



SOLUTION BRIEF

Cloud Observability Suite for Google Cloud

Complete Network Visibility for Cloud Environments



cPacket provides Google Cloud 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 a complex problem in distributed hybrid environments. Maintaining all three – without rearchitecting your network – requires observability solutions that can:

Google Cloud

- 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.

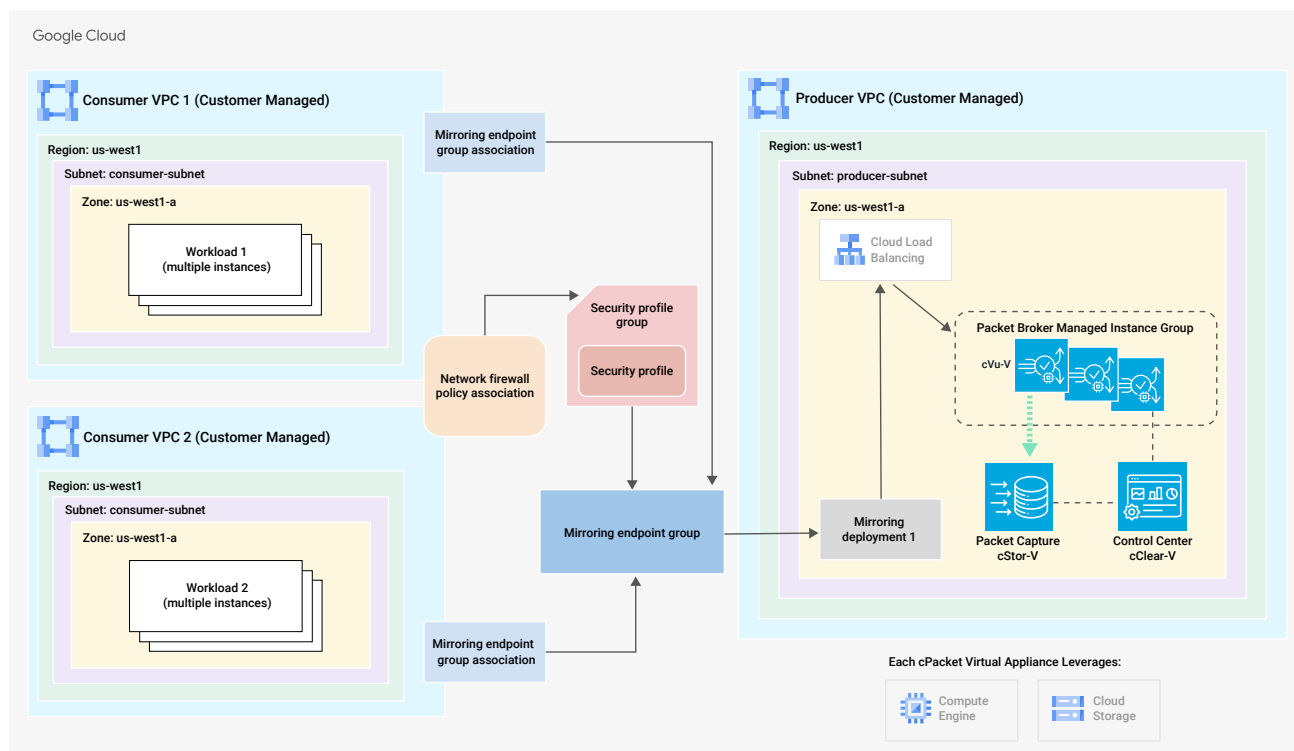


For organizations that need edge-to-cloud visibility rooted in packet-level evidence, the cPacket Cloud Observability Suite complements native Google Cloud monitoring tools – exposing what metrics and logs can't see. By deploying cPacket solutions through Google Cloud's Network Security Integration (NSI) services, 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.

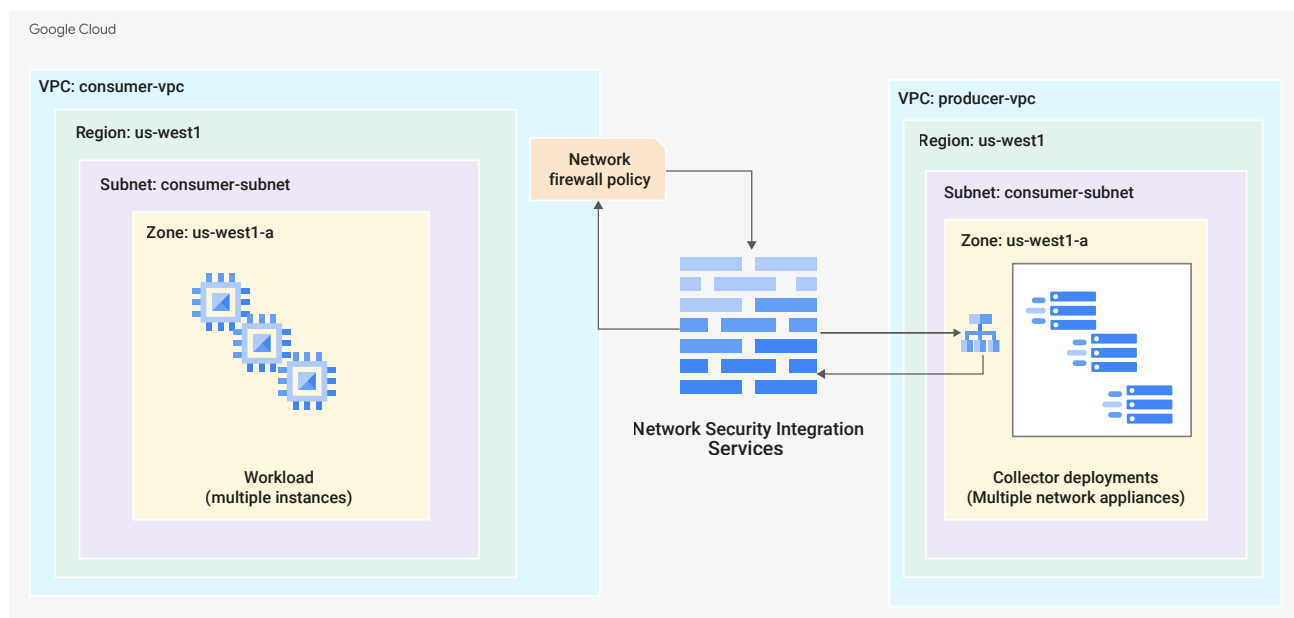
New Out-of-Band Mirroring Architecture

Leveraging the new design for Google Cloud Packet Mirroring, cPacket virtual packet broker and packet capture appliances reside in a Producer VPC, where packets are forwarded to a network load balancer fronting the virtual appliances (Packet Broker and Packet Capture). Forwarding rules enable specified traffic to be mirrored via Geneve encapsulation from a consumer network. This elegant design ensures that only the traffic that 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, NSI provides seamless in-band monitoring that can be integrated with security and network monitoring use cases. In this case, traffic ingressing or egressing is intercepted and forwarded to a dedicated VPC or subnet for security and network inspection. In-band monitoring can also 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 NSI to support mission critical security and performance monitoring, compliance and audit readiness services for Google Cloud 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.



Network Security Integration and cPacket Packet Broker

cPacket's cVu-V packet broker extends out-of-band packet mirroring in cloud environments by replicating a single packet to up to 10 out-of-band network monitoring, and packet inspection tools. All of this is accomplished with an agentless platform, in which Linux-based instances perform advanced filtering and packet replication within a customer's cloud deployment.

Network Security Integration and cPacket Packet Capture

cPacket's agentless cStor-V appliance provides continuous or on-demand packet capture at speeds surpassing 100Gbps from GCP workloads. It can be paired with 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 unlocks network performance monitoring, forensics, troubleshooting, compliance, and auditing capabilities. Running Wireshark on-device, cStor-V captures and analyzes packets with network analytics—spanning protocol performance, latency, jitter, hop-by-hop analysis, exfiltration and DDoS detection.

cStor-V can be used by both NetOps and SecOps teams that require deeper visibility into their cloud 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 Google Cloud and hybrid network deployments.



Single User Interface for cPacket Analytics and VM Management

cPacket's Control Center (cClear-V) simplifies management of distributed cloud 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, retrieve, and analyze packets from across a customer's cPacket estate of virtual and physical appliances. This allows customers to aggregate, analyze, and surface network intelligence from Google Cloud 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.