ps-record and playback processor- ps-rapp





The ps-rapp system captures Ethernet frames via the pne-balancer and distributes them over several egress ports where they are stored to NVMe SSDs in the Store servers. Each frame is tagged with its origin port so that correct synchronization to the port can be done during playback. Bi-directional hash distribution is done on the source and destination IP address such that each stream has flow-affinity

features								
- record and playback 25 – 200 Gbps in 25 Gbps chunks		7 Bytes	1 Byte	46 - 1514 Bytes	4 Bytes	12 Bytes		
- recorded streams have flow-affinity independence	Ethernet Frame including 'on the wire' overhead	Preamble	Start Of Frame	Ethernet Frame	e Ethernet Frame Check Sequence	Inter Frame Gap		
- up to 24 NVMe SSDs per Store server in 1.6, 3.2 or 6.4 TB								
- flexible scaling configurations in:		6 Bytes	6 Bytes ∢>	2 Bytes	32 - 1500 Bytes			
- volume - duration	Ethernet Frame excluding 'on the wire'	Destination MA	MAC Source MAC Ethernet Type		Ethernet Frame Payload			
- cost-effective storage media	overhead							
- greater scaling options using cascaded pne-balancers								
- control server for two or more Store servers		6 Bytes	6 Bytes	4 Bytes 2 By	tes 32 - 1500 Bytes			
- complete link recording or customized:	Ethernet Frame with added VLAN Tags	Destination M4	C Source MAC	Ingress Port VLAN Tag	et Type Ethernet Frame Payload			
- Layer 2 to Layer 4 filtering - black- or white-list filtering			802.1g tag format					
			¥	16 bits 16 bits	802.1Q VLAN Tag			
 playback in single-shot or looped mode according to: pcap timestamps 				TPID TCI				
- throttled to a limit	3.665 1.6H 12.0Hs							
- CLI interface to control configuration and read statistics								
- REST API for third party systems integration				pre-balancer Port embedded				
- statistics for ports, ingress and egress traffic to InfluxDB and Grafana								
sample configuration – 200 Gbps ~ 100 TB			connectivity					
- one pne-balancer – 2 x 100 GbE ingress, 16 x 25 GbE egress			- QSFP28 SR, LR – 100 GbE					
- two ps-store servers – AMD Epyc servers, 32 x 3.2 TB NVMe SSDs			- SFP28 SR, LR – 25 GbE					
- minimum record duration – 1 hour at 200 Gbps			- DAC – 25 GbE & 100 GbE					

www.picomass.com

ps-rapp@picomass.com