

# Transform Network Operations with Network AI

Networks are more critical than ever to your business, supporting nearly every process and aspect of our 21<sup>st</sup> century economy. Outages and grey failures that may have been just a minor inconvenience in the past can now impact tens of millions of dollars of revenue in a matter of hours. A new example appears in the headlines nearly every week.

Operations teams are feeling the pressure – and the pain. With a constant stream of new tech like public cloud, SD-WAN and Clos data center topologies, network complexity seems continuously one step ahead of operational ease. Existing monitoring systems don't help, with alert streams that are either noise or emergency, leading to a never-ending firefight.

Augtera's Network AI changes the game. Using both published and proprietary ML, **Augtera builds comprehensive models of network constructs, relationships and behavior** from a combination of data sources including SNMP, syslog, flow and gRPC / gNMI streaming. Patterns and correlations are automatically identified, providing both anomaly detection and noise reduction, focusing operations team resources on actionable insights.

These methods provide a huge gain for operations teams. By **detecting precursor signals traditional systems miss**, Augtera provides lead time to address network problems before they explode into failures, downtime and business impact. By **eliminating the noise** produced by thresholds, baselines, and standard deviations, Augtera allows ops teams to focus on the most operationally relevant events.

Ready to move your network into the Augtera Era? Contact us today for a demo or trial.

## Augtera Network AI Platform Benefits

### Deploy Your Way

On-prem or in the cloud, self-managed or fully managed SaaS

### Get Started Fast

Insight-driven network operations in hours, not weeks or months

### All Your Network Data

Capture and correlate telemetry from any network device

### Output That Matters

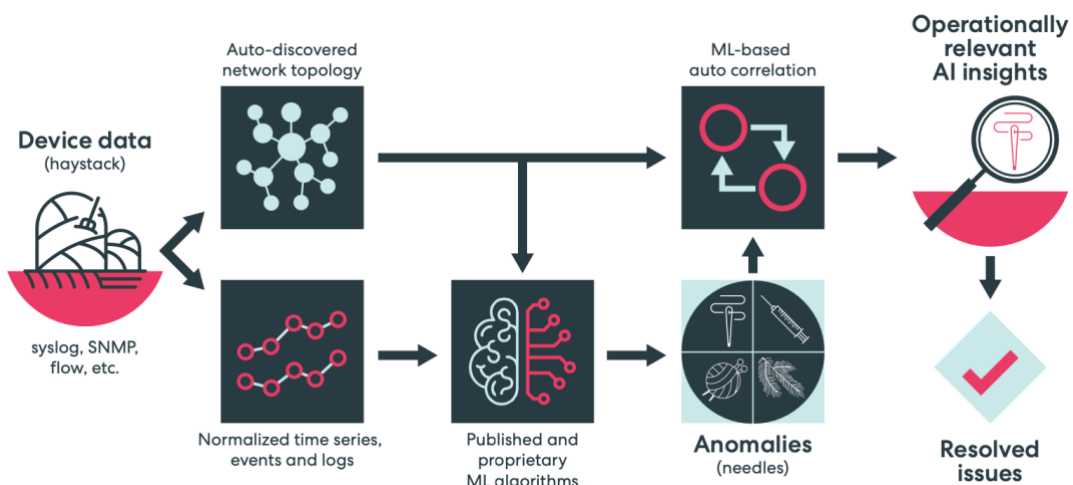
Eliminate noise and focus on what is operationally relevant

### Get Ahead of the Incident

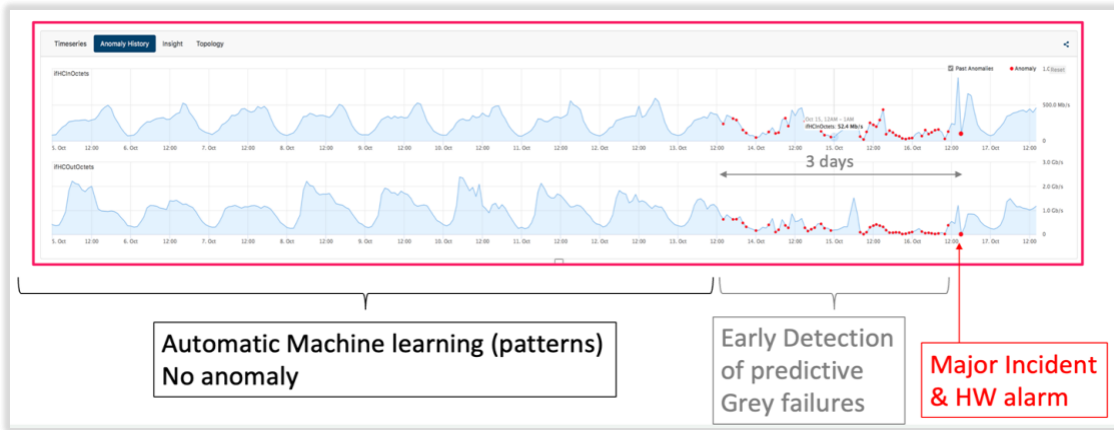
Mitigate and remediate customers, application teams, and your business is impacted

### Automate Your Response

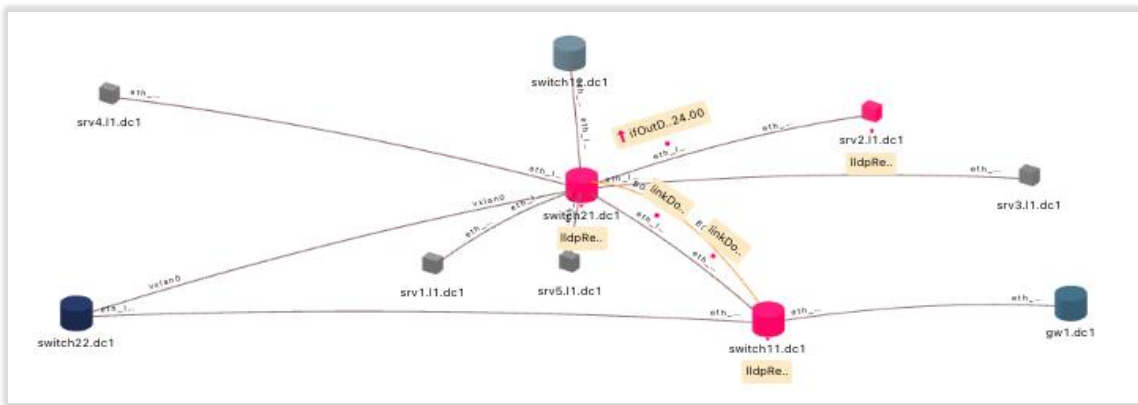
Integrate with DevOps and other operational systems



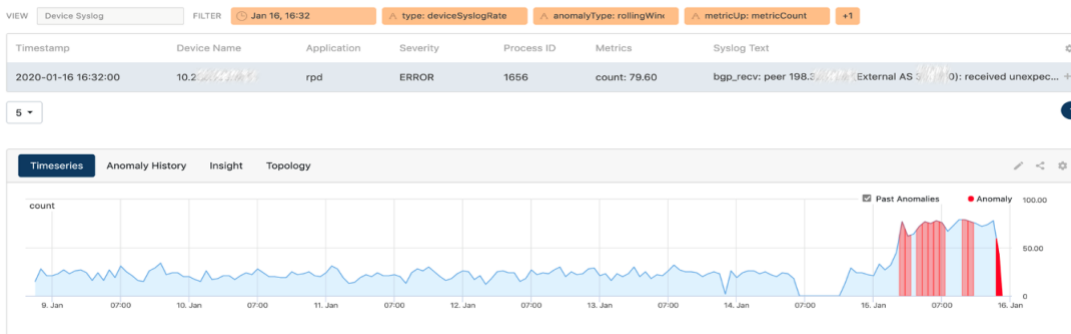
**Early Detection:** Augtera learns multivariate patterns at scale across a wide spectrum of metrics enabling operators to proactively identify impairments and degradations **before the business is impacted.**



**Automatic Correlation:** Augtera leverages a multi-layer ML network model to **automatically correlate network events** across data sources into a single incident.



**Automated Log Analysis:** Augtera automatically classifies log data and quickly **detects pattern changes and behavioral anomalies that other systems can't find.**



# Holistic Data Ingestion

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## Data Type

Network Topology  
System Events  
Control Plane State & Metrics  
Data Plane & System Metrics  
Operator Metadata  
Ticketing System  
Operator aggregated traffic Data (e.g., HTTP)  
VM/Container Topology & Metrics  
Flow Data  
Log Data  
Forwarding State  
Probe / Ping data  
Data interfaces

## API Type

SNMP, NETCONF, Proprietary vendor APIs, screen scraping  
Syslog, SNMP Traps, Telemetry Streaming, Proprietary vendor APIs  
SNMP, Telemetry Streaming, Proprietary vendor APIs  
SNMP, Telemetry Streaming, Proprietary vendor APIs  
APIs provided by the platform  
Proprietary vendor APIs  
APIs provided by the platform  
Cloud platform APIs  
NetFlow, sFlow, IPFIX, VPC flow logs, Platform APIs  
Syslog, JSON  
SNMP, Telemetry Streaming, Proprietary vendor APIs  
Proprietary APIs, Platform APIs  
Kafka, gRPC / gNMI, Augtera API, customer APIs

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## Delivery Methods

- SaaS
- Hybrid Cloud
- On-Prem

## Minimum On Premises Hardware

- 16 Cores
- 64GB RAM
- 128Gb HDD

## Operating System Support

- Ubuntu
- Red Hat
- Amazon Linux
- Other

## Cloud Integrations

- Amazon Web Services
- Microsoft Azure
- Google Cloud Platform

## Equipment Types

- Wide range including Switches, Routers, Servers, Firewalls, Load Balancers, SD-WAN & SDN, Data Lakes, & Public Cloud

## Vendors

- Arista, Cisco, Juniper
- Avi, F5
- Dell Enterprise SONiC & OS10
- Palo Alto Networks
- VMware/NSX
- Standards-compliant Devices

## Log and Timeseries Platform Integrations

- Splunk, Elastic Search
- Prometheus & Other

## Platform Notification Endpoints

- ServiceNow
- Slack
- Syslog endpoints
- Kafka consumers

## SD-WAN Integrations

- Viptela, VersaVeloCloud
- CloudGenix/Palo Alto

## The Need for AIOps

“The traditional NMS system, they’re based on regex matching or some rules system stuff, and tons of noise floods into the alert console,” Parantap Lahiri, VP Network & Data Center Engineering, eBay, ONUG 2021, Executive Round Table AI in Networking

“In a multivendor and software stack environment, it is not possible anymore to trouble shoot the network or even understand the visibility,” Ihab Tarazi, SVP & CTO, Dell Technologies, ONUG 2021, Executive Round Table AI in Networking

“We are convinced that artificial intelligence is going to systematically improve and transform our network management,” Jean-Luis Le Roux, Head of Global Wholesale and Enterprise Networks, ONUG 2021, Executive Round Table AI in Networking

## The Impact of AIOps

“We would have a switch die and we would get 100 tickets. With topology-aware and event-hierarchy-aware auto correlation, we get one ticket. There is only one true event that needs to get addressed. For RTP [maintenance] activities we go from 100 tickets to no tickets,” Rick Casarez, Technical Director, Network Software Engineering & Operations, eBay, ONUG 2022

## Customer Testimonials

“You have got to get the signal out of the noise [...] in our journey we have actually developed confidence in the AI/ML system in a way where we are actually pumping it directly in our ticketing system,” Fortune 500 e-commerce

“After more than a year of deployment in production infrastructure, the platform has shown instrumental results and demonstrated several use cases,” Jean-Luis Le Roux, Head of Global Wholesale and Enterprise Networks

“Anomaly detection results are excellent,” Fortune 500 Financial

“With Augtera we are able to prevent facility failures by getting advanced notification when our environmental system begins to degrade,” Ken Branscum, Director of Operations, Vyve Broadband

“There is increasing relevance for machine learning as we apply closer to services where the noise from network signals and alarms is massive,” Global MSO

“We have detected several important anomalies such as traffic loops [...] and they were detected before any customer impact,” Global MSP