



VMware vRealize Cloud Universal

Overview

VMware vRealize® Cloud Universal™ is a multi-cloud software-as-a-service (SaaS) management suite built to accelerate cloud adoption by combining on-premises and SaaS capabilities for automation, operations, log analytics, network visibility, cost optimization, security and compliance into one license. It delivers the flexibility to deploy on premises or as SaaS, interchangeably, without the need to repurchase, for a consistent hybrid and multi-cloud management experience. The flexible licensing and delivery models enable organizations to move at their own pace, helping them to become more agile, scalable and efficient.

vRealize Cloud Universal includes the following products:

- CloudHealth® – Delivers visibility into multi-cloud and hybrid cloud costs to optimize infrastructure without sacrificing development speed or application performance
- CloudHealth Secure State™ – Improves risk visibility and remediation of misconfigurations with an intelligent, faster and scalable cloud native security and compliance approach
- VMware vRealize Automation™ and vRealize Automation Cloud™ – Delivers a modern infrastructure automation platform for both traditional and cloud native workloads, powered by DevOps principles and the Salt Project open source community
- VMware vRealize Operations™ and vRealize Operations Cloud™ – Delivers continuous performance optimization, efficient capacity management, proactive planning, intelligent remediation, and integrated compliance powered by AI and predictive analytics
- VMware vRealize Log Insight™ and vRealize Log Insight Cloud™ – Delivers centralized log management, deep operational visibility, and intelligent analytics
- VMware vRealize Network Insight Cloud™ – Enables acceleration and optimization of application security and networking across private, public and hybrid clouds¹
- VMware Skyline™ – Provides proactive intelligence that helps organizations avoid problems before they occur, and reduces the time spent on resolving active support requests

1. vRealize Network Insight Cloud is only available in the vRealize Cloud Universal Enterprise Plus edition (exclusive to VMware Cloud Universal™ and as an add-on to VMware Cloud™ on AWS).

SaaS-exclusive features

In addition, vRealize Cloud Universal includes powerful new, SaaS-only features:

- VMware vRealize AI Cloud™ – Provides reinforcement learning to learn, adapt and optimize storage KPIs across mixed application workloads
- VMware vRealize Cloud Federated Catalog™ – Delivers a unified catalog of IT infrastructure resources to end users globally
- VMware vRealize Cloud Federated Analytics™ – Enables a unified view of hybrid and multi-cloud environments in a single interface
- VMware vRealize Cloud Subscription Manager™ – Delivers automated license usage metering from vRealize deployments, both on premises and in the cloud

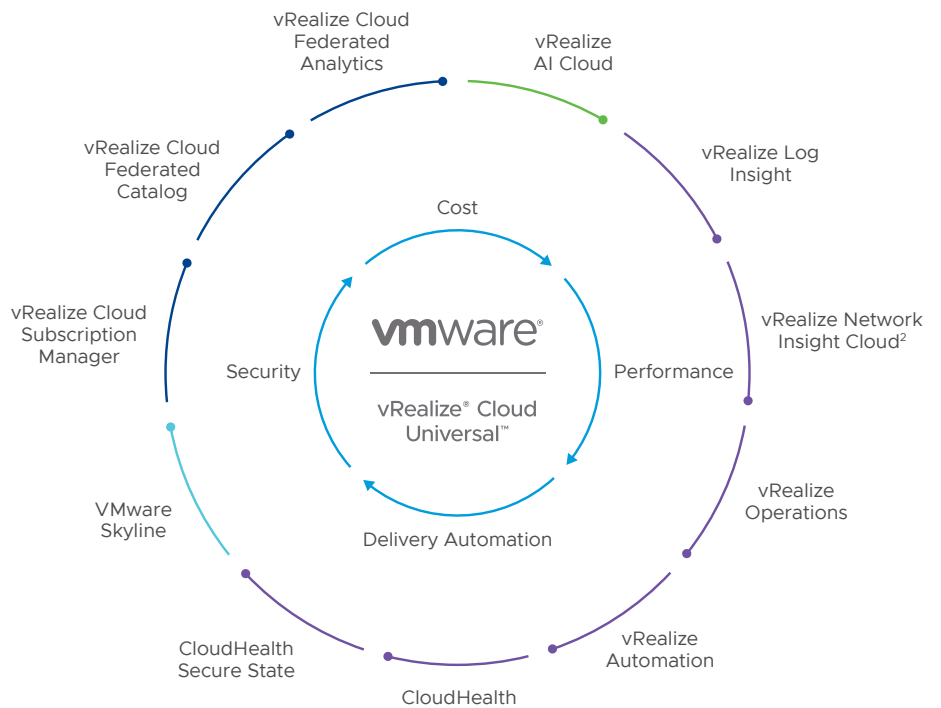


Figure 1: Products and features that comprise VMware vRealize Cloud Universal.

2. vRealize Network Insight Cloud is only available in the vRealize Cloud Universal Enterprise Plus edition (exclusive to VMware Cloud Universal and as an add-on to VMware Cloud on AWS).

Key benefits

- Flexible consumption
- Move at your own pace
- Agile, scalable and efficient

Key capabilities

Federation

A cloud federated portal helps organizations scale operations at ease, while maintaining governance at a global level, as well as reduce application development costs, complexity and time to market. Cloud administrators gain the ability to centralize services, enabling them to identify service gaps and redundancies, as well as gain insight into supply and demand, eliminating the need to develop and support services at individual locations. Cloud federated analytics enables teams to view, analyze and compare performance, capacity, compliance, cost, utilization of cloud services, the underlying infrastructure, and the deployed workloads across a mix of on-premises clouds and public cloud environments.

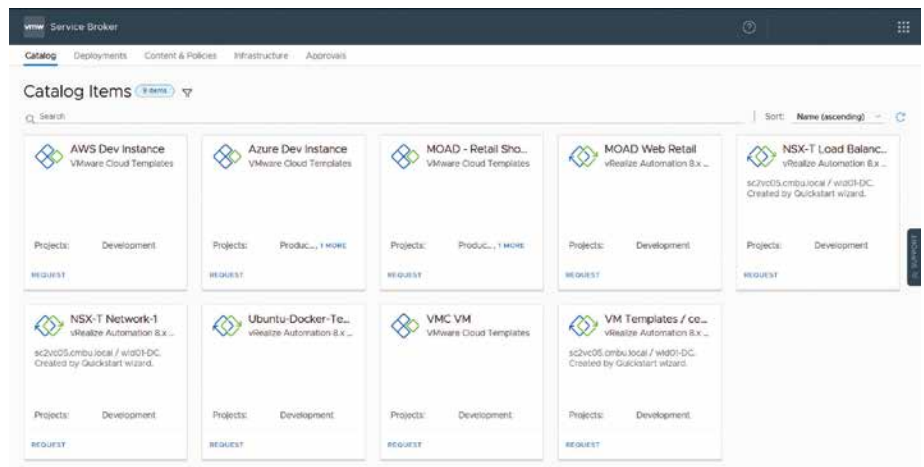


Figure 2: vRealize Cloud Federated Catalog.

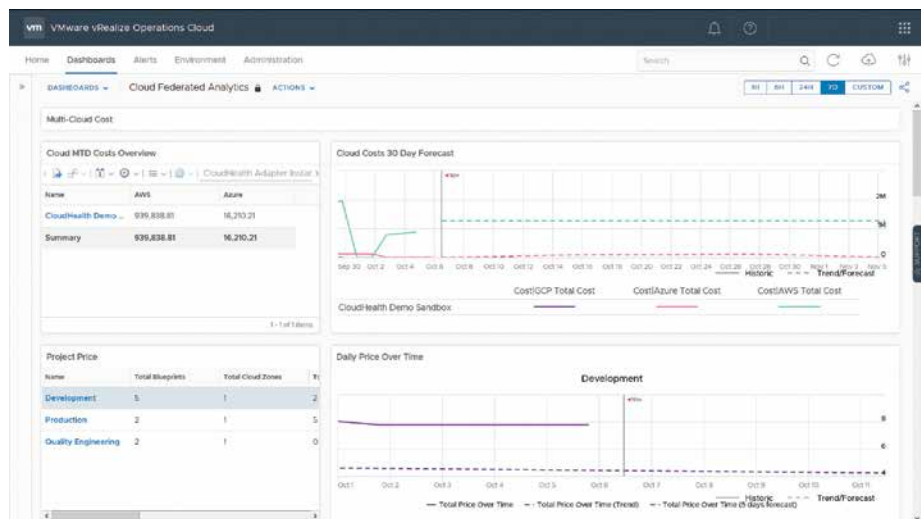


Figure 3: vRealize Cloud Federated Analytics.

Choice

With flexible deployment and licensing, organizations can consume management both on premises or as SaaS as the demands of the business evolve. This strategic alignment enables a seamless movement of workloads to the cloud while protecting existing cloud investments for a consistent operating model, leading to better efficiency, flexibility and scalability.

Intelligent

Integrated machine learning and reinforcement learning techniques continuously learn, adapt and optimize storage KPIs to deliver consistent and optimal performance for mixed application workloads. As workload applications get scaled out or migrated to different data centers or clusters, vRealize AI Cloud will dynamically adjust VMware vSAN™ tunables to continuously optimize KPIs, such as I/O read and write throughput, or reduce network latency.

Integrated

Proactive intelligence keeps customers out of harm's way, alerting them to potential issues before they occur. Avoiding problems and downtime keeps customers' infrastructures healthy, secure and productive. If problems do occur, integrated self-service troubleshooting speeds the issue's time to resolution. VMware Skyline helps IT organizations transition from a reactive firefighting mode to a proactive self-driving model, freeing time to focus on more strategic business initiatives and innovation.

Secure

CloudHealth Secure State is an intelligent cloud native security and compliance platform that helps organizations reduce misconfiguration risk and protect millions of cloud resources at scale. Using an intelligent, resource relationship-based cloud data model, CloudHealth Secure State improves risk visibility with real-time inventory search, advanced risk correlation, and more than 950 best practice rules to report 95 percent of security and compliance violations within 6 seconds of a cloud event notification.

Overcoming multi-cloud management challenges

Challenge	Solution: vRealize Cloud Universal
<p>Multiple cloud silos Have a single source of truth and the ability to report to management on the overall state of the cloud infrastructure.</p>	<p>Accelerate agility Unlock innovation by speeding up delivery of infrastructure, applications and services in a single license.</p>
<p>Rising cloud costs Optimize costs and free up cash for core business functions by shifting from a CapEx to an OpEx model.</p>	<p>Optimize performance Maximize efficiency by delivering end-to-end intelligent operations at scale without the need to repurchase</p>
<p>Security and compliance Drive rapid business transformation while delivering enterprise-level resiliency, security and operations.</p>	<p>Control your clouds Mitigate risks by simplifying financial management, strengthening security, and automating governance.</p>
<p>Operational continuity Transition on-premises workloads to SaaS at a pace that matches the needs of the business.</p>	<p>Freedom of choice Consistently manage any cloud, infrastructure and application on-premises or as SaaS.</p>

Why vRealize Cloud Universal?

- Flexibility to use on premises or as SaaS in a single license
- Unified view of cloud management activities for supporting large-scale and distributed environments
- Federation of IT services using a SaaS-based catalog across multi-cloud endpoints
- The latest AI and machine learning innovations that enable a self-driving data center
- The consistency to provision, optimize and govern across hybrid and multi-cloud environments with a single operational model
- The ability to manage subscription licenses, analyze usage for transparency, and determine present and future subscription requirements
- VMware-managed SaaS upgrades
- The agility, efficiency and scalability benefits of SaaS with proactive support for faster, more reliable access to innovation

Supported platforms

VMware vRealize Cloud Universal supports a private cloud based on VMware; VMware Cloud on AWS; and the native public clouds of AWS, Microsoft Azure, Google Cloud Platform, VMware Cloud on Dell EMC and other VMware vSphere® environments.

For more information or to purchase VMware products

Call 877-4-VMWARE (outside North America, +1-650-427-5000). Visit the product page at vmware.com/products/vrealize-cloud-universal.

How to buy

VMware vRealize Cloud Universal is available in four editions that cater to different levels of management needs and use cases:

- Standard – Supports self-driving operations for enterprises looking to deliver continuous performance optimization based on intent, efficient capacity management, proactive planning, and intelligent remediation.
- Advanced – Supports self-service infrastructure automation, enabling IT to deliver an easy-to-use, unified self-service cloud infrastructure consumption layer via a service catalog or as-code model, and across both VM- and container-based Kubernetes infrastructure.
- Enterprise – Supports hybrid and multi-cloud infrastructure, cost optimization, security and compliance. Also enables IT with DevOps-powered infrastructure delivery and consumption use cases, leveraging infrastructure as code, VMware Cloud Templates™, infrastructure pipelining, and GitOps.
- Enterprise Plus – Supports application operations and includes vRealize Network Insight Cloud for end-to-end network visibility and analytics across VMware and third-party network infrastructure. Available only as part of VMware Cloud Universal and as an add-on to VMware Cloud on AWS.