

CA Unified Infrastructure Management for OpenStack



At a Glance

CA Unified Infrastructure Management (CA UIM) for OpenStack enables your IT teams to proactively monitor and manage service levels of your OpenStack implementations, including computing, storage and network services. The solution provides detailed quality-of-service metrics, comprehensive usage metering, service-centric insights and sophisticated alarms. With these capabilities, CA UIM delivers the insights you need to meet SLAs, boost uptime and control costs and usage. With the solution, staff can use one platform to monitor OpenStack environments and a wide range of other cloud-based and on-premises systems, so internal teams don't have to learn and manage different monitoring tools.

Key Benefits/Results

- **Faster issue resolution.** Gain deep, actionable insights into OpenStack infrastructures and the services running on them, so your staff can spot and address issues faster.
- **Reduce cost and complexity.** Stop managing multiple monitoring tools, and use a single, unified solution for all your environments.
- **Optimize utilization.** Get actionable insights on your OpenStack infrastructure, so you can do more effective capacity planning.

Key Features

- **Comprehensive coverage.** Get performance metrics on all the key elements of your IT ecosystem, including OpenStack, other cloud environments and traditional IT infrastructures.
- **Flexible dashboards.** Leverage pre-packaged dashboards to gain immediate, actionable insights, and create custom HTML dashboards for specific uses and users.
- **Predictive, intelligent alarms.** Identify issues proactively, and respond quickly and effectively, before the user experience suffers.
- **SLA and trend reports.** Track applications and service performance against SLAs and analyze historical data to find the root cause of issues and better plan for future capacity.

Business Challenges

With OpenStack, users can instantly deploy virtual machines and other resources required to manage a cloud environment. OpenStack makes horizontal scaling easy, which means organizations can efficiently serve more users by spinning up more instances. This flexibility provides significant advantages, but for those tasked with managing OpenStack and related service levels, these dynamic environments can pose significant challenges. With so many inter-reliant components, how do you quickly determine whether service levels are on target, and, if not, where the issue is?

With many systems in a cloud employing virtualized computing and networking, adapting monitoring to reflect continuous changes in these dynamic environments can be complex and time consuming. Further, even if a point solution has been employed to track all these virtualized elements, other tools would still be needed to track the associated infrastructure elements. Beyond the up-front cost and effort of implementation, these tools require substantial ongoing effort associated with manual data aggregation, analysis and reporting.

Solution Overview

CA Unified Infrastructure Management (CA UIM) represents a comprehensive IT monitoring solution that provides the capabilities administrators need to track and optimize the performance of their OpenStack deployments. Further, the product offers centralized visibility, ease of deployment and operation and architectural efficiency—so it can significantly reduce the cost and effort associated with OpenStack administration.

CA UIM is easy to deploy and manage, and it can automatically generate the views and insights you need to manage the OpenStack environment. With the platform you can gain timely alerts and insights that help speed issue detection and resolution, spot ways to pre-empt issues and institute tactics for ongoing optimization.

The solution provides comprehensive monitoring coverage of the OpenStack environment, including computing, storage and networks, as well as the services or processes running in these environments. In addition, CA UIM equips you with a single, unified solution that enables you to monitor performance of your other cloud or traditional IT environments. With the solution's pre-packaged monitoring templates and bulk configuration capabilities, your IT staff can rapidly configure and deploy monitoring in highly elastic OpenStack environments.

Critical Differentiators

Holistic coverage for OpenStack performance management: CA UIM provides comprehensive insights into your OpenStack environment, including computing, storage and networking resources. The solution collects data about resource health, availability and performance. CA UIM can collect data on virtual machines, including CPU, disk, memory, services, tenants and volumes; availability zones; computing hosts; and hypervisors.

Robust, predictive analytics: With CA UIM, you can leverage predictive analytics capabilities that help you proactively identify issues before the user experience suffers. The solution presents a prioritized list of problems that represent situations administrators should watch.

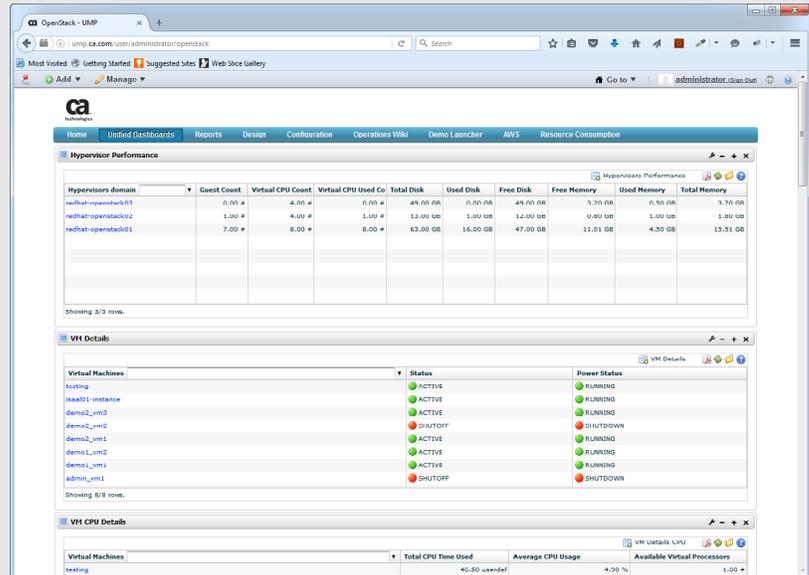
Performance trending: CA UIM allows you to analyze historical OpenStack services data, so you can better predict upcoming problems, perform root cause analysis and plan for future capacity needs.

Correlational analysis: With the solution's correlational analysis, you can identify and track relationships between performance variables and IT infrastructure elements and spot patterns over time.

Unified, multi-tenant solution: CA UIM supports both traditional data centers and newer virtualization and cloud environments. It provides out-of-the-box support for over 140 technologies, including Citrix, AWS and many more, which eliminates the need to integrate and manage multiple monitoring tools.

For more information, please visit ca.com/uim

CA UIM dashboards provide unified views of complex, dynamic OpenStack environments.



SLA management: CA UIM features integrated capabilities that enable you to easily create reports and alarms on SLAs for your OpenStack infrastructure and related systems and services.

Rapid, elastic monitoring configuration: CA UIM offers pre-packaged templates and bulk configuration capabilities that enable IT staff to rapidly deploy monitoring, and to efficiently adapt to dynamic OpenStack environments.

Out-of-the-box and custom dashboards: CA UIM provides immediate insights into OpenStack environments, presenting key metrics in an actionable format. Users can also create custom HTML 5 dashboards that address the unique needs of IT and development teams.

User experience monitoring: With the solution's integrated synthetic transaction monitoring capabilities, you can consistently measure end-user response times.

Open, flexible architecture and APIs: CA UIM allows you to deploy, extend and automate monitoring to meet the needs of highly dynamic hybrid IT environments.

Intelligent alarms: CA UIM offers sophisticated alarm functionality that enables fast, effective response when issues arise. The solution offers dynamic thresholds that minimize false alarms and improve staff productivity. The solution offers granular, automated alarm routing policies and integrates with leading service desk systems.

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