

# Unified Network Observability & Automation

Powering Large Enterprises, Service Providers and Public Safety Organizations in managing their diverse networks

## Challenges

Organizations today face significant challenges in managing their diverse network environments, including campus, edge (branches), WAN/SD-WAN, and data centers. Additionally, they must ensure that their customers and partners can access applications and services over internet and mobile networks with an excellent user experience.

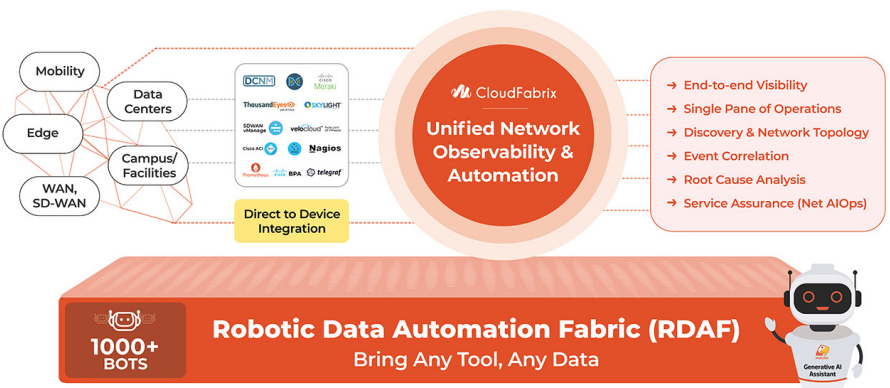
- ▶ **Multiple Home-Grown and Domain Specific ITOps Tools:** Disparate tools result in siloed data and lack of end-to-end visibility.
- ▶ **Lack of Accurate and Aggregate Asset Visibility:** Siloed views and data impede comprehensive, end-to-end visibility.
- ▶ **Operational Inefficiencies and Missed Outages:** Siloed operations and outdated tools delay issue detection and resolution.
- ▶ **High MTTR and Missed SLAs:** Lack of cross-domain dependency insights increases repair times and leads to missed service levels.
- ▶ **Lack of Agility:** Blind spots related to dependencies and rigid tools hinders quick adaptation and changes needed to support the business needs.
- ▶ **High Opex:** Inefficiencies and manual processes drive up operational costs.
- ▶ **Poor Customer Experience:** Network performance issues degrade user satisfaction with applications and services.

Ensuring visibility and optimal performance across all network segments, including internet and mobile access, is crucial for maintaining high-quality service delivery. Enterprises must adopt integrated and automated solutions to overcome these challenges, enhance operational efficiency, reduce costs, and provide an exceptional user experience.

## Solution Approach

Unified Network Observability & Automation addresses the complexities of managing diverse network environments by providing a comprehensive, end-to-end visibility solution. This solution offers an integrated, detailed view of your entire network, including campus, edge, data centers, mobile/internet, and WAN/SD-WAN.

By consolidating data and insights into a single platform, it eliminates silos and offers true end-to-end visibility, including network dependencies. The solution also integrates with automation tools to help resolve issues quickly and efficiently. The single-pane view provides clear insights into the dependencies, performance, and health of your entire network, enabling superior customer experiences and effective change management.



## How It Works

### Integration with Domain Controllers and Management Tools:

- › Connects through APIs/Message Bus for seamless data collection and interaction with existing management systems and tools.

### Direct Data Retrieval where necessary

- › In environments lacking management tools, the solution directly retrieves data from network devices using standard interfaces such as:  
1) SNMP 2) SSH/CLI 3) gNMI 4) Bulkstates

### Discovery and Visualization of Assets & Dependencies

- › Discovers assets across domains, learns their dependencies, and provides flexible visualizations options such as:  
1) Geo maps 2) Flow paths 3) Topology views - left to right, top to bottom etc.

### Telemetry Data Pipelines

- › Collect and transform near real-time telemetry data related to network inventory, health and performance, providing up-to-date insights using composable low-code/no-code bots and pipelines

### Advanced Data Analysis using ML/AI

- › Utilizes AI and machine learning algorithms to analyze the collected data, identifying patterns, correlate across domains, detecting anomalies, and providing actionable insights

### Role-Specific Dashboards and Insights

- › Provides customizable dashboards that deliver role-specific views, ensuring relevant information is easily accessible to different stakeholders

### Automated Remediation

- › Supports automated remediation by integrating with tools like Cisco NSO and BPA, enabling swift resolution of detected problems and ensuring optimal network performance

## Key Features

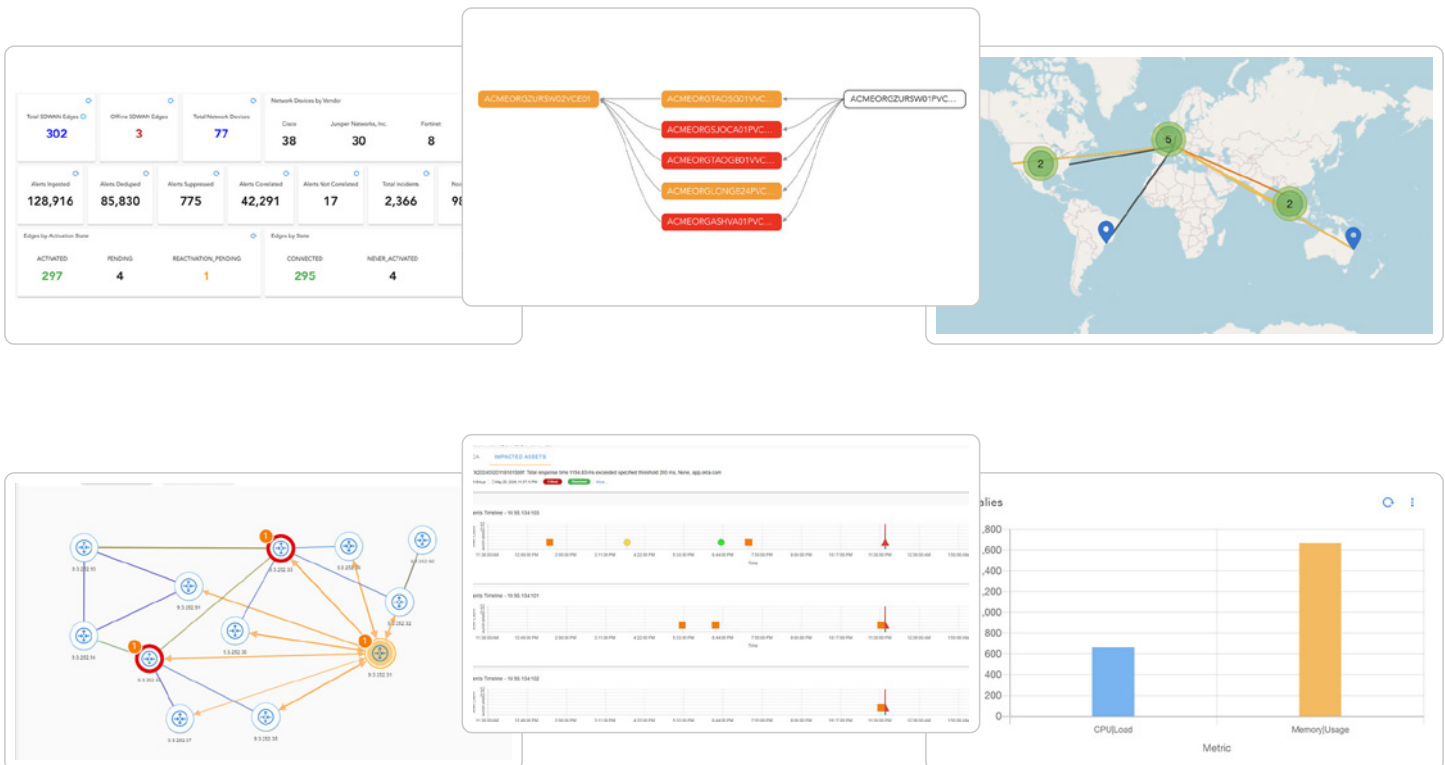
- › **Multiple Network Domains support:** Campus/Office, Branch/Edge, DataCentre, WAN/SD-WAN, Optical, Mobility & Internet/Mobile
- › **Multi-Vendor support:** Support for multi-vendor network environment including Cisco, Arista, Juniper, HPE etc
- › **Multi-Protocol Support:** Ingest telemetry data using various protocols including SNMP, Vendor APIs, Webhook, Kafka, gNMI, Bulkstats & more..
- › **Asset Dependency Mapping:** Discover & Visualize relationships between various network elements using Geo-Maps, Flow Maps, and Relationship Maps.
- › **Integrated Dashboard:** A single, user-friendly dashboard that consolidates data and insights from all network domains.
- › **Instant & Advanced ML Analytics:** Immediate access to near real-time data and advanced ML driven analytics for proactive network operations and troubleshooting.
- › **Advanced Reporting:** Detailed, customizable persona based reports that provide insights into network performance, trends, and potential areas for improvement.
- › **Security:** Robust security features to ensure data integrity and protection across all network segments.

## Benefits

- › **End-to-End Visibility:** Gain a holistic view of your entire network infrastructure, enabling better decision-making and faster issue resolution.
- › **Improved Efficiency:** Reduce the time and effort required to manage and monitor multiple networks with an integrated solution.
- › **Effective Change Management:** Accelerate changes and reduce errors by leveraging insights into network dependencies.
- › **Enhanced Customer Experience:** Deliver superior customer experiences with reliable and high-performing network operations.
- › **Proactive Management:** Anticipate and address network issues before they impact business operations with real-time analytics and automated alerts.
- › **Cost Savings:** Lower operational costs with faster learning curve, reduced incidents and faster resolutions.
- › **Flexibility and Scalability:** Adapt to changing network demands and grow with your business without additional complexity

## Featured Integrations

- **Network Performance Monitoring Tools:** Accedian Skylight, Prometheus, Zabbix, PRTG, Telegram
- **Domain Controllers:** Cisco DNAC, DCNM, Meraki, SDWAN vManage, VMware VeloCloud
- **IT Service Management (ITSM):** ServiceNow, BMC Remedy, Jira, ManageEngine
- **DEM & RUM Data:** ThousandEyes, APM tools like AppDynamics etc.
- **Automation Platforms:** Cisco NSO, BPA, Ansible



For more information visit:  
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