Optimize Hybrid Cloud with Self-Driving Operations for VMware Cloud Foundation

What is VMware Cloud Foundation?
VMware Cloud Foundation™ is the hybrid cloud platform for managing virtual machines (VMs) and orchestrating containers, built on full-stack hyperconverged infrastructure (HCI) technology. With a single architecture that’s easy to deploy, VMware Cloud Foundation enables consistent, secure infrastructure and operations across private and public clouds.

VMware Cloud Foundation is a universal workload platform, built for today and the future. It is the simplest, fastest path to hybrid and multi-cloud with consistent operations and management.

“Having a software-defined platform deployed by VMware Cloud Foundation really allows us to grow and scale faster.”
LUKE HUCKABA
PRINCIPAL ARCHITECT
RACKSPACE

KEY HIGHLIGHTS
• VMware Cloud Foundation is the simplest, fastest path to a unified cloud operating model.
• Self-driving operations management is an integral part of VMware Cloud Foundation, delivered in VMware vRealize Suite.
• vRealize self-driving operations delivers the ROI on full-stack hybrid cloud infrastructure by helping organizations optimize performance, capacity, cost, planning, troubleshooting and compliance.

FIGURE 1: VMware Cloud Foundation is a universal workload platform.
What is self-driving operations management?
As data centers grow in scale and complexity and extend to multiple public clouds, IT organizations can increasingly benefit from solutions that automate and simplify operations management.

VMware vRealize® Suite is an integral component of VMware Cloud Foundation. All editions of vRealize Suite provide self-driving operations management to deliver this automation and simplification. Users can optimize, plan and scale deployments with the following use cases:

- **Continuous performance optimization** – Assure application performance at minimal cost, driven by operational and business intent with real-time predictive analytics-driven actions and artificial intelligence (AI) to automatically balance workloads and proactively avoid contention.

- **Capacity and cost management and planning** – Reduce cost and improve efficiency with real-time capacity analytics correlated with cost analytics, improving utilization and consolidation while proactively planning for the future.

- **Intelligent remediation** – Predict, prevent and troubleshoot faster with actionable insights, correlating metrics and logs with unified visibility from applications to infrastructure.

- **Integrated compliance** – Reduce risk and enforce IT and regulatory standards with integrated compliance and automated drift remediation.

Customers taking advantage of the self-driving operations capabilities that vRealize Suite offers can expect to see significant reductions in unplanned downtime, improvements in productivity, and hardware and software cost savings—as well as better organizational planning and reporting. See how five real customers have been able to quantify the benefits of vRealize in this VMware-commissioned Forrester study.

The unified control plane for the unified hybrid cloud
The self-driving operations capabilities of vRealize Suite are built for VMware Cloud Foundation. vRealize maximizes the return on an investment in VMware Cloud Foundation, making the promise of consistent infrastructure and operations across hybrid clouds an optimized reality.

Specifically, vRealize gives organizations the power to automate, optimize, modernize and extend their cloud infrastructure:

- **Automate** – No matter what cloud platform(s) an organization uses, an operational best practice is to ruthlessly automate everything. vRealize is designed to help organizations automate workload performance management, freeing up IT organizations to spend less time putting out fires and more time adding value.

- **Optimize** – Regardless of the level of automation, vRealize leverages AI and predictive analytics to help organizations optimize their VMware Cloud Foundation to realize maximum performance at the minimum cost. If troubleshooting is required, users are given the power of app-to-infrastructure visibility; metric correlation; proactive alerting; and custom, shareable dashboarding to solve issues—and communicate the right information to the relevant stakeholders—as quickly and accurately as possible.
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- **Modernize** – vRealize is deeply intertwined with each of the infrastructure elements of VMware Cloud Foundation, including the radical integration of Kubernetes with VMware vSphere®. vRealize is built to help organizations efficiently modernize operations management to support both traditional VMs and container-based developer-ready infrastructure.

- **Extend** – VMware Cloud Foundation seamlessly spans private and public cloud infrastructure. vRealize offers the integrated tools for planning and monitoring deployments, regardless of cloud.

Maximize the ROI of VMware Cloud Foundation with self-driving operations

The following are some questions organizations should ask to determine whether they could benefit from the self-driving operations of vRealize for VMware Cloud Foundation:

- How much is complexity slowing you down? How can you take advantage of optimization to increase velocity?
- Do your business stakeholders think infrastructure and operations are fast enough? Flexible enough? Automated enough?
- How much time and money could you save on operations if you had a unified hybrid cloud management control plane?

Traditional IT is full of complexity, blind spots, risks and delays. VMware Cloud Foundation with self-driving operations delivers unified management/visibility and full-stack speed and agility for consistent, standardized, simplified infrastructure. This architecture helps organizations:

- Improve resource efficiency.
- Deliver better service-level agreement (SLA) fulfilment.
- Decrease risk.
- Empower employees to be proactive rather than reactive.

How to get started

VMware Cloud Foundation comes in four editions: Starter, Standard, Advanced and Enterprise. All of these except Standard come with self-driving operations. Please see the [VMware Cloud Foundation product page](vmware.com/products/cloud-foundation) for a full comparison of the editions.

To get started, try a [hands-on lab](vmware.com/products/vrealize-operations) demonstrating how vRealize integrates with the rest of the VMware stack (and beyond), try a [free trial](vmware.com/products/cloud-foundation) or contact a [team member](vmware.com/products/vrealize-operations) to get started today.

For more information on VMware Cloud Foundation, please visit [vmware.com/products/cloud-foundation](vmware.com/products/cloud-foundation).

For more information on self-driving operations, please visit [vmware.com/products/vrealize-operations](vmware.com/products/vrealize-operations).