

SUMMARY

ntop certifies ATLAS-1000 platform for nProbe flow exporter software.

KEY CHALLENGES

- Guarantee 100% lossless packet capture across all ports at 10G and 40G speeds
- Require hardware-based packet processing features to boost nProbe performance
- Require cost effective, fully integrated hardware platform with full service support

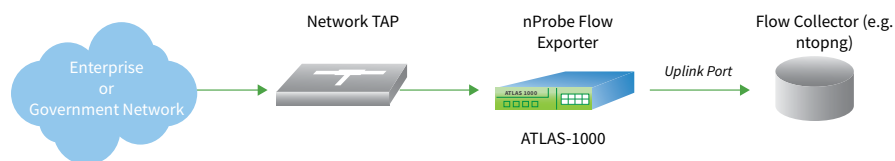
WHY ACCOLADE?

- Worked closely with ntop to rapidly certify nProbe on ATLAS-1000 hardware
- Provide fully integrated hardware platform that allows seamless access to all Accolade packet processing capabilities
- Flexibility to modify features as needed

ANIC FEATURES USED

- Flow Classification
- PF_RING
- 100% packet capture
- Packet Filtering
- Timestamping

ntop is an established and innovative network monitoring software company. The firm offers a unique, hybrid open-source/commercial business model that fits the needs of nonprofit institutions such as high schools and universities as well as large commercial enterprise and service provider customers. ntop started as an open-source project in 1998 and soon blossomed into a profitable enterprise, offering technologies for traffic recording and replay, deep packet inspection, netflow, traffic analysis, packet capture and more. ntop has certified its nProbe flow exporter software on Accolade's ATLAS-1000 platform. This unique combination of software and hardware delivers unprecedented levels of performance and scalability to meet the requirements of the most demanding enterprise and service provider customers.

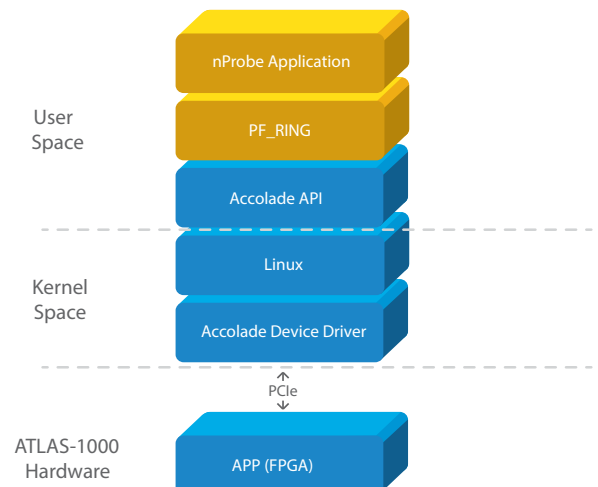
**TECHNICAL CHALLENGE**

Traditionally ntop did not have to pay much attention to the underlying hardware that supports its network monitoring software. In fact, one of the benefits of ntop software is that it can run on commodity hardware. This philosophy works well for small-scale deployments with moderate levels of traffic. However once 10G or 40G speeds are required, the underlying hardware becomes critical in order to sustain desired levels of performance and scale. In order to achieve these performance levels, ntop turned to the Accolade ATLAS-1000 platform that offers far more capabilities than any standard commodity hardware. ATLAS-1000 provides many advantages to ntop such as flexible network interfaces (including integrated optical TAP) and an onboard FPGA that houses Accolade developed packet processing features. nProbe software takes advantage of many Accolade features including flow classification (to aid in deep packet inspection or DPI) which provides hardware-based flow processing that directly improves the performance and scalability of the flow exporter solution.

ntop and Accolade Deliver Innovative Flow Exporter Solution

THE SOLUTION

Generating flow records is an important monitoring function in computer networks in order to provide data to support network and security monitoring, network planning, traffic analysis and IP accounting. NetFlow (IETF version known as IPFIX) was originally developed by Cisco and is the de-facto standard for flow records. Because of Cisco's involvement, flow record generation is most often associated with routers and switches. However, due to lack of scalability, heterogeneity, location and other reasons sometimes a dedicated external flow exporter or probe is a better option. nProbe software provides a robust and flexible solution for flow record generation (e.g. Netflow v5/v9/IPFIX) that can be deployed on commodity hardware for small scale deployments or the ATLAS-1000 for 10/40G enterprise and service provider deployments. nProbe has been integrated, tested and certified on ATLAS-1000. The graphic shows how the nProbe software is layered on to the Accolade platform. nProbe takes advantage of the ntop developed PF_RING technology which has been updated to support all Accolade APIs and is offered free of charge to all Accolade customers. PF-RING also enables other open source applications such as Wireshark or Snort to run natively on ATLAS-1000. Via Accolade APIs, nProbe is able to exploit the power of the underlying hardware platform including the extensive packet processing capabilities of the onboard FPGA. For example, nProbe utilizes the Accolade developed, hardware-based, flow classification capability to track and gather statistical information such as byte/packet count for every flow. This greatly streamlines the process of flow record generation and provides the performance and scalability required for enterprise and service provider deployments.



NTOP PROFILE

ntop has been in business for over 10 years and is a profitable, engineering-driven company with a diverse set of customers. The company has traditionally focused on smaller companies and nonprofit entities such as educational institutions but has expanded to large enterprise as well as telecom operators. Major networking companies have also licensed ntop software to embed in their own products. ntop prides itself on developing high-quality networking software that is offered at minimal cost for nonprofit or research purposes and at reasonable prices to commercial customers with full service and support. www.ntop.org

ACCOLADE PROFILE

Accolade Technology provides the most technologically advanced, lossless packet capture and acceleration adapters available in the market. Accolade's 1-100GE ANIC FPGA-based adapters help accelerate network/cyber security and monitoring applications developed by the world's leading networking companies. ANIC adapters are fully PCIe compliant and seamlessly integrate into standard servers offered by companies such as Cisco, Dell, HP, Super Micro and others. Accolade's OEM customers offer products for network security and monitoring, flow classification, deep packet inspection, network test and measurement, video stream monitoring, high frequency trading (HFT), and more.

ID:170131