Value-Added Functions

- Time Stamping

- Packet Slicing

- Header Stripping

- Header Insertion

- Deduplication

- NetFlow Export

- Black/White Lists (Security)

- Flow Mapping

- RegEx Matching

- Packet Masking

- GTP Correlation

Key Product Highlights

- Small form factor (1U height). 2 platforms fit side-by-side in standard 19-inch rack

- 4 x 100G QSFP28 interfaces

- Supports pipelined multi-stage table based operations at 2 x100G

- Multiple ATLAS appliances may be cabled together for service chaining

ATLAS-2000 Service Node (ASN)
200G Advanced Flow and Packet Handling

The Accolade Technology ATLAS-2000 Service Node or ASN performs advanced flow and packet handling functions at 200Gbps. The ASN is designed for value-added functions that include deduplication, header stripping and packet slicing. It can be deployed in 2 different configurations: 1) In augmentation mode (Figure 1) it serves as an adjunct to a Packet Broker with traffic coming in from a Packet Broker and U-turned on the same port once selected functions are performed. In this mode the ASN centralizes advanced packet processing, especially with Packet Brokers based on commodity Ethernet Switches resulting in significant
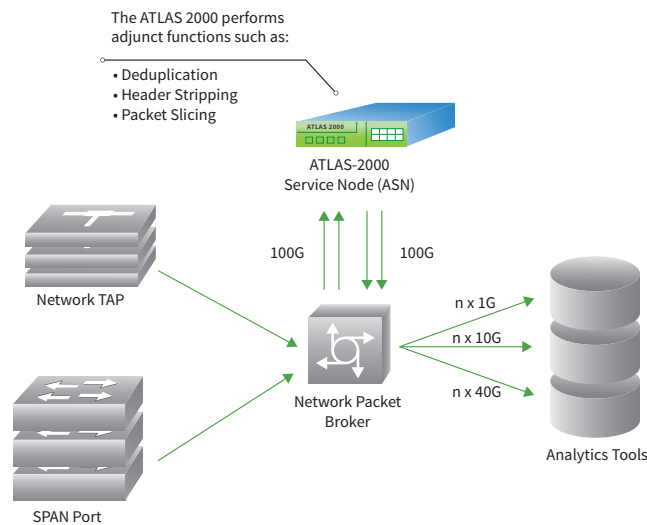

Figure 1: ATLAS-2000 Service Node (ASN) Augmentation Configuration

cost savings. In addition the ASN architecture provides increased flexibility as multiple packet processing functions can run in one ASN and new functions can be seamlessly added as required. 2) With Inline mode (Figure 2) the ASN sits in the traffic path and performs packet processing functions as traffic is flowing through the network. For example, in this configuration IP traffic can be filtered or scrubbed on-the-fly based on black or white lists thereby preventing malicious traffic from entering an enterprise environment.
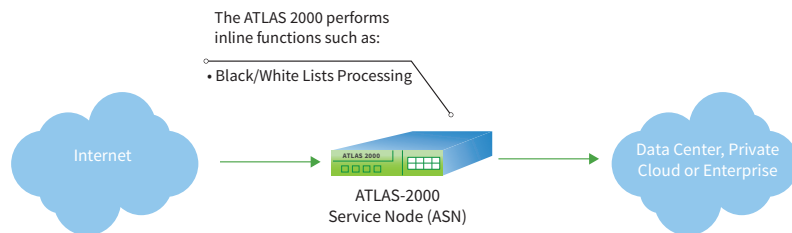

Figure 2: ATLAS-2000 Service Node (ASN) Inline Configuration

Value-Added Functions

The table below details all of the value-added functions supported by the ASN.

VALUE-ADDED FUNCTION	DESCRIPTION
Timestamping	Apply a 4 nanosecond resolution timestamp to each processed packet. Disciplined by NTP or 1 PPS input.
Deduplication	Removal of duplicate packets with a programmable deduplicaton window ranging from 1 millisecond to 250 milliseconds (mS).
Packet Slicing	Slice a packet by a programmable number of bytes offset from beginning of Ethernet Frame or anchored to L2, L3 or L4 packet headers.
Header Stripping	Strip protocol headers (e.g., VXLAN, MPLS) and extract IP packet payloads for the benefit of analytics tools that cannot process them.
Header Insertion	Insert protocol headers (e.g., VLAN) for the benefit of directing a Flow via a Packet Broker to a specific analytics tool.
NetFlow Export	Convert metadata and flow records into standard Netflow formats such as NetFlow v5, v9 and IPFIX.
Black/White Lists	Block (blacklists) or allow (whitelists) data traffic based on a large table of source/destination IP addresses.
Flow Mapping	A host application, based on the results of DPI, can direct traffic flows (by adding VLAN tags) to specific analytics tools.
RegEx Matching	Inspect packets for ASCII patterns/rules using the regex methodology and direct traffic flows (by VLAN tags) to specific analytics tools.
Packet Masking	Overwrite personally identifiable information (PII) such as credit card numbers, passwords, Social Security Numbers, etc.
GTP Correlation	Monitor traffic in a GTP tunnel while matching and correlating all identified subscriber control and data sessions.

Specifications

Hardware

- Interface support: 4 x QSFP28
- 10G LAN Port (SFP+)
- Scalable Type 6 COM Express Module (i3 to i7)
- Front-to-back cooling (3 smart fans)
- M2-SSD Storage (1 Terabyte)

Power

- Max Power Consumption: 150 watts
- AC option: 100-240VAC - 47/63Hz - 2.5A
- DC option: 48VDC@2.8A

Dimensions

- 1.75 (H) x 12.28 (W) x 14 (D) inches
- 4.45 (H) x 20.96 (W) x 35.56 (D) centimeters

Environmental

- Operating Temperature: 0° to 50°C (32° to 122°F)
- Operating Humidity: 0 to 95%, non-condensing

Product Safety

- UL60950-1 (USA/Canada)
- EN60950-1 (EU)

Compliance

- FCC 47 CFR Part 15 Class A (USA)
- EN55022:2006/A1:2007 Class A ITE (EU)
- EN61000-3-2, EN61000-3 (EU)
- VCCI Class A ITE (Japan)
- AS/NZS 3548:1995/CISPR22 Class A ITE (Australia)
- EN55024 (EU)

RoHS Compliant   REACH COMPLIANT

ID:190508