

SOLUTION BRIEF
Service Assurance

how do I tame IT
complexity, align
with business
goals, and deliver
a great end-user
experience?

agility
made possible™





CA Service Assurance is a battle-tested, integrated portfolio of management products for delivering an exceptional application and service experience designed to help you increase revenue and productivity. It puts you firmly in control of the new heterogeneity by linking applications and transactions to infrastructure.

CA Service Assurance provides the technology, processes and innovation to make IT more agile and guide you to a more service-centric model.



executive summary

Challenge

IT organizations are under dueling pressures exerting force on how they operate: budgets are flat while user demand, driven by mobile and consumer devices, is exploding. This growth leads to more complex applications and a mix of infrastructure that may include mainframe, physical, and virtual systems as well as cloud-based services. IT must be able to tame the complexity with limited resources while still providing great experience to end-users.

Opportunity

CA Service Assurance is a battle-tested, tightly integrated portfolio of management products that provide extensive visibility into applications and transactions as well as top-to-bottom insight over the entire IT infrastructure, no matter how complex. This integrated solution links application and infrastructure performance, allowing greater understanding of how IT-delivered services impacts business. The CA Technologies Service Assurance portfolio spans four key competencies—Application Performance Management, Infrastructure Management, Service Operations Management and Executive Insight—each addressing key IT challenges and stakeholders. Together they comprise an unmatched solution capable of managing the modern complex environment that includes physical, virtual, and cloud.

Benefits

CA Service Assurance provides a collaborative platform for IT executives, IT operations staff, infrastructure domain experts, application owners, support teams and even non-technical stakeholders, to deliver the right information to the right people in real time. The solution helps IT organizations move to a service-centric model by facilitating exceptional application experience across desktops and mobile to help increase revenue, improve customer experience, and raise the quality of service across the infrastructure. The positive impact of Service Assurance is measured by the world's largest organizations in reduced IT costs, ensured service-level agreements for cloud-based services, and reducing business-impacting degradations and outages.

Section 1: Challenge

Managing modern IT complexity while delivering great service to end-users

IT organizations are under dueling pressures to perform. First, there is a constant pressure to deliver flawless experience to an ever growing number of users that are accessing applications and services from a diverse set of devices ranging from the traditional desktop to tablets to smartphones. Second, enterprise IT budgets, despite the increased user demand, have remained flat or shown little growth, meaning IT executives have to somehow get more done with less resources.

External customers are accessing applications and services via mobile devices whenever they have the time and wherever they have a connection to the Internet. To wit, Comscore reported that non-computer device traffic accounted for nearly 7% of all U.S. Internet traffic in August 2011¹, a percentage that is sure to continue its upward path.

Internal customers are helping drive the consumer driven IT trend, where employees are saying what devices they want to use and dictating how they want to access productivity applications and other internal systems. Adding to the pressure is both groups want a flawless user experience whether using a web-based service delivered in a browser window or specialty application running on their desktop or mobile device. A mediocre experience could mean lost revenue as external customers go to the competition while internal users are less productive; both are bad for the bottom line.

While having more customers accessing a system could be seen as a good problem to have, stagnant budgets are not keeping pace with user growth. According to Gartner, the overall IT forecast growth in U.S. dollar terms has been revised up from 7.1% to 7.6% for 2011 but down from 5.0% to 4.6% for 2012. However, stripping out the effect of exchange rates, the underlying forecast has been revised down slightly on both 2011 and 2012, from 3.6% to 2.9% and from 5.0% to 3.9%, respectively². This leaves IT having with the conundrum of doing more with less, which is not sustainable. IT must fundamentally change and be creative and agile. One such example is the rapid adoption of cloud-based services and infrastructure, as well as private cloud build outs to support more users with less hardware to support.

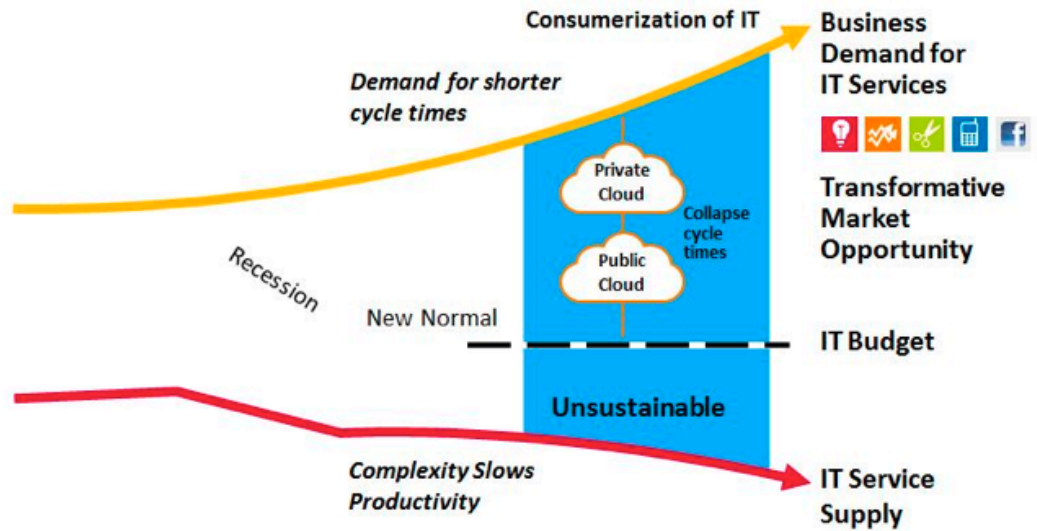
The added cloud and virtualization technologies are being layered on top of existing physical systems and applications, making critical systems more complicated to monitor as there are more points of possible degradation or failure that could impact end-user experience and overall service availability. IT organizations are being charged with having to ensure business critical systems and infrastructure—spanning mainframe to cloud—are available 24x7 and deliver a consistently good user experience.

¹ Comscore Digital Omnivore whitepaper, October 2011.

² Gartner, Inc.'s "IT Spending, Worldwide, 3Q11 update", September 28, 2011, http://www.gartner.com/DisplayDocument?doc_cd=225765

Figure A.

In the “new normal” organizations must close the gap between flat budgets and growing demand for services by adopting a service-centric approach to IT.



To accomplish this, organizations are moving from an IT-centric to a service-centric model, which means IT organizations have to think and act more holistically about the service they provide to the business. This shift means no longer leaning on siloed metrics like server response time or network availability. In today’s dynamic environment, the outcome must be measured by the end user (or customer) experience and transaction success of the delivered IT service. That means IT needs to monitor the individual components comprising the overall service, and focus the attention not necessarily on the individual details but on how those elements support the service and how that service fulfills the customer’s needs and mission.

Section 2: Solution

An integrated portfolio that links transactions, applications, infrastructure and cloud-based services

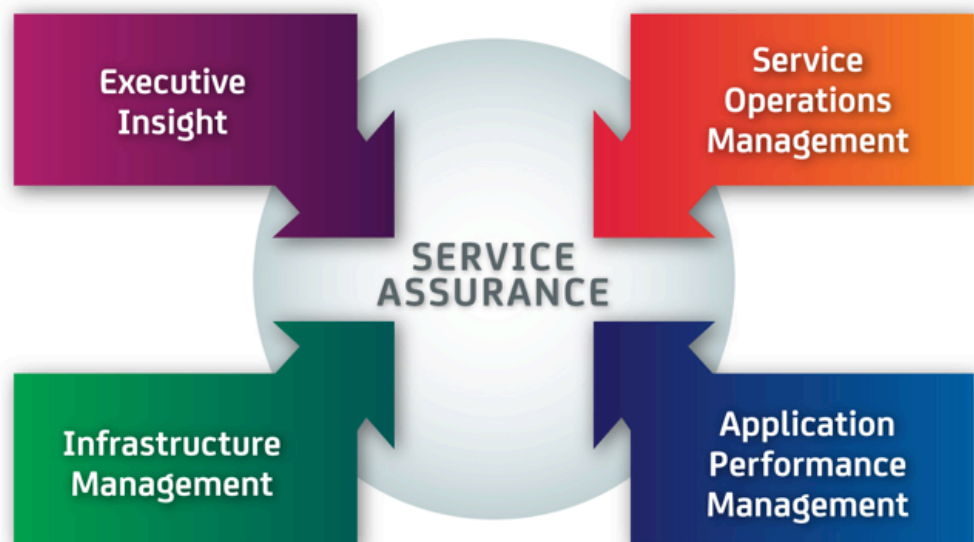
CA Service Assurance is an integrated solution that provides multiple levels of the IT organization—as well as line-of-business owners and other business stakeholders—with role-specific views, workflow, and a common understanding of service impact, risk and root cause of problems whether they occur in the application, infrastructure or are the result of cloud-service outage:

- Customizable, real-time executive dashboards report on business services according to their priority, service level agreement compliance, quality of experience, levels of risk, and root cause of service-impacting problems

- Mobile access to key application and infrastructure metrics for non-technical stakeholders on the go
- Automated discovery, relationship mapping and model-based root-cause analysis allow IT technical staff to adapt to dynamically changing business and technology environments and to quickly identify and address issues affecting service delivery
- Transaction-aware application and infrastructure performance management helps enable staff across all technology domains to reduce finger pointing in the wake of a problem and focus on a resolution more quickly
- Dynamic performance thresholding and alarming allow rapid problem identification and resolution before users are impacted
- Global cloud-based monitoring of applications to help ensure user experience, service availability and track service level agreements for cloud and SaaS contracts
- Integration with third-party measuring and monitoring tools for deeper visibility in to application and infrastructure performance
- Support for pre-production environments to help ensure applications and services under development can withstand the rigors of production use, before they're deployed
- CA Service Assurance is design to install, configure and deploy quickly with easy customization and speed, minimizing professional services, "one-off" integrations, and total cost of ownership while delivering a faster time-to-value. The solution scales to the world's largest environments with the power to collect and process data for real-time analysis and capacity planning.

Figure B.

CA Service Assurance links real end-user experience, transactions and services with underlying systems, network infrastructure and cloud-based services, enabling wall levels of an IT organization to get views of critical performance data while resolving problems more quickly.



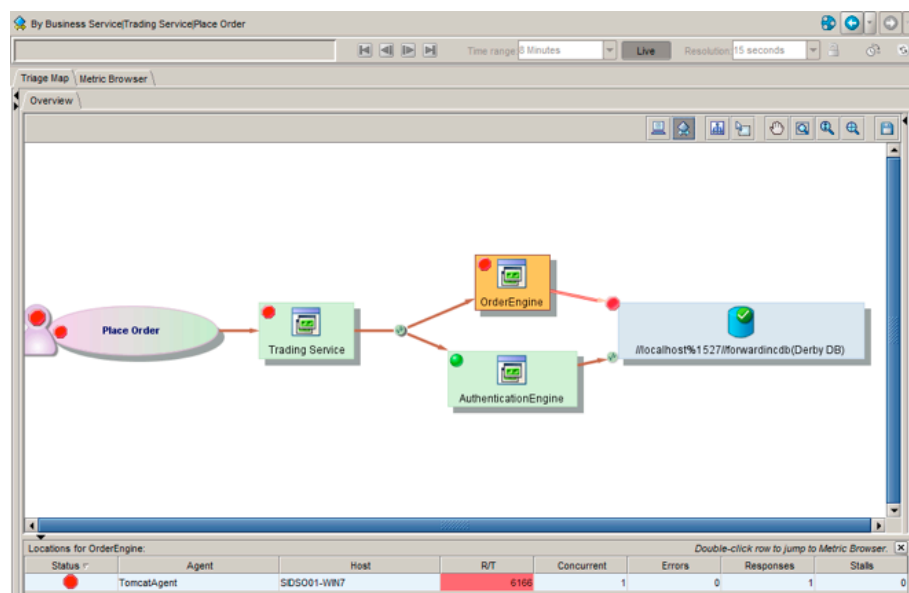
Superior business responsiveness through best-of-breed capabilities and practical innovation

CA Application Performance Management (CA APM)

- Pinpoints failing components quickly—across complex hybrid-cloud environments—to help eliminate costly problem-resolution guesswork and end the blame game
- Traces applications and transactions traversing the infrastructure to proactively identify performance problems and find the root cause across platforms, whether it resides in a piece of code or is an infrastructure issue
- Prioritizes problem resolution efforts to assure high-value transactions receive the highest service levels
- Anticipates future issues and proactively manages revenue-generating transactions end-to-end
- Accurately measures transaction performance to prove that IT is delivering against SLAs, business objectives and SaaS vendor commitments
- Monitors end-user experience to ensure high levels of service delivery to customers, partners and employees
- Identifies problems in pre-production environments to test application capabilities before being rolled into production

Figure C.

CA APM's Application Triage Map feature dynamically shows all components in the transaction paths and helps easily pinpoint trouble spots.



CA APM Cloud Monitor

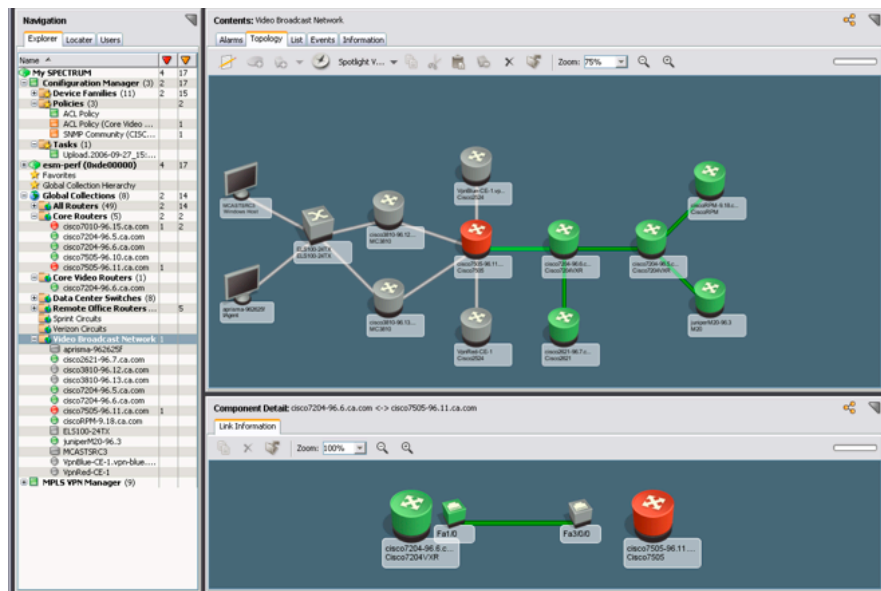
- Monitor cloud-based applications outside enterprise control such as those delivered by SaaS vendors and MSPs to quickly and easily check cloud application availability and performance, proactively manage SLAs and help prove that vendors are meeting service delivery commitments
- Replicate real-user transactions to monitor application health and availability, enabling you to check performance even at times when there is no real user traffic
- Discover geographic knowledge of end-user performance through over 60 monitoring stations spread across 40-plus countries to understand end-user performance according to geography
- Get complete visibility into the entire spectrum of factors that impact end-user experience, such as third-party content delivered directly to the user’s browser, JavaScript execution, DNS lookup and first/last TCP transmission to better pinpoint problems and assure the best possible end-user experience

CA Infrastructure Management

- Increase visibility and control into the performance and availability of your heterogeneous service delivery infrastructure and all of the traffic it delivers
- Demonstrate value to the business by prioritizing incident remediation resources against the most important business service issues
- Make more informed investment decisions
- Confidently incorporate and manage new technologies, such as virtualization and cloud services
- Reduce the effort needed to manage your infrastructure
- Reduce the occurrence of network and system disruptions and reduce MTTR

Figure D.

CA Infrastructure Management deduces the root cause and visually pinpoints the single impacting device (in red), as well as other impacted devices (in gray).

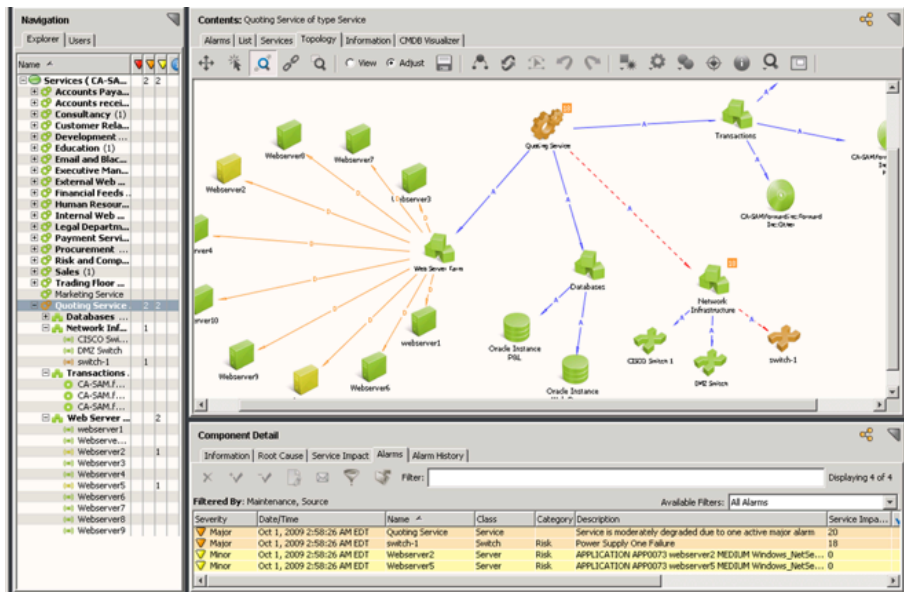


CA Service Operations Insight

- Build and maintain real-time, end-to-end models of your business services with dynamic business service modeling based on a variety of advanced technologies (transaction discovery and mapping, policy-based relationship discovery, real-time updates of imported infrastructure models, etc.)
- Pinpoint service quality problems and risk (i.e., which IT assets across technology domains are the sources of current or immanent service quality degradations and outages) via service analytics and alerts
- Enable service-impact alerts to trigger actions according to service priority, alert severity and business requirements using service-driven automation (escalation, synchronization and workflow)
- Measure service quality and availability according to internal and external customer expectations through integrated service level agreement (SLA) performance management
- Correlate and transform cross-domain events with unified event management for higher quality, more actionable alerts and exert more control over how alerts are prioritized and escalated

Figure E.

CA Service Operations Insight can aggregate performance data from CA Application Performance Management, CA Infrastructure Management, and third-party applications to give a complete overview of critical system performance.



CA Executive Insight for Service Assurance

- Fuel organizational agility by providing real-time access to high-value metrics anytime, anywhere
- Amplify the value of existing IT management investments with fast and simple integration to existing data sources
- Accelerate end-user productivity with a flexible and interactive mobile user interface
- Demonstrate IT's strategic value by giving a real-time view of how critical IT services affect business outcome

Figure F.

Users of CA Executive Insight can get a detailed view of a business indicator and use interactive charts to see values change over a range of time, expand or zoom in data range values, create annotations to comment on behaviors and explain values to peers.



Section 3: Benefits

Transforming IT into a service-centric model

Transforming IT operations with Service Assurance technologies makes the service-centric model possible. By monitoring and managing the myriad of components in a sophisticated IT environment from development and test out to production and the cloud, Service Assurance technologies help IT organizations bring applications to market faster, prevent performance problems from impacting end users, and enable the business to better meet and exceed customer expectations. The difference in Service Assurance versus traditional IT management approaches is that the focus is squarely on outcomes down to the transaction level—the end user or customer experience with the IT service—rather than on the underlying elements that contribute to delivering the service. All the elements continue to be important, but the outcome is the key metric to be managed.

The CA Service Assurance portfolio of Application Performance Management, Infrastructure Management, Service Operations Management and Executive Insight can help your organization ensure good outcomes for end users with access to critical applications and systems. Service Assurance gives an end-to-end view of application performance, top-to-bottom look at infrastructure components, plus the ability to view end-user experience from outside the firewall. This 360-degree view of critical systems can help spot problems before they impact users, find root cause quicker, and triage issues based on impact to the business, allowing the IT staff to focus on delivering value to the business.

Section 4: CA Services

Helping customers make the most of CA Service Assurance

With 1,400 certified consultants and architects located in 25 countries, CA Services is the largest consulting group focused on CA Technologies in the world. The organization's collective experience—earned from more than 35 years of work on thousands of successful CA Technologies projects—is unmatched. No other organization has seen CA Technologies solutions in action in more environments than CA Services.

CA Services has one objective: to properly assess the current situation and assist in moving forward as quickly and effectively as possible. The CA Services portfolio includes:

- **Rapid Implementation** – provides a fast implementation at a fixed price with defined outcomes to help ensure project success
- **Solution Implementation** – delivers a configurable implementation with greater flexibility in scope and scale to meet your specific requirements
- **Healthcheck** – gives you a short, fixed-price post-deployment engagement if you have an existing CA Technologies product implementation
- **Managed Services** – allows CA Services to act as an extension of your team in performing day-to-day operations in support of your CA Technologies solution
- **Assessment** – evaluates your existing environment and delivers recommendations as well as an action plan to meet business priorities and IT requirements for project scope, timing and budget
- **Software Rationalization** – identifies, catalogues, and assesses accumulated IT infrastructure tools against business criteria and helps optimize your environment to save money while reducing vendor management pressures
- **Consulting Services** – pragmatic, flexible solutions that address the adoption lifecycle designed to help provide enterprises and service providers the agility and operational benefits that can be derived from CA Technologies solutions
- **Hosting Services** – achieve optimum performance without the administrative and implementation costs associated with installing and managing an in-house system with access to the right resources to maintain a high quality of service
- **Staff Augmentation** – leverage existing resources as well as utilize outsourced services and contract workers to seamlessly improve overall service levels and areas of expertise, maintain project staff levels, and meet aggressive deadlines and deliverables on schedule
- **Optimization Services** – objectively evaluates product usage and alignment to best practices and implements cross-solution integration and automation that extends the value of your CA Technologies solutions to more stake

Section 5:

The CA Technologies advantage

The CA Technologies approach to Service Assurance is a more effective and dynamic way to deliver IT-dependent business services, to manage physical, virtual, cloud, and hybrid computing environments, and to leverage your existing investments in CA Technologies, third-party and custom IT management tools. The solution uniquely links end-to-end application performance, transaction visibility and end-user experience with top-to-bottom understanding of the underlying IT infrastructure. Proven in the world's largest enterprise, government, and service provider IT environments, CA Service Assurance provides exceptional reliability and power to collect and retain data and perform complex analysis. The solution is rooted in practical innovation with heavy investment in usability, workflows, and reporting tailored to each stakeholder, both technical and non-technical. Its platform-independence and flexible architecture accommodate any environment and are built to adapt to rapid change.

Section 6:

Next steps

CA Technologies can provide web-based demos, personalized consultations, and an on-site proof of concept so you can quickly determine how the CA Service Assurance solution can address your challenges with fast time-to-value.

To learn more about how the CA Service Assurance solution can meet your needs, visit ca.com/service-assurance.

CA Technologies is an IT management software and solutions company with expertise across all IT environments—from mainframe and distributed, to virtual and cloud. CA Technologies manages and secures IT environments and enables customers to deliver more flexible IT services. CA Technologies innovative products and services provide the insight and control essential for IT organizations to power business agility. The majority of the Global Fortune 500 rely on CA Technologies to manage their evolving IT ecosystems. For additional information, visit CA Technologies at ca.com.