CA Application Performance Management for Docker

At a Glance

As businesses strive for competitive differentiation through software, new technologies, such as Docker containers, are being adopted to accelerate the delivery of modern, microservice-style architectures and cloud applications. Consequently, as organizations become more dependent on these systems to conduct business at massive scale, ensuring applications stay performant is essential. CA Application Performance Management (CA APM) for Docker uses true agentless monitoring to rapidly discover and detect problems, and optimize the performance of containerized applications running in dynamic Docker environments.

Key Benefits/Results

- CA APM helps speed and simplify triage for app performance issues for every app in any cloud or containerized application.[1]

- CA APM's Docker monitoring helps a Global 500 computer services company better troubleshoot application performance issues.[2]

- 95 percent rate CA APM's ability to monitor cloud-native and containerized applications in Docker as superior.[3]

Key Features

- Provides agentless, non-intrusive, resource-efficient Docker monitoring.

- Automatically detects and tracks dynamic Docker environments.

- Correlates issues across microservices and Docker containers.

- Includes analytics, deep monitoring and change impact to pinpoint complex performance issues.

Business Challenges

Modern digital business is fueled by innovative apps running across modern platforms and architectures. To accelerate digital transformation and increase business agility, organizations are adopting Docker, which enables teams to rapidly develop and deploy modern, distributed, cloud-based applications. But while Docker can help support continuous delivery goals, monitoring complexity increases exponentially. Managing application performance presents new challenges:

- As microservices and containers proliferate, teams need intelligent visualization and analytics to prevent alert storms and surface key metrics and performance indicators.

- Microservice architectures increase the number of components, dependencies and communication flows. Monitoring methods must automatically map these elements and maintain telemetry data when containers move.

- Many variables impact microservice performance, including application metrics and container-specific attributes. For effective root cause, teams need to correlate from app to container.

Your organization needs an advanced APM solution—one that delivers effective monitoring for microservices running in Docker containers.

Solution Overview

With CA APM, your organization can ensure the pace of delivery is matched with superior application performance and a flawless user experience. The solution offers teams key advantages including:

- Simple, easy to deploy. CA APM for Docker provides an agentless approach that's easy to install and fast to detect.

- Deep, actionable insights. CA APM provides deep visibility into the vital signs of Docker containers, the apps they house and the APIs that connect them. Teams can quickly pinpoint root cause with analytics and app-to-infrastructure correlation.

- Hyper-performance at scale. CA APM scales to manage millions of events and alarms, detecting and isolating problems across containers, clusters and cloud-services.

- Advanced topology visualization. CA APM automatically detects and builds Docker topology maps, and allows teams to collect and use Docker container attributes to map, visualize and administer Docker environments.

Critical Differentiators

Now available on the CA Marketplace, CA APM for Docker offers numerous advantages over competing products.

**True, agentless Docker monitoring.** Teams can avoid installing and configuring resource-heavy agents. The solution automatically detects and maps new containers, dependencies and communication flows. Instant support for Docker clusters handles tracking and monitoring microservices and distributed cloud apps.

Powerful, customizable visibility. Task-relevant views help simplify complex Docker topologies. Users can customize views based on attributes including container host, ID, cluster and service name.

Team Center timeline. This functionality speeds triage by making it easy to assess the impact of Docker changes (topology, attributes, status changes) and the origin of performance problems.

Smart instrumentation. The solution can automatically collect deep transaction traces and deliver detailed intelligence to speed performance troubleshooting.

CA APM detects, tracks and isolates microservice performance issues across dynamic Docker environments.
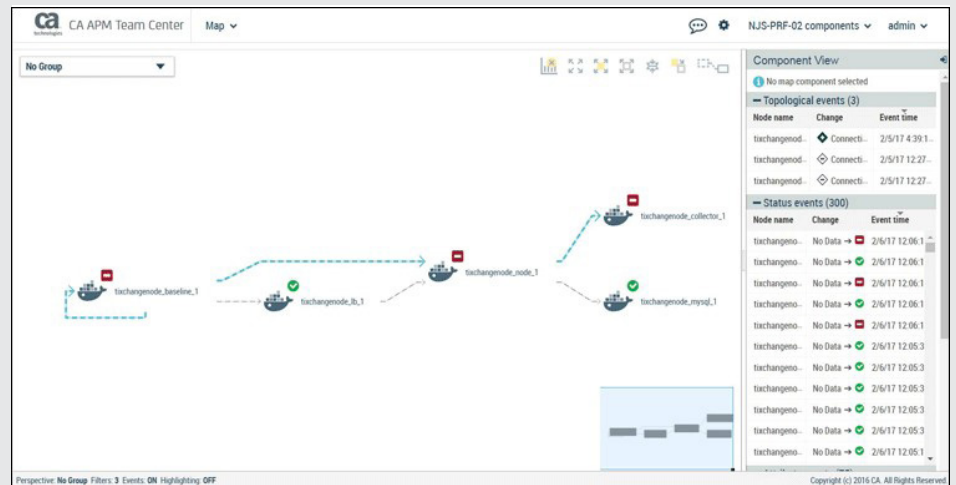
Proactive, extensible controls. Teams get deep insight into container health, load and which services are under or over-utilized. Engineers gain access to application performance metrics and transactions tracing to pinpoint performance problems to software code, APIs, messaging or database calls.

Differential analysis. Applies predictive intelligence to reduce noise and prioritize critical Docker problems.

Related Products/Solutions

CA App Synthetic Monitor provides synthetic transaction monitoring delivered through a global network.

CA App Experience Analytics delivers insights for optimizing the user experience across web, mobile and wearable devices.

CA Unified Infrastructure Management enables you to optimize performance across on-premises and cloud infrastructure.

For more information, please visit **ca.com/docker-monitoring**