

PRODUCT BRIEF

KEY BENEFITS

Optimize Costs

From a single management portal, gain visibility and control into complex, traditional, software-defined, and multivendor infrastructures.

Reduce Downtime

Automate triage and root cause identification to expedite network problem resolution.

Minimize Risks

Make early decisions based on anomalies, patterns, and trends before they impact network delivery.

Accelerate Innovation

Tame the complexity of modern environments and capitalize on transformative technologies like SDN, SDDC, and SD-WAN.



DX NetOps

Improve NOC Efficiency with Faster Issue Resolution and Reduced Operational Costs

Business Challenges

Network architects, engineers, and operators require visibility and control into a complex ecosystem: software-defined and virtualized networking, wide diversity of services and connections, ubiquity of wireless, exponential growth in traffic, and a multiplicity of network tools and equipment vendors.

However, traditional NOC tools lack the processing efficiency to costeffectively scale, instantly analyze and correlate the massive amount of data to handle the dynamic nature of modern network inventories and services. Furthermore, the heavy reliance on hybrid networks creates additional blindspots that mean application performance and user experience are at risk of disruption.

As a result, without a way to address these challenges, network teams continue to rush to react to issues after end-users are affected. Hence, productivity and business performance continue to suffer.

Product Overview

DX NetOps delivers advanced scalability and features that enable network teams to effectively monitor and manage complex, multi-vendor networks — including traditional, software-defined, and edge infrastructures. The product provides a single portal that converts inventory, topology, device metrics, logs, configurations, faults, and flows into actionable insights for network operations teams.

Most importantly, DX NetOps enables routing end-user experience metrics through the standard operating procedures and workflows network specialists depend on. Backed by comprehensive analytics, network teams can triage easily, find root causes quickly, escalate to engineers or architects, open trouble tickets, or isolate and resolve efficiently network delivery issues that deteriorate user experiences.



DX NetOps provides holistic and contextual information across domains.

PRODUCT BRIEF

KEY FEATURES

- Unified management portal and data model for fault, performance, flow, configuration, and user experience.
- Proven operational workflows that simplify network management.
- Network fault suppression, topology-based isolation, and correlation of configuration changes to outages.
- Alerts based on dynamic thresholds, deviation from baseline, and anomaly detection.
- Configuration management and auto-remediation of single devices and device families.
- Network traffic analysis with application identification.
- Visibility into the overlay and underlay of software-defined networks.
- Wide scope of protocols supported (SNMP, non-SNMP, Flows, gNMI, Telemetry...).
- Multi-vendor device and topology discovery, including SDN, SDDC, SD-WAN, NFV, and Wi-Fi.
- High-scale monitoring of up to 5M items and 500K metrics per second.

Fault Management

DX NetOps helps pinpoint the root cause of network delivery problems for faster resolution. The product offers automated event correlation and root cause analysis capabilities that suppress unnecessary or symptomatic alarms and identifies the actual component responsible for an issue. DX NetOps also correlates outages to configuration changes with audit trails for any network device.

All Groups 🛌																			
Overview	N											00	3 Last 4	Hours	C Toda	ay 8:27 AM t	to 12:27 PM		
Alarms																		⁶	¢
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Severity	Last Occurrence	Date/Time J	tem Name	Model Type	IP Add	Alarm Title		Impact	Number of	Occur	Acknowledge	rd Tr	oubleshoote	r Trou	ble Ticket ID	Custom	ner Impact	Service Im	pact
🗌 🔶 Major	Jun 6, 2023 12:27:	Jun 6, 2023 12:27:	CE3.mydomain.co	Cisco3640	192.1	A Threshold Violation event has been raised or Rtmon HTTP: 1.1.100.3-10.2.100.1:3". (Profile Traffic Congestion, Rule Name: HTTP High Late	2 Name:	0	1										
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🗌 🔶 Major	Jun 6, 2023 1:35:5.	Jun 1, 2023 3:17:1	mumbai-asia-mp	NetworkPath		APPNETA EXCESSIVE NETWORK CHANGES		0	2			LL	ke Wilson	Ticke	t Number IN.				
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		DUE TO LOST BGP PEER	ING SESSION																
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Impact: Management Lost			Jun 6, 2023 9:26:40 Al Fa2/0 - FastEthernet2			Symptoms: The Peering session between	n this letost	here and	its connected a	undar a	r naer devica i		orthliched (denirer ara U	kolu affected			
Impact: Symptoms			192.168.100.6	/0		Probable Cause:													
Neighbor Topology		Model Type					The peering session has been broken through configuration error or protocol failure.												
Interfaces		Acknowledged			Actions:														
		Contact Person				eck the device configuration to ensure that the peering session has not been manually taken down or disabled. Otherwise ensure that the interfaces are enabled and operational. tain the Remote Peer Interface IP Address from the message and determine if the local peer interface is operational.													
Log Events		Troubleshooter	None																
		Trouble Ticket ID	None																
	N	lumber of Occurrences	1																

DX NetOps delivers practical insights to identify and resolve problems quickly.

Performance Monitoring

DX NetOps collects, stores, analyzes, and displays massive amounts of performance data for assuring holistic visibility across complex, multivendor network infrastructures. Designed for traditional and modern software-defined network technologies, the product enables proactive capacity planning, anomaly detection, and problem-solving through flexible dashboards and reports that unify all aspects of monitoring and help optimize network operations.



DX NetOps offers network path visualizations that enable to isolate performance degradations quickly.

PRODUCT BRIEF

Flow Analytics

DX NetOps ingests and analyzes flow data to deliver actionable intelligence and real-time visibility into network behavior. The product provides deep visibility into network traffic, identifying the source, destination, and volume of data flows. With intuitive visualizations and customizable dashboards, network specialists can easily interpret complex data, identify potential bottlenecks and manage network resources effectively.



DX NetOps helps understand application/service utilization with location-by-location comparisons and categorized traffic details.

Configuration Management

DX NetOps minimize risks and troubleshooting efforts that result from ineffective configuration changes. The product offers change scheduling and automation, approval controls, and detailed change reporting that enables establishing reference configurations, tracking deviations, and even generating alarms when deviations occur.



DX NetOps delivers visibility and control, minimizing erroneous changes that lead to performance issues and outages.

PRODUCT BRIEF

End-User Experience

DX NetOps seamlessly integrates with AppNeta® to transform NOC triage and response times. The integration brings end-user experience to the forefront of NOC visibility, extending operational reach across unmanaged networks and cloud-based applications.

All Groups 🛼				
Network Experience F	Projection by ISP		🖿 🥥 🛞 Last 4 Hours	🕥 Today 8:37 AM to 12:37 PM 💼
Outbound Capacity by ISP with	Projections - SDN Path			÷ #
û User Group: By ISP				
Timeframe: Last 4 Hours Metric Calculate Li	evel: Component Hierarchy Resolution: As Polled Data			
🛕 Critical Status 🔶 Major Status 🕕 M	inor Status 🛛 Normal Status 💮 Invalid Data Point			
Quick Filter				
Group/Sub-Group/Item Name	Outbound capacity utilization percentage - Average	1 Outbound capacity utilization percentage - 30 Day Projec	Outbound capacity utilization percentage - 90 Day Projec	Outbound capacity utilization percentage - 180 Day Proje
By ISP	27.37%	45.76%	41.7%	35.61%
Azure Azure	40.43%	64.55%	64,61%	64.71%
az-australiaeast-c01-06-apndem	no <-> https://avy 🛕 99.63%	A 100.11%	A 100.52%	A 101.14%
 az-southeastasia-c01-02-apnder 	mo <> demo.pa 🛕 96.12%	A 95.02%	A 99.13%	A 105.29%
az-westus-c01-01 <> demo.pati	twiewcloud.com 🛕 93.64%	A 93.84%	A 97.26%	A 102.38%
az-australaeast-c01-06-apnderr	no <-> demo.pati 🛕 90.65%	A 91.61%	A 92.34%	A 93.43%
Amazon	21.76%	52.12%	50.63%	48.4%
aws-workspaces-us-west <> 10	4.196.148.230 (c 🥝 59.21%	A 91.49%	A 92.12%	A 93.07%
aws-workspaces-us-west <> GN	AT Anycast 🥝 39.63%	60.8%	52.03%	38.88%
 aws-workspaces us-west <> big 	query googleap 🥥 29.25%	69.3%	66.77%	62.96%
10 per page 🐨		Page 1 of 2		Displaying 1 - 10 of 1
Inbound Capacity by ISP with P	Projections - SDN Path			÷#
🔒 User Group: By ISP				
	evel: Component Hierarchy Resolution: As Polled Data inor Status 🔮 Normal Status 💮 Invalid Data Point			
Quick Filter				
Group/Sub-Group/Item Name	Inbound capacity utilization percentage - Average	Inbound capacity utilization percentage - 30 Day Projection	Inbound capacity utilization percentage - 90 Day Projection	Inbound capacity utilization percentage - 180 Day Project
By ISP	32.92%	29.04%	24.81%	18.46%
Azure	48.93%	57.7%	58.14%	58.81%
AZ-US-West <-> Ashburn VA.DC	(dual) 🔺 90.02%	64.27%	S 55.29%	41.83%

DX NetOps enables visibility beyond the edge of the enterprise network into ISP and cloud provider networks.

For more information, visit broadcom.com/netops



For more information, visit our website at: www.broadcom.com

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