Overview

Data centers have become highly complex environments. Workloads are growing 26 percent year over year, even while IT budgets are growing at a meager 3 percent. Add the fact that most organizations are complementing their on-premises infrastructure with multiple public clouds, and the challenge of complexity increases exponentially. At the same time, IT is experiencing growing pressure to keep up with the business, or be replaced. Continuously assuring performance while minimizing costs is critical. It enables development teams to innovate and create great applications. It ensures that line-of-business end users and customers have great digital experiences. It drives revenue. But this challenge is more complex than ever and only becoming more so. Managing it all is beyond human capabilities.

Cisco® Workload Optimization Manager is a real-time decision engine that drives continuous health in the IT environment. The intelligent software continuously analyzes workload consumption, costs, and compliance constraints and automatically allocates resources in real time. It assures application performance by giving workloads the resources they need when they need them.

Benefits

When software makes the right workload decisions in real time, your teams benefit.

Performance assurance
- 37% better application response time
- 23% more orders per minute

Team productivity
- 80% fewer tickets and troubleshooting

Efficiency and quick ROI
- 24% greater density
Time for software to make the right decisions

Dynamic cloud infrastructure, containers, microservices, and public cloud services are forcing enterprise IT teams to become more proactive. “Automate everything” is the new mandate across every level of the organization. We are entering a new age of IT automation, one that addresses the complexity that these organizations face—one where software makes decisions (Figure 1).

Figure 1. Evolution of automation

Manual to Automated to Real time

Self-managing

1999 2001 2003 2005 2007 2009 2011 2013 2015 2017

How it works

Workload Optimization Manager is easy to install and the agentless technology will instantly begin to detect all the elements in your environment from applications to individual components. As illustrated in Figure 2, within one hour of deployment Workload Optimization Manager will deliver a global topological mapping of your environment and the interdependent relationships within the environment.
Dynamic optimization for multicloud environments is needed

“Sixty-two percent of organizations expect that, by 2019, more than half of their IT capabilities will be delivered through some form of cloud service – public, private, or hybrid... Cloud resource management and integration of resources across cloud platforms will grow to become critical technical capabilities at IT organizations driving DX [Digital Transformation] at enterprises.”

IDC October 2017

Cisco Workload Optimization Manager provides specific real-time actions that ensure workloads get the resources they need when they need them, for:

- Placement
- Scaling
- Capacity

Customers can automate the software’s decisions according to their level of comfort: recommend (view only), manual (select and apply), or automated (executed in real time by software).

**Key features**

**Optimize data center and private cloud:**

- Automate workload placement, scaling, and capacity to assure performance while maximizing efficiency.
- Quickly model what-if scenarios based on the real-time environment to accurately forecast capacity needs.
- Leverage purpose-built integrations with Cisco Unified Computing System™ (Cisco UCS®) to deliver elasticity on premises.
- Enjoy multi-hypervisor support for VMware and Hyper-V.

**Control cloud assets to deliver service levels:**

- Automatically scale workloads, storage, and databases in real-time to assure performance.
- Track, report, and view trends for compute, storage and database consumption metrics (CPU, memory, IOPs, latency, and Database Transaction Unit (DTU)) across regions and zones.

![Figure 2. Interdependencies across a global data center](image-url)
Help ensure workload performance with real-time optimization

How do you ensure the performance of workloads on your premises and in the public cloud? Cisco Workload Optimization Manager can remove the guesswork with real-time analytics and modeling so that you know just how much infrastructure is needed to allow your business to keep pace with the marketplace.

With Cisco Workload Optimization Manager, data center and cloud infrastructure dynamically adjusts to meet changing workload demand—ensuring continuous health in the environment. It relieves Infrastructure and Operations teams from the day-to-day management of infrastructure and resource availability, giving them time back to drive innovation for the business.

Minimize public cloud costs:

- Automatically scale down Microsoft Azure virtual machines or Amazon Web Services (AWS) instances, storage tiers, and database tiers, reducing costs without impacting performance.
- Identify ghost and unattached storage instances.
- Suspend or terminate unused instances.
- Project actual cost of workloads by projecting compute, licensing (OS), IP address, and storage costs.
- Aggregate monthly bills across services, regions, accounts, specific workloads, and lines of business; track in a single view against a defined budget; and project monthly bills.

A solution to fit your needs

Workload Optimization Manager is available in three editions, each providing additional capabilities to meet your specific automation requirements and use cases. Each edition can be run on premises, in a public cloud (AWS, Azure), or across a hybrid environment. These editions make it easy to get started and see more value as you extend Workload Optimization Manager into all layers of the stack and further automate actions.

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Getting started is easy

Cisco Workload Optimization Manager installs as an OVA in your environment. Once it is deployed, you connect to your browser of choice, add the license key, and select your targets. After you have selected your targets, add IP addresses, user names, and password credentials. Targets include hypervisors, cloud platforms, applications, storage, network, etc. Workload Optimization Manager uses these targets to discover your environment and determine the specific actions that will drive continuous health. [Download a trial license](#) and get started today.