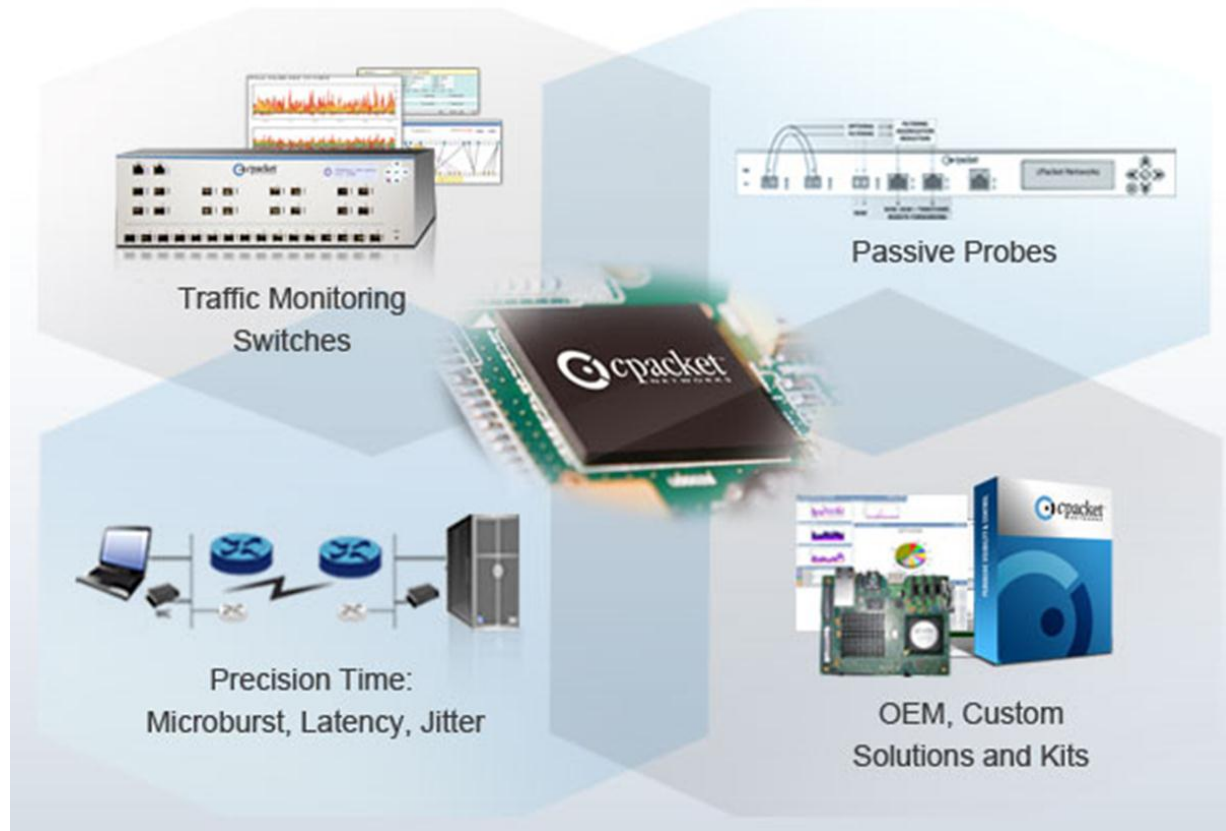


cVu Product Family Overview

**Network Intelligence, Visibility,
Trouble-shooting, Performance
Measurement**

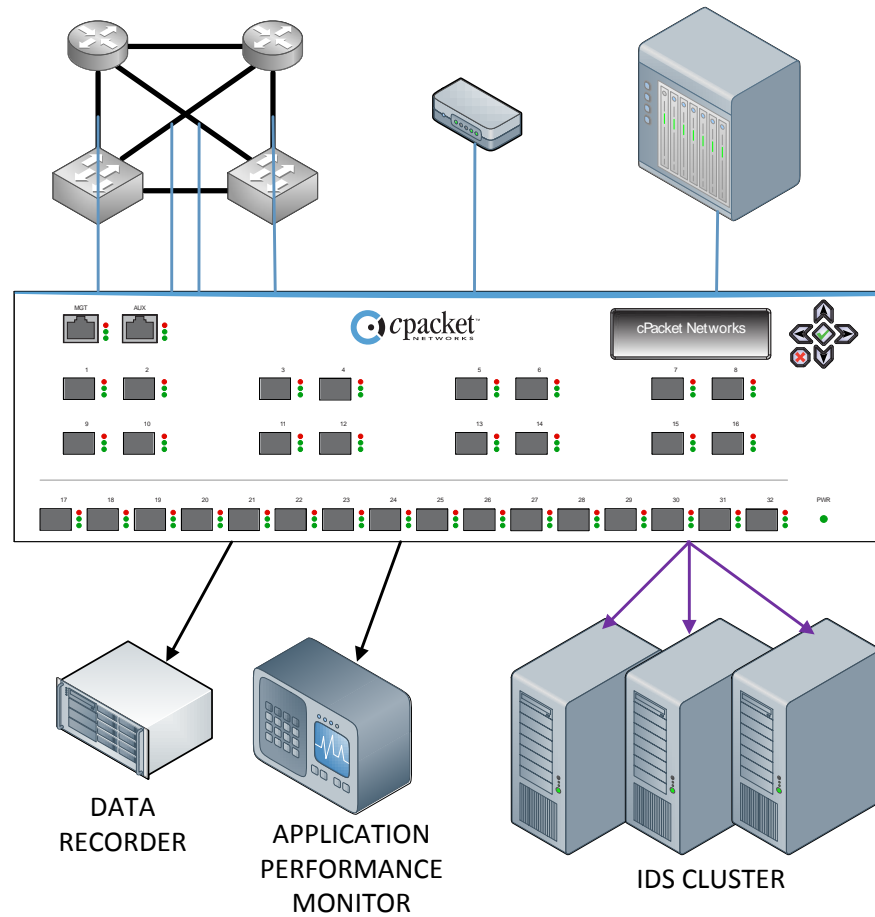
cPacket Unique Network Intelligence Solutions



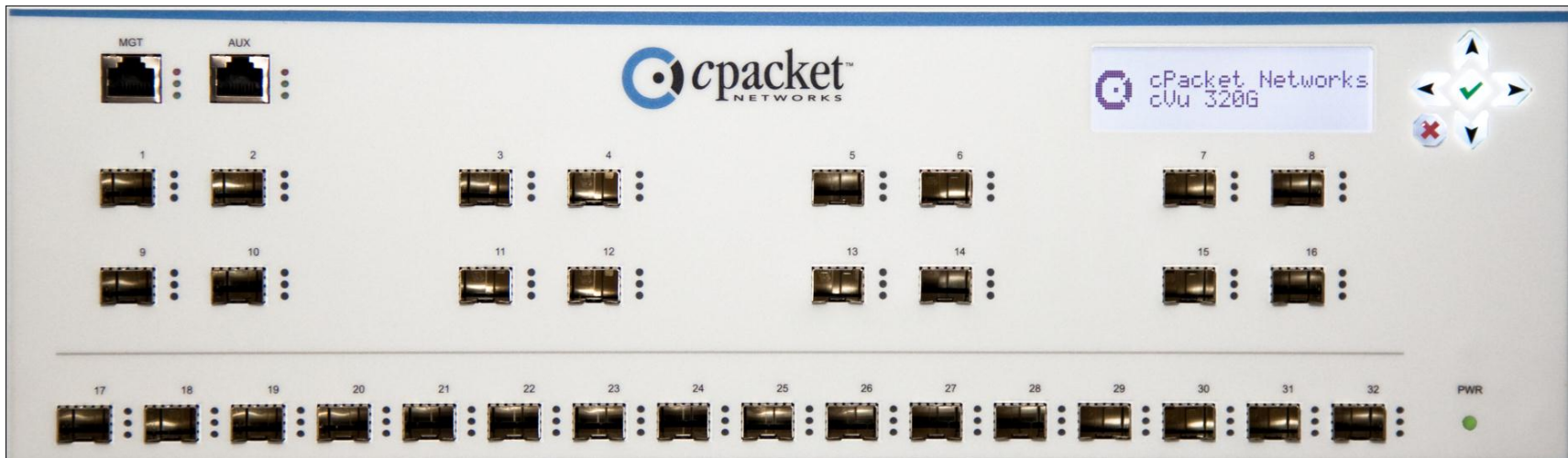
Versatile HW/SW architecture for a wide spectrum of intelligent Networking, including: visibility, monitoring, measurement

CVU Family - Any Traffic to Any Tool

- Any-to-Any:
any input port to any output port
- Many-to-One:
TAPs and SPAN ports aggregation
- One-to-Many:
ports and traffic replication for tools
- Filtering based on packet headers and payload content
- Automatic coherent flow balancing



Centralized Aggregation and Measurement



- Smart traffic monitoring switch
- 32 x 10G SFP+ or SFP network interfaces
- Filtering, aggregation, replication, balancing, time stamping
- Granular performance monitoring
- Based on cPacket unique HW/SW architecture and chip

cVu Product Family Overview

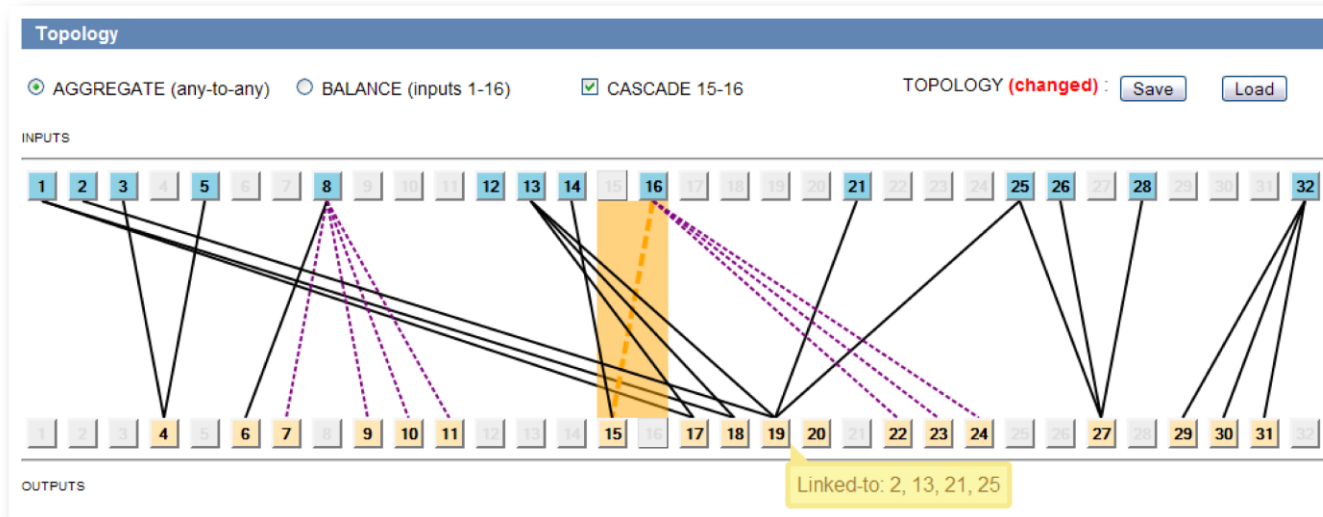
cVu Model	10G ports	1G Ports	Form Factor
cVu 320G	32 (16 x Standard + 16 x Smart)	all ports have SFP+ cages that can accommodate 1G SFP	3U
cVu 240G	24 (16 x Standard + 8x Smart)	all ports have SFP+ cages that can accommodate 1G SFP	2U
cVu 120G	12 (10 x Standard + 2 x Smart)	all ports have SFP+ cages that can accommodate 1G SFP	1U

- The management port is not included in the port counts in the table

CVU 320G: 32 x 10G ports

	16 x Std Ports	16 x Smart Ports
Configured as Input or Output	Y	Y
Any-to-Any Topology	Y	Y
Oversubscription Counters and Alerts per second	Y	Y
Light Intensity Report per second	Y	Y
Bandwidth and Packet Rate per second	Y	Y
1G/10G Speed Select (SFP+/SFP)	Y	Y
Simple Filters (src/dst 5-tuple)	Y	Y
Built-in counters: Frame Size, TCP events, Custom		Y
Real-time On-the-fly Microburst/Spike Reporting		Y
Complex Filters (Inspection <u>anywhere</u> in Payload)		Y
Selective Snap Capture of Matching Complex Profiles		Y
Slicing (static at offset and dynamic TCP offset)		Y
Slicing override for specific Profiles (complex)		Y
Accurate time stamping at Input		Y

Aggregation, Replication, Balancing, Filtering



- Simple to use and flexible Topology Configurations interface
- One-to-many, many-to-one, and many-to-many
- Flexible input and output filters
- Automatic load Balancing for inputs or groups of inputs

Easy Filtering: Complete Packet Inspection

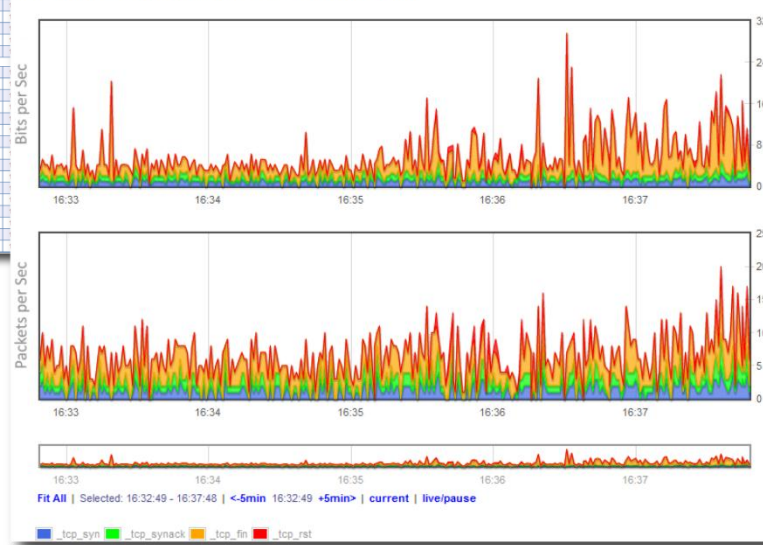
The screenshot displays the configuration interface for packet filtering. At the top, there is a filter name field containing "example_filter", a protocol dropdown menu set to "VLAN:IP:(TCP OR UDP)", and three radio buttons for "PASS" (selected), "DROP", and "BALANCE". A "BURST" checkbox is also present. Below this, the configuration is organized into several sections: "ETHERNET" with fields for SA (aa.bb.cc.dd.ee.ff), DA (00:11:22:33:44:55), and VLAN (100); "IPv4" with SRC (192.168.0.10), DST (66.77.88.99), and MPLS (105); "PROTO" set to "TCP"; "SPORT" (80) and "DPORT" (80); and "FLAGS" with "IGNORE" selected and checkboxes for URG, ACK, PSH, RST, SYN, and FIN. The "PAYLOAD" section includes a text input field with "testPayload", an "ANCHORED" checkbox, and an "IGNORECASE" checkbox (checked). A "WORD OFFSET" field is also present. At the bottom right, there are labels for "bps:" and "pps:".

- Inspects every bit in every packet at full line rate
- Analyzes packet headers and payload down to the last bit
- Anchored/non-anchored, case sensitive/insensitive, wildcards
- Wirespeed at 10G per input

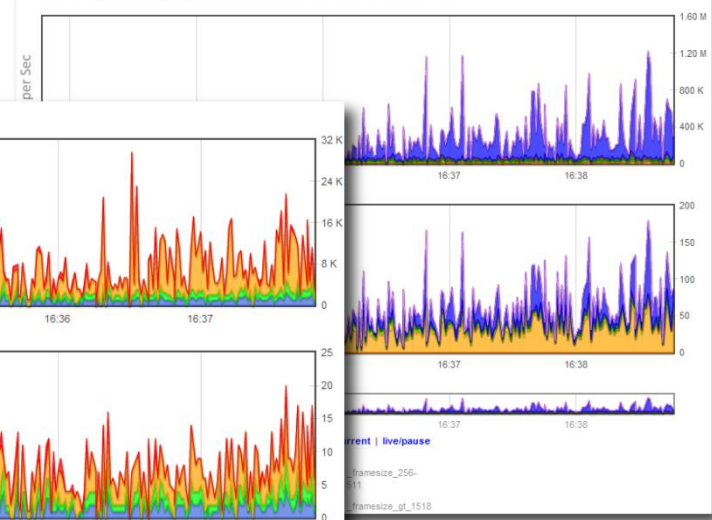
Granular Performance Counters and Graphs

EOPort	Name	T	S	Signal	Rate: (bits pps)	Cumulative: (bytes packets)	Connections: (pps bits)
0 1	Uplink 1	N	100	-32.2	9,869,432,656	815,924 127,626,198,009 200,665,705	- 3, 4, 5, 6
0 2	Uplink 2	N	100	-2.6	9,869,433,232	815,924 103,643,696,960	29 -
0 3	Traffic Analyzer 1	N	100	<-49	0	0 0	- 1
0 4	Traffic Analyzer 2	N	100	<-40	0	0 0	- 1
0 5	Traffic Analyzer 3	N	100	-33.0	9,869,454,440	815,929 127,846,989,341 200,676,605	- 1
0 6	Traffic Analyzer 4	N	100	-3.2	9,869,424,244	815,929 127,846,989,617 200,676,601	- 1
0 7	Port 7	N	100	-31.5	9,869,485,088	815,929 126,866,572,153 200,163,446	- -
0 8	Incoming Traffic Primary	N	100	-2.7	9,869,485,280	815,929 126,868,581,429 200,163,452	- 9, 10, 11, 12, 13
0 9	ES Cluster Unit 1	V	100	-31.0	9,869,441,576	815,926 127,624,452,093 200,266,561	- 8, 14
0 10	ES Cluster Unit 2	V	100	-4.2	9,869,462,152	815,926 new new new	- - -
0 11	ES Cluster Unit 3	N	100	-31.5	9,869,467,952	815,929	- - -
0 12	ES Cluster Unit 4	N	100	-3.3	9,869,486,896	815,929	- - -
0 13	ES Cluster Not Standby Unit	N	100	-31.5	9,869,446,720	815,907	- - -
0 14	ES Cluster Not Standby Unit	N	100	-2.8	9,869,449,008	815,927	- - -
0 15	CASCADE GROUP 15-16	N	100	-34.0	9,869,473,672	815,928	- - -
0 16	CASCADE GROUP 15-16	N	100	-4.0	9,869,473,768	815,928	- - -
0 17	Voice Analyzer	N	100	-3.2	8,838,717,443	813,372	- - -
0 18	Video Quality Monitoring	N	100	-3.0	8,838,251,342	813,281	- - -
0 19	Voice Intercept A	N	100	-2.2	8,864,421,867	815,163	- - -
0 20	Voice Intercept B	N	100	-4.6	8,864,322,529	815,537	- - -
0 21	Example - Many to One Src 1	N	100	-3.3	8,865,811,262	815,572	- - -
0 22	Example - Many to One Src 2	N	100	-2.4	8,866,216,409	815,732	- - -
0 23	Example - Many to One Src 3	N	100	-2.3	8,866,161,664	815,768	- - -
0 24	Example - Many to One Src 4	N	100	-3.2	8,870,031,389	815,749	- - -
0 25	Port 25	N	100	-1.8	8,871,387,950	815,819	- - -
0 26	Example - Aggregated Traffic to Analyzer	N	100	-3.1	8,866,163,536	816,069	- - -
0 27	Port 27	N	100	-2.4	8,877,074,201	816,685	- - -
0 28	Example - One to Many Src	N	100	-2.2	8,877,074,201	816,689	- - -
0 29	Example - Duplicate One to Many 1	N	100	-2.7	8,876,879,390	816,726	- - -
0 30	Example - Duplicate One to Many 2	N	100	-2.8	8,876,531,576	816,660	- - -
0 31	Example - Duplicate One to Many 3	N	100	-2.5	8,881,132,579	816,986	- - -
0 32	Example - Duplicate One to Many 4	N	100	-3.0	8,880,736,915	816,960	- - -

TCP Events: 07 Jun 2010, 16:32:49 - 16:37:48 (GMT-7)

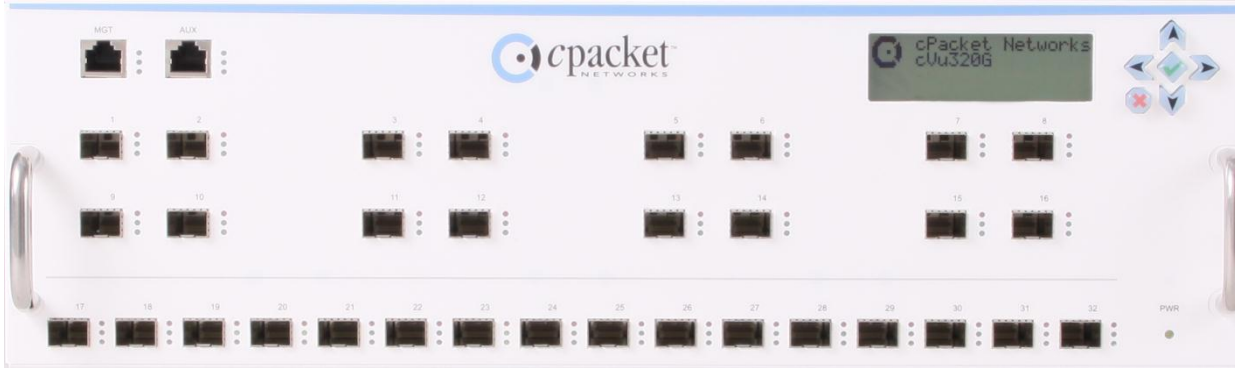


Framesize Distribution: 07 Jun 2010, 16:33:47 - 16:38:46 (GMT-7)

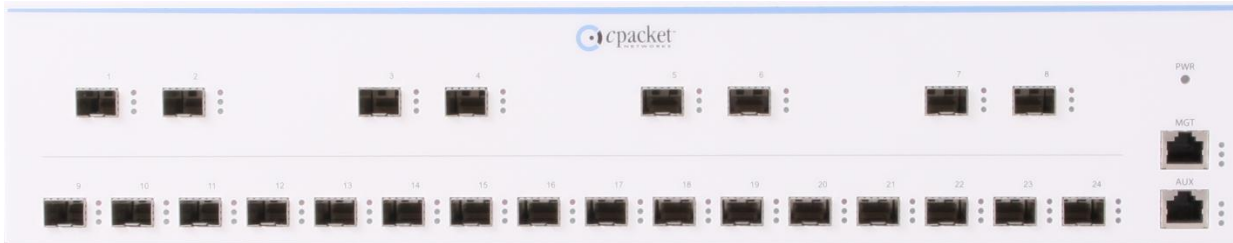


- Accurate on-the fly analysis in real time
- Second by second counters and visualization by default
- Ability to drill down on spikes and micro bursts

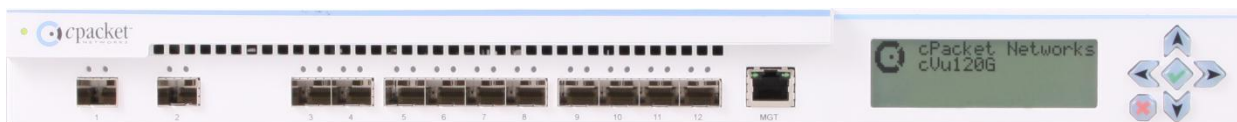
cVu Product Family



- **cVu 320G**



- **cVu 240G**



- **cVu 120G**