



AI for Networks
Networks for AI

Introduction to Aviz Networks

PRIVACY-FIRST, AI Networking



- **Intros**
 - Vishal Shukla, CEO, CO-Founder
 - Chid Perumal, CTO, CO-Founder
 - Thomas Schiebe, Chief Product Officer
 - Neal Trieber, Director U.S. Federal
 - Aaron Glass, VP WW Enterprise Sales
- **Aviz Solutions Overview**
- **DEMO TIME!**



Commercial Organizations and Government Agencies **EVERYWHERE** are re-thinking infrastructure in the era of AI

01

Fundamental Shift in Computing

AI first compute is becoming
mandatory in nextgen
infrastructure

02

Warfighters are Bandwidth Hungry - Drones are Hungrier and Data is Everywhere

Apps and Battlefield of Things is
generating and consuming more data
with exponentially growing trends

03

AI is driving change

AI-Agent based workflows are set
to bring more efficiencies than
ever with more data and
bandwidth requirements

Legacy networks can't meet today's demands. **It's time to rethink, not just upgrade.**



Aviz Enables DISA's "FULCROM" for The Warfighter's Networks

The Warfighter's AI connected environment demands an **open, agile, sustainable foundation**

Standardized for Seamless Network and Fully Integrated Security Operations

Open and Interoperable to Accelerate Innovation for Secure AI Networking and Automation

Sustainable and Predictable in Cost, Built for Rapid Network Infrastructure Change and AI Adoption

While the KPIs remain—Resilient, Secure, Always-On Joint Connectivity
"Defend The Net. Protect The Nation."

Legacy DoD Networks are **costly, closed, and monolithic**

Budget Spikes

Proprietary bundles drive up costs with hardware-first approaches.

Innovation Barriers – NOT “AI-Ready”

Closed systems delay AI and automation adoption due to lack of standardization.

Upgrade Cycles Lag

Infrastructure needs evolve faster than current upgrade cycles can support.

Gartner

"Nearly half of the Gartner clients are looking to reduce expenditures in the near term... Network vendors are consistently raising pricing and/or adjusting licensing models....

Andrew Lerner . Best practices to Optimize Network Spending



"The top technical issues with network automation are: Integration issues Lack of network standards Legacy network issues (poor vendor APIs, inconsistent features)"



Open networking enables up to 50% faster deployment compared to traditional proprietary systems.

— IDC Open Networking Impact Report, 2022

Status quo feels safer, while chronic problems quietly pile up.

Who is Aviz Networks?

Company Genesis: (Started in 2019)

Open Networking Enterprise Suite (ONES)

Best-In-Class 24x7x365 SONiC Support

Customers Demanded:

Deep Network Observability
without proprietary "Sticker Shock"

Modern Networks REQUIRE 100%
PRIVACY:

Network Copilot - Private AI

Single Vendor = Single Failure Point:

Mitigate hardware Wait Times and
Supply Chain interruptions

Our Vision

Vendor Agnostic, Open and PRIVACY FIRST AI Networking Software Stack

Our Investors



Hardware Partners



Deployments Example

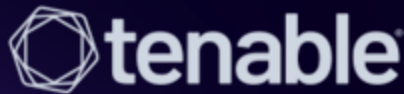
**Largest eAuction
retailer** in the
world

Largest Carriers
in the U.S. and
PACASIA

**Largest
Retailers** in
North America

Privacy First – Meet DoD's Stringent Requirements

Aviz Secure Software
Supply Chain



Aviz Is COMPLIANT



Aviz is Air-Gapped and
100% Private



**NO
INTERNETS
REQUIRED**



- ✓ Transparent
- ✓ Explainable
- ✓ 100% Private

Aviz Zero-Trust SDLC:
Aviz adheres to STRICT SOC2 TYPE-2 Compliance
(even without a cloud native service offering)

Privacy First – The #1 Non-Negotiable Requirement

- **Aviz is 100% On-Prem/Hybrid/Private Cloud**
- **No Data Spray**
- **No Monetization of Data**
No Public Exposure =
- **NO INTERNET REQUIRED FOR ANY Aviz PLATFORMS**
- **End-To-End Encrypted**
- **DATA Encrypted At-Rest, In-Motion, and Cross-Platform**
- **No Model Sharing, Fully Transparent AI (explainable)**
- **No Monetization on YOUR Model Learning**
- **YOUR DATA STAYS YOUR DATA – Federated, Agentic, In-Place**
- **CISA Compliant SBOMs for Everything**

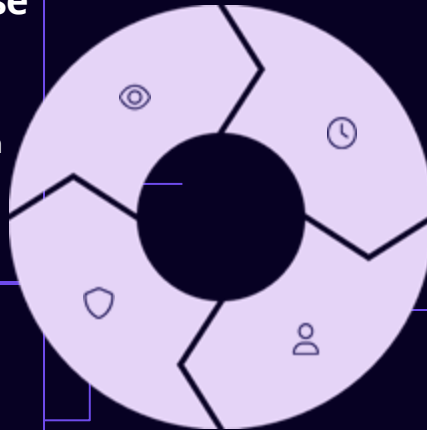
Why Networks with Aviz are More Secure By Design: Zero-Trust, Visibility with Faster Mitigation and Lower Risk

Higher Visibility, Better Response

SONiC and Open Networking with Aviz has broader Community Support and Faster mitigation times compared to Arista/Others with active, transparent vulnerability management..

Reduced Risk

Transparent process expedites remediation. Security fixes tested across all vendors. Aviz **INCLUDES Observability as a minimum requirement.**



Faster Fixes

Aviz: 24 hours response with hot-fixes.
<6 weeks average patch regression time.
Vs. Arista/Others: 8-12 weeks after disclosure.

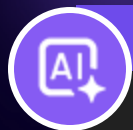
Community Power

Global developer for collaboration driving the least risk.

Why Your Status Quo Needs a Rethink

As AI is changing Networks..

Your network can no longer be a black box, dictated by any single vendor.



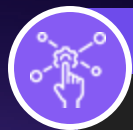
AI is becoming standard

You need networks that are open to AI agents and telemetry, not just CLI commands.



Costs are scaling linearly with speeds

Why should 4/800GB cost 4x more if the use case hasn't changed?



No vendor-neutral control

Your roadmap should be dictated by YOU...
not your vendor(s).



Proprietary = Stack rigidity

Limits automation, integration, and innovation.



Limited visibility

Troubleshooting still takes hours, not minutes or seconds.



Ask Aviz to talk to
F100 who **ALREADY**
made the switch

Aviz Unique Value Prop for The Department of Defense and The IC – The Status Quo HAS Already Changed...



PEO ENTERPRISE

1. Introduction:

The United States Army, Program Executive Office, Command, Control, Communications-Networking (PEO C3N), Program Manager (PM) Integrated Enterprise Network (PM IEN) identified the need for a flexible, scalable, and secure network solution that can be standardized and deployed across the entire Army enterprise. PM IEN is seeking information from Information Technology Enterprise Solutions 3-Services (ITES-3S) prime contractors that can provide information technology and certification testing support services for White Box Access Switch (WBAS) solutions.

A WBAS is defined as a network switch that is decoupled from a specific (singular) proprietary network operating system (NOS). The Army desires a WBAS solution that will allow the Army to install its own choice of open-source NOS. The proposed WBAS models need to meet the Army's stringent performance, scalability, and security requirements.

The WBAS uses open architecture to improve network flexibility and programmability. This open architecture separates and disaggregates switch software, allowing open and/or custom operating systems to be implemented. White box switches can fulfill Core, Edge, Distribution, Spine, Leaf, and Data Center Switch roles. These switches are comprised of Commercial Off-the-Shelf (COTS), open network install environment (ONIE) configurable hardware, and open-sourced NOS.

Prior to standardizing the WBAS configurations and implementing across the Army, the selected WBAS solutions must undergo rigorous testing and evaluation to ensure compliance with all operational and cybersecurity standards. Testing will align with Approved Products List (APL) or National Information Assurance Partnership (NIAP) standards to ensure baseline interoperability and cybersecurity requirements are met, which will certify the WBAS product for approved Department of Defense (DoD) acquisitions, and access on the Army's network installation campus area networks (N-ICAN). The prime contractor should provide previous

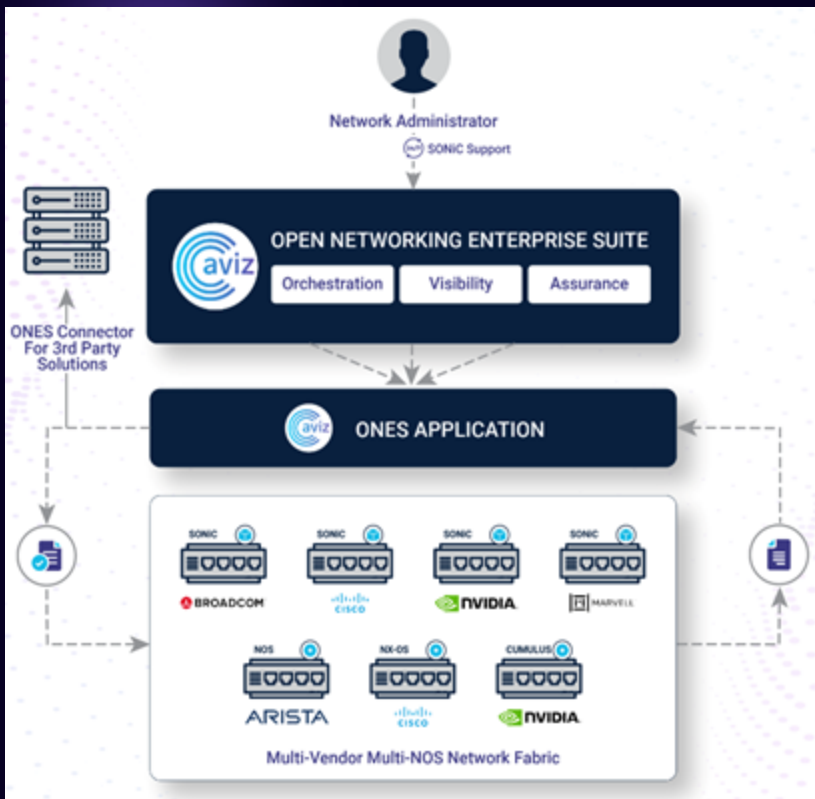
“WBAS Is Defined as a network switch that is decoupled from a specific singular proprietary Network Operating System (NOS)...to install its own choice of Open Source NOS”



aviz DEFINED

“WBAS open architecture is to improve flexibility...programmability...separates and disaggregates software and hardware...”

Aviz Open Networking Enterprise Suite (ONES)



License	Features
SONiC Support + Multi-Vendor Observability (Pro-Lite Edition)	Observability – ALL Network Vendors <ul style="list-style-type: none"> Topology visualization Inventory (Hardware & System, PSU, Fan, SSD etc health) Control Plane (BGP, LACP, MCLAG, VXLAN) Data Plane (ASIC Tables Utilization) Links (Ports Inventory, Transceivers, Flaps, Cabling) Traffic (In/Out Packets, Errors, Queue Counters, RoCE Visibility) Support <ul style="list-style-type: none"> Image Management (ZTP, Custom) Access & Management (SSH, Console, SYSLOGs, Reboot)
SONiC Support + Multi-Vendor Observability + NetOp (Pro Edition)	Orchestration – SONiC + Cumulus <ul style="list-style-type: none"> Intent Driven Orchestration for IPCLOS, L2LS, EVPN-VXLAN, EVPN-Multihoming End-to-End GPU (RoCEv2) Orchestration and Observability Day 2 Operations - Policies, System Config & QOS Config Generate, Validate, Apply & Config Drift Integration & Alerting <ul style="list-style-type: none"> Rule Engine with alerting on metrics Integration with Slack, Zendesk etc

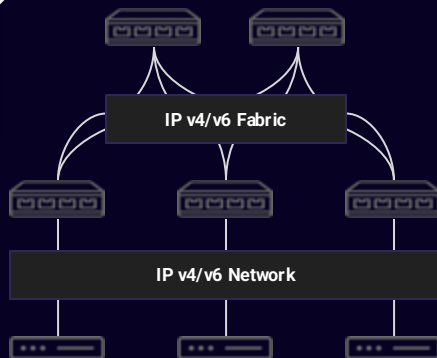
Supported Deployments



3 Stage BGP IP-CLOS

2 Spines, 3 Leafs, 3 Hosts

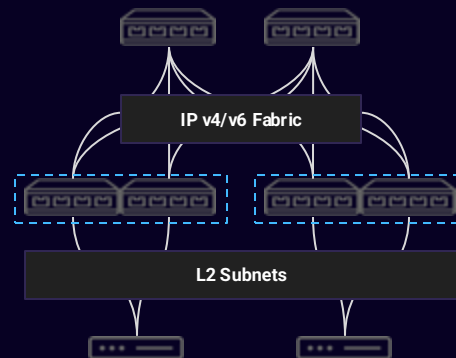
Community SONiC



BGP IP-CLOS with MC-LAG

2 Spines, 4 Leafs (2 MC-LAG Pairs), 2 Hosts

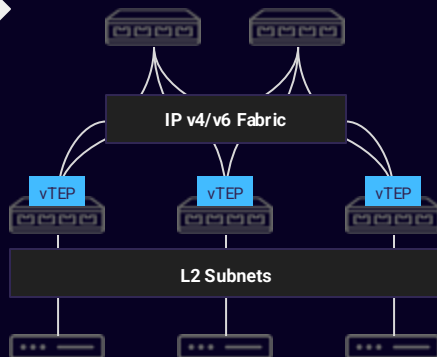
Vendor SONiC



L2 VXLAN EVPN

2 Spines, 3 Leafs, 3 Hosts

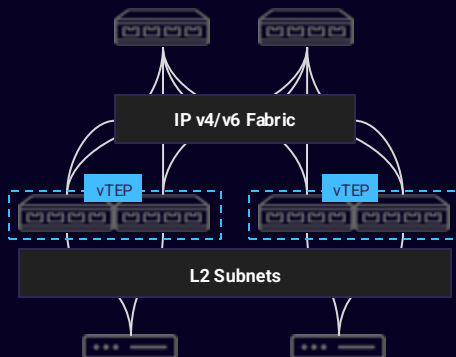
Vendor SONiC



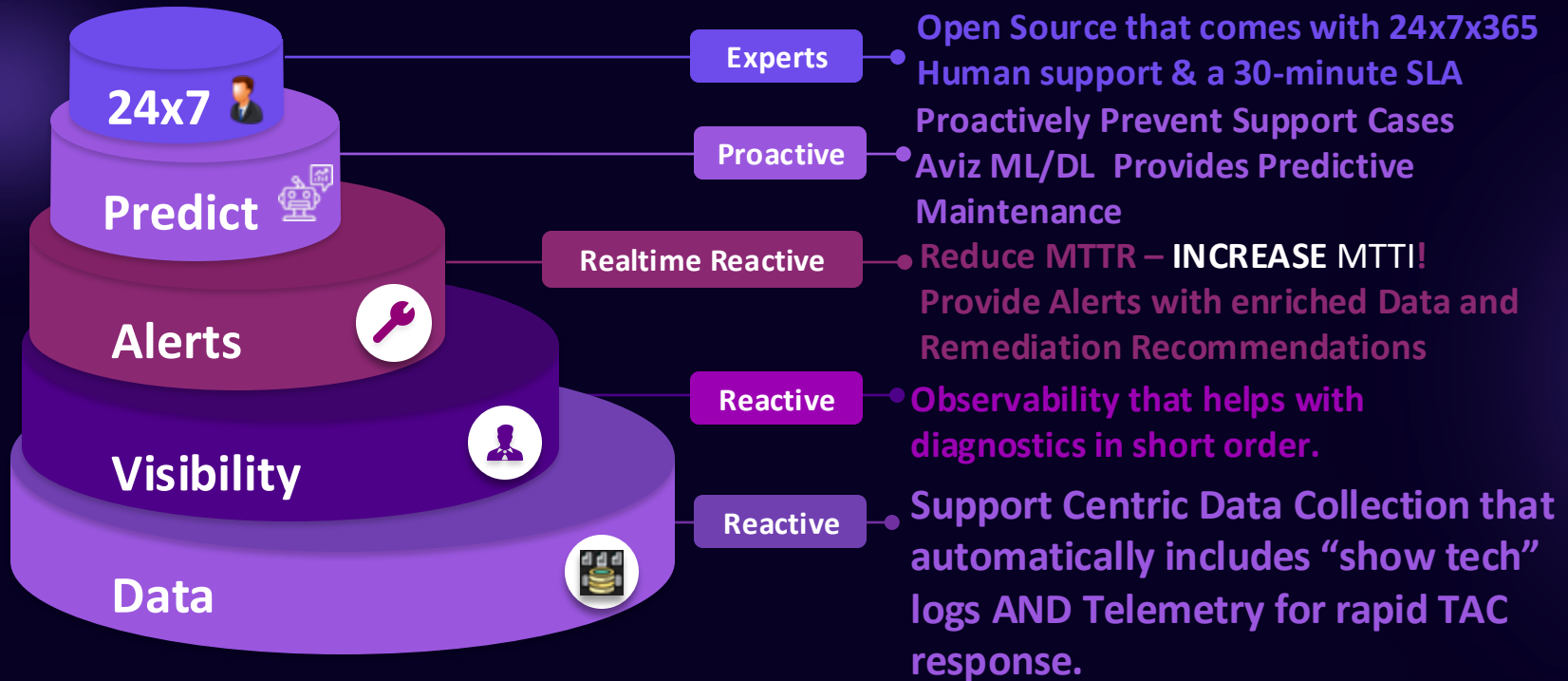
L2 VXLAN EVPN with MC-LAG

2 Spines, 4 Leafs (2 MC-LAG Pairs), 2 Hosts

Vendor SONiC



Support AS A Software Stack – Aviz SONiC Support INCLUDES ONES Observability Platform (NOT A “BOLT ON” EXTRA)



**Aviz
ONES**



Aviz ONES is a support as a service software that provides support Data Collection, Visibility, Rule Based Alerts and integrates with Customer Zendesk or ServiceNow. Aviz Network CoPilot augments Aviz ONES with LLM based predictive analytics

Deep Network Observability is **ESSENTIAL** for DoDIN Networks

Modern Networks **DEMAND** End-to-End X-Ray Vision, Not Just Legacy, Insights..



Detect Lateral Threat
Movements and Blind
Spots across E-W



Prevent Performance
& Scalability
Bottlenecks



Integrated AI Driven
Insights Deliver Faster
RCA

This New Frontier Requires Performance and Security without compromising agility or cost

Aviz Represents The Fulcrom for Enabling Deep Network Observability



The diagram is a pyramid divided into three horizontal layers. Each layer has an icon on the left and a text box on the right. The top layer is labeled 'AI-Driven Intelligence' and features a brain icon. The middle layer is labeled 'Data-Centric Architecture' and features a code icon. The bottom layer is labeled 'Software-First, Hardware-Agnostic' and features a chip icon.

AI-Driven Intelligence



Natural language-powered predictions, summarization, dynamic dashboards, and an AI assistant that transforms NetOps from reactive to proactive.

Data-Centric Architecture



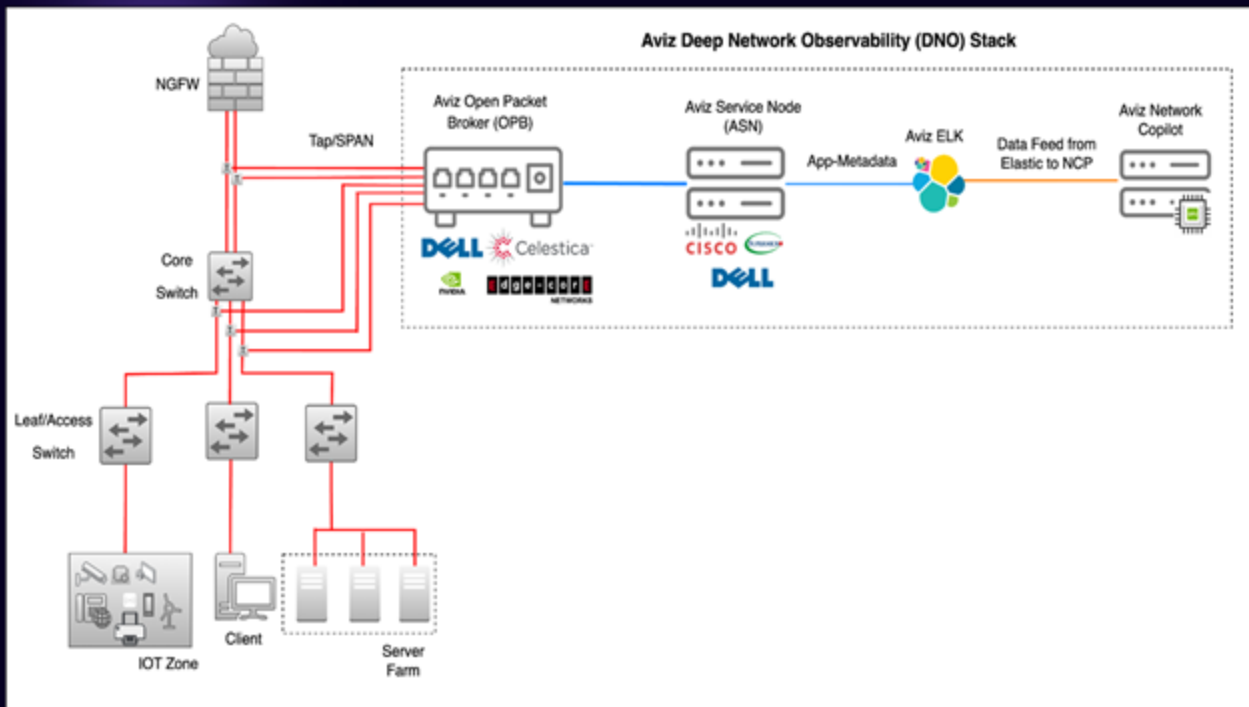
Unified, normalized data across all infrastructure—enabling deep insights, cross-domain correlation, and long-term compliance.

Software-First, Hardware-Agnostic



Runs on any switch or server—whether DPU-based or commodity x86—ensuring flexibility, scalability, and freedom from vendor dependencies.

Aviz Deep Network Observability - AI Driven Network



Open Packet Broker (OPB) w/FlowVision

- A high-performance, Multi-Vendor traffic management fabric capable of traffic filtering, replication, aggregation, slicing, labeling, and tunneling

Aviz Service Node (ASN)

- X86-based software appliances perform deep packet inspection, metadata extraction, application identification, and deduplication

Network Copilot (NCP)

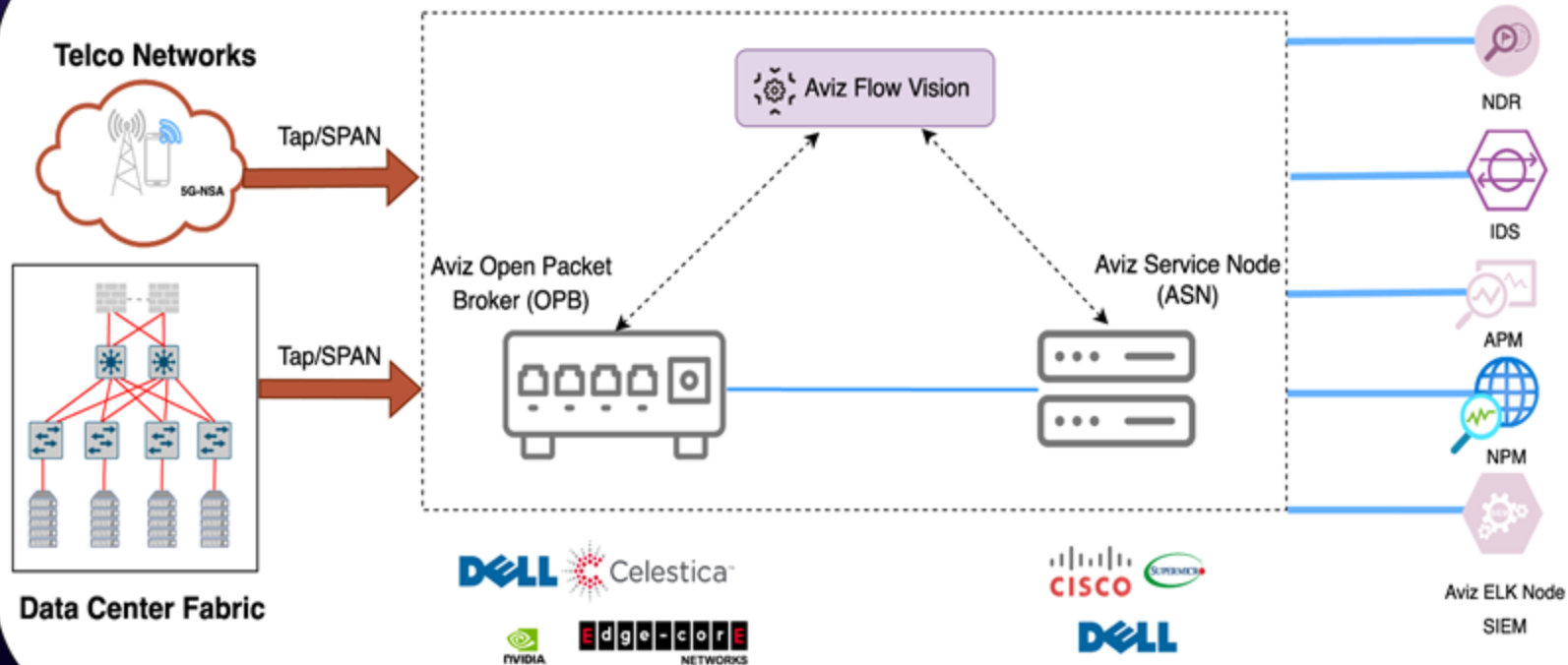
- An AI-powered, on-premises assistant built on open-source LLMs

Aviz Deep Network Observability with AI

Network Copilot™

(Generative-AI Solution for Private and Public Cloud Networks)

Aviz Deep Network Observability (DNO)



The Problem with Status Quo “BOLT ON” AI from Single Vendors

Avoid The 7 Most Common GenAIOPs Pitfalls from “Bolt-On” Solutions...

1

AI should be *programmable*, not pre-packaged

2

Your AI should evolve faster than your vendor's release cycle

3

AI should be open to YOUR ecosystem, Not Lock You in to theirs

4

AI should be Agentic, Customizable, and not violate support agreements

5

MUST BE 100% PRIVATE LLM-powered not aimed at a single vendor

6

Your AI should NOT charge you for every word it says, reads, or is asked.

7

ZERO Hallucinations Allowed – Should have mandatory Guardrails

It's 2025: Why should your AI be tied to a single vendor?

Meet Aviz Network Co-Pilot (NCP) – 100% Private and Sovereign

The Open, Fully Privatized, Purpose Built, AI-native Alternative

- 100% Private AI platform
- Network and Security Focused
- Talk to ANY Role or Rank
- Agentic architecture (MCP/A2A/ACP)
- Fully Automated Data Cleansing Ingestion Pipeline (Let us “ETL”)
- RAG Knowledge Base Pipeline
- Choice Of ANY LLMs
- NO INTERNETS REQUIRED
- BECAUSE NO 2 DAYS ALIKE



**DEMO TIME –
SEE IT ALL
IN ACTION**

**Let Aviz
BE YOUR
FULCROM
FOR CHANGE**



Aviz Networks

Deployed Globally. Trusted by the Best.

Retail | Telco | e-Commerce
CSP | Healthcare | Automotive
Government

Aviz Federal / Public Sector Contact

Neal Trieber, CISSP

Director

Federal Sales

e: neal.trieber@aviznetworks.com

p: (301) 928-6756

Follow us on LinkedIn



www.aviznetworks.com