CA Infrastructure Management is a solution that provides discovery, fault isolation, root cause analysis, configuration and change management, performance management, traffic analysis, trend analysis, and predictive capacity planning to help you deliver high performing IT services.

CA Infrastructure Management provides visibility and control into the performance and availability of the service delivery infrastructure —and all of the traffic it delivers.

**Business value**

CA Infrastructure Management is designed to allow you to baseline how your infrastructure is delivering IT services, provide early warnings for performance issues and predict future capacity needs. When service is impacted you can quickly understand the priority and find the root cause to remediate the problem. The results can benefit your business with improved performance, maximized uptime, smarter investments and greater customer satisfaction—whether the customer is internal or external to your organization. Key characteristics of the portfolio include:

- Meeting the needs of increasingly complex and diverse environments with scalability for the largest and most demanding enterprise, government and service provider environments

- Simplified IT management with cross-domain correlation (physical and virtual systems, data and voice networks, databases, client/server applications) to visualize performance information on a single enterprise dashboard

- Investment protection through integration with other Service Assurance products, such as CA Application Performance Management (CA APM) and CA Spectrum Service Assurance, as well as third-party products for improved quality and predictability of your business services.

CA Infrastructure Management customers have seen as much as:

- 50% improvement in MTTR
- 15% reduction in monthly bandwidth costs
- 32.7% reduction in network disruptions

Key capabilities

CA Infrastructure Management is powered by market-leading technologies. It includes the following capabilities:

Integrated fault isolation and root cause analysis
Discovery, fault isolation, and root cause analysis, as well as network configuration and change management help enterprises, government agencies, and service providers dependent on a reliable infrastructure avoid the cost and risk of service delivery failure.

Business benefits
- Automated discovery and topology mapping helps ensure you are managing your entire infrastructure end to end and minimizing time-consuming and error-prone manual tasks.
- Automatic detection and correlation of seemingly unrelated events suppresses unnecessary alarms and “noise” so your IT staff can focus on real issues.
- Business service modeling and management automates service and customer-impact analysis so you can identify and remediate the most critical issues first.
- Fault isolation and patented root cause analysis, designed to dramatically reduce mean time to repair, maximizes service uptime.
• Network change and configuration management leverages “change aware” root cause analysis that eases the complexity of managing network device configurations, identifies when configuration changes violate your gold-standard policy or policies, and highlights when the unintended consequences of configuration change are the root cause of an incident.

• A highly-acclaimed user interface offering a variety of views, including a business service view for executives and senior managers, a topology view popular with network operators, and an alarm detail view for network engineers and help-desk professionals, provides clear, relevant and actionable information.

Figure 2

Topology map—multiple views for business and IT
The topology map clearly identifies faults in physical and virtual environments, simplifying IT’s job.
Proactive performance management

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, capacity analysis, and reporting. CA Infrastructure Management proactively manages voice and data networks, physical and virtual servers, databases, and client-server applications. It allows you to manage a diverse collection of devices from numerous vendors; distill data from disparate sources across technology silos into clear, actionable information; isolates the source of performance degradation; and provides detailed and executive level historical reporting.

Business benefits

- A combined performance view of the voice/data networks, physical/virtual systems, databases, client/server applications, and environmentals enables IT Operations to optimize infrastructure operations.
- Real-time status and exception reporting detects and notifies you of performance anomalies so you can address performance issues before users are impacted.
- Patented, intelligent technology presents threshold violations within a historical context so that only persistent degradation problems are reported.
  - The Time Over Threshold (TOT) feature compares the value of each KPI at each poll to a predefined threshold and reports if the value has been “wrong for too long,” eliminating traps each time the threshold is crossed.
  - The Deviation from Normal (DFN) feature uses historical data to establish a baseline for what is normal behavior for your business over time and notifies you when violations occur.
- Support for hundreds of network hardware vendors (covering thousands of devices), networking technologies, RFC standard/vendor-specific MIBs, and environmentals (energy, temperature, humidity, etc) enables you to start managing performance out of the box.

Problems found and fixed at a major university

We were at the end of day one of the CA Infrastructure Management workshop. The solution was up and running and pulling events and performance from the network. During a walkthrough we saw an “Errors on Full Duplex Port” alarm on a core switch. That alarm indicated that there was a duplex mismatch. The client’s senior network engineer didn’t believe the alarm and started to leave the room so that he could go to his workstation to log into the switch and check the settings. The CA Technologies sales team showed him how to log into the switch directly from within the CA Technologies solution. He then checked the configuration and found that there actually was a duplex mismatch. He fixed the configuration and the issue was resolved. The total time to resolve this problem took 15 minutes, including talking.

We later found out from a junior network admin that this problem had been affecting network performance for over a year.
Historical data and trend analysis give you the information to manage capacity—adding it before performance is degraded and reducing it where it is not needed to help reduce recurring costs.

Extensive reporting helps you to demonstrate IT business value to executive and business stakeholders.

Real-time performance dashboard

The real-time performance dashboard enables context-sensitive launching into detailed performance data.

Comprehensive traffic analysis

- Real-time visibility and historical analysis of which applications and hosts are consuming the most bandwidth enables you to make cost-effective decisions for optimizing and improving network service delivery. CA Infrastructure Management is designed to provide comprehensive traffic analysis reports including custom reporting capabilities; anomaly detection capabilities to capture abnormal behavior; flow forensics for 100% of all flow traffic on the network; data storage capabilities to retain and access up to a year of enterprise-wide flow data; and real-time threshold alarms.

Business benefits

- Real-time reports and alarms on each interface of the network—from high-level enterprise summaries into detailed flow forensics—help groups identify problems and troubleshoot more efficiently, reducing Mean Time To Repair (MTTR).

- Customizable calculations for capacity planning—including “what if” trending based on application, location, and bandwidth—improve accuracy of decisions made regarding cost reduction and capacity requirements.
• 100% traffic flow analysis provides you an enterprise-wide view so you can make informed network performance decisions.

• Trends in applications, hosts, and conversations per QoS policy improve your ability to classify applications.

• Reporting by minute, day, week, month, year or by customizable period ensures you can view the history you need.

Figure 4

100% traffic visibility

Visibility into all traffic that traverses the service delivery infrastructure gives you insight into why WAN links are saturated and allows for effective and efficient capacity planning.
CA Infrastructure Management

Quickly find traffic flow congestion impacting applications

A large airline was experiencing unexplained intermittent application performance issues across all of their applications, which led them to believe that something on the network was impacting performance. Using sniffers to capture packets wasn’t working because, by the time the sniffer was deployed, the performance issue would vanish, only to crop up later.

The airline used CA Infrastructure Management traffic analysis to gain full enterprise-wide visibility to their network bandwidth. They found the problem was being caused by storms of anti-virus update activity consuming the majority of their network bandwidth. The anti-virus application had a bug causing updates to be sent repeatedly. The airline was able to work with the AV company to resolve the issue.

The CA Technologies advantage

CA Infrastructure Management combines world class fault and configuration management, performance management, and traffic analysis in an integrated portfolio that works across the infrastructure and is integrated with applications and business service management for a full service assurance solution. The result benefits your business. With CA Infrastructure Management customers have seen as much as 50% improvement in MTTR, a 15% reduction in monthly bandwidth costs and a 32.7% reduction in network disruptions.\(^1\)

As always, CA Technologies solutions support a broad range of third party vendors to help you realize the value of your investment across your infrastructure.

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