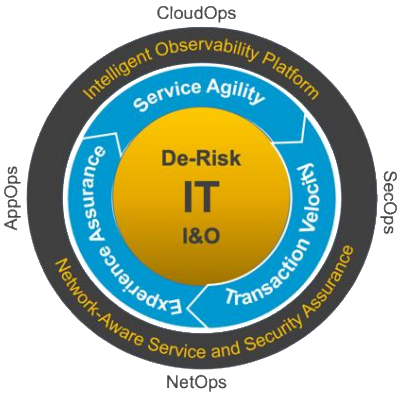
Solution Brief

cPacket® Cloud Observability for AWS

Enabling Deep Packet Inspection and Analytics into your Cloud Network Traffic



Migrating application workloads to the public cloud is accelerating, causing network and security architectures to change and evolve. New developments and services from cloud service providers and tool suppliers offer options and choices for observing networks and applications. As more network telemetry from the platform becomes increasing available, the focus turns to quality of data, insights, context, reduced time for diagnosis, and break-fix.

The requirements for AIOps and critical IT Operations has led the focus on agentless probes and tapping techniques to protect production applications to avoid resource contention in shared cloud environments. Utilizing the AWS Gateway Load Balancer (GWLB) and VPC Traffic Mirroring services enable the network visibility and packet forwarding to be less impactful to the workload and allows telemetry to be forwarded and replicated to network and security tools.

Hear from our customers:

"The cPacket solution helped us reduce cost and complexity during and post AWS cloud migration. It enabled us to port our workflows and have seamless visibility across the board. "

– Sr. Cloud Architect at a major Financial Software Company

WHAT WE OFFER

The cPacket cCloud™ Visibility Suite provides IT teams and the tools they use with a visibility service chain that consists of agentless self-hosted services including virtual packet brokering, flow generation, packet capture, and network analytics.

The cPacket cCloud observability solution consists of:

- cClear®-V – Centralized, single-pane of glass management and observability
- cStor®-V - Packet capture and replay up to 10Gbps for historic, stateful, and low-latency analysis
- cVu®-V – Virtual Packet Broker including replication, packet slicing, filtering, deduplication, and VPC Mirroring packet acquisition
- Supports GWLB for for scalable appliance management; Inter-VPC/Transit Gateway (TGW), and north-south Internet Gateway (IGW) monitoring
- Supports network ingest for partner device flows, meta-data, and analytics that are natively available in the cloud platform.

Why cPacket + AWS?

Network Analytics Based on Intelligent Observability for AWS Cloud Traffic

The cCloud Visibility Suite based on cPacket's Intelligent cPacket Observability Platform for AWS consists of an AIOps-ready full visibility stack including cClear-V series analytics, cVu-V series packet brokers, and cStor-V series packet capture virtual appliances.

How cPacket Solution Leverages AWS GWLB and VPC Traffic Mirroring

The AWS GWLB service load balances traffic across multiple cCloud cVu-V packet broker virtual appliances allowing transparent insertion, enhanced serviceability, and horizontal scaling. The GWLB service sends traffic to the cVu-V instances in the load-balanced group via encapsulated GENEVE tunnels.

Key Benefits

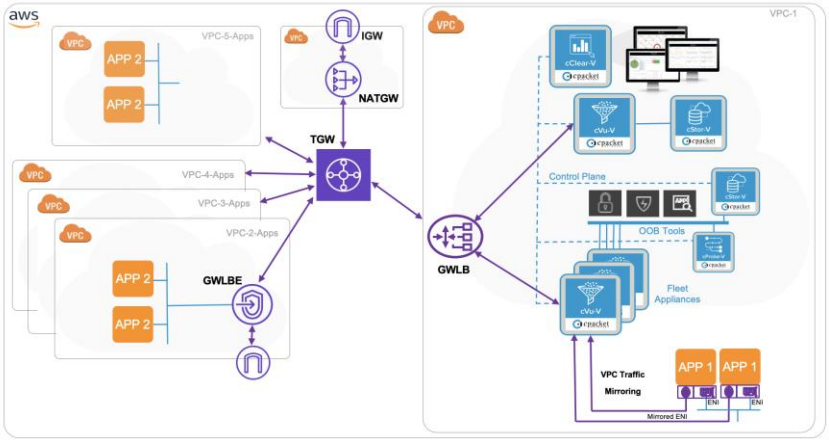
- **Business Profitability**
  Stay ahead of security and network performance challenges. Reduce downtime and enable the Security team to improve breach MTTD and MTTR.
- **Operational Efficiency**
  Minimal agentless monitoring components, centralized data processing, and network packet data delivery with analytics and unified fabric management in single-pane-of-glass reduce IT complexity, down-time, and operational costs
- **Intelligent Observability**
  cPacket and AWS offer a fully integrated agentless packet acquisition solution for predictive DPI analytics

AWS Gateway Load Balancer

This use-case includes ingress, egress, and inter-VPC East-West traffic monitoring from multiple VPCs. cPacket cVu-V sits as a scalable network packet broker virtual appliance behind the GWLB service in a fault tolerant load-balanced group, mirroring traffic to cStor-V packet capture and analysis virtual appliance which works with cPacket's cClear-V analytics and management solution. cVu-V instances can be added or removed as needed minimizing downtime.

AWS VPC Traffic Mirroring

VPC Traffic Mirroring replicates network traffic flowing to and from Amazon Elastic Compute Cloud (Amazon EC2) instances and replicates Elastic Network Interface (ENI) traffic sending the mirrored session to the cVu-V packet broker for packet forwarding services and load balancing to out-of-band tools for monitoring, security, and performance management.



Extending Amazon VPC Traffic Mirroring and GWLB Services

cPacket 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 provides the deep network visibility required for today's complex IT environments. The result: increased service agility, enhanced experience assurance, and faster transactional velocity.
Learn more at www.cpacket.com