

PRODUCT SHEET:
CA eHealth

CA eHealth®

agility
made possible™



CA eHealth helps you take corrective action before business processes are negatively impacted by collecting and analyzing key performance information across the IT infrastructure, providing both real-time and predictive performance analysis.

Overview

Ensuring IT is not a risk to critical business services can be challenging with the many complexities associated with a large and diverse infrastructure.

CA eHealth gives you the flexibility to manage multi-vendor networks, systems, databases, and client/server applications with proactive, real-time analysis, distilling data from disparate sources across all technology silos into clear, predictive, and actionable information.

Benefits

Help assure the health and availability of business services with centralized, proactive performance management of the IT infrastructure.

Transform IT operations from reactive to proactive with CA eHealth patented technology to detect performance anomalies.

Demonstrate IT business value to executive and business stakeholders with extensive reporting for performance and capacity planning.

Move from reactive to proactive IT performance management

Ensuring IT is not a risk to critical business services can be challenging with the many complexities associated with a large and diverse infrastructure. IT services must be continuously available and operating at acceptable performance levels to support critical business processes. The importance of service assurance is escalating, as some studies have indicated that network outages can cost enterprises as much as \$100,000 per hour and that performance issues continue to be top-of-mind among IT professionals.

When performance issues do occur, problem resolution is often slow due to the reliance on multidisciplinary triage teams to try to identify where within IT the issue lies. This type of triage can negatively impact productivity, as network, systems, database, and applications personnel are all typically involved.

Recapture wasted time performing group triage with a centralized proactive performance management solution that directs you to the performance issue.

Improve service quality with visibility into performance of the IT infrastructure

In addition to its ability to monitor and collect information from hundreds of network hardware vendors (covering thousands of devices), networking technologies, RFC standard/vendor-specific MIBs, and environmental (energy, temperature, humidity, etc.), CA eHealth also utilizes add-on capabilities, giving you wide breadth across IT and depth within the IT domains—all viewable within one product. These include:

Voice performance Seamlessly monitor heterogeneous voice infrastructures like Avaya, Cisco, and Siemens, managing migrations to VoIP

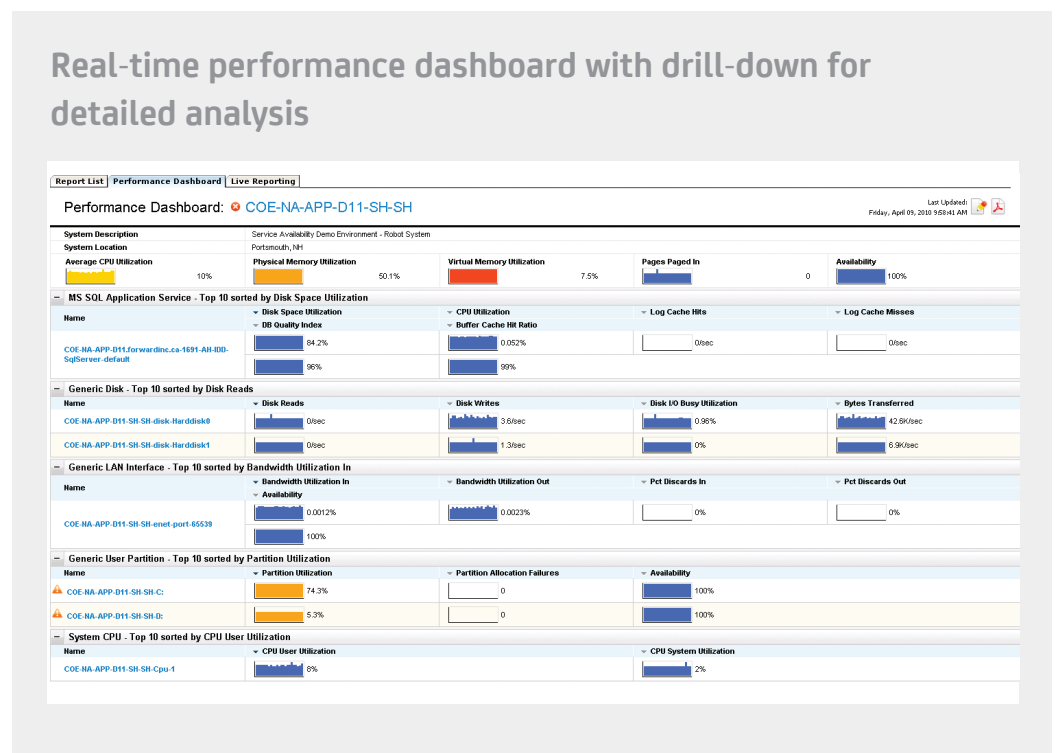
Virtual systems Discover Sun Solaris Zone, IBM LPAR, Microsoft Hyper-V, and VMware environments and their associated virtual machines (VM), collecting performance and availability metrics that include hosts, VM's resource pools, etc. CA eHealth also supports the Cisco Unified Computing System, allowing the discovery of the blade servers, fabric Interconnect switches, fiber channel and Ethernet interfaces, and environmental components, including power, current, voltage, temperature, etc.

Physical systems Autonomous, SNMP-based monitoring of heterogeneous systems with extensible plug-in architecture

Databases Monitor across DB2 for Linux, UNIX, Windows (LUW), Oracle, SQL Server, and Sybase databases. A database-quality index provides you with a way to easily view database health correlated to system information.

Client/Server applications Measure total response time (client, network, and server), provide end-user application response times for Virtual Desktop Infrastructures (VDI), and periodically test and evaluate service health.

Figure A



How CA eHealth works

CA eHealth identifies and alerts you of developing bottlenecks, degradations, and impending failures and then documents the need for repair, reconfiguration, or capacity upgrades. Role-based reports help you to meet the needs of IT and business management, operations staff, administrators, engineers, and capacity planners.

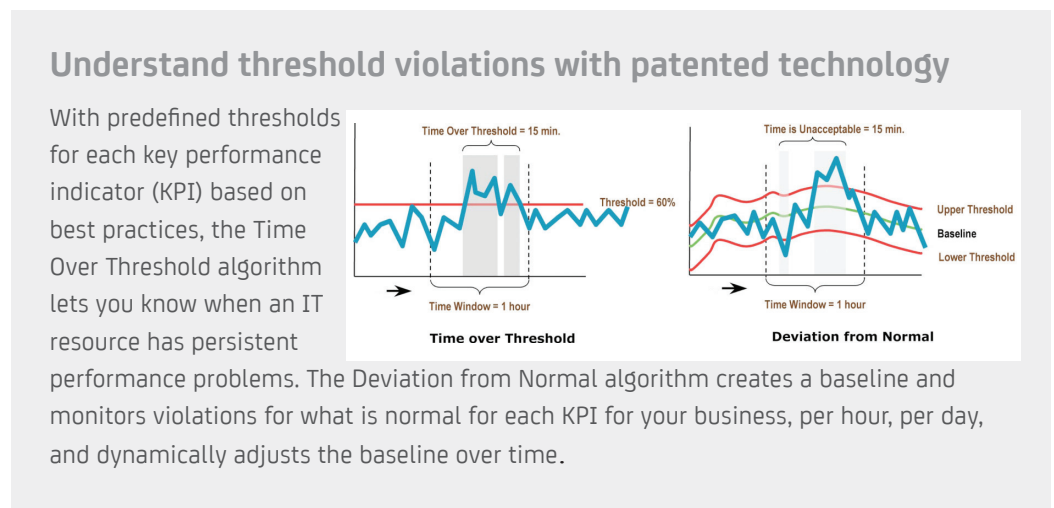
Collect The CA eHealth poller collects performance and availability statistics from a wide variety of vendor devices, including network, system (physical and virtual), and database

devices. The polling interval can be set at various rates, including a fast rate of 30 seconds, a normal rate of 5 min, and a slow rate of 15 min. An import poller is also available that bulk transfers information into the eHealth database.

Analyze & detect Dynamic real-time monitoring intelligence is based on patented technology that is used to understand threshold violations within a historical context and help assure that only persistent degradation problems are reported.

- **The Time Over Threshold (TOT) algorithm** compares the value of each KPI at each poll to a predefined threshold and reports if the value has been “too wrong for too long.” Instead of generating a trap each time the threshold is crossed, the algorithm determines the aggregate duration of violations within a monitoring window to filter out spikes and determine real, persistent problems.
- **The Deviation from Normal (DFN) algorithm** uses historical data to establish a baseline for what is normal behavior for your business. DFN monitors infrastructure component behavior (i.e., KPI values) within each monitoring window (e.g., hour of each day, day of week, etc.) and then assesses whether the current behavior deviates from that norm. The algorithm gradually adjusts normal thresholds, based on the rolling average over the previous six weeks, to reflect the dynamic, changing state of your business.

Figure B



Diagnose Sophisticated performance reporting is at the heart of CA eHealth, which combines historical and real-time metrics with intelligent analysis to generate out-of-the-box, role-based views that are used to understand when, where, and how to avoid developing performance degradations before service quality is jeopardized. These reports provide a wide range of perspectives for triage and remediation:

- **At-a-Glance reports** At-a-Glance reports provide a comprehensive view of the availability and performance of a particular IT resource, displaying the key statistics over a specified time interval. By automatically capturing performance data and presenting it uniformly, these reports can help significantly reduce the time spent troubleshooting.
- **Health reports** These reports evaluate the health of a group of IT components by comparing current performance to historical performance over the course of a day, week, or month. The report provides a list of situations to watch and identifies errors, unusual utilization rates, or volume shifts that warrant investigation. You can easily spot the overall status of a component by its health index, a value that CA eHealth bases on multiple variables.
- **Trend reports** CA eHealth generates Trend reports that track the value of one or more performance variables over a period of time. Because of its flexibility, you can use a Trend Report to reveal traffic patterns over time, and relationships between IT components and between variables. Components that you can track this way include CPUs, disks, LANs, WANs, databases, processes and process sets, user or system partitions, and more.
- **MyHealth reports** Displayed in the CA eHealth Web interface, MyHealth reports are easily tailored to meet the unique needs of any individual user. They can include any collection of trend charts from the wide range of CA eHealth reports that are critical to a particular user's job function (for example, database, server, WAN, and application availability performance, all related to a specific IT service).
- **Service Availability reports** By performing regularly scheduled tests on IT services, you can watch over your critical business applications—from email to SAP to ecommerce. Common examples are: ping testing for connectivity across sites, measuring time to load a URL to test Web page performance and availability, and measuring specific SQL calls across a network to a server.
- **Service Level reports** These reports demonstrate overall QoS across different classes of service and document compliance with internal and external SLAs. You can adapt them to your specific business by defining service level goals, core thresholds, and other performance metrics. There are views tailored for business executives, IT managers, and service customers.
- **Application Response reports** These reports help you troubleshoot performance problems quickly to help minimize their impact and examine long-term trends for application tuning and capacity planning. To identify bottlenecks, these reports illustrate network transmission, client processing, and server processing times as percentages of the total response time.

- **Top N reports** A tabular Top N report sorts the elements that meet some user-defined criteria. For example, you can use it to find the best, worst, fastest, slowest, or least-utilized circuits, servers, databases, and more. Top N reports can be scheduled to run automatically at specified intervals, and they also make a useful on-demand tool.
- **Traffic Analysis reports** Traffic analysis capabilities let you monitor traffic across Cisco NetFlow routers and standard RMON2 probes. These reports show you who is saturating a particular link and what protocols and applications she/he is using. You can view network resource consumption by users, business units, regions, or applications, and use this mechanism to allocate costs back to individual departments.
- **Voice Quality reports** In addition to the voice, data, and QoS monitoring for converged network performance management found in CA eHealth Live Health, CA eHealth provides additional IP telephony management services. These include the Voice Quality Monitor for ongoing quality assurance and the integration of the Cisco IP SLA Jitter MOS test into CA eHealth with reporting.

In addition to providing these out-of-the-box, role-based reports, you can customize your reports using templates or can create completely from scratch.

Display & Alert The CA eHealth Live Health Application provides four related real-time displays for monitoring and visualizing the performance of your infrastructure, its components, and the services it supports: Live Trend, Live Exceptions, Live Status, and Live Reporting. Notification levels include normal, warning, minor, major, and critical.

Improve predictability through integration

Integrations to prioritize incidents by business impact

Be proactive, in control, and better informed on how to plan and prioritize remediation of performance issues by sharing analysis through integrations to other CA Service Assurance solutions. These allow for key performance information to be correlated with root cause and mapped into business service impact analysis.

- **CA Service Operations Insight** models and monitors IT infrastructure components and applications that together support specific business services. It uses performance data from CA eHealth to calculate and pinpoint which infrastructure components are putting specific business services at risk, so you mitigate those risks before users are impacted.
- **CA Spectrum®** performs configuration-aware, fault and service management, advanced event correlation, root cause analysis, and impact analysis. Integration with CA eHealth creates a comprehensive solution that improves service performance and availability, helps avoid outages, and reduces the impact of outages if they occur. This combined solution includes the following features:

- CA Spectrum global data collections can be used to seed CA eHealth discovery, with CA eHealth discovered elements' names and attributes synchronized to CA Spectrum model names and attributes.
- Single sign-on from CA Spectrum to CA eHealth for user authentication, and context-sensitive launching create a solid foundation for seamless workflow between the two products.
- Alarms generated by CA eHealth Live Health can be correlated and factored into CA Spectrum root cause analysis.

Third-party integrations to leverage existing investments

CA Technologies has certified thousands of third-party IT components to ensure that CA eHealth monitors and evaluates their full complement of KPIs.

- **Universal Workflow integration** Gain performance management capabilities without having to learn a new product with integration that provides two-way communication between CA eHealth and third-party management consoles such as HP OpenView Network Node Manager, IBM Netcool, and Cisco CIC. Operators of these third-party products gain a historical perspective of network performance with dynamic reporting.
- **Universal Data integration** Meet the needs of service provider networks with integration that supports equipment from Cisco, Alcatel-Lucent, Nortel, BrixWorx, and Psytechnics, for managing the performance of carrier-class switching environments.

Through integration with Cisco IP Solution Center, CA eHealth obtains configuration and performance information from Cisco VPNs based on Multi-Protocol Label Switching (MPLS) or the IPsec protocol. You can prioritize fixes, document adherence to SLAs, and report performance in VPN-oriented reports that distinguish between classes of service.

- **Wireless Data integration** Designed for carrier-class cellular wireless networks (Nortel PDSN/GGSN and Starent PDSN/GGSN), this integration gives CA eHealth the ability to gather the statistics needed to manage these industry-leading wireless voice and data gateways. Collect performance, configuration, utilization, and availability data from these platforms, correlate and analyze it, and generate reports with actionable information.

The CA Technologies advantage

Vendor neutral and platform-independent, CA Service Assurance portfolio management products offer wide support of the system types and versions available, and broad language support for global deployments.

CA Services and our partners can help you assess your current IT situation, define your goals, and implement solutions to gain measurable results. To keep your CA Technologies solutions operating at peak performance, CA Support delivers unparalleled technical and customer support worldwide, and we offer training and certification through CA Education.

Next steps

You should consider CA eHealth if you're finding that:

- IT staff spend too much time reacting to performance issues in firefighting mode
- IT staff are unable to understand and prioritize capacity, availability, and utilization management needs to support the business service
- You are unable to contain escalating IT costs

CA eHealth continuously collects performance and utilization data from voice and data network devices, physical and virtual systems, multi-vendor databases, and client/server applications. The data is then evaluated for threshold violations and early warnings are issued in real time to help you identify threat of performance degradation, which could impact the business service, allowing you to take action before internal and external customers are impacted.

To learn more, and see how CA Technologies software solutions enable other organizations to improve service assurance, visit ca.com/customers.