

Precision API Monitoring

At a Glance

Now more than ever, customer satisfaction and application experience depend heavily on the performance of underlying APIs and microservices. As a result, today's organizations require the ability to rapidly identify and resolve any related performance issues to advance back-end integration, mobile optimization and cloud orchestration.

Precision API Monitoring leverages the functionality of CA API Management and CA Application Performance Management (CA APM) from CA Technologies to provide near-real-time, transaction-level visibility into the critical API performance necessary to meet this challenge.

Key Benefits/Results

- **Improve operational efficiency** in API development, testing and management.
- **Speed root cause analysis** and triage of API-related performance issues.
- **Understand the assertion** of monitored APIs and trace transaction performance.
- **Optimize and monitor** API gateway traffic health via analytics and instrumentation.

Key Features

- **Transaction trace metrics** of desired services (APIs), including policy definition and back-end systems calls for highly granular performance views.
- **Customized user interface** for API gateway services enable centralized monitoring and management of key, service-related metrics.
- **Detailed visualization, automated detection and alerting** of API service latency degradation, using CA APM differential analysis.
- **Customizable dashboards and services**, including Team Center Map and Experience View with Assisted Triage in CA APM.
- **BlamePoint metrics** including response time, invocation rates and error processing to assist in the triage process.

Business Challenges

With API gateways serving as the de facto entry point into an organization's data and services for critical applications, enterprises require dedicated capabilities to surface and address the root cause of performance issues, going deeper than the API interface or gateway performance. By combining core API gateway capabilities with advanced APM analysis and visualization, organizations can greatly increase their ability to address key management requirements, including:

- Proactive identification, contextualization and triage of all application performance issues, including those with API-oriented root causes, to reduce overall mean time to repair (MTTR).
- Detailed visualization and tracing of all transactions traversing the API gateway, across all monitored services, with correlation to related back-end systems, including containers such as Docker.
- Logical topology visualization to quickly understand and trace critical services transaction paths and logical groupings where emerging performance issues might be occurring.

Solution Overview

Precision API Monitoring serves as a dedicated integration between the CA API Gateway, mobile gateway and CA APM products from CA Technologies, providing increased insights into APIs, application microservices and transactions via:

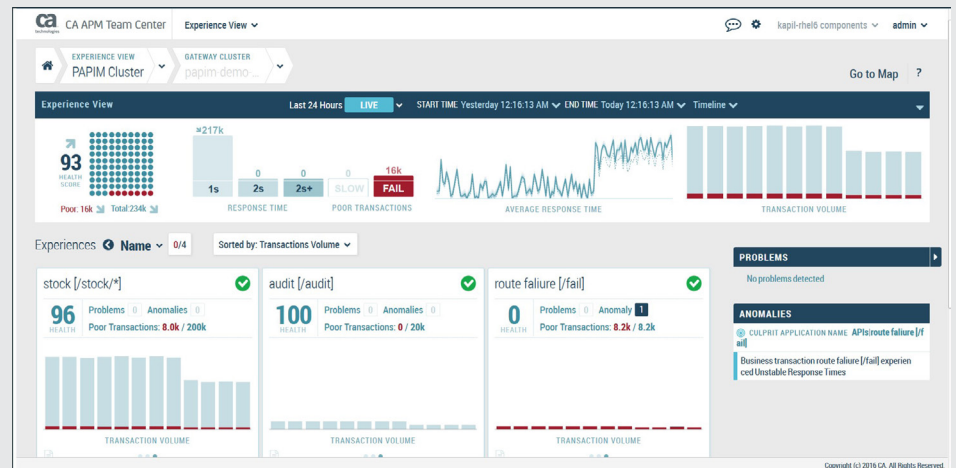
- Inclusion of metrics gathered at the API service layer into the application monitoring context for conclusive root cause analysis.
- Predictive monitoring of service impacts through detailed and customizable visualization of API performance metrics.
- Conclusive oversight into API-driven microservices in direct relation to application infrastructure and back-end services.
- Proactive management of API layer performance and scalability metrics that impact application infrastructure and SLAs.
- Detailed representation and correlation of API relationships to better inform issue resolution.

Critical Differentiators

Precision API Monitoring:

- Further extends the capabilities of CA API Management, whose customers reduce API policy maintenance and support times by over 50 percent on average¹
- Enables targeted root cause analysis of API-level issues via CA APM, which is ranked number one among all APM solutions reviewed by IT Central Station²
- Deepens the intelligence of CA API Management, which has helped Rogers Communications manage more than 2,500 existing APIs³
- Builds on the results of CA API Management, whose customers reduce apps deployment time from 90 days to three days (97 percent) on average⁴
- Adds detailed API-level visibility to CA APM, which was named as a leader by Forrester⁵
- Provides API-level context to the advanced analysis of CA APM, which enabled global telecommunications provider, Orange, to increase availability of critical business systems three-fold⁶

Precision API Monitoring combines the detailed analysis and dashboard visibility of CA APM with the API-related intelligence of CA API Management.



Related Products/Solutions

- **CA APM** simplifies the monitoring of modern application environments and safeguards application performance from mobile to mainframe.
- **CA API Management** combines advanced functionality for back-end integration, mobile optimization, cloud orchestration and developer management using APIs and open SDKs.
- **CA API Gateway** can be used to secure and govern integrations that span on-premises systems and cloud apps.

Supported Environments

Precision API Monitoring integrates with most application infrastructures supported by the enterprise-ready CA APM and CA API Management solutions from CA Technologies.

For more information, please visit ca.com/api-gateway

CA Technologies (NASDAQ: CA) creates software that fuels transformation for companies and enables them to seize the opportunities of the application economy. Software is at the heart of every business, in every industry. From planning to development to management and security, CA is working with companies worldwide to change the way we live, transact and communicate—across mobile, private and public cloud, distributed and mainframe environments. Learn more at ca.com.

1 CA Technologies press release, "Study Finds CA Technologies API Management Helps Drive Business Growth With 97 Percent Improvement in Application Time-To-Market," Jul 2015.

2 IT Central Station, "Best Application Performance Management Vendors," Feb 2017.

3 CA Technologies customer success story, "Rogers Communications Elevates the Customer Experience With Enhanced API Management and App Testing Capabilities," 2016.

4 CA Technologies press release, "Study Finds CA Technologies API Management Helps Drive Business Growth With 97 Percent Improvement in Application Time-To-Market," Jul 2015.

5 Milan Hanson, Eveline Oehrlich, Stephanie Balauras, Vanessa Wegner, Diane Lynch, Forrester, "The Forrester Wave": Application Performance Management, Q3 2016," Sep 22, 2016.

6 CA Technologies customer success story, "CA Application Performance Management Helps Orange Increase Sales and Improve Customer and User Experience," 2016.