cPacket cProbe® Series

Generate and Export Network Flow Data in Real Time

cProbe enables you to:

- Gain visibility into high-speed networks at rates up to 40 Gbps

- Optimize the experience and performance of your applications, users and the network

- Convert packet data to flow data for exporting to external flow collectors and analysis tools

- Export flow data in industry standard NetFlow v5/v9 and IPFIX formats

- Readily interact with cPacket's cVu® series packet broker+ and cStor® series packet capture devices

- Feed data into cPacket cClear® analytics engine for single-pane-of-glass visualization

cProbe Solution

The cPacket cProbe Series is a family of purpose-built flow generator and exporter devices that collect wire-data in packet format, construct flow information, and export flow data. cProbe exports flow records in these formats: NetFlow version 5 and 9, and IPFIX. The flow data is consumed by security tools, application/network performance monitoring tools, SD-WAN gateways, external flow collectors, and other third-party applications.

Financial trading floors, banks, insurance companies, hospitals, utility companies, manufacturing houses, retail chains, government sector, defense entities, mobile operators, and managed service providers are just some of the industries that need network visibility for IT operations. cProbe, along with other cPacket solution components is used for a range of applications with highly demanding needs for data visibility including: application/network troubleshooting, identifying client devices, applications, and services that consume the most bandwidth, identifying the rogue devices on the network, policy shaping and capacity planning, and security analysis.

Key Benefits

cPacket cProbe Series combines a number of key technical features, building upon cPacket's industry-leading software and hardware pedigree to maximize performance and analysis-based metrics. It helps deliver on a wide range of application and network visibility via a powerful combination of benefits, including but not limited to the following.

Flexible Deployment

cProbe enables a variety of use cases ranging from filling in the gap for a flow generator in an environment where only packet data is available, replacing embedded, low-performance flow probes, or acting as a flow format converter.
NetFlow and IPFIX flow data ensure it readily interoperates with external flow collectors, third-party tools, and cPacket's cClear® for visualizing and analyzing the data in a single-pane-of-glass fashion. The flexible deployment of cProbe maximizes return on investments by deferring or eliminating the need to upgrade existing network infrastructure and helping with its deficiencies.

Reliable Data

Flow data enables network visibility without bias from the infrastructure or blind spots so you can have a consistent and reliable source of truth of your network activity. Rapid, accurate and lossless data delivery in packet or flow format, ideally both, is critical for having complete network visibility so agile and accurate decisions can be taken.

Consistent Performance

cProbe can generate lossless and persistent flow data at line rates up to 40 Gbps supporting today's network requirements. cProbe can ingest a live stream of high-speed packet from devices like cPacket cVu® series Network Packer Broker+, sort the

data through its fast flow-map technology and generate the flow data out of it – all without slowing down at any stage. Having a dedicated appliance for flow generation/export has clear performance advantage over 'all-in-one' solutions that not only charge for additional licenses, but also cannot keep up with performance requirements.

Deployment and Use Case

The cProbe Series is a rack-installable solution for data center, campus, remote site, or telco environments. The 10/40 GbE capable cProbe series is fully compatible with cPacket cVu series 10/25/40/100 GbE Network Packet Broker+, 10/15/25/40/100 GbE cStor series packet capture appliances, and cClear series for centralized analytics, provisioning and management all within a single-pane-of-glass. cPacket's visibility tools provide proactive metrics such as application visibility, top-talkers, bandwidth consumption, TCP response-time, round-trip time, retransmits, one-way latency, and micro-burst analysis at high resolution. With cPacket, network operators can deploy the functionality they need at the locations they need, to monitor and analyze issues from anytime.
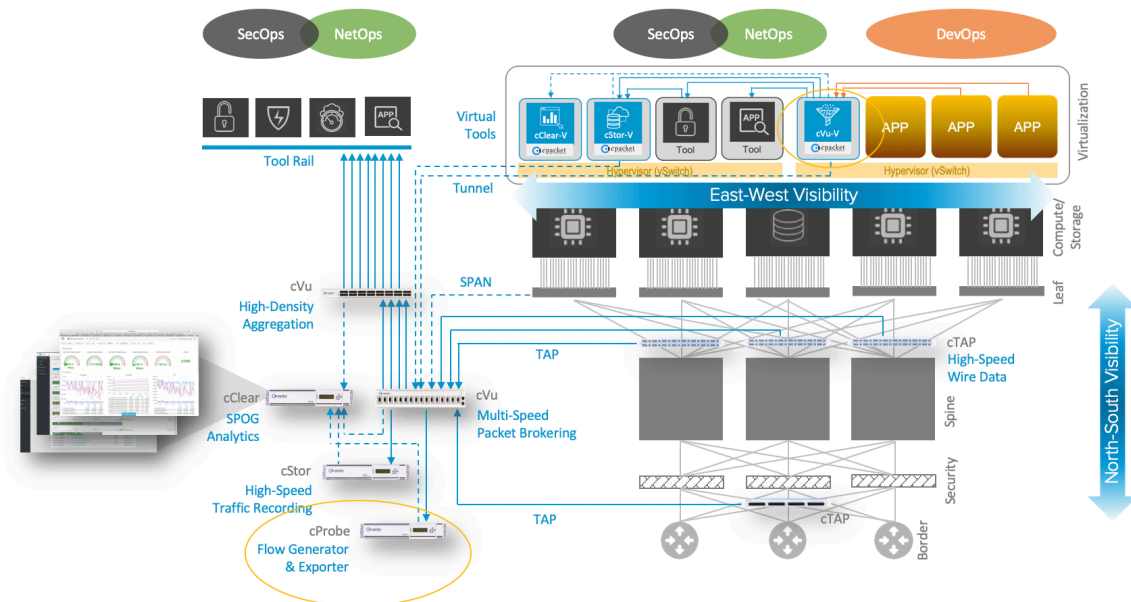
Reference design for complete north-south and east-west network visibility

The typical deployment in a physical network, such as in a data center, starts with accessing the wire-data at high-speeds by deploying cPacket cTap series network TAP (Test Access Point). The cTap feeds the raw wire-data to a cPacket cVu series 100G-enabled packet broker+ where the data is processed based on different requirements such as performance and security monitoring tools managed by the NetOps and SecOps teams. For aggregation purposes, another low-cost cVu unit can be used to aggregate data as the number of tools grow. Should the data be stored for later usages or analysis, a cStor appliance can be hooked to the cVu for capture-to-disk (CTD). From the same cVu packer broker, network data can be fed to the cProbe device to be converted into flow data. The flow information can then be exported to cClear for visualization or to third-party devices.

To learn more, visit www.cpacket.com

Positioning

	cProbe 40 (1x40GbE)	cProbe 40 (4x10G)*
Branch/Remote Site		WAN Edge
Cell Site/Central Office	Backhaul	RAN
Data Center/Colocation	North-South/Spine-Leaf	East-West/Leaf
Financial/Trading Exchange	North-South/Spine-Leaf	East-West/Leaf
Service Provider/Operator	Aggregation	Access

* Future release

Key Features

Description	cProbe 40
Flow data in NetFlow version 5, version 9, and IPFIX formats	Yes
IPFIX with Private Enterprise Numbers (PEN) and variable length encoding	Yes
IPv4 and IPv6 support	Yes
Web based GUI for system management with secure SSL access	Yes
Integration with cPacket cClear for management	Yes
Front panel input control pad with LCD display for setup/administration	Yes

Interface and Flow Capacity

Description	cProbe 40
10 GbE Ports (SFP+)	Future (using breakout cables)
40 GbE Ports (QSFP+)	1
Management/Configuration	Front panel input control pad with LCD display
Management Interface	Management interface in the rear panel
Sustained Flows-per-Minute Performance	600K - 1.2M
Maximum Flows-per-Minute Performance	3M - 6M
Maximum Throughput	6 MPPS (for any packet size)
Default Storage	None

Dimensions and Weight

Description	cProbe 40
Height/Rack Unit	3.5" (8.9 cm) 2U
Width	17.2" (43.7 cm)
Depth	23.3" (59.9 cm)
Weight	52 lbs. (23.6 kg)

Operating Conditions and Regulatory Compliance

Description	cProbe 40
Operating Temperature Range	41° F (5° C) to 95° F (35° C)
Operating Humidity	50% to 90%
EMC Regulatory Information	FCC Class A per Part 15 of FCC Rules, and EN55022

Power and Cooling

Description	cProbe 40
Airflow	Front-to-Back
Power Redundancy	1+1 AC/DC, 100-240 VAC, 48 VDC, 50-60 Hz
Max. Power Consumption	300 W
Heat Dissipation	1,023 BTU/Hour

Ordering Information

SKU	Description
CP_CPROBE_40	cPacket cProbe network flow generator and exporter appliance, 2RU with 1 x 40GbE interface. Maintenance not included.

About cPacket Networks

cPacket Networks delivers visibility you can trust through network monitoring and packet brokering solutions to solve today's biggest network challenges. Our cutting-edge technology enables network and security teams to proactively identify issues in real-time before negatively impacting end-users. Only cPacket inspects all the packets delivering the right data to the right tools at the right time and provides detailed network analytics dashboards. Whether you need greater network visibility for security tools or performance monitoring tools, our solutions are designed to overcome scalability issues and reduce troubleshooting time. The result: increased security, reduced complexity, with lower costs, and a faster ROI.

Based in Silicon Valley, CA, cPacket enables organizations around the world to keep their business running. Leading enterprises, service providers, healthcare organizations, and governments rely on cPacket solutions for improved agility, higher performance, and greater efficiency. Learn more at www.cpacket.com, the cPacket blog, or follow us on Twitter, LinkedIn, and Facebook.