



SOLUTION BRIEF

Cloud Observability Suite for Google Cloud

Complete Hybrid Cloud Visibility for GCP Environments



cPacket provides GCP customers with an end-to-end view of workload traffic, performance and security – grounded in packet-level granularity and scaled across hybrid and multi-cloud environments.

The balancing act between application performance, security compliance, and operational efficiency is difficult in complex hybrid environments. Maintaining all three – without rearchitecting your network – requires observability solutions that can:

- Scale across multi-cloud environments to eliminate blind spots;
- Meet security requirements for data monitoring and forensics;
- Integrate with existing security tools and workflows with minimal friction.

For organizations that need edge-to-cloud visibility rooted in packet-level evidence, the cPacket Cloud Observability Suite complements native GCP monitoring tools by exposing what metrics and logs can't see. By deploying cPacket solutions through Google Cloud's Network Security Integration (NSI), CloudOps teams can pinpoint root causes faster and reduce downtime, while Security teams maintain compliance across distributed networks.

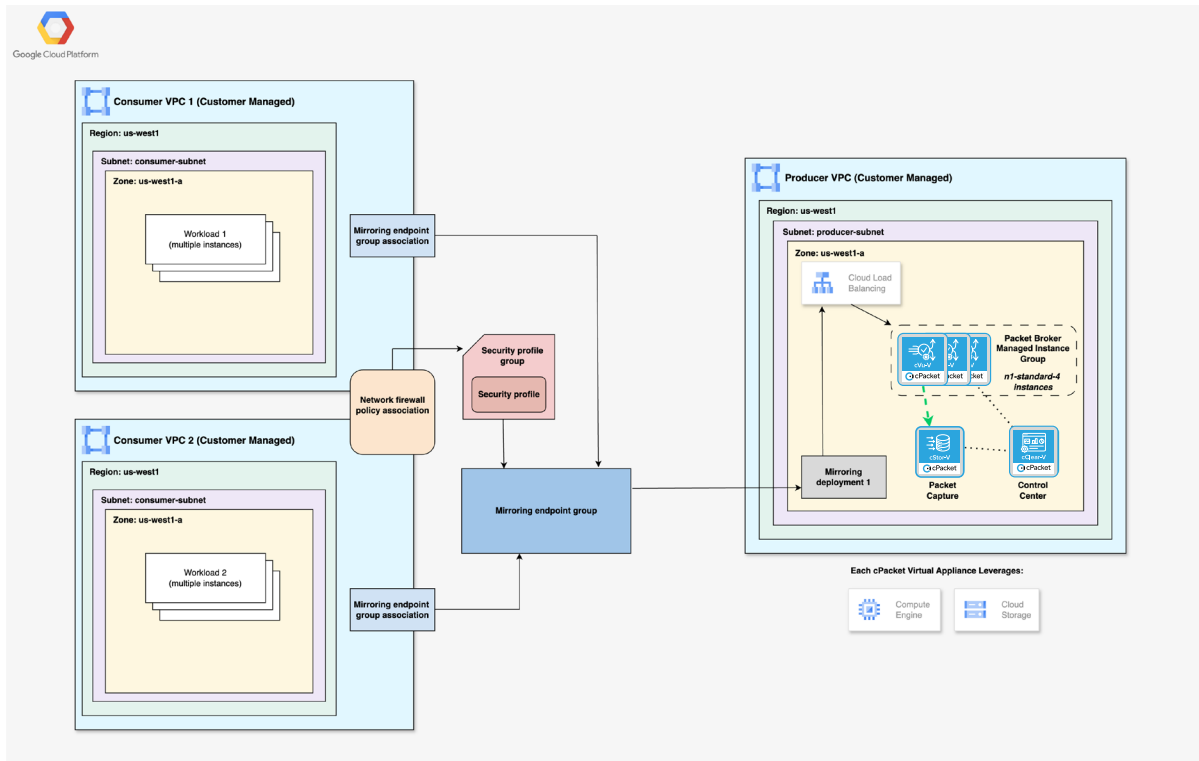
cPacket's Cloud Suite is part of its Unified Network Observability Platform, which combines high-speed packet delivery, capture, analytics, and AI insights to provide an end-to-end view of network health, performance, and security across hybrid and multi-cloud environments. Whether feeding into NDR tools or SIEM workflows, cPacket's high-fidelity packet data provides actionable intelligence that helps SecOps, NetOps, and CloudOps teams detect, diagnose, and prevent service disruptions and cyberattacks – ensuring reliability at scale.



Google Cloud

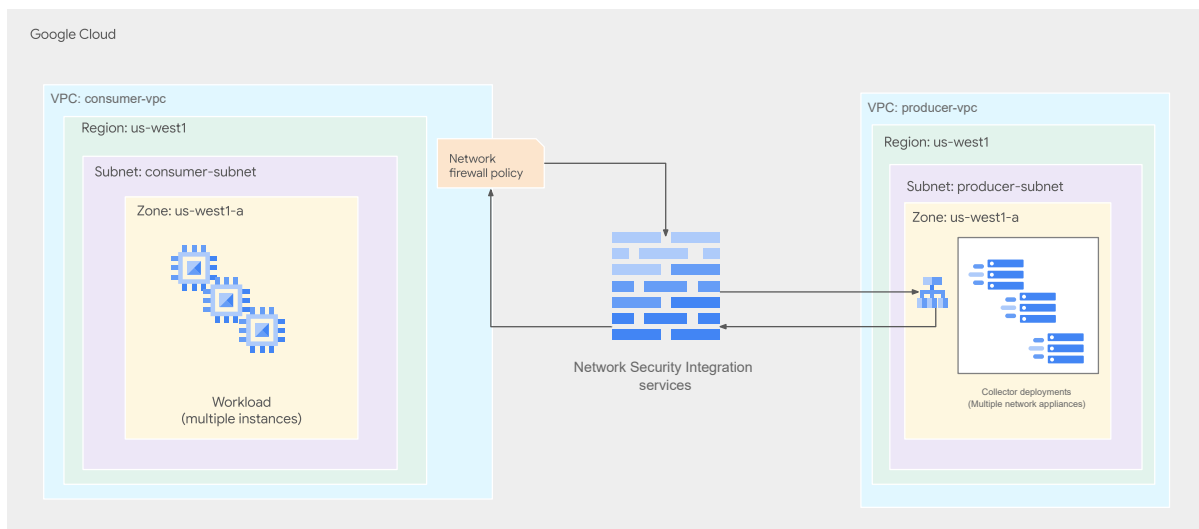
New Out-of-Band Mirroring Architecture

Leveraging the new design for Google Cloud Packet Mirroring, cPacket virtual appliances reside in a Producer VPC, where packets are forwarded to a Network Load Balancer fronting cPacket virtual appliances (Packet Broker and Packet Capture). Forwarding rules enable specified traffic to be mirrored to mirrored via Geneve encapsulation from a consumer network, where mirroring sources reside. This elegant design ensures that only the traffic which requires security monitoring is mirrored to the Producer VPC network for inspection and capture.



New In-Band Monitoring Solution

For companies who require additional security controls or are implementing zero-trust architectures, Network Security Integration's incorporation of in-band monitoring provides a seamless solution that can be integrated with security monitoring and network monitoring use cases. In this case, traffic ingressing or egressing a workload is intercepted and forwarded to a dedicated VPC or subnet, where traffic can be inspected and monitored for security and network inspection. In-band also offers support to be used in conjunction with the Cloud Next Generation Firewall (NGFW) and third-party firewalls to support granular security policies.



Interoperability with cPacket Cloud Suite

cPacket's **Cloud Observability Suite** has been fully validated for both in-band and out-of-band Network Security Integration services to enhance network and application security for GCP customers. The Cloud Suite includes agentless Packet Broker (cVu-V), Packet Capture (cStor-V), and Control Center (cClear-V) appliances that deliver on-demand mirroring/replication and inspection to support mission critical security and performance monitoring, compliance and audit readiness.

Network Security Integration and cPacket Packet Broker

cPacket's cVu-V extends out-of-band packet mirroring in GCP environments by replicating a single packet to up to 10 out-of-band tools, such as NDR, network monitoring, and packet inspection toolsets. All of this is accomplished with an agentless platform, where cVu-V Linux-based instances reside in a customer's GCP deployment for advanced filtering and packet replication capabilities. cVu-V perfectly complements these new out-of-band and in-band solutions delivered by Google Cloud's Network Security Integration.

Network Security Integration and cPacket Packet Capture

cPacket's cStor-V provides continuous or on-demand packet capture at speeds surpassing 100Gbps from GCP workloads. It can be paired with a cVu-V packet brokers for out-of-band packet replication or used on its own to decapsulate GENEVE packets received from Google Cloud Packet Mirroring. This enables a host of new capabilities for customers, including network performance monitoring (NPM), forensic investigation and troubleshooting, compliance, and audit use cases.

cStor-V runs Wireshark on-device for packet capture storage and analysis. In addition to capturing packets, cStor-V also offers a host of network analytics capabilities – including but not limited to protocol performance, latency characterization, measuring jitter, hop-by-hop analysis, exfiltration, DDoS detection and more. cStor-V can be utilized by both NetOps and SecOps teams that require deeper visibility into their GCP workloads for security inspection, network performance monitoring (NPM), and compliance use cases. cStor-V is used in many Fortune 500 networks to reduce mean time to resolution (MTTR), improve end-user experiences, and to unlock deeper observability capabilities into GCP and hybrid network deployments. All of this is provided using cPacket's an agentless platform.

Single User Interface for cPacket Analytics and VM Management

cPacket's Control Center (cClear-V) simplifies management of distributed GCP deployments, VMs, and data center monitoring points from a single user interface. cClear-V runs an onboard instance of Grafana to visualize network analytics and metrics and offers an Open API to query all cPacket virtual and physical appliances for packet capture retrieval and analytics from a single interface. This allows customers to aggregate, analyze, and surface network intelligence from GCP and hybrid datacenter deployments where cPacket appliances reside.

Find out more

For more information or a demonstration of the cPacket suite of network observability and security tools, please contact your local cPacket sales representative.



About cPacket

cPacket's Unified Observability Platform empowers organizations to deliver reliable, secure, and high-performing digital experiences. By uniting packet-level visibility with AI-driven insights, cPacket enables faster decisions, reduces risk, and improves operational resilience across hybrid and multi-cloud environments. Trusted by leaders in finance, healthcare, government, and technology. Visit www.cpacket.com to learn more.