

Achieving Zero Downtime: Network Observability Demands Capturing Every Packet at Line Speed

Today's complex hybrid infrastructure demands complete network observability enabled by packet capture and analytics to support zero downtime enterprises.

Explore the innovative capabilities of cPacket's industry-leading packet capture and brokering technology, which tackles the formidable challenges of capturing and analyzing packets in real-time at line speed of 100 Gbps and more, under the heaviest network loads. cPacket's robust solutions excel in the crucial task of packet capture and analytics and seamlessly integrate sophisticated query and retrieval mechanisms with no packet loss. This unique combination of features positions cPacket as the preferred choice for discerning organizations prioritizing unwavering reliability and pinpoint accuracy in their network observability solutions.

Downtime is not an option for today's most demanding enterprises. Every quote and trade on a stock exchange, for example, needs to be delivered in real time—without exception. No dropped quotes. No dropped packets. Timing is everything.

Zero downtime is also the reality for healthcare providers, military and first responders, where lives depend on network availability and performance. Yet enterprises have complex IT infrastructures and heterogeneous environments with hybrid cloud and multi-cloud frameworks. Furthermore, they are often heavily regulated and a prize target for cyber adversaries.

Therefore, a network observability solution based on packet analytics to quickly root-cause problems and keep infrastructure running smoothly all the time, is a must.

Observability is essential to achieving zero downtime and fast performance required to achieve outcomes amid increasingly complex operational environments. To properly operate the network, administrators require constant oversight to what's happening on the network. And that requires analyzing packets in real time while capturing them for deeper analytics.

In a world where zero downtime, continuous change and constant risk are normal, reliable and accurate packet data is the foundation of any observability or security solution. Packet delivery, capture and analytics must operate at line speed anywhere, at any time, with millisecond resolution and real-time concurrent analytics.

The observability answer

For effective network management, capturing 100% of packets is a requirement. The packet you miss might contain essential information to remediate a network outage or slowdown.

That's where cPacket comes in. We provide best-in-class packet brokering for effective network management and third party verified 100% capture to disk at 100Gbps.

cPacket delivers the industry's only fully featured packet broker providing Smart Processing at line speed, with 100% packet accountability. Likewise, cPacket's industry leading packet capture features simultaneous capture, query and retrieval, for lossless packet capture at up to 100 Gbps under load. cPacket supports the fastest packet search and retrieval time, with complex, multi-variable queries to quickly pinpoint and retrieve desired packets.

This combination makes cPacket unique. Competitors can duplicate any of these capabilities individually, but cPacket is the only provider that can do them all at the same time—for example, capture at line speed while simultaneously performing advanced searches and retrievals, without dropping a single packet.

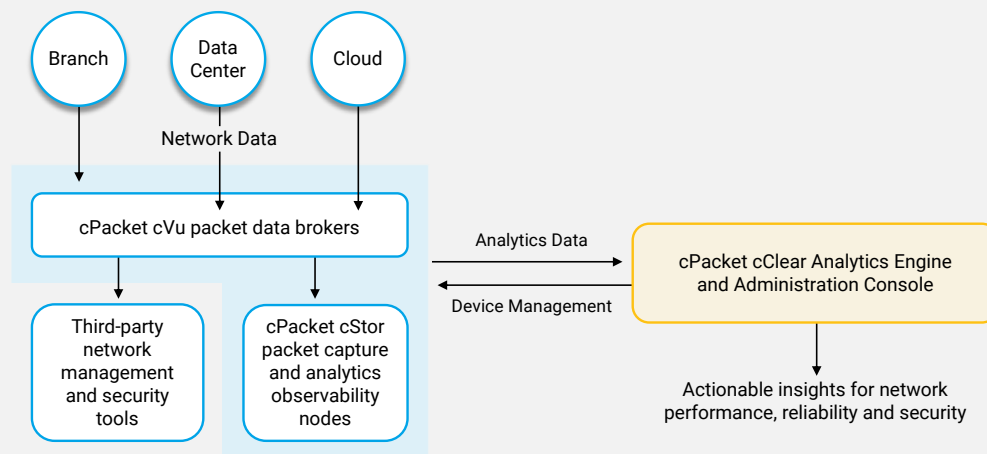
cPacket achieves these simultaneous capabilities and breakthrough performance by providing a Field Programmable Gate Array (FPGA) behind every port, working with custom indexing algorithms and software, along with extensible storage support, including self-encrypting drives.

cPacket cVu and cStor appliances seamlessly deliver, capture and store data from all environments—on-premises, virtualized, multi-cloud and hybrid cloud. And cPacket cClear provides single-pane-of-glass management and data visualization for all cPacket devices.

Our unique agentless solution simplifies deployment by eliminating the need to install software agents on servers, routers, firewalls and other data center components.

And cPacket is the only agentless solution for the cloud, with partnerships with the leading cloud providers.

cPacket Solutions: Better Together



Reliable, cost-effective network observability

cPacket provides industry leading solutions for network observability: cVu for packet delivery, cStor for capture and analytics, along with cClear, which provides a single pane of glass for managing all cPacket devices on the network and displaying analytics. Each component is better than the competition and they are great separately—but even better together.

cPacket is the only solution that reliably captures all packets under load while simultaneously providing the fastest analytics and retrieval times. That's important because in case of breach or network disruption, you can't afford to wait for packet retrieval, and you can't drop packets while retrieving. You need answers immediately.

cPacket products are great separately....

Processing every bit of every packet. cPacket cVu is the industry's only packet broker operating fully featured at up to 100 Gbps line speed on every port. It supports de-duplication, truncation header stripping and other advanced brokering to unlock the power of complementary tools and drive to insights, all with 100% packet accountability

Seamless sourcing from and in all environments. cPacket cVu's agentless solution supports frictionless analysis across teams, using packets sourced from and in on-premises, virtualized, multi-cloud and hybrid cloud environments.

Every port is a tool. The performance-engineered cVu packet broker offers a unique, distributed architecture with Application-Specific Integrated Circuits (ASICs) and FPGAs providing processing on every port. Our competitors don't have processing on every port—they have a centralized processor for the entire appliance, which slows their performance.

Up to 30% fewer tools. Because the cVu packet broker offloads packet processing, other network management tools operate more efficiently for cost savings.

Consolidated, intelligent alerting and reporting. cClear proactively ensure smooth operation of networks as they grow with advanced, smart alerts and reports, along with centralized visualization and management, retrieving packets from all environments to determine the cause of application glitches.

... and better together

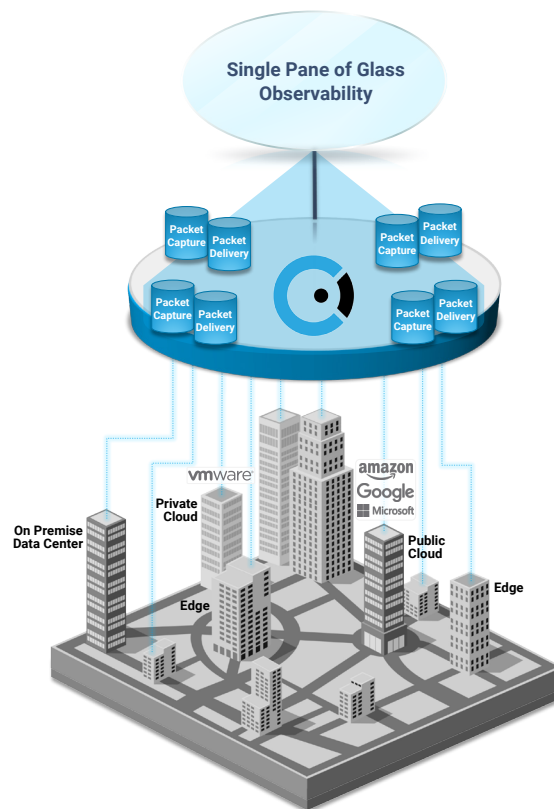
cPacket's products are great individually, but they work better together. cPacket cStor provides packet capture, designed to work with cVu for packet brokering. cPacket cClear provides single-pane-of-glass management for all cPacket products, such as provisioning and pushing out firmware updates, as well as visualization of packet data. All three products are available as physical appliances or as virtualized software that can run on-premises, in co-location facilities and the cloud.

The fastest troubleshooting available. cPacket solutions deliver real-time analytics of packet streams for immediate insights and queries such as live, in-packet string searches.

Quickly spot network health issues. Centralized visualization of packet analytics and brokering spanning all environments enable you to spot network trouble fast. cPacket's real-time analytics support dramatically reduced mean time to resolution (MTTR).

Special features for special requirements. cPacket's depth of experience allows us to build special features valuable for particular markets. For example, timestamping is necessary for traders, who need to know to the nanosecond when a trade is placed. Also, for traders, multicast analytics ensures all quotes go out simultaneously, so no individual trader gets an unfair advantage by getting information first. Millisecond micro bursting provides visibility into bursts of packets that jeopardize network performance.

Fine-tune packet routing support. cPacket solutions can route specific packets to the right network management tools. And our solutions can do the same with particular parts of packets. For example, if network content is encrypted, cVu can route headers only. This selectivity means cPacket solutions require less storage.



Market-leading total cost of ownership (TCO)

Apples-to-apples cost comparison of cPacket solutions with the competition is difficult because cPacket does far more than the competition. cPacket solutions offer best-in-class total cost of ownership per Rack Unit (RU) for packet capture. And cPacket's performance is better.

cPacket is the only solution with every feature fully enabled out of the box, without incremental licensing or additional hardware required. You don't get nickel-and-dimed with unpleasant surprises down the line when your needs change. Every feature is available to you for one licensing fee.

cPacket is a data center-friendly solution, which contributes to reduced TCO. cPacket provides the highest storage density in the market, requiring reduced rack space and fewer appliances and connections for management efficiency.

Single-pane-of-glass administration and reporting, provided by the cPacket cClear console, reduces management overhead. It's easy to manage all cPacket devices through the cClear console.

Learn more

Achieving zero downtime and fast performance in today's complex IT environments is paramount. cPacket's packet brokering technology offers a reliable solution to capture 100% of packets in real time, providing organizations with the observability they need to maintain 100% network availability and meet performance requirements. Find out more about how cPacket solutions can help you.



About cPacket Networks

cPacket Networks de-risks IT I&O through network-aware service and security assurance across hybrid and multi-cloud environments. Our AIOps-ready Intelligent Observability Platform provides single-pane-of-glass analytics and deep network visibility required for complex IT environments enabling Fortune 500 organizations around the world to keep their business running. cPacket solutions are fully reliable, tightly integrated, and consistently simple. Our cutting-edge technology enables network, application, and security teams to proactively identify issues before negatively impacting the business. The result: increased service agility, enhanced experience assurance, and faster transactional velocity. Learn more at cpacket.com.