

Product Brief

Mainframe Operational Intelligence

Key Benefits

- **Predict problems earlier:** Respond sooner with embedded intelligence that dynamically alerts on abnormal patterns of operation
- **Diagnose issues faster:** Pinpoint the root cause faster with multi-source data feeds and advanced data science algorithms
- **Collaborate more efficiently:** Enable generalists to triage issues faster and engage only the experts needed
- **Improve continuously:** Recommend and automate corrective action for future events based on continuous machine-learning feedback

Key Capabilities

- **Anomaly detection** proactively warns of abnormal patterns so corrective action can be taken sooner
- **Collaborative visualization and analysis** speeds issue triage and root-cause analysis using an embedded issue-triage workflow, visual analysis tools, self-service dashboards, and ad-hoc reporting
- **Multiple data collectors** provide broad visibility, more in-depth insights, and increased accuracy of predictions

At a Glance

Mainframe Operational Intelligence helps organizations prevent downtime and optimize IT operations by proactively detecting when systems are behaving abnormally and expediting problem resolution. This machine-learning environment uses a wide set of data collectors and data science algorithms to provide additional time to remediate potential issues before they impact your business. Embedded intelligence and a modern, easy-to-use collaboration hub provide more actionable insights, helping novice IT Ops staff triage and analyze the root cause faster. Automated problem remediation can be dynamically triggered to further simplify management, increase efficiency, and protect your experts.

Business Challenges

Increasing business reliance on IT systems and always-on mobility are putting pressure on IT to provide increased scalability and availability of mission-essential services. Leading organizations rely on the mainframe to meet these needs, but traditional reactive approaches to mainframe management will not be able to keep up with the velocity of change and dramatic growth. The following challenges exist:

- **Too late:** After an IT system problem occurs, it is typically too late; systems are down, revenue is being lost, and customers are upset and possibly gone for good. Organizations need a more advanced warning to prevent system issues from having significant impacts on the business.
- **Too long:** Complex systems are comprised of many components; it takes too long to gather data from the interrelated sources, determine what is relevant, and then derive insights to identify the cause of a problem and remediate it.
- **Too many:** Too many people are required to collect, interpret, and diagnose complex system issues. Also, many of these are mainframe experts are rapidly approaching retirement. New automated approaches are needed to simplify mainframe management, increase efficiency, and quickly on-board new IT specialists to support mainframe operations.

Solution Overview

Mainframe Operational Intelligence uses machine learning and predictive analytics to help you anticipate and avoid problems. Embedded operational intelligence ingests operational data from numerous sources to proactively detect abnormal patterns of operation. This helps your team act on potential issues much earlier, isolate the real root cause faster, and ultimately remediate issues before they become business-impacting incidents. These insights are not only available to your experts, but also presented in an easily consumable manner where even novice mainframers can follow a path to diagnose issues on their own.

Key Capabilities (cont.)

- **Dynamic alerting** improves mean time to resolution with real-time dynamic notification of issues
- **Advanced historical analysis** combines simplified visualization of time-series data with deep-dive analysis tools
- **Issue intelligence** automatically correlates related alerts and symptoms to remove irrelevant data points and provide more actionable insights

Related Products

Mainframe Operational Intelligence correlates data from multiple solutions to provide more in-depth insights and increased accuracy of predictions:

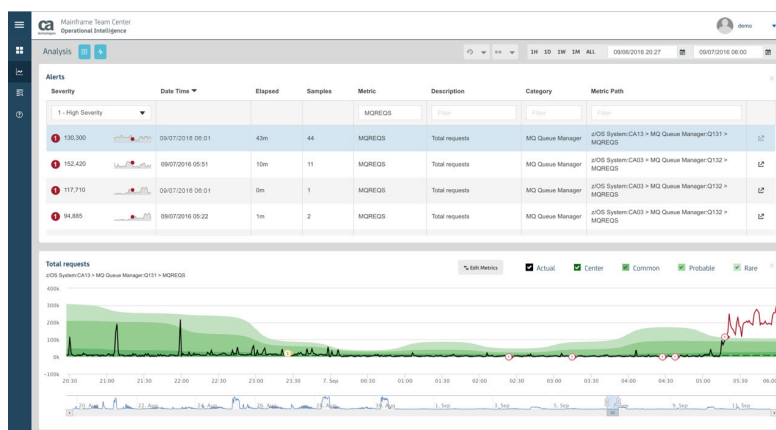
- SYSVIEW® Performance Management
- NetMaster® Network Management
- Vantage™ Storage Resource Manager
- Detector™ for Db2 for z/OS

Further simplify your mainframe management by automating the remediation of issues. Integrate with automation solutions such as, OPS/MVS® Event Management and Automation, Mainframe Application Tuner, and Automic® Automation.

Solution Overview (cont.)

Mainframe Operational Intelligence consumes data from multiple Broadcom® solutions. It also consumes data directly through SMF records from the IBM Z Systems environment. Raw alerts from all data sources are automatically correlated to surface specific issues. Predictive insights are then provided for each issue, including drill-down and probability. Automated problem remediation can also be triggered for optimum performance and efficiency.

Proactively Detect Performance Anomalies



Critical Differentiators

Mainframe Operational Intelligence is designed to support the needs of organizations that rely on the mainframe for their most mission-essential applications, offering the following advantages:

- **Operational intelligence** is uniquely embedded into the management environment to more proactively optimize mainframe performance and availability with fewer resources.
- **Multi-source data feeds** enable you to gather data and derive intelligence across multiple systems and sub-systems, including data directly from the IBM Z Systems environment, in addition to data from Broadcom products. When it comes to machine learning and intelligence, wider sets of data produce more accurate predictions and better opportunities for relationship and pattern analysis.
- **Issue intelligence** automatically correlates related alerts to better predict cascading events before they spiral out of control. This capability assists lower skilled IT Ops in driving to root cause faster and providing more accurate and actionable insights by automatically scoping relevant issues and focusing on related symptoms.
- **In-depth integration** with leading mobile-to-mainframe management and automation solutions from Broadcom uniquely enables you to monitor and manage large, complex environments with less effort and lower cost.

For more information, please visit www.broadcom.com/solutions/mainframe/aiops.