



CASE STUDY

Enhancing Pharmaceutical Manufacturing with cPacket cVu® Packet Brokering Solutions

The Challenge: Building Resilient, Secure, and Compliant Factory Networks

A global pharmaceutical leader, known for its innovative treatments and lifesaving drugs, faced a pivotal moment. Amid surging global demand for its breakthrough therapies, the company embarked on an ambitious expansion – building several new manufacturing facilities across the United States. These facilities aimed to fortify the company's supply chain and reduce dependencies on overseas production.

However, this growth introduces new networking challenges. The company's operational networks need to meet rigorous standards, including:

- **Regulatory Compliance:** Strict adherence to FDA and international data handling guidelines.
- **Data Security:** Protection of intellectual property and patient-sensitive information.
- **Zero Downtime:** Continuous operations to maintain uninterrupted drug production.

Addressing these requirements is even more challenging in heterogeneous IT environments with limited staff – making centralized visibility, automation, and support paramount.

Vendor Limitations Sparked the Search for a New Solution

As the pharmaceutical company expanded, its existing packet broker solution began falling short. The IT organization experienced frustration with its current vendor, due to:

- **Poor Responsiveness:** Feature requests went unaddressed, and support failed to meet the industry-mandated 1-hour incident response windows.
- **Increased Costs:** A recent overhaul of the vendor's product portfolio and licensing model made contract renewal cost prohibitive.
- **Compliance Risk:** Lack of prompt support and limited functionality jeopardized their ability to meet compliance requirements.

Recognizing the need for a better solution, the company began evaluating alternative packet broker vendors capable of supporting next-generation networking needs.

A Critical Technical Roadblock: TrustSec Support

The tipping point came when the IT staff noticed performance issues related to its deployment of Cisco TrustSec, which enhances security and compliance through tag-based access control. However, TrustSec tags create abnormally sized packets that the existing packet broker could not filter – resulting in dropped packets and visibility gaps. After months of support requests, the vendor suggested a complex work-around that would be cumbersome to deploy. This technical deficiency posed a risk to both compliance and operational efficiency.



The Solution: cPacket's cVu Advanced Packet Broker

In a competitive evaluation, only cPacket's Advanced Packet Broker met all the key technical requirements, including:

- **TrustSec Support:** Leveraging its programmable FPGA-based architecture, cPacket swiftly delivered a cVu feature to strip SGTs and filter TrustSec-tagged packets, preventing oversubscription and enabling consistent packet delivery.
- **Embedded Analytics:** Real-time network analysis is available directly from the packet broker, providing immediate insights without the need for external tools.
- **Performance and Capacity:** The selected cVu models offered sufficient port density and throughput to meet factory requirements.
- **Compliance Documentation:** The system automatically generates detailed logs and audit reports essential for semi-annual regulatory reviews.
- **Scalable Intelligence:** On-board FPGAs support smart processing at every port, ensuring adaptability as network traffic grows.
- **User-Friendly Interface:** A simple, GUI-based experience made deployment and ongoing operations intuitive—even for non-specialized IT staff.

"cPacket helped us realize that the right packet broker can do more than feed our security tools. We can actually use packet data and real-time snapshots to improve our operational troubleshooting – leading to faster response times and greater efficiency."

Business Value Realized

Beyond the technical capabilities, the pharmaceutical company gained significant strategic value from its partnership with cPacket:

- **Customer-Centric Support:** cPacket listened to the customer and responded to the TrustSec challenge within days, showing unmatched responsiveness. This proactive support continued throughout the deployment and operation of the solution.
- **Transparent Licensing:** cPacket offers a comprehensive feature set and simple, flat licensing model that covers the life of the product.
- **Innovation and Agility:** cPacket's ability to rewrite and optimize code across product generations gave the customer confidence in the long-term viability and scalability of the solution.

Conclusion

The deployment of cPacket's cVu Advanced Packet Broker is transforming the network observability approach in its manufacturing facilities. By addressing compliance, performance, and security challenges through a unified, high-performance solution, the company can improve the reliability and efficiency of its operations – setting a new standard for pharmaceutical IT infrastructure.

About cPacket



cPacket delivers AI-enhanced, intelligent observability for the world's most demanding networks. As a pioneer in high-performance network analytics, cPacket provides real-time visibility and deep insights that empower IT and security teams to detect, diagnose, and resolve issues before they impact operations. Trusted in environments where performance is critical—from AI/ML clusters and financial trading platforms to hybrid and multi-cloud data centers—cPacket's integrated hardware and software solutions enable complete network transparency. Its portfolio includes AI-driven network insights, packet-based analytics, encrypted traffic visibility, scalable packet capture, and high-performance packet brokering—all managed through a unified, intuitive platform. By turning complex network data into actionable intelligence, cPacket helps organizations ensure reliability, reduce risk, and maximize digital performance at scale. Learn more at cpacket.com.