Unlocking the True Potential of Cloud and Hybrid IT Infrastructures With CA Unified Infrastructure Management

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Your World Is Changing

By necessity, every company is now a software company. By 2017, two-thirds of customer service transactions will no longer require the support of a human intermediary.[1] That means that if you haven't already done so, you must adapt your business model to meet the needs of online customers. Failure to do so will put you at a severe competitive disadvantage.

And chief among those demands is that you provide an exceptional user experience. App speed, reliability and ease of use are the new currency in this fast-changing landscape. In fact, app characteristics such as convenience and the ability to save users time can enhance brand loyalty by 60 percent or more.[2]

To truly succeed in the app economy, it takes more than a tool that's state of the art at the time it's released. Users expect overall performance—new features, faster load times, better stability—to improve on a nearly monthly basis. And that requires you to be able to accelerate release cycles for new apps and updates.

25% of users abandon apps after 3-second load delay[4]

50% of users rank "ease of use" as their top driver for app adoption[5]

86% of users delete poor performing apps[6]

94% of executives feel pressure to release apps faster.[3]

[1] "Why You Need to Rethink Your Customer Self-Service Strategy," Gartner, March 17, 2015
[2] Zogby Analytics survey of 6,770 consumers and 809 business decision makers in 18 countries conducted in September—October 2014
[3] 2015 Vanson Bourne study commissioned by CA
[4] "Reaching the Top of the Web Performance Mountain," Aberdeen Group, May 2013
[5] Statista, Akamal
[6] Bridgewater, Adrian, "Google: Users Abandon Slow Web Pages in Four Seconds, Here's Our Answer," Forbes.com, January 2015

The Cloud Makes It Possible

Cloud Adoption Continues to Expand

93%

of organizations surveyed are running applications or experimenting with infrastructure-as-a-service

82%

of enterprises have a hybrid cloud strategy, up from 74 percent in 2014

86%

of organizations are using public cloud while 63 percent are using private cloud

Source: "New Stats From the State of the Cloud Report,"
Ben Kepes, Forbes, March 4, 2015

Accelerating and maintaining the pace of development puts an enormous strain on traditional infrastructure. In fact, most organizations simply don't have the on-premise resources to meet the demands of the app economy.

That's why companies are increasingly adding public and private cloud into the mix. The cloud allows you to greatly expand your capabilities without making huge capital investments (CapEx) in growing your existing infrastructure.

What makes this approach even more economical is the agility of cloud-based services. The cloud allows you to provision infrastructure on demand—which means you can easily scale, expanding or contracting services as demand requires. By paying only for what you actually use, as part of your operating expenses (OpEx), you avoid the risk of investing CapEx in on-premise capabilities that can often sit idle in times of waning demand.

The cost efficiency and agility generated by a cloud environment also supports innovation. By ensuring the resources necessary to develop and test new technology are always available—while simultaneously encouraging and enabling cooperative interaction—the cloud makes innovation considerably faster and more efficient.

It's a Group Effort

As the application economy matures, computing infrastructures are getting more dynamic, yet also more complex. The days of standalone data centers are giving way to hybrid infrastructures that combine traditional on-premise technology with public and private cloud. There's room for all in today's sophisticated computing environments, as different requirements demand different capabilities.

Each component of the whole has its own strengths to offer:

Traditional infrastructure comprised of physical computing and storage servers, databases, networking management and more offer superior security and internal access. They also give IT a greater level of control. And it's often easier and more cost-efficient to continue running older applications and workloads that are already integrated into your traditional infrastructure than it is to migrate them to the cloud.

Public cloud infrastructure is often the most cost-effective and convenient option for high user-volume applications that don't require the most robust security. They also offer the advantage of scaling to demand, making them even more cost-efficient.

Private cloud combines many of the advantages of traditional infrastructure (security and control) and public cloud (flexibility and lower cost), but typically does require a greater investment than public cloud.

88% of organizations are using public cloud while

63% are using private cloud

Source: "New Stats From the State of the Cloud Report," Ben Kepes, Forbes, March 4, 2015

What Challenges Does a Hybrid Cloud Environment Present?

Hybrid cloud would appear to offer the best of both worlds—allowing you to run each app in your portfolio in the environment that offers the appropriate levels of speed, performance, security and control. If only it were that easy.

The challenge in establishing a high-performing hybrid environment is managing and monitoring all the various pieces. Most infrastructure management and monitoring tools are built to accommodate a single element of the overall environment. These very limited built-in, or point, solutions do one thing, and they often do it well. But they aren't able to extend beyond their original intent.

You can choose the best point solution for each element of your environment, but you'll soon find that those solutions are difficult to integrate—if you can get them to communicate at all.

As a result, you also lack the holistic visibility into your cloud environment that you need to meet your SLAs and ensure a great user experience. You need to be able to monitor not only the cloud but get deep insights on the services running on them. This approach is also critical if you want to ensure application or workload migrations to the cloud happen smoothly. And your ability to proactively identify and address performance issues is dramatically compromised with limited point tools. Your team is left in reactive mode— jumping from screen to screen and putting out fires as they arise. And that is no way to create a great user experience.

IT Is Under Enormous Pressure

In the end, it's IT that's left to bear the brunt of these challenges. You have to monitor the cloud alongside on-premise infrastructure. You're not only required to learn, configure, manage and attempt to integrate multiple monitoring tools, you're left with no end-to-end visibility of the infrastructure you're expected to optimize.

This jumble of uncooperative management and monitoring tools results in an inefficient use of your IT resources, generating little or no business value. You're forced to manage long triage calls, you have no user-centric visibility to speak of and you're constantly at risk for over- or underutilizing cloud resources. And without insight into cloud success, your plan to migrate the appropriate applications to the cloud is likely to be delayed.

Worst of all, these deficiencies all contribute to a poor user experience—the exact result you can least afford. In the end, customers and the business are slow to adopt the tools you're counting on to increase productivity. In fact, many customers simply look to your competitors, while internal users often opt to "go rogue" and seek their own technology solutions outside the control of your IT team.
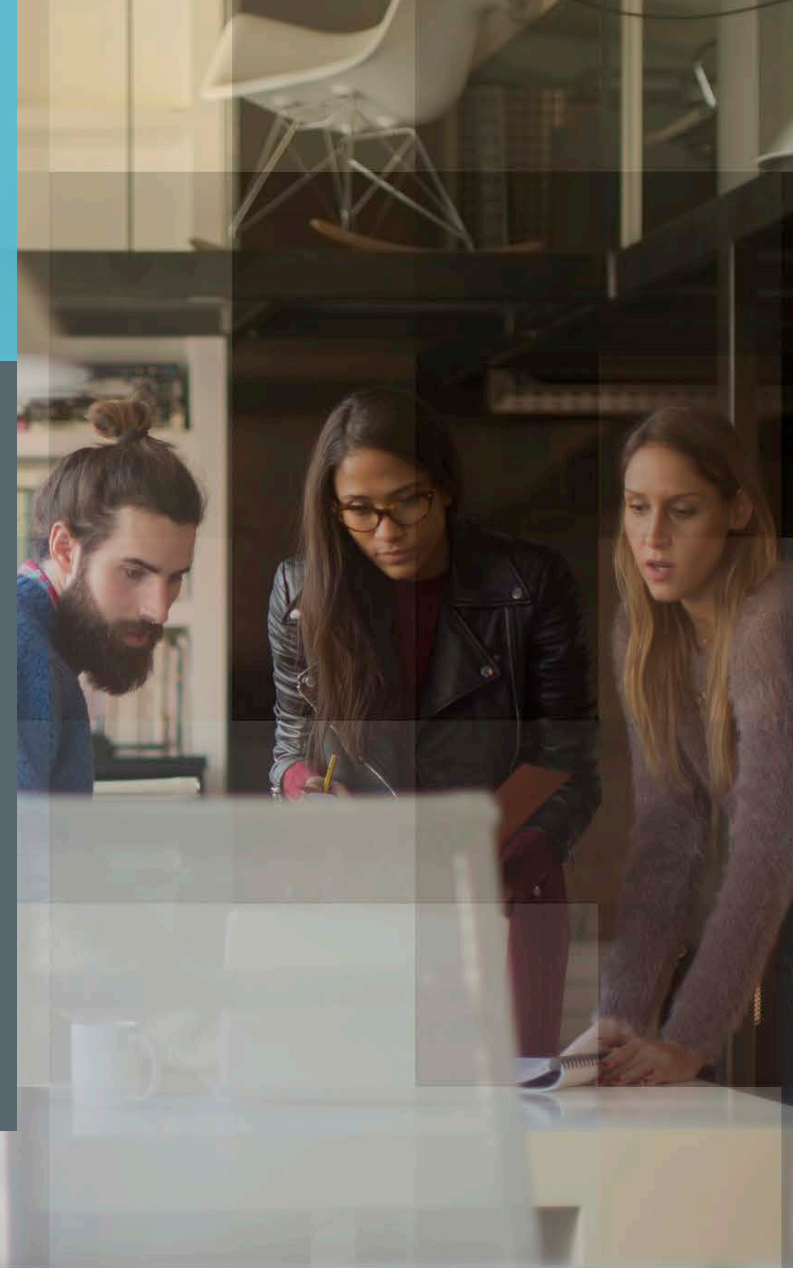
# CA UIM Offers the Single, Most Comprehensive Cloud and IT Monitoring Solution

Unlike a cobbled together package of point tools, CA Unified Infrastructure Management (CA UIM) ensures optimal performance of both your cloud and on-premise infrastructures through a single console and back-end architecture. Now you can efficiently monitor your entire environment and address potential issues proactively.

And not only is CA UIM a uniquely robust, unified solution, it is the most comprehensive monitoring solution for static and dynamic infrastructures across the data center and private or public cloud. Out-of-the-box support for more than 140 on-premise and cloud technologies allows you to monitor and adopt new public or private cloud and dynamic technologies, faster, through the same solution.

You'll also have the information you need to optimize staff productivity by eliminating the hunt-and-seek nature of trying to stay on top of multiple monitoring tools. It will free up your IT team to devote more time to innovation and revenue-driving initiatives. By proactively addressing performance issues, you'll create an exceptional user experience that will drive adoption of new technologies, productivity and revenue.

CA UIM offers out-of-the-box support more than 140 technologies, including:

Amazon Web Services™	Apache Cassandra™	Pure Storage®	Oracle®
Microsoft Azure™	Apache Tomcat®	Microsoft SQL Server®	NetApp™
openstack®	Citrix®	Microsoft Exchange™	mongoDB®
VMWare®	Salesforce®	JBoss® Developer	SAP®
Docker	VCE™	Cisco™	
	Nutanix™	Hadoop®	
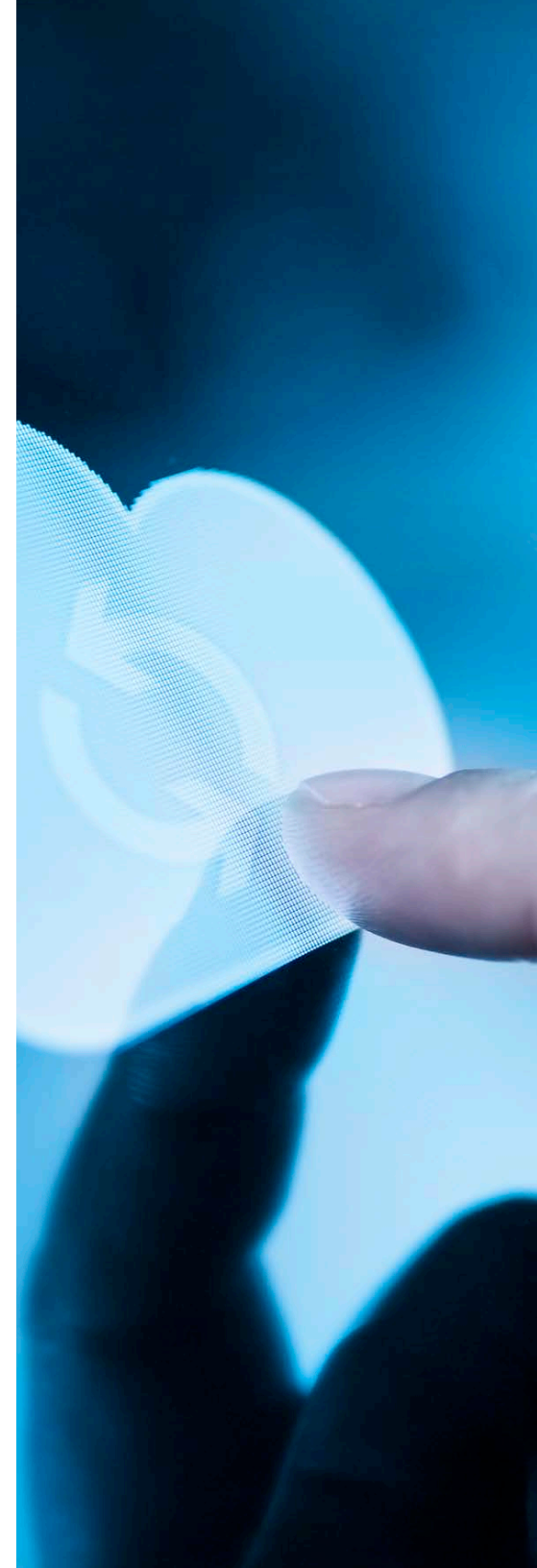
Deploy. Extend. Automate With CA UIM

CA UIM features an open, flexible architecture and APIs you need to meet the demands of today's highly dynamic and cloud environment.
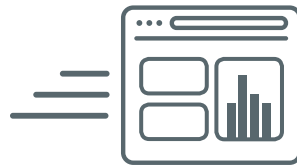
Deploy rapid monitoring: New cloud technologies are popping up everywhere. Bus-based architecture allows you to add new monitoring capabilities without disruption to existing services.

Extend: Robust APIs can be used to create new or extend existing monitoring capabilities to fit your needs.

Automate workflows for the cloud: CA UIM APIs offer a range of opportunities for automating workflows. For example, many enterprise customers are using CA UIM to automatically trigger "cloud bursting," triggering access to additional cloud-based resources based on predefined constraints.

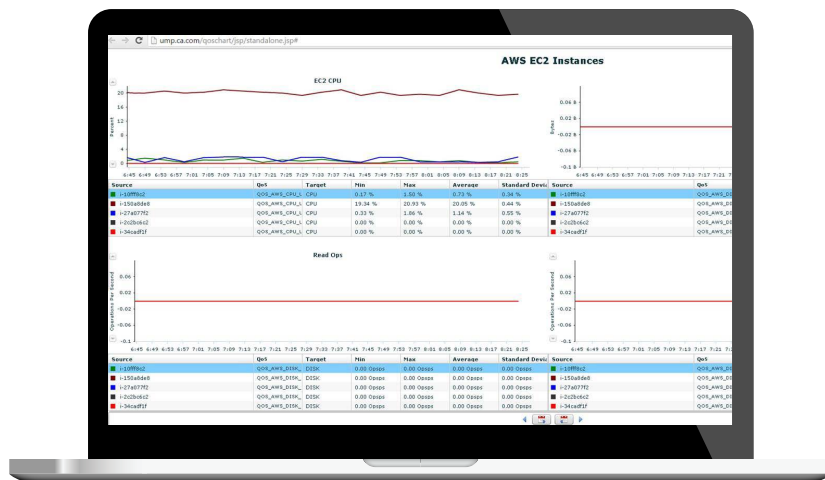# Key Use Cases For CA UIM in Cloud and Hybrid IT Environments
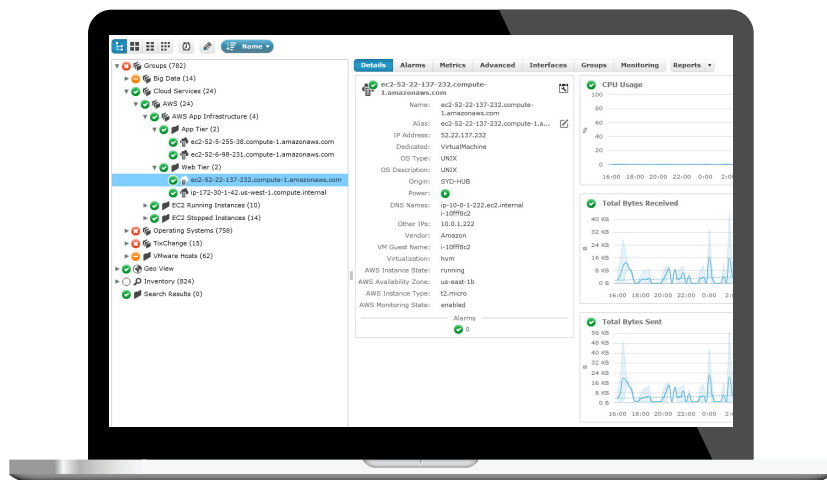
Holistic cloud monitoring provides deep insights into:

- **Public cloud:** Monitor and get actionable insights into all leading cloud services and the processes or applications running on them.

- **Private cloud:** Monitor and get insights into all your single or multivendor, components within private cloud and any applications or services running on them.

Unified cloud and hybrid IT analytics:

Encapsulate the complexity of hybrid infrastructures and provide end-to-end visibility across your on-premise, private or public cloud-based infrastructures through a single view, resulting in faster mean time to repair and better staff productivity.

Trend and correlation analysis:

Easily analyze performance and utilization trends across your cloud and on-premise resources to better plan for future capacity and spend.

Easier cloud migration:

Ensure smoother migrations by getting insights into performance throughout the lifecycle of your migrations. Compare post- and pre-migration performance insights to gauge success and optimize performance.

One Solution. Multiple Benefits

CA UIM delivers significant advantages to every corner of your organization. IT, finance and individual lines of business will all benefit from the solution's ability to:

Ensure a superior user experience across cloud and hybrid IT

Monitor every corner of your infrastructure—on-premise data center, public cloud and private cloud—from a single pane of glass to gain a thorough understanding of where issues may exist, resulting in a faster mean time to repair and a better end user experience.

Reduce cost and complexity

Streamline your IT ops through a single console with template-based monitoring and configurations to reduce complexity, boost staff productivity and ensure rapid monitoring deployment in highly dynamic-based environments.

Improve resource utilization

Derive more value from your cloud infrastructure through better insight into driving rapid cloud adoption that allows you to more easily scale to demand and eliminate over- and underutilization of resources.

Meet tomorrow's needs today

Future-proof your monitoring approach for existing and emerging infrastructure technologies and make it easier to add new, cutting-edge capabilities.

Unlock the Power of Hybrid Cloud and IT With CA UIM

Learn more

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