



DX Operational Intelligence

Business Challenges

As organizations continually invest in and refine digital experiences while relying more heavily on core IT operations, the rate of change and pressure on IT is skyrocketing.

Service delivery and business value are inextricably connected. Like never before, data has become multipurpose; it is used by both business and IT stakeholders to reveal insights, prioritize work, and shape decisions. And, customers, employees, and partners expect unfailing performance at all points along the digital value chain. For IT operations, the digital era exposes the following significant challenges:

- · Deriving value from the explosion of data
- Avoiding operational inefficiencies
- · Elevating digital services orientation with fragmented IT
- · Delivering products consistently, quickly, and with quality

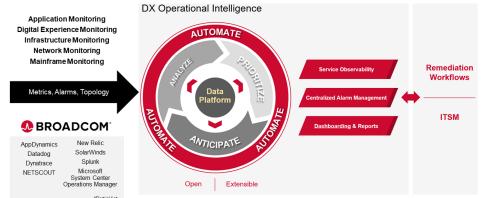
Product Overview

DX Operational Intelligence (DX OI) harnesses the vast volumes, variety and velocity of IT operational data. This data provides valuable insights and guides actions for maintaining the health and performance of digital services on an enterprise level.

Service observability capabilities complement traditional monitoring to help teams shift to an end-to-end service centric approach for monitoring and managing applications, infrastructures, and networks across technical platforms and functional silos. Centralized alarm management and customizable dashboards guide teams to relevant insights drawn from vast amounts of operational data, prioritize work, and respond more effectively to issues which impact the customer experience.

Teams benefit from advanced algorithms, AI/ML, and automation which reduce manual effort. The teams can collaborate more efficiently, make better decisions, and take appropriate actions to support customers and business stakeholders.

Figure 1: DX OI Capabilities



:

Alarms

KEY CAPABILITIES

- Service Analytics deliver a unified view of the health and availability of business services across management domains for business and application owners.
- Alarm Analytics provide consolidated and correlated views of alarms from integrated monitoring solutions and help to reduce alarm fatigue for operations teams.
- Performance Analytics allow subject matter experts to dive deeper into the performance issues and easily monitor tailored views over time.
- Capacity Analytics help capacity planners proactively manage resources by ensuring that resources are sized to meet current and future needs.
- RESTMon framework enables ingestion of structured and unstructured data such as topology, metrics, traces, alarms and logs from built-in integrations, and third-party sources to support tool and data consolidation.

Service Observability Complements Traditional Monitoring

Traditional monitoring of applications, infrastructures and networks is becoming, and will be increasingly important, not less. To successfully manage modern digital delivery chains, teams need both end-to-end observability and comprehensive coverage of the entire digital value delivery chain.

Using DX OI, IT operations can shift to a service-centric approach for monitoring and managing applications, infrastructures, networks across platforms, functional silos, geographies, and so on. By defining a service within DX OI, teams can associate IT elements that support a defined service; thus creating a logical boundary for what to monitor and manage. DX OI complements traditional monitoring through the following capabilities:

- **Service-driven monitoring:** Monitor and manage the health and performance of your services through service-level indicators.
- Service-based triage: Leverage topology correlation across users-appinfra-network data to prioritize work and solve problems faster.
- Service-aware performance analytics: Explore relationships between resources, digital services, and performance to help teams focus effort and assess future needs

Compressional Intelligence

Services 115

Services 115

All services Banking services 0 | Vices |

Worst 1

Banking services 0 | Vices |

Worst 2

Health 0

Health 0

Health 0

All services 0 | Vices |

Worst 3

0

100%

Figure 2: Example DX OI Services Dashboard

Services / Sub-Services (# Subs)

Digital Banking (5) 🚓

KEY CAPABILITIES (CONT.)

- Customizable dashboards, built on Grafana, help with persona-specific data visualization, reporting, and collaboration.
- IT Service Management (ITSM) integrations enable user-defined policies to automatically create tickets and update them with relevant information.
- Channel integrations foster collaboration among different teams.
- Automation integrations help teams automate workflows for triage and remediation.

Centralized Alarm Management

Excessive and redundant alarms make understanding and prioritizing issues difficult. The alarms can distract teams from impactful end-to-end management of digital services. Teams work harder but less efficiently, and they are less confident that the insights and actions they prescribe are optimum.

Using sophisticated artificial intelligence and customizable algorithms, DX OI addresses the challenges caused by excessive and redundant alarms through the following methods:

- Alarm consolidation with contextual details: Cluster related alarms into situations to identify patterns of issues that may impact the health and performance of services.
- Anomaly detection and dynamic baselines: Advanced algorithms, AI/ML, and correlation analysis helps to detect anomalies, establish baselines, and generate insights for complex situations.
- Ticketing, notifications, and automation: Use intelligent automation to provide seamless integration with Broadcom® solutions and third-party solutions to incorporate alarms, with relevant context into ticket management and remediation workflows.

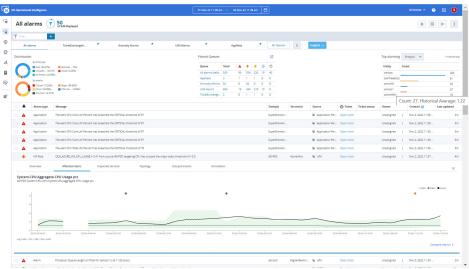


Figure 3: Example DX OI Alarms Dashboard

RELATED BROADCOM SOLUTIONS

- Automic® Automation
- DX Application Performance Management
- DX NetOps
- DX Unified Infrastructure Manager
- RFSTMon

Dashboards and Reports

The fragmented nature of IT caused by organizational structures, disparate tools, and data impedes the ability of teams to triage issues quickly and focus on the overall health and performance of digital services. The immense volume and broad variety of specialized data means that the IT teams can struggle to understand data in-context, extract the right insights, and proceed to the best actions.

DX OI normalizes, correlates, and analyzes diverse data sets to provide a single pane-of-glass view. Actionable insights are presented in the necessary context to guide and prioritize remediation across IT domains (application, infrastructure, and network management teams; mobile, onpremises, cloud, and mainframe). DX OI provides the following capabilities:

- **Consolidated dashboarding:** Enable cross-functional teams to leverage a shared view of data to ensure that all teams, from executives to support engineers, have end-to-end visibility, in an appropriate context for IT operations data and the insights generated by DX OI.
- Cross-domain metric-driven triage: Leverage out-of-the-box metric rich dashboards to help teams prioritize specific issues, outliers, and trends that need attention. Create customized dashboards to meet the needs of diverse IT and business personas.

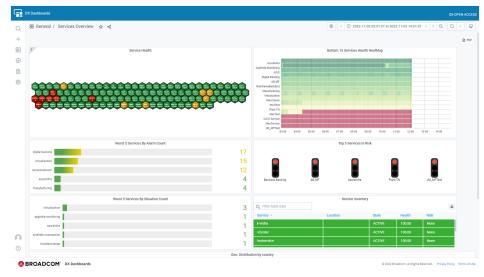


Figure 4: Example DX OI Reports

About Broadcom Software

Broadcom Software is a world leader in business-critical software that modernizes, optimizes, and protects the world's most complex hybrid environments. With its engineering-centered culture, Broadcom Software is building a comprehensive portfolio of industry-leading infrastructure and security software, including AlOps, Cyber Security, Value Stream Management, DevOps, Mainframe, and Payment Security. Our software portfolio enables scalability, agility, and security for the largest global companies in the world.



