

## CASE STUDY

# Company Revitalizes Product Line With Flow Shunting



### SUMMARY

Mid-size company migrates to ANIC-40Ku adapter to decrease cost and implement flow shunting

### KEY CHALLENGES

- Reduce product cost for network traffic recording product line
- Implement compelling new features to help revitalize traffic recording product line

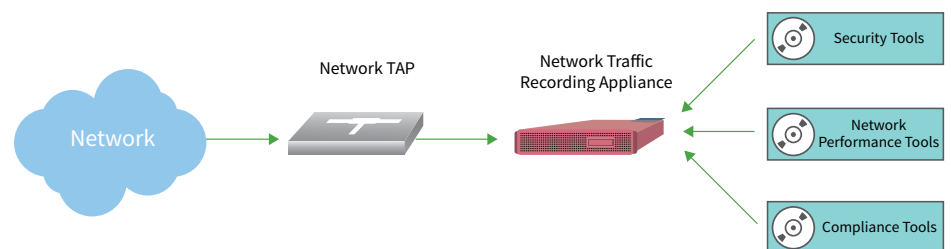
### WHY ACCOLADE?

- Accolade product had lower cost and compelling new capability: flow shunting
- Accolade engineering provided great support to help implement flow shunting feature across entire network traffic recording product line.

### ANIC FEATURES USED

- Flow Shunting
- 100% Packet Capture
- Packet Filtering
- Timestamping

A mid-sized company had been offering network traffic recording appliances for years; but the product line was lost in the noise. Network traffic recording is a very crowded, but crucial, market with dozens of vendors offering what appear to be very similar products. Traffic recorders are used to monitor and capture packets as they traverse an enterprise, government or telco network. Traffic can be captured for many different purposes including forensic analysis (security), troubleshooting (network performance monitoring) and to meet government or industry regulations (compliance). Captured traffic is stored on disk (typically 10s of terabytes or more) and the data is accessed by various software tools for analysis, reporting and playback.



### THE PROBLEM

During a strategic product review, senior management focused keen attention on products in the company portfolio that were not performing well; with an eye to either discontinuing the product(s) or making some fundamental change. Everyone agreed that the traffic recorder product line was languishing, but initially there wasn't a clear consensus on the precise reason. After some discussion, two predominate reasons emerged: 1) cost and 2) lack of unique feature(s). One driver of cost was the FPGA-based adapter that was installed in each appliance. The engineering team had qualified this product over 3 years ago and were satisfied with it at the time, but from the discussions it was clear that use of this adapter had to be revisited. After discussions with Accolade Technology, the company decided to migrate from a competing vendors' FPGA-based adapter to the ANIC-40Ku. This upgrade provided two key benefits that were in line with the strategic direction that senior management wished to pursue. The new Accolade adapter was 20% less expensive and more importantly offered a novel new capability called "[flow shunting](#)" which would be the basis for some new and unique features.

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## THE SOLUTION

By migrating from another vendor's 4-port, 10G adapter to the Accolade ANIC-40Ku, a defined goal of cost reduction was met immediately. The 20% cost reduction dropped straight to the bottom line, and the company's network traffic recorder product line was now more cost competitive. However, this benefit paled in comparison to the advantages offered by the [flow shunting](#) feature, which was only available on the Accolade product. Simply put, flow shunting allowed the company's traffic recording software to programmatically turn packet transmission on or off—for a given flow (based on 5-tuple). Adopting this new capability offered at least three new advantages, which resulted in both further cost reduction and unique features that no competitor had: 1) Because entire classes of traffic (e.g. video in general or specific types of video such as Netflix) could be programmatically targeted and not written to disk, the engineering team concluded that available disk space for each appliance could be reduced by 25%, with no loss in efficacy. The result was an additional cost savings: 2) Similar to the first advantage, the available CPU in each appliance didn't have to be upgraded (or in some cases could be downgraded) because the flow shunting feature dropped some network traffic before it ever reached the application for processing; and finally 3) The company could now offer a compelling new feature. By combining deep packet inspection (DPI) software with flow shunting, the company's traffic recorder gave customers the ability to reliably and efficiently filter in or out specific applications. Previously, filtering decisions were made based on network level parameters such as MAC/IP address, port number, protocol, SIP URI, MPLS label or the like. These parameters could still be used, but now also in combination with specific applications. This feature alone resulted in increased product sales.

## 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.

### TRAFFIC RECORDING APPLICATION

