5G PlugFest Report

Aviz Service Nodes

Aviz Service Nodes enhance network application efficiency and seamlessly integrate with packet broker networks. These nodes operate on general-purpose hardware, offering significant cost savings and optimal performance while reducing dependency on vendor-specific hardware. This flexibility helps avoid cost increases associated with network speed upgrades. Additionally, Aviz Service Nodes provide essential metadata insights for 4G-LTE, 5G-NSA, and 5G-SA networks. They excel in correlation analysis through interface protocols such as S11 (GTP-C), S1-U (GTP-U) for LTE/5G-NSA, and N4 (PFCP), N3 (GTP-U), and N11 (SBI-HTTP2) for comprehensive network analytics.

- Open for Integration
- Improved price and performance ratio
- Data Driven and AI-Ready
- 50% TCO Savings

Spirent Landslide

Landslide is a versatile platform designed to test and emulate 5G and O-RAN mobile networks on both traditional and cloud-native infrastructures. It simulates real-world traffic from millions of mobile subscribers to extensively test the 5G core in standalone and non-standalone configurations, with virtualized test functions deployable directly on cloud infrastructure. This platform supports an evolutionary strategy from 4G to fully-native 5G, ensuring service providers can develop and assess key performance indicators for effective 5G rollouts. Landslide boasts advanced 5G core testing capabilities, supporting the latest 3GPP releases and offering extensive historical coverage. It has significantly reduced time to revenue by 60%, cut testing costs by 80%, and minimized live network issues by 95%, making it a leading choice in mobile network testing. Aviz Networks has successfully used Landslide to emulate a 5G core network, generating substantial traffic to validate the performance and accuracy of its service models.

Plugfest Topology

Test Scenarios

5G SA/NSA

Mobile Handover

Application Visibility
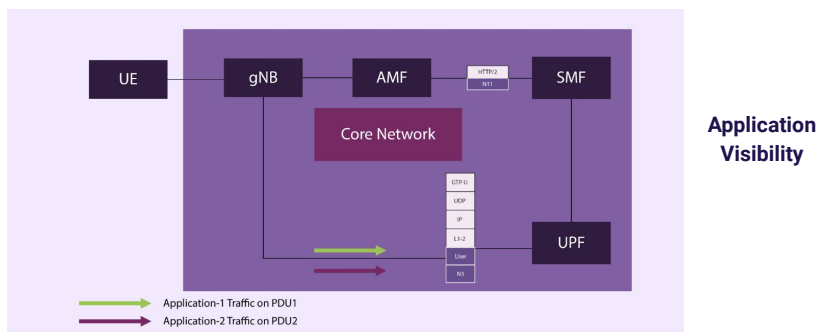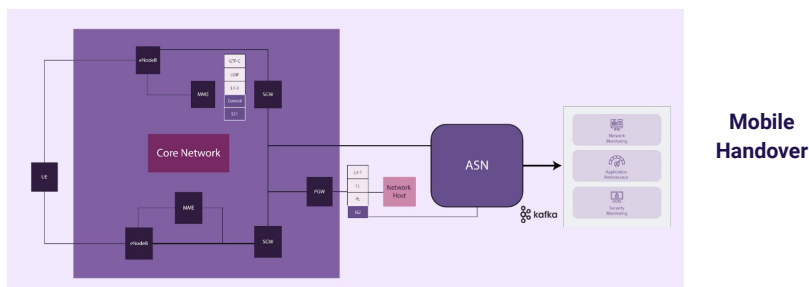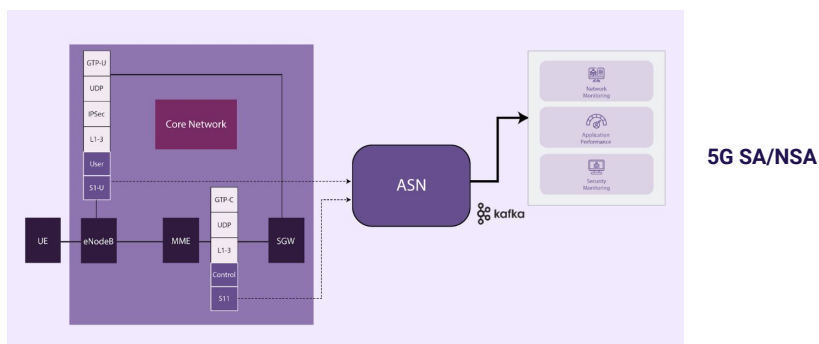
Test Coverage

Capabilities	
01	Correlation and Metadata extraction for 5G-SA.
02	Correlation and Metadata extraction for 5G-NSA.
03	Mobile Handover: 5G Control and User plane handling on ASN when UE attached gNodeB.
04	Mobile Handover: 5G Control and User plane handling on ASN when UE attached eNodeB.
05	Application Visibility: Deep packet inspection for identifying application traffic based on Destination IP, Port, SNI Identification, Multiple bearers and metadata extraction

| Performance	
01	Validate 1 million subscriber, verify the data extraction and correlation is proper and kafka upload from a 5G Network (SA, NSA)
02	Validate ASN capacity on correlating the user packet 100Gbps with control sessions. Total bytes/total packet processed per core without drop
03	Validate Maximum number of application traffics possible per subscriber with maximum payload on each
04	Validate ASN behavior while the user core is hitting iMIX traffic from the core network. Ensure memory and CPU is stable across
05	Validate ASN for multiple streams of traffic with different packet size on each stream
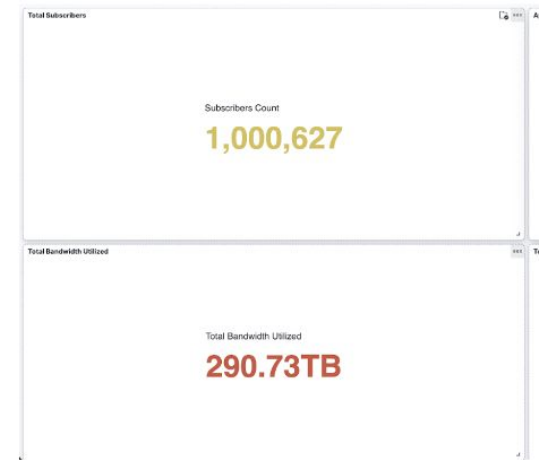
Sample Results

Top Application Identified by ASN
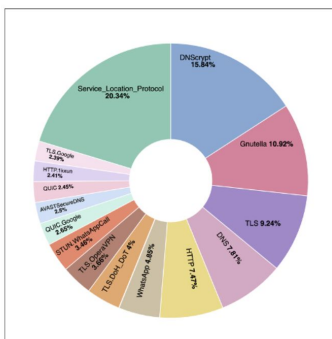
Top Devices by OS
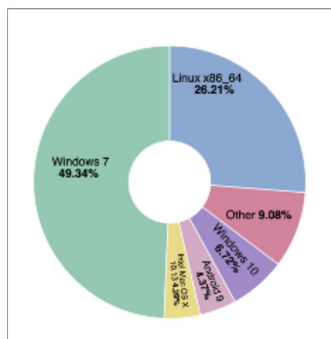
Packet Size	Drop %
< 128	< 2
256	0
512	0
1024	0
1512	0
IMIX Landslide (64 to 1512)	0