

SOLUTION BRIEF

Service Assurance Solutions for SAP

can you manage
SAP application
performance so
that it works for
your business and
not against it?

agility
made possible™





With extensive performance management solutions for SAP, you can be confident that you are providing customers with the highest service levels. That translates to higher customer satisfaction, retention, and the ability drive more revenue and increase profitability.



executive summary

Challenge

Having deep insight into the performance of your applications from the perspective of end users, business partners and customers is a mandatory requirement today. And, as pressure mounts to adopt new SAP extensions and accelerate upgrades, so will the need to ensure optimum performance across an increasingly dynamic and extended SAP value chain. Unfortunately, many of the methods, processes and tools used in IT lack the breadth needed to manage an increasingly sophisticated SAP ecosystem and the depth required to pinpoint persistent problems and identify opportunities for improvements.

Solution

Service Assurance solutions from CA Technologies helps protect revenues and provides a superior experience for your customers by monitoring and diagnosing performance related issues across the complex stack of technology supporting SAP applications—from the SAP GUI to the network switch. Easy to use and administer, these solutions provide rich insights into technical performance problems and how they impact and affect your service levels and the business and customers you support.

Benefits

By combining the breadth of visibility into SAP application performance and customer experience with deep and powerful diagnostics, your organization can quickly realize substantial business benefits, including increased customer satisfaction and reduced operational costs. Furthermore, understanding and establishing performance requirements for SAP upgrades helps you more quickly incorporate new systems and processes needed for increased competitiveness.

Section 1: Challenge

Making SAP performance work for the business

Because of the scope, power and reach of SAP applications, the business processes they enable affect just about everyone in the organization—from procurement and supply-chain managers, to HR and accounting professionals. It's not just internal users; SAP systems are also accessed by a diverse network of customers, suppliers and partners, all relying on high performance operation and a superior customer experience.

With such a diverse set of internal and external stakeholders to support, the challenge of delivering optimum performance while keeping costs in check remains a constant challenge for IT departments. Add to this the increased complexity and sophistication of SAP applications and the underlying infrastructure means that performance management must address many facets of SAP operations, including a deep understanding of how components interact and influence each other.

These performance management challenges persist across many stages of an SAP application lifecycle. During migrations and upgrades, the key concerns are related to reliably predicting infrastructure and operational capacity requirements to avoid costly implementation delays, while during production pressure is mounting to reduce costs by proactively diagnosing problems before they impact business.

Critical issues to address include:

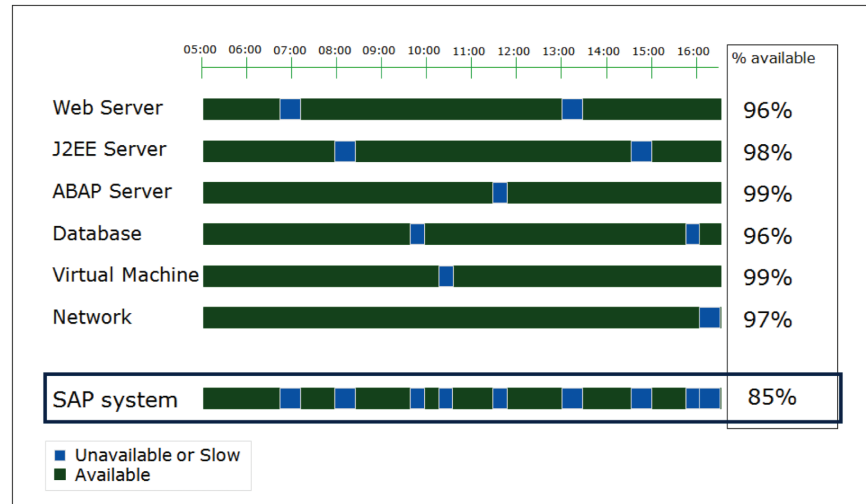
Managing the end-user experience

Many organizations might have an understanding of how individual technology components perform and have teams working to ensure service levels are maintained at many discrete layers of a technology stack, such as networks, server and so on (see figure A). All this, however, doesn't provide a complete picture of how an overall SAP application performs in the eyes of the end-user. Without this critical insight including which customers and business units are affected, IT operations will operate in 'fire-fighting' mode, continuously reacting to complaints about slow application response times.

Figure A.

Small issues can add up

While service levels may be fine at each layer of the SAP technology stack, small problems across applications, infrastructure and services can add up to severely impact the end-user experience.



Finding a ‘needle in the haystack’

It’s one thing managing performance from the perspective of the ‘end user’, it’s another thing having the means to rapidly detect and triage persistent problems across many interconnected SAP and non-SAP systems and technologies. Failure to detect such diverse problems as faulty custom code, dropped database indexes, memory leaks, network traffic bottlenecks, web-service errors and back-end mainframe connectivity faults can result in failing to meet service level obligations or continued investment in unnecessary infrastructure.

Coordinating teams and prioritizing responses

An inward focus on meeting technology-focused service level agreements and responding to technical events in a haphazard or disorganized manner often results in severe consequences for the business. And, while different teams may have adequate insight into the performance from one perspective, the overall IT business operation can lack that critical insight needed to judge how these issues affect delivery of an overall SAP service and consequently where efforts should be prioritized.

Proactively determining performance requirements

Change is the only constant in business computing—changing business models and processes, new legislation, globalization and new markets. Taking advantage of these changes means accelerating SAP upgrades and implementing new enhancements, but these can be delayed when there is uncertainty

about what level of IT performance is needed. With poor visibility many IT operations teams fail to deliver the performance needed to support business growth, or unnecessarily purchase new hardware when it isn't actually needed.

Section 2: Solution

Comprehensive SAP performance management

CA Service Assurance solutions for SAP are designed to deliver the comprehensive management IT teams need to deliver effective services to their SAP customers and helps them assure that business transactions are successfully completing with a high degree of success. In addition, stakeholders can be better assured that service levels are being met and business objectives are being achieved because they have the right information that they need to make the right decisions—from prioritizing problem resolution to quickly and efficiently determining how infrastructure changes across the complex stack of technology supporting SAP applications will impact business performance.

Components of this solution manage every aspect of SAP application performance, including the following.

Customer experience and deep application diagnostics

With CA Service Assurance solutions for SAP, IT teams can measure the success of mission-critical, web-based transactions (including SAP or non-SAP) from the end user's perspective. The end user might be a direct customer or partner interfacing with SAP applications, or it might be a business manager accessing SAP applications such as SAP ERP Human Capital Management, or it might be an employee servicing a customer, or an agent or partner.

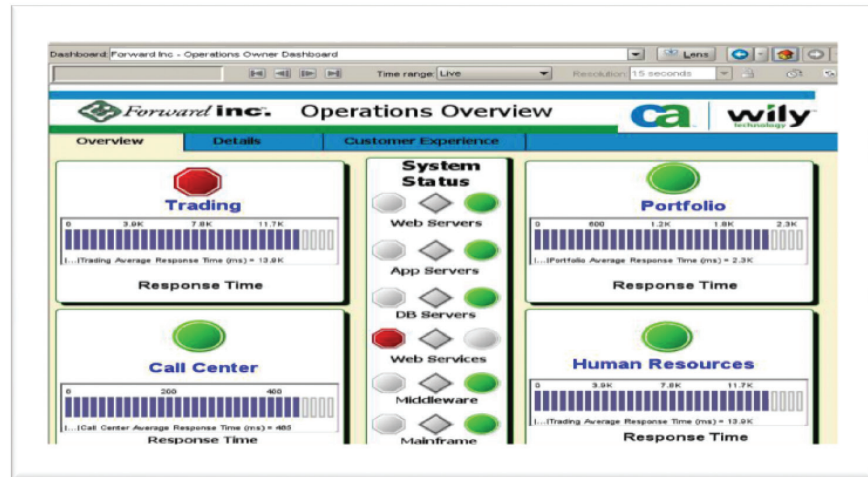
But whatever the situation, CA Technologies solutions inspect individual SAP transactions such as SAP portal login, account summary, as well as multiple transactions that might be grouped together to form a business process. Additionally, and to help ensure streamlined SAP performance, this solution measures how successful users are in conducting business online and how degradations in performance will impact those same users and the business being conducted in real-time.

In addition to SAP transaction visibility, IT teams need to pinpoint performance problems specific to the SAP application itself. This means monitoring the application, its components and how these components interact both inside and outside the SAP system. To address this requirement, CA Technologies solutions provide deep visibility and diagnostics into essential elements of SAP applications and any integrated systems—including SAP Portal elements, Java and .Net components, middleware and back-end systems. The result—a complete 'X-ray' into SAP application performance and insight into SAP application performance root-cause before end users, customers and the business is impacted.

Figure B.

Proactive SAP application performance management

Only end-user experience management combined with deep diagnostics helps IT teams quickly determine the business impact of performance problems and exactly where the problem resides across SAP systems.



Infrastructure responsiveness and transaction visibility

Understanding application response times between infrastructure components supporting SAP systems (such as servers and network elements) is also critical to managing the end-user experience.

To support this critical requirement, CA Service Assurance solutions for SAP provide the means to continually measure and analyze infrastructure performance, comparing response times against the baselines and thresholds that are automatically calculated, and alerting support teams when performance deteriorates. Convenient reporting also helps IT teams focus infrastructure investments in the areas that require it most and validate the impact of these changes.

CA Technologies solutions help IT prove to the business whether or not their use of an SAP application is meeting both the agreed upon application’s availability SLA and the applications’ performance SLAs. CA Technologies solutions are designed to allow IT to prove this based on real application response times, and without the need for synthetic tests, probes, or agents. Key features include:

- **Proactive problem determination** Identification of where problems exist within and across the SAP infrastructure along with detailed analysis to understand the cause of performance degradation. Convenient application scorecards provide an at-a-glance view of critical application performance, while SLA reporting summarizes either performance or availability of applications.

- **Rapid problem triage** Automated troubleshooting and integrated workflows with long-term packet capture provide detailed analysis to help quickly resolve issues. Solutions here can initiate detailed traffic analysis to identify the slowest point in a SAP transaction path when network performance issues arise. Affected servers are polled automatically for top SAP processes, CPU utilization, memory and disk usage, and interface statistics, and if a potential server availability issue is detected, solutions can actively test the affected server and SAP and non SAP applications to verify their status. Additionally, SAP support teams receive troubleshooting assistance via automatically collected packet traces filtered for the affected systems and servers, while application port connects are launched to verify service availability when an application availability issue is detected.

SAP service insight

Traditional IT toolsets, management silos and fragmented views into which infrastructure elements and application components comprise specific SAP services often make it difficult for SAP support teams to prioritize management. This often results in surprise customer and end-user complaints, constant fire-fighting, extended troubleshooting to pinpoint which IT assets are impacting services, and slow mean-time-to-repair.

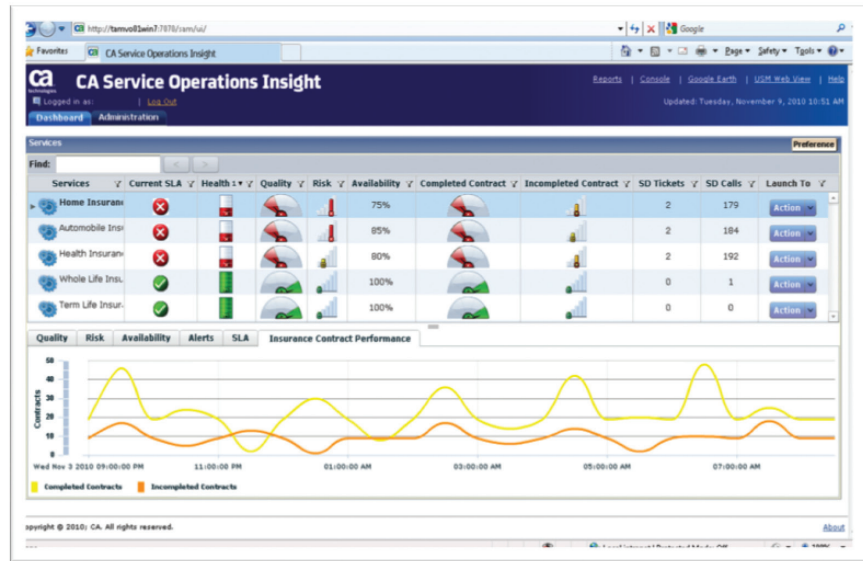
CA Service Assurance solutions for SAP have been designed to address these issues by correlating and analyzing information from your SAP infrastructure, SAP application performance and other IT management tools in real time, calculate service quality and to pinpoint what impacts SAP service quality and what puts service delivery at risk.

Flexible, role-based dashboards (for IT executives and SAP service owners) and consoles (for your SAP operations teams) foster a common understanding of service status, risks and quality problems. This provides actionable information so executives can focus operations on business priorities, SAP service owners understand IT status in business terms, and operations staff always knows which components across the stack of technology supporting SAP are impacting specific business services and can proactively mitigate risks.

With this solution you can further optimize SAP operations by automating: SAP service discovery, service modeling and analysis, impact and risk alert escalation to service desk, change management and SLA teams.

Figure C. SAP service dashboard

View SAP business service status in real-time, including metrics such as service quality, risk, availability, and operational SLA compliance.



Section 3: Benefits

Making SAP performance work for the business

Managing SAP application performance is not just about identifying and fixing problems quickly—it’s about working proactively to ensure the best possible outcomes for your customers and seeking out opportunities to make incremental service improvements.

CA Service Assurance solutions for SAP deliver the deep visibility your teams need to determine how both application and the infrastructure performance conditions impact the customer experience, together with the diagnostics to pinpoint complex problems across the complex stack of technology supporting your SAP systems.

Our broad approach to managing SAP performance delivers numerous business benefits, including:

- **Improved customer satisfaction and service quality** by identifying performance issues before they become problems means fewer calls to the help desk, less complaints and increased availability.

- **Lower operational costs** by coordinating responses and pinpointing problems, IT teams spend less time in 'reactive' fire-fighting mode and more time optimizing and fine-tuning service delivery.
 - **Accelerate SAP enhancements** by understanding how new SAP functionality and enhancements affect performance, IT teams can better plan, procure and implement the right infrastructure investments or architectural changes.
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Section 4

The CA Technologies advantage

CA Technologies understands the huge investment your organization has made in SAP applications, which is why we deliver SAP endorsed and certified solutions that are squarely focused on addressing performance challenges that if unchecked can quickly compromise customer confidence, impact business performance, and damage reputation and brand.

Our extensive service assurance solution not only identifies and mitigates technology related issues, but also provides the insights needed to better exploit technology investments for a more streamlined and cost effective SAP business operation.

In partnership with SAP, our commitment is to delivering the solutions you need to manage day-to-day tactical issues, while providing the management practices needed to drive more strategic business outcomes, which include: accelerating the adoption of powerful SAP enhancements; providing a seamless and secure environment for your customers and partners; and migrating SAP applications to more dynamic, agile and cost effective infrastructure.

To learn more about CA Service Assurance solutions for SAP, visit ca.com/sap.