may vary.

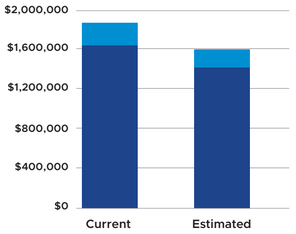
TCO Savings
Your Total Cost of Ownership (TCO) savings over analysis period

	Year 1	Year 2	Year 3	Total
Hardware Purchase Cost—Server, Network and Storage	$6,998	$6,998	$6,998	$20,995
Hardware Support	$1,400	$1,400	$1,400	$4,199
Facilities Expense—Power & Space	$820	$820	$820	$2,459
Software Support	$16,690	$16,690	$16,690	$50,070
Software Purchase	-$5,033	-$5,033	-$5,033	-$15,100
IT Payroll	$39,984	$73,304	$99,960	$213,248
Total TCO Savings	**$60,858**	**$94,178**	**$120,834**	**$275,871**

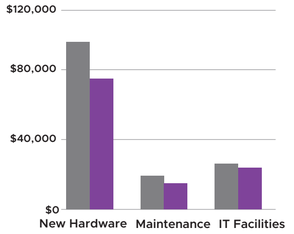
Total Cost of Ownership



CAPEX vs. OPEX



Hardware Expenses



- Hardware Purchase Cost—Server, Network and Storage
- Hardware Support
- Facilities Expense—Power & Space
- Software Support
- Software Purchase
- IT Payroll

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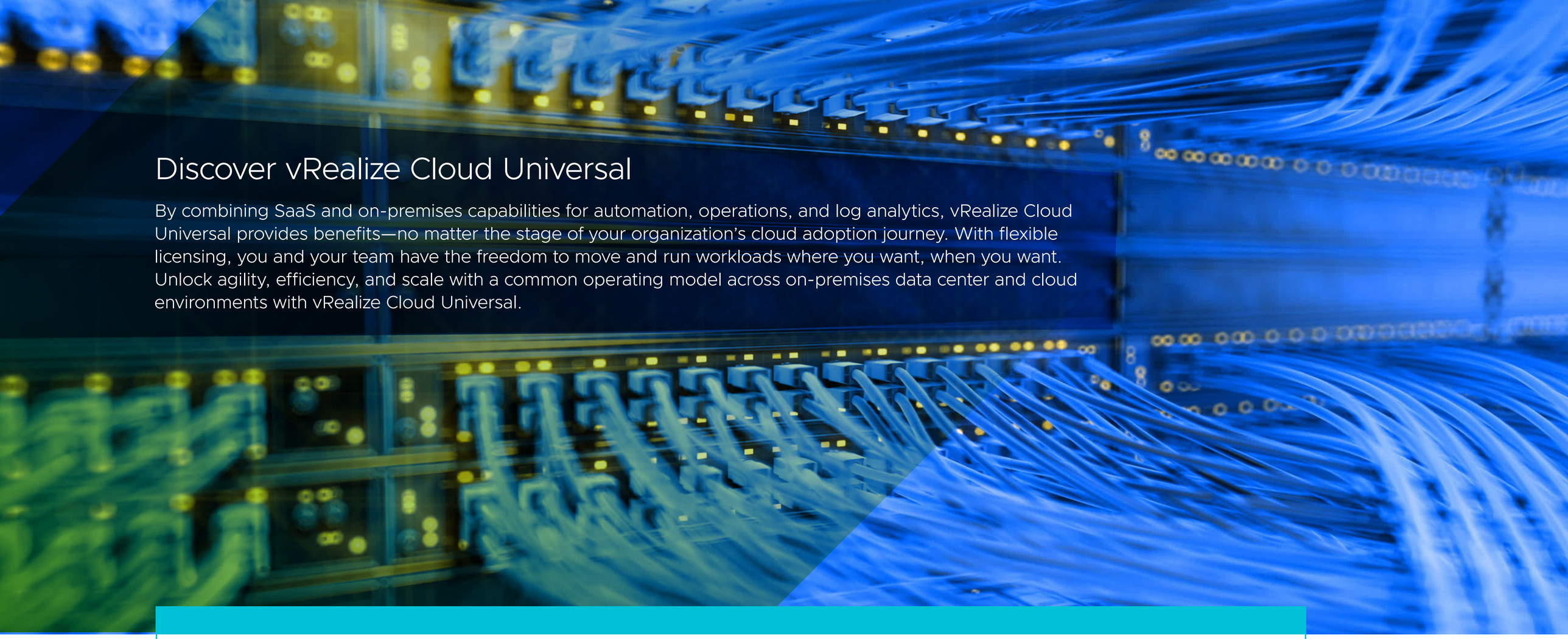

Discover vRealize Cloud Universal

By combining SaaS and on-premises capabilities for automation, operations, and log analytics, vRealize Cloud Universal provides benefits—no matter the stage of your organization's cloud adoption journey. With flexible licensing, you and your team have the freedom to move and run workloads where you want, when you want. Unlock agility, efficiency, and scale with a common operating model across on-premises data center and cloud environments with vRealize Cloud Universal.

Calculate your organization's estimated savings and ROI from cloud.

Get started

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