AI for Networks
Networks for AI

Aviz Service Nodes Product Brief
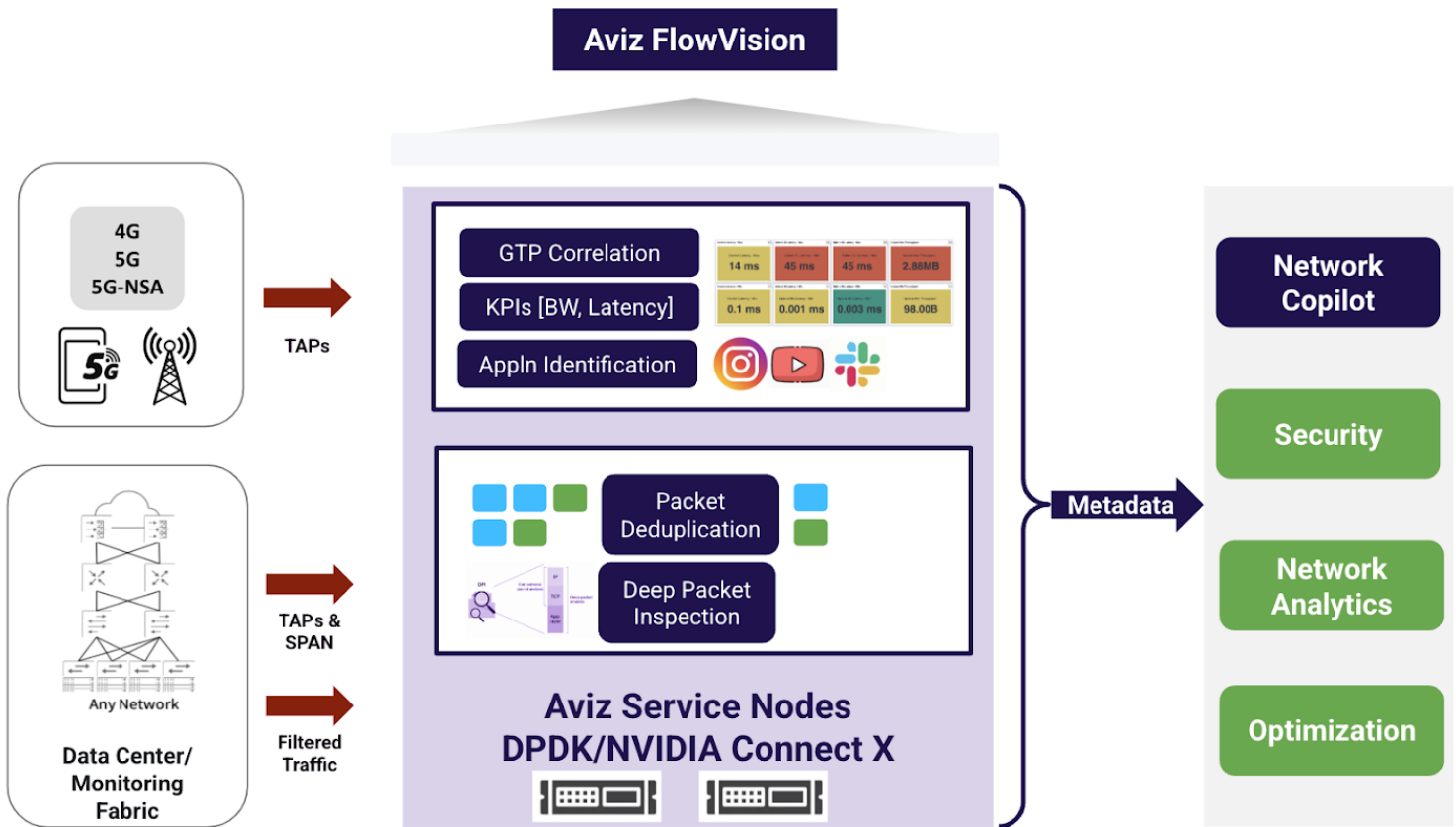
Advanced Network Intelligence for Telco, Enterprise & Data Center: Optimizing Traffic Observability and Performance

Demand for a Cost-Effective, Scalable and Uncompromised Observability Solution

As networks grow, managing high-bandwidth traffic, ensuring visibility, and optimizing performance have become major challenges for enterprises and telcos. Increasing data loads, security threats, and operational complexity demand a smarter, more scalable approach to network monitoring. On top of that, duplicate network traffic captures create inefficiencies, increases processing overhead, and slows down performance.

Introducing Aviz Service Nodes

Aviz Service Nodes (ASN) revolutionizes Network Observability with advanced filtering, deduplication, and intelligent traffic distribution. It integrates high-performance packet processing, deep packet inspection, and seamless packet capture to enhance visibility and security. Aviz Service Nodes delivers business relevant performance insights through real-time traffic analysis, correlation of network, application, and subscriber date, and generates KPI updates via Kafka.

Aviz FlowVision

4G
5G
5G-NSA

TAPs

GTP Correlation

KPIs [BW, Latency]

Appln Identification

| 14 ms | 45 ms | 45 ms | 2.88MB |
| 0.1 ms | 0.001 ms | 0.003 ms | 98.00B |

Any Network

Data Center/ Monitoring Fabric

TAPs & SPAN

Filtered Traffic

Packet Deduplication

Deep Packet Inspection

Aviz Service Nodes DPDK/NVIDIA Connect X

Metadata

Network Copilot

Security

Network Analytics

Optimization

Benefits

Optimized Performance

Intelligent packet deduplication eliminates redundant L2, L3, and L4 packets, reducing unnecessary processing over-head and improving monitoring efficiency by 30-50%.

Deep Observability

Advanced Deep Packet Inspection (DPI) provides precise application identifica-tion, enabling stronger security policies, optimized resource allocation, and better network intelligence.

Enhanced Troubleshooting

Real-time packet capture capabilities accelerate diagnos-tics and issue resolution, ensuring a smoother user experience and faster problem identification.

Cost Efficiency

Lowers bandwidth and storage costs by removing duplicate traffic. Lets you choose cost-effective servers and NICs while supporting speeds from 10GbE to 100GbE.
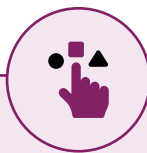
Choices

Easy integration with open-source and commercial tools for performance and security analytics.

Enterprise, Data Center & Telco Readiness

Supports large-scale enterprise infrastructure and high-traffic telecom networks with seamless scalability, reliability, and high availability.

Licensing Options

Flexible Licensing:

1. ASN Subscriber – Tailored for telecom (4G LTE, 5G NSA/SA), enabling advanced traffic analytics.
2. ASN Application – Optimized for data centers, FTTH, edge, and campus networks with deep IP session and application-level insights.
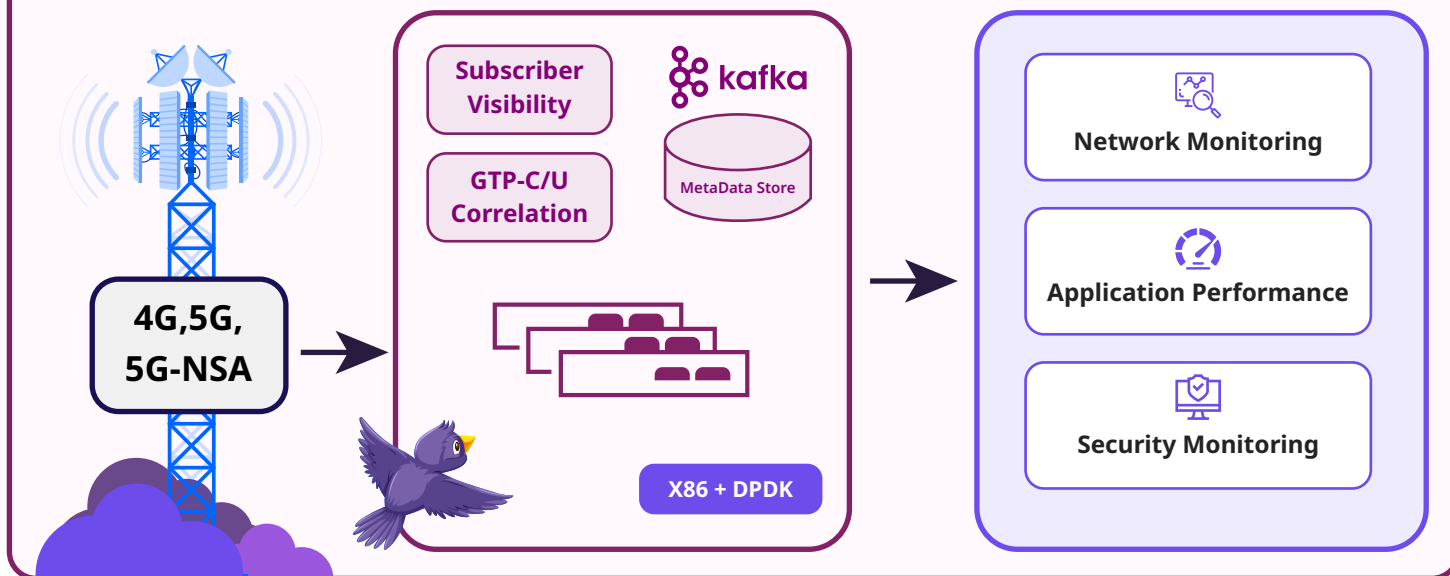
Note: Customers can use both licenses simultaneously as needed on the same Aviz Service Nodes.

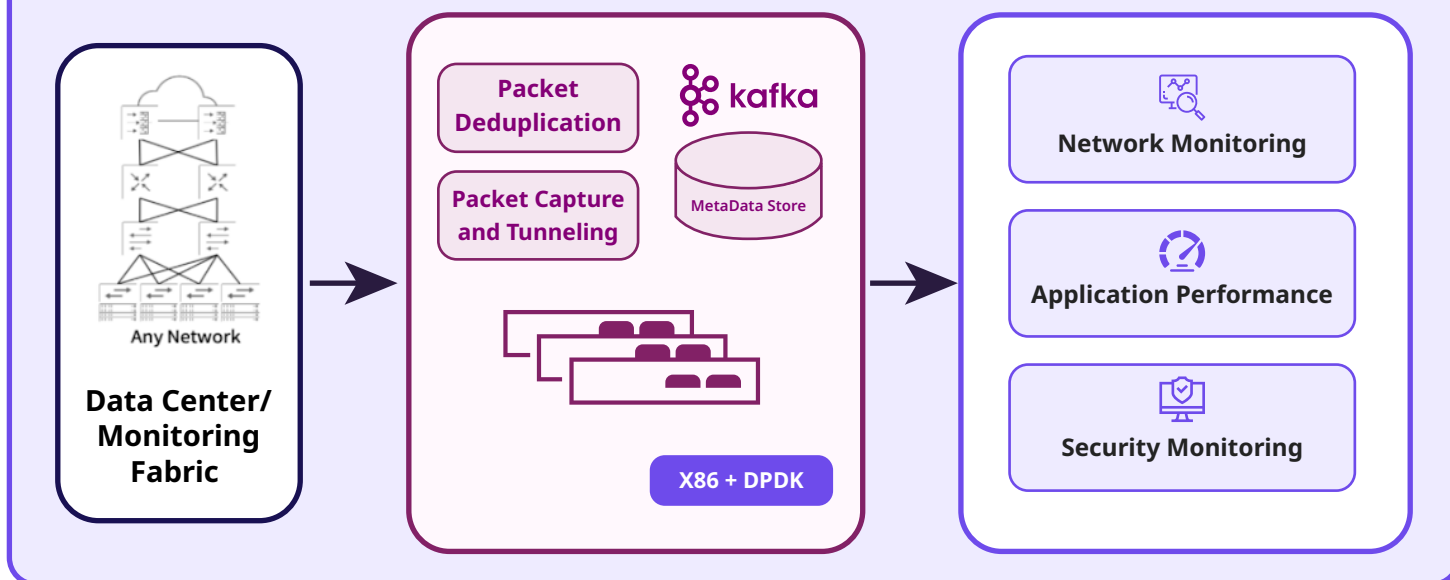| Capabilities	Features
Deep Packet Inspection and Data Correlation	• 4G LTE & 5G NSA Traffic Extraction & Correlation. • 5G Correlation, GTP Correlation, and Stateful Flow Sampling. • GTP-C/U Correlation for 4G-EPC & 5G NSA.. • Metadata Extraction for S1-U, S11, N3, N4, N11. • N4 and N3 Correlation for 5G-SA. • N4 or N11 and N3 Correlation for 5G-SA. • N4 SBI Metadata Extraction for Ericsson 5GC vTap. • Subscriber-Aware Load Balancing. • Advanced Filtering, Forwarding, Load Balancing, and Header Stripping. • KPI Calculation • IP session management. • Upto 3M Subscribers with 45M sessions **New Features** • Intelligent Packet Deduplication • Next Generation Application Identification with Advanced DPI • 1000+ Applications with 45M session
Management Features	• Management Functions: CLI, SNMP, API, NTP, GUI • Metadata export via Kafka • Redundancy via HA **New Features** • Real time packet capture support

Use Cases

Aviz Service Nodes for Telco
Mobile Subscriber Quality of Experience Tracking

4G,5G, 5G-NSA

Subscriber Visibility

GTP-C/U Correlation

kafka

MetaData Store

X86 + DPDK

Network Monitoring

Application Performance

Security Monitoring

Aviz Service Nodes for DC/Enterprise
Application Identification and Performance Insights

Any Network

Data Center/ Monitoring Fabric

Packet Deduplication

Packet Capture and Tunneling

kafka

MetaData Store

X86 + DPDK

Network Monitoring

Application Performance

Security Monitoring

Conclusion

Aviz Service Nodes provides a transformative approach to handling large-scale network traffic with greater intelligence and efficiency. By integrating real-time filtering, deduplication, deep packet inspection, and seamless metadata distribution via Kafka, organizations will get business relevant performance insights. Whether for enterprise or telco applications, Aviz Service Nodes empowers businesses with next-gen visibility, security, and performance optimization

See Aviz Service Nodes in action and discover how it can transform your network intelligence.

Book a Demo Today