Case Study: Global Fortune 500 Company Leverages cPacket's cVu Products to Improve Network Performance

Key Issues

- Previous monitoring solutions were limited to 5G and 10G packet inspection
- Monitoring unfiltered traffic causes security issues
- Needed to capture traffic at speeds up to 100G

Solutions

- cPacket's cVu 3240NG
- cPacket's cVu 2440NG

Results

- Reduced troubleshooting by 80%
- Substantial cost savings
- Improved network efficiency and visibility

"We tested a number of solutions from other vendors but none of them offered us complete network visibility without compromising on performance until we evaluated cPacket."

-Network Security Engineer

Overview

A leading multinational technology company with over $100 billion in revenue and millions of consumers worldwide, the company offers a wide range of consumer products and services, hardware, cloud computing, and gaming.

With a global network, efficient performance monitoring and troubleshooting was critical for this diversified company. The network department had implemented monitoring solutions from other vendors, but these tools were limited to 5G and 10G packet inspection which resulted in taking packets from a SPAN port or a single link from a TAP port. With multiple networks running at 100G speeds, the company needed to find a cost-effective and intelligent way to monitor multiple links at full line rate for complete packet inspection on every port.

Challenges

With the goal in mind of meeting the performance demands of their network, the company upgraded its infrastructure to meet reliability, accuracy and security requirements. Network links can often pose major challenges such as monitoring critical traffic thoroughly in a high-speed, high-volume environment and avoiding the risk of overburdening other tools. The company tried to overcome these challenges by distributing the traffic load to multiple tools but quickly discovered that this was not a viable solution. In addition, the company was concerned that the increase in network traffic at higher speeds would overwhelm and limit the effectiveness of their existing monitoring tools. This would result in the inability to analyze packet data coming into the network which poses a major security threat.

Given the extraordinary volume of network traffic, it was apparent that the company needed to upgrade to a solution that would selectively filter incoming network traffic and deliver this traffic with minimal latency to increase efficiency and maintain secure operations. The company prioritized aggregation, filtering and the ability to capture traffic at speeds up to 100G to ensure complete visibility across the entire network. To facilitate this upgrade, the company chose cPacket and its purpose-built cVu 3240NG and cVu 2440NG to provide them with real-time, end-to-end visibility to better manage, analyze and secure their network.

"We wanted to TAP everything for port density. Before we upgraded the network, we had an aggregation tool in place but that only supported 5G or 10G and we needed a solution that would support 100G."

– Network Security Engineer

Resolution

The company explored and tested other options and tried various monitoring solutions but had seen a 40% performance loss. “We needed a tool that could aggregate, filter packets, and replicate customized traffic streams to our downstream tools,” stated a Network Security Engineer. The company discovered cPacket’s cVu 3240NG and cVu 2440NG and tested the products in their datacenter, which proved to be an unqualified success. Within a short period of testing, the company’s IT team noticed a substantial improvement in network uptime as well as a dramatic reduction in microbursts. “cPacket’s cVu devices allows us to filter out unnecessary traffic, which increases our systems’ efficiency,” a Network Security Engineer said. “This is another capability that has extended the value of cPacket beyond performance management to offer major benefits across our entire business ecosystem.”

cPacket’s versatile cVu 3240NG and cVu 2440NG offer 32 and 24 ports in a 2U form factor. These devices intelligently aggregate traffic from multiple links at speeds of 40G for line rate performance analytics and complete packet inspection on every port to support mission critical monitoring. cPacket’s cVu products reduce mean time to resolution from common network problems such as oversubscription and microbursts allowing for optimized tool efficiency. With its open monitoring architecture, cPacket’s cVu devices can forward detailed forensic data in real-time to other monitoring and security tools for additional analysis and troubleshooting.

After initial testing, the company decided to deploy cPacket’s cVu NG products throughout their network. Additional cVu NG products and other cPacket solutions are expected to be deployed in the near future.

Benefits

Before deploying cPacket’s cVu devices, the IT team was missing critical outages due to packet loss and was not receiving the accurate data to troubleshoot network problems. In a large and complex datacenter with mission critical business applications, any outage could cost the company millions of dollars in lost revenue. With cPacket, troubleshooting time was reduced by 80% and saved the organization the cost of purchasing more monitoring tools to aggregate and filter incoming traffic. “Because of cPacket, we can centralize monitoring capabilities and specifically choose what traffic we want to feed to the right analysis tools,” explains the Network Security Engineer. “We can now analyze nearly all of our traffic using cPacket’s cVu devices and have greater confidence in the reliability of this data which enables us to proactively solve problems before they occur.”

cPacket’s cVu 3240NG and cVu 2440NG has enabled this company to do more with less, reducing the cost and complexity of its network monitoring infrastructure. Simplified management has allowed the IT team to focus their effort on managing the network and less on managing the tools, which translates into improved network uptime, performance and greater ROI.

About cPacket Networks

cPacket Networks offers next-generation performance monitoring, packet brokering and security forensics solutions for service providers and other large network operators. By bringing network intelligence closer to the wire, cPacket enables network operators to proactively identify problems before they negatively impact end-users. cPacket delivers real-time performance analytics at line-rate speeds up to 40Gbps and 100Gbps and provides the broadest coverage available in the industry. By improving operational efficiency and proactively identifying problems, cPacket customers are able achieve substantial OPEX and CAPEX savings. Based in Silicon Valley, CA, cPacket solutions are relied on by operators of the world’s largest service provider and enterprise networks.

For more information about cPacket products visit **www.cpacket.com**.