

AlOps with VANI and VERBO



Rapid Pace of AI/ML Innovation...

The industries most advanced real-time AI/ML pipeline model generation architecture for the most accurate and relevant outcomes

Versa AI/ML Team created

AI/ML
Development
Commences

AI/ML
Algorithm
Training
(Internal data)

AI/ML Google-hosted VANI platform Al/ML Algorithm Training (Customerbased data)

AI/ML GCP Cloudbased release of VANI and VERBO

Integrated with Concerto and Versa Director Authentication

VersaGPT

Enhancement to Versa AI/ML using GPT and Versa proprietary knowledgebase

AI/ML

GCP Cloudbased release of Malware Detection

GenAl Firewall

AI/ML GCP Cloud-

based release of DLP

Enhancement to GenAl Firewall

Many other features

2017

2018

2019

2020

2021

2022

2023

2024

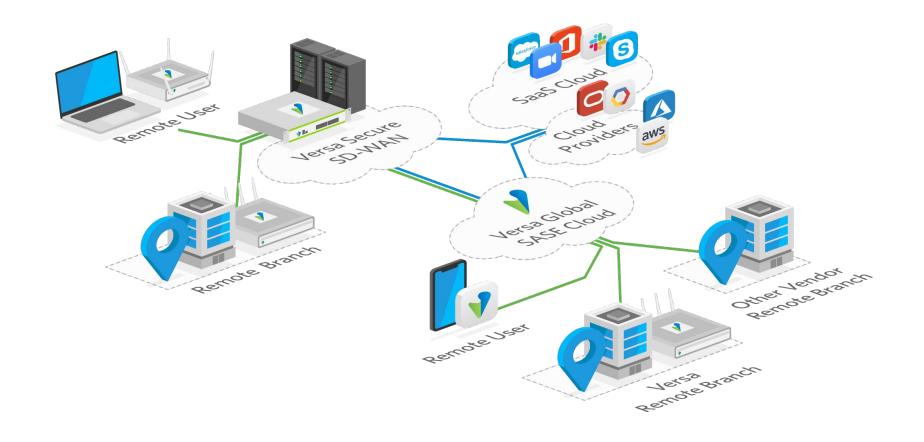




Business as usual



Let's take a typical deployment network





Let's take a typical deployment network



Lots of multivendor networking devices (e.g., routers, switches, firewalls, load-balancers, etc.)



Device monitoring is not standardized. Need a mix of Rest APIs, SNMP, httpping to monitor all the devices.



Reliance on decades-old standards like SNMP that are not good enough for modern mega-scale infrastructure.



Typical NOC setup



An expensive NMS software: Looping through SNMP mibs, rest APIs is still inefficient.



A team of engineers working on network management: Regional NOCs are expensive to maintain.



Carefully crafted set of rules and alerts: Massive amount of data generated.



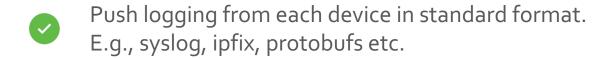


A step in the right direction





Smart Logging





Problem of data overload still exist.



Onus still on user

Setup alerting and threshold for each signal and feature

Prioritize the alerts that are generated



AIOPs to the rescue!







VANI

Versa Advanced Network Insights



Problem



Realtime predictive notification

Branch103 might see a surge in traffic in about 15 minutes



Anomaly detection

Just noticed uncharacteristic latency in traffic between branch A and branch B



Predictive network design

What kind of delay would I notice if I chose underlay A vs underlay B



Alarm Correlation

Branch A is down (instead of bgp is down on Branch C,D...)



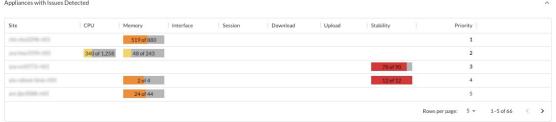
Smart Debugging

Underlay seems to have issues on Fridays 3pm-4pm



Alarm Suppression and Prioritization





- Find the most independent cause of the alarm
- Suppresses and correlates the alarms to simpler data points
- Finds the focal point to begin your investigation/debugging



Network Signal Prediction

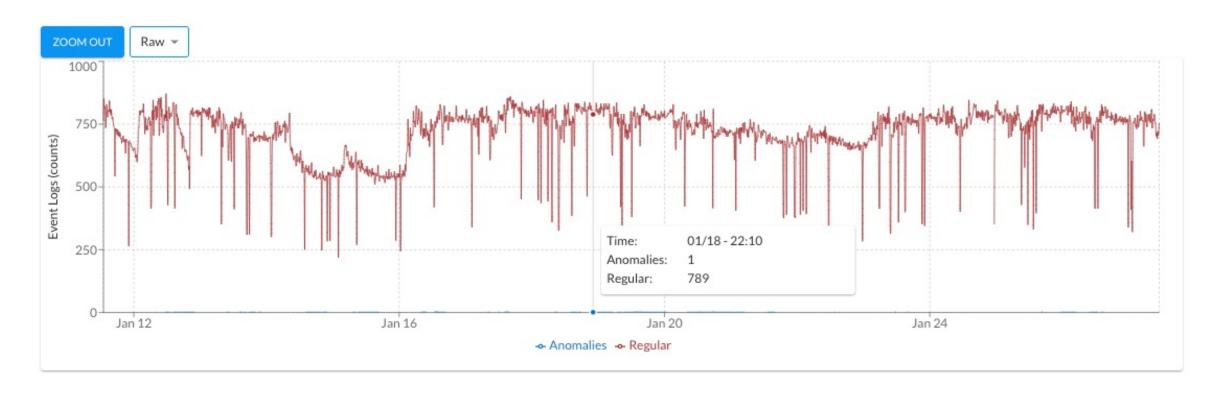
Predicts and alerts a week in advance





Anomaly Detection

Finds anomalies from raw event logs





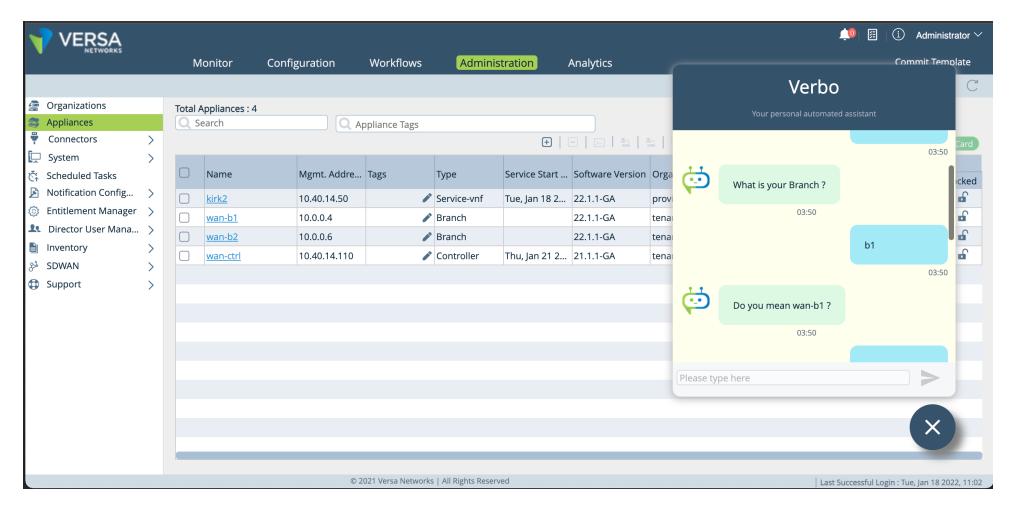


Verbo

Versa Chatbot



Intuitive access built everywhere





What can it do?



Provides a context sensitive chat window for the user to interact with in natural language



Troubleshoot common problems



Redirect the user to appropriate UI screen (on Director/Concerto etc)



Integrates with Vani



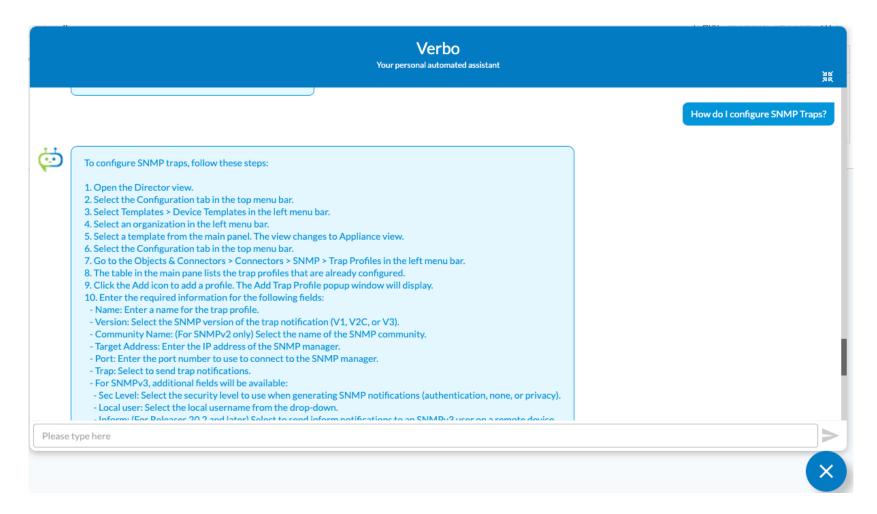


VersaGPT

Generative AI access to Versa Ecosystem



Generative AI with the latest Versa knowhow





What can it do?

Provides arbitrary search capability on everything Versa

Integrates with Verbo & Versa Website

Prompt tuned embedded generative AI to parse through knowledgebases/documents/whitepapers

Fine tuned GenAl to ingest support tickets



Tying it all together



Improving the existing design

Intelligence Plane

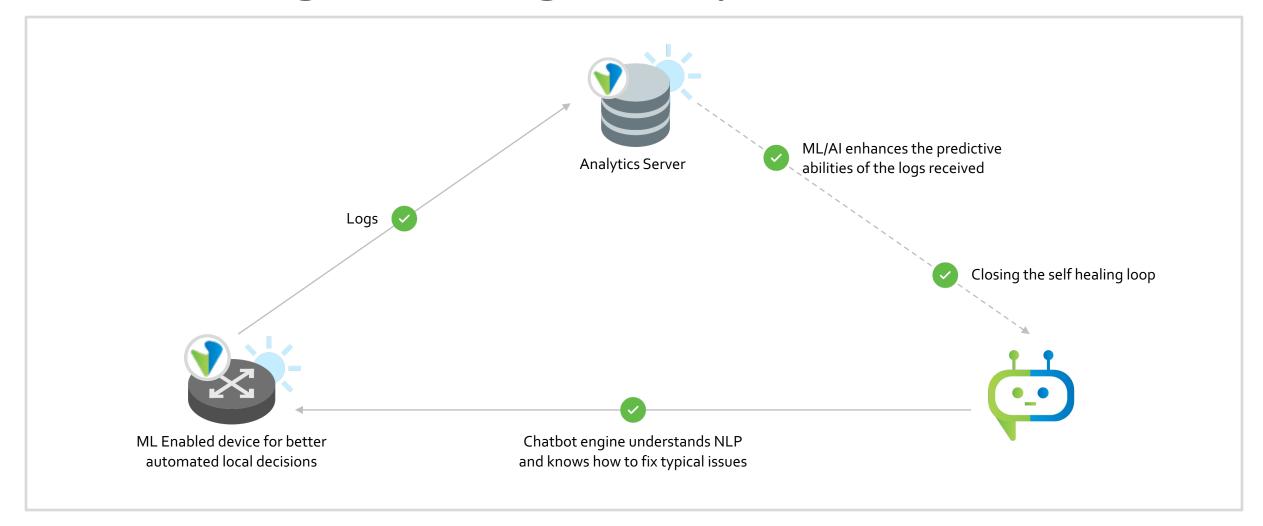
Control Plane

Data Plane

Traditional Networking



Architecting the intelligence layer









Thank you

