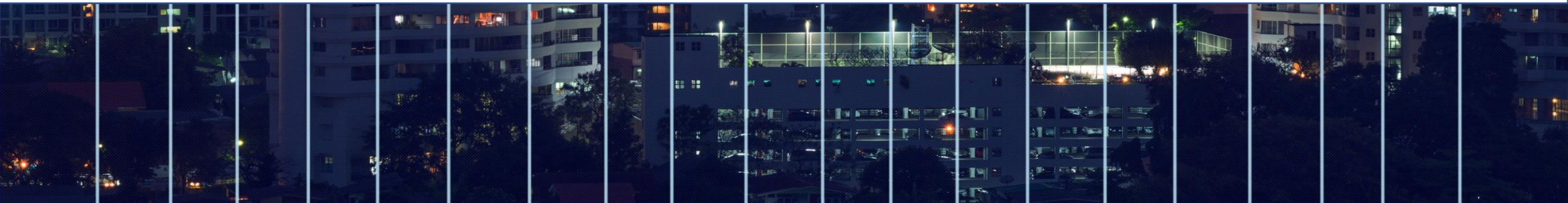




Packets2Disk - Thinking Outside the Black Box 2022



What did you do during Covid Daddy ?

Packet Capture and Analytics	Old	New	Why
Architecture	Appliance, HW dependent	Software Modules, Std server and OS	Flexibility, cost, performance
Packet Capture	FPGA NIC, proprietary packet store	DPDK. Standard NIC. PCAP files	Price, performance, open
Analytics – Network, Latency, Gap detection etc	Local, Memory, FPGA, from proprietary packet store	Modular, scalable, PCAP	Performance, distributed, open. Cloud Ready



Use Case 1 - 100Gb/s Capture and Analytics

Standard linux platform

Server quality NVME drives

Standard NIC

100 Gb/s line rate

Any packet size

PCAP storage

Network Analytics: Utilisation,
Microburst, TCP analytics.

- Cost - H/W \$35K
S/W \$35K



- Capture, Storage and Analytics in single box

Use Case 2 – Scalable Decode and Analytics



Message decode and Storage from existing pcap

Complex matching

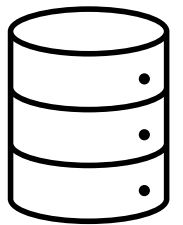
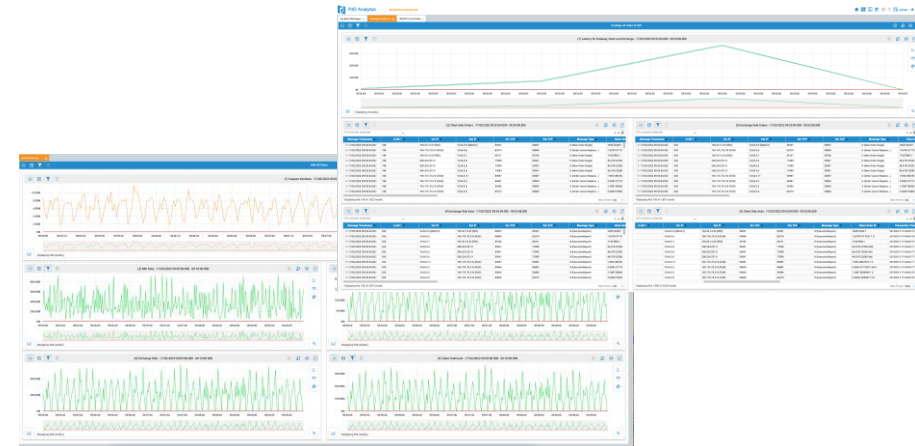
Single box

Multi-core decode and analytics

120 + cores used to decode and match (for latency)

100-200 Billion messages decoded and matched per day

No Drops. Handles busiest trading day / bursts



PCAP

- Highly scalable Analytics in single box from pcap

Use Case 3 – Distributed Capture and Analytics

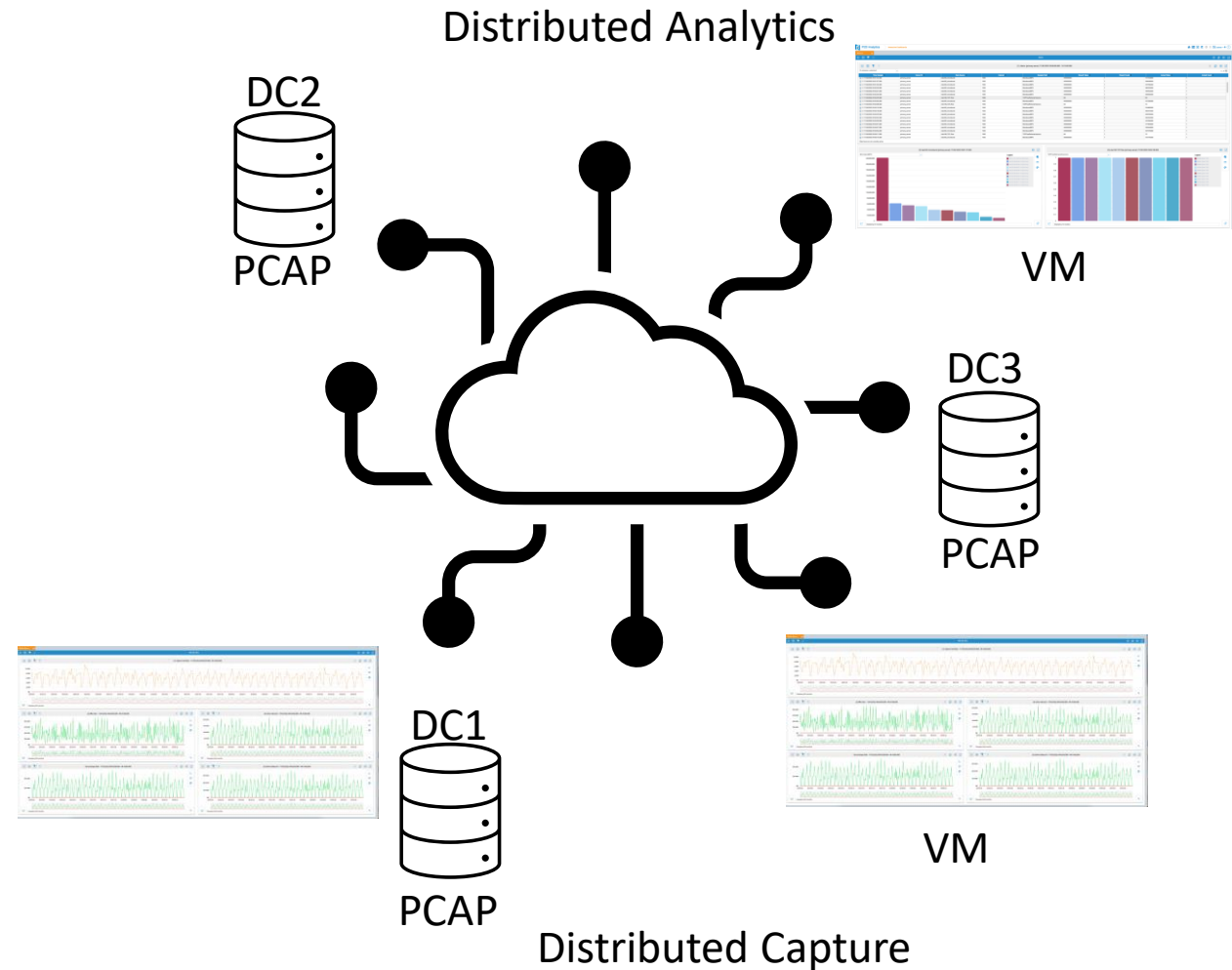
Distributed, low cost, capture servers

VM based Analytics on capture server or internal VM farms

Big advantage in cost and flexibility

Network Analytics: Utilisation, Microburst, TCP analytics.

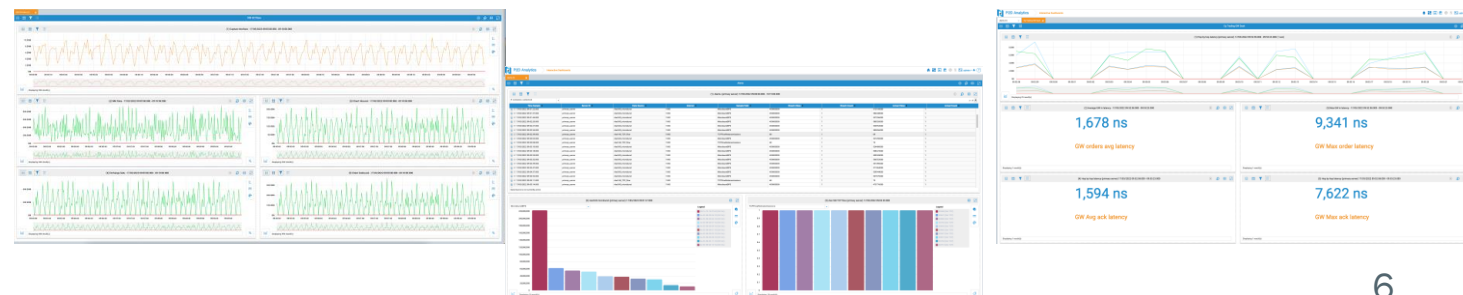
Gap Detection, Decode, Latency analytics etc as required.



Use Case 4 – Managed Service

- Available in global datacentres
- Distributed P2D Capture and Analytics Software running Inside Options Environment.
- Packet Capture and Network and Trade Analytics
- Fully Managed service
- Options 24/7 Global Support Coverage
- Leveraging All Flash Pure Storage
- Integrated with Options' Highly Accurate PTP Timing Service
- User-friendly Reporting with Highly Customisable Dashboards

- 1- 100 Gb/s Capture
- Analytics VM sized to client
- Simple Deployment and maintenance
- Customisable (storage, retention, analytics, dashboards)



Think outside the box for Packet Capture and Analytics

Software Architecture, standard linux servers and NICs

Modular Analytics on box or distributed

Open, Scalable performance

Interoperable (pcap, Kdb+.....)

Lower cost, higher performance



Thank you: find us in the STAC Exchange and at
packets2disk.com

