

g i g a m o n . c o m

GigaVUE-420

The Next Generation



Data Access Switch

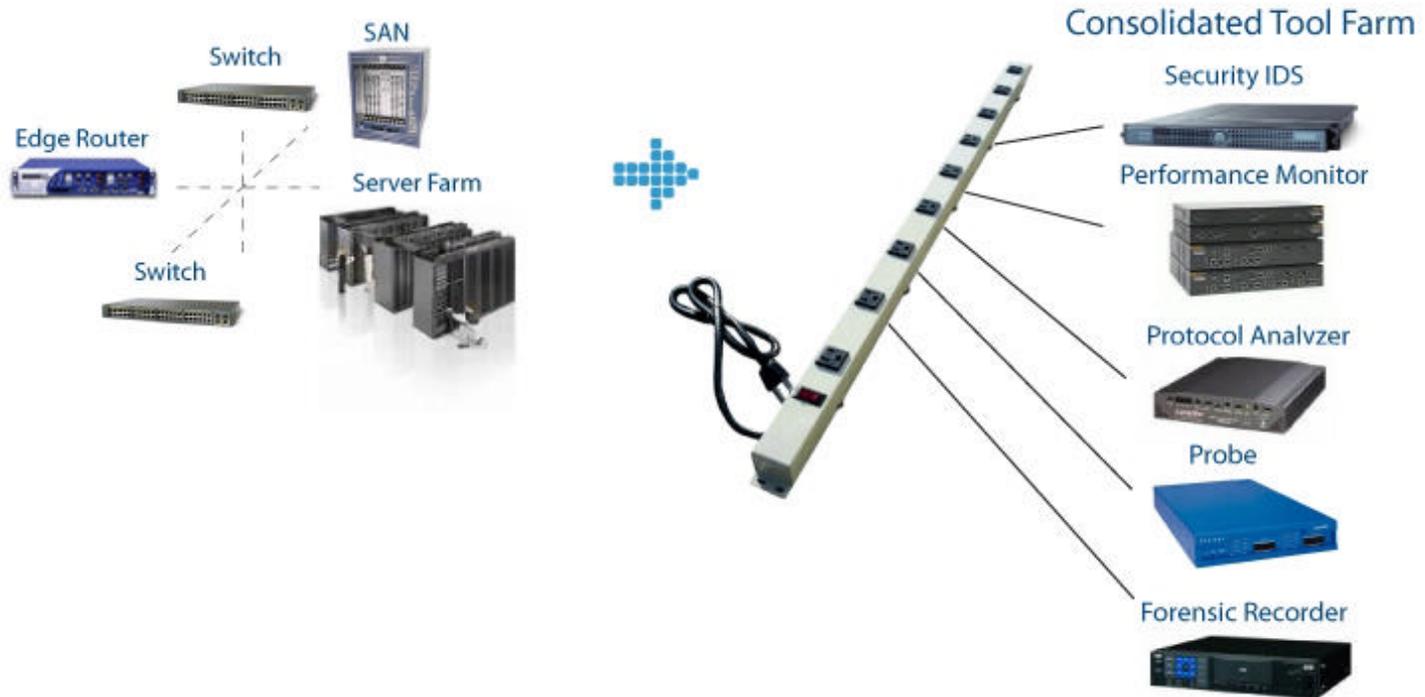
Gigamon Systems

Intelligent Data Access Networking

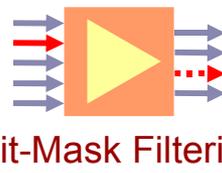
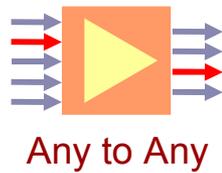
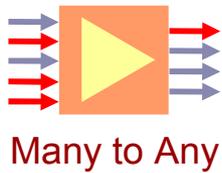
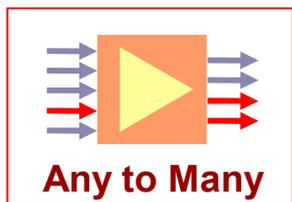
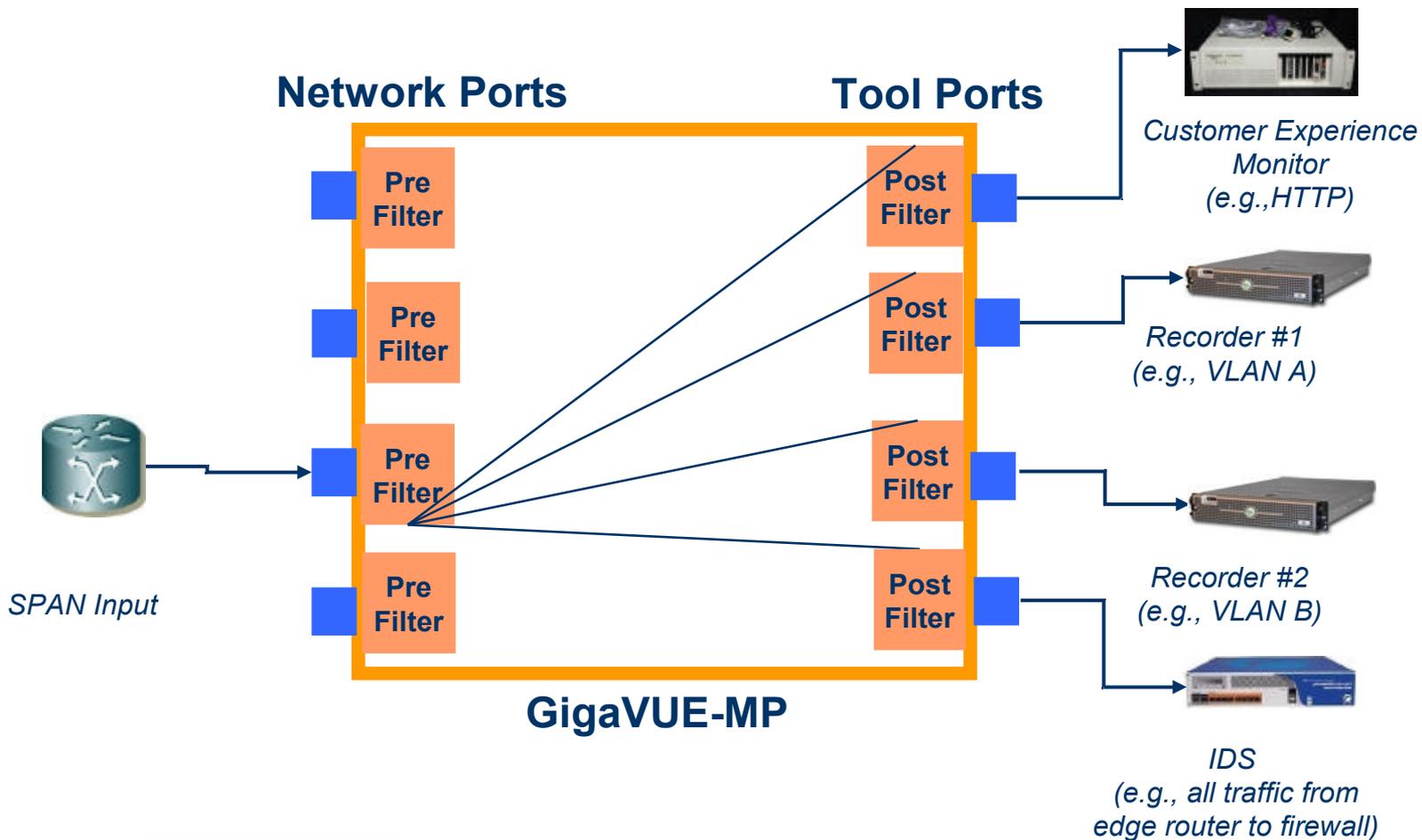
GigaVUE is a “Data Socket”

Part of the Reliable Network Infrastructure

- Plug-in multiple out-of-band tools – any tool to any data
- Unobtrusive tool connections – never touch the network
- Aggregate, Multicast, Filter and load balance data streams

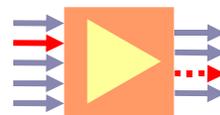
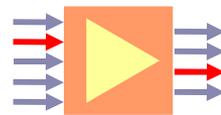
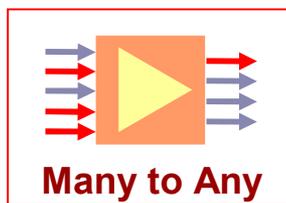
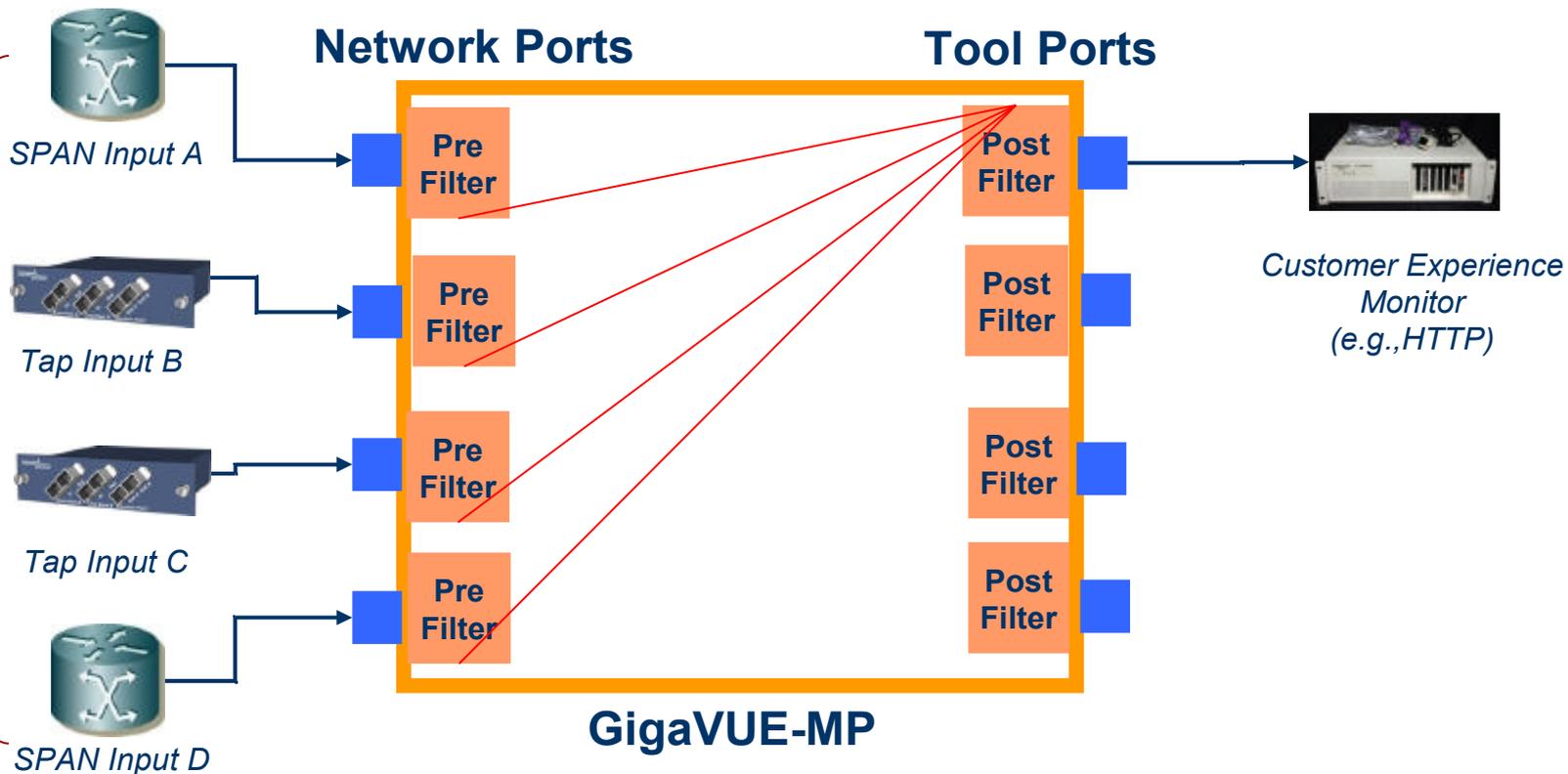


Multicast Shares One to Many

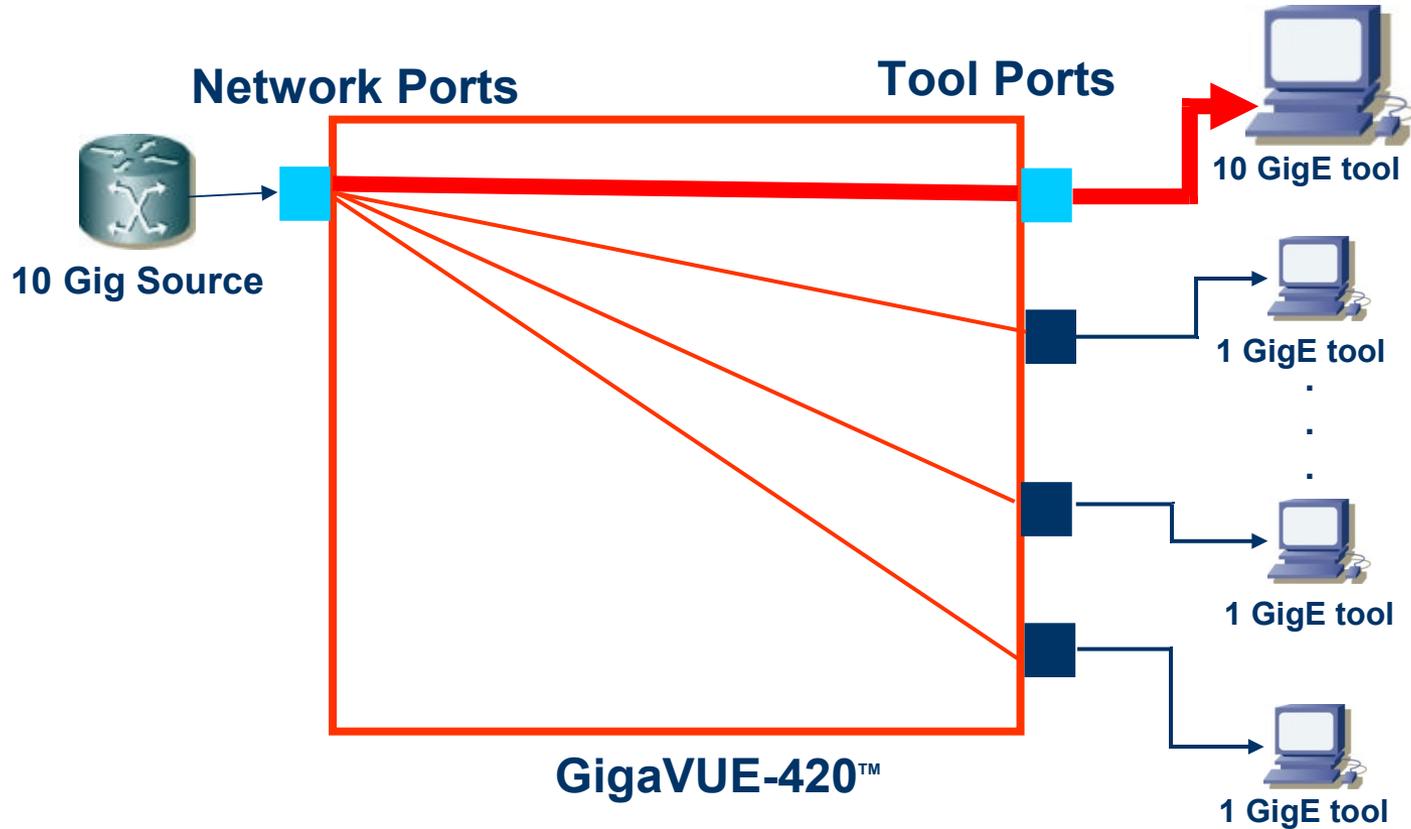


Aggregate Many to One

SPAN Ports or TAPS

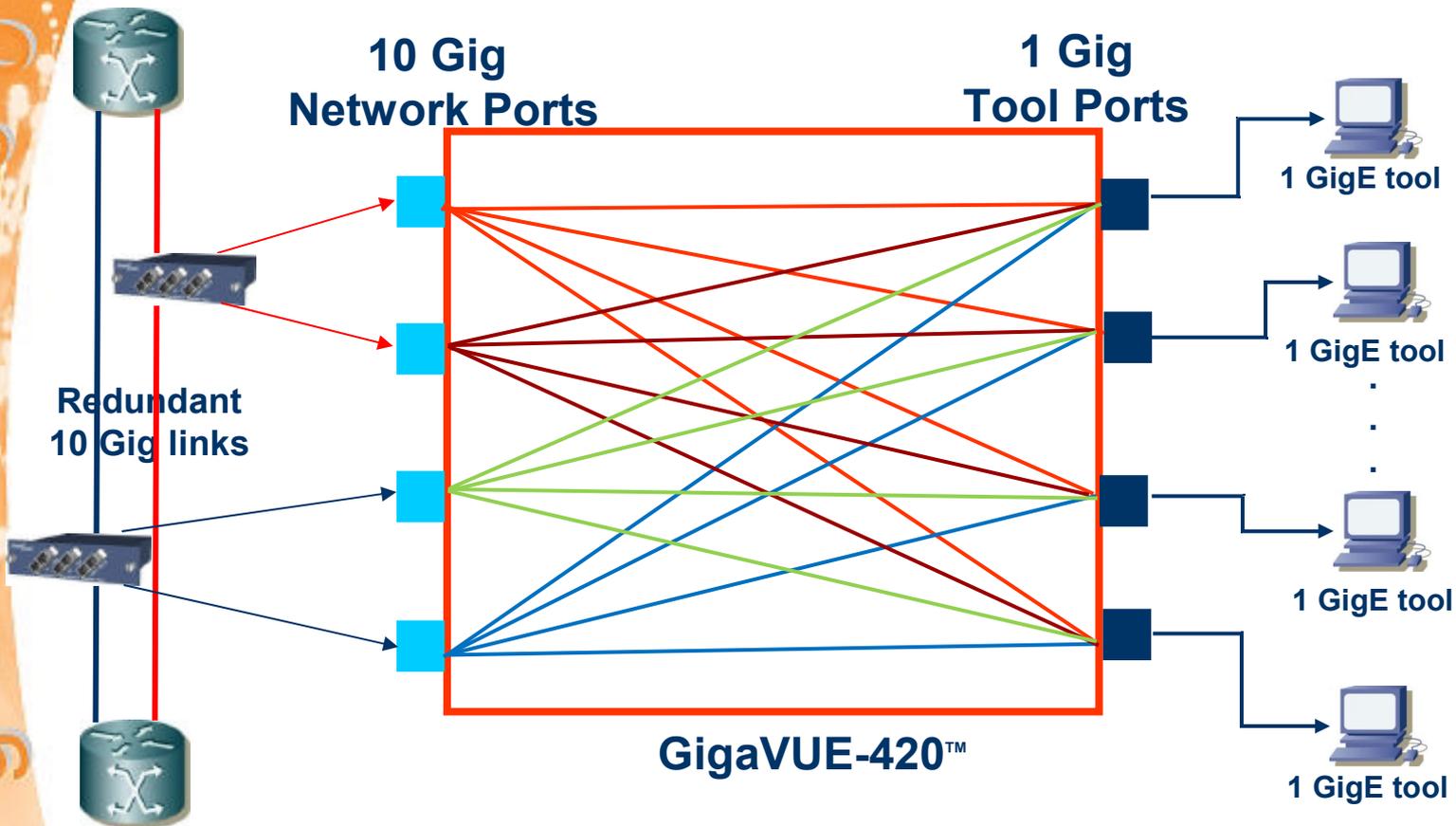


10 GigE to Many 1 & 10 GigE Tools



- 10 Gig traffic divided across multiple tools

10Gig Taps to Many 1 GigE Tools



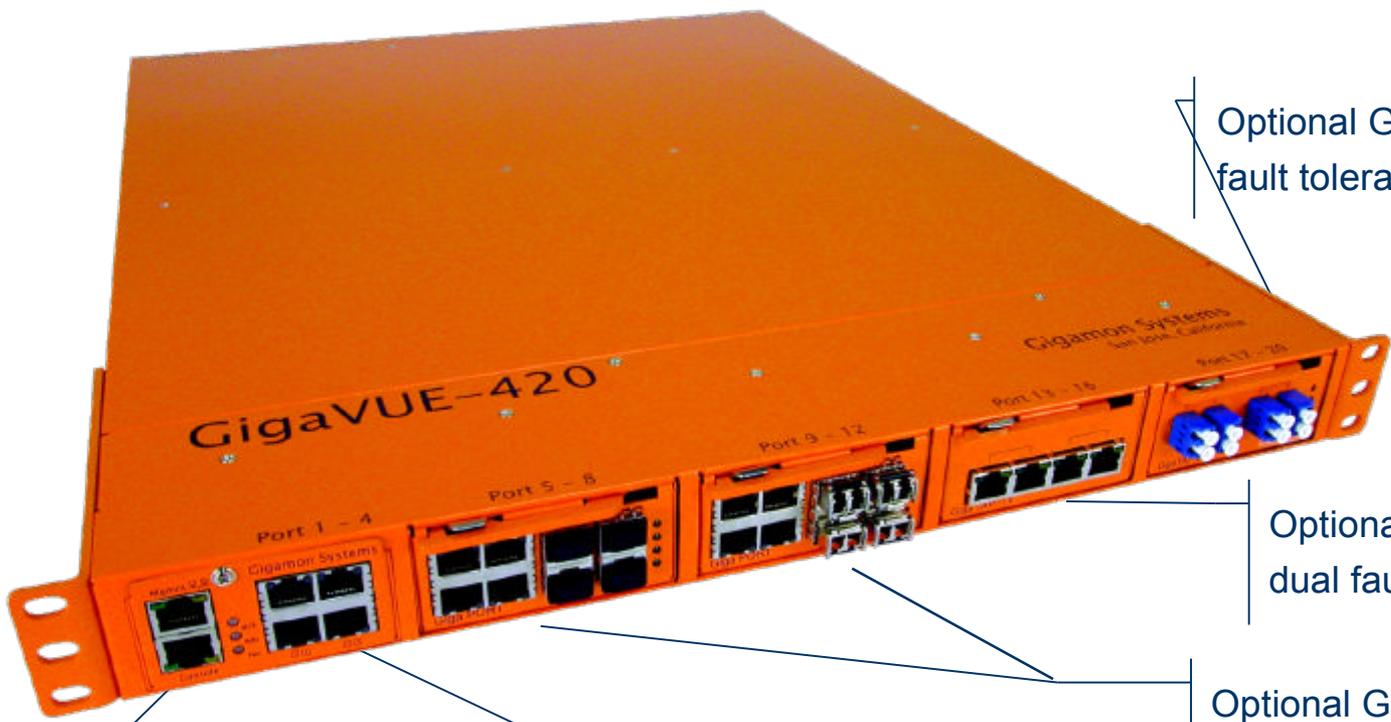
- 10 Gig traffic divided across multiple tools

Hardware based Data Access Switch

- Purpose built, non-blocking cross-connect hardware switching
 - Based on circuit switching, not destination address switching
 - Packet aware, aggregating and filtering
 - NOT a physical layer matrix switch
 - NOT software based, no OS, no CPU, no Store & Forward
 - Full 100% line rate performance at all ports – even if filtering is on
 - Ultra-low 6 micro seconds latency from port to port
 - Speed and media converting from ingress to egress

GigaVUE-420 Hardware Tour

- 20 ports of 10/100/1000 Ethernet
- 1U modular chassis
- Stackable up to 10 chassis for 240 ports



Remote Ethernet (telnet or SSH) and local serial Management Ports with TACAC+ or Radius

Base Unit provides four 10/100/1000 RJ45 ports or Optical SFP ports (all ports can be network ports or tool)

Optional GigaPORT module provides another four 10/100/1000 RJ45 ports or Gigabit optical LC ports (using pluggable SFP transceivers)

Optional GigaTAP-Sx dual fault tolerant fiber taps

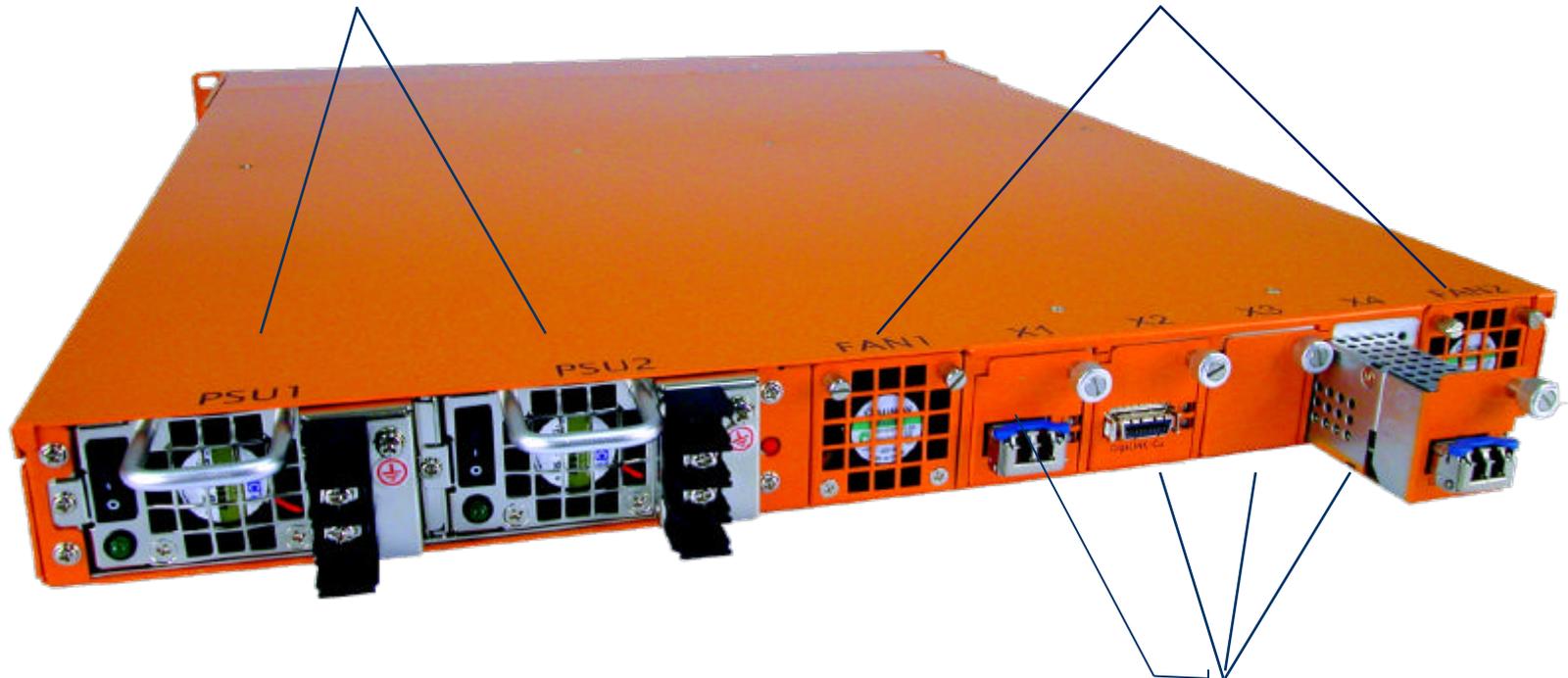
Optional GigaTAP-Tx dual fault tolerant taps

GigaVUE-420 Rear Hardware Tour

- 4 x modular GigaLINK 10 Gig ports
- Dual redundant AC or DC Power Supplies
- Dual redundant fans
- All modules hot swappable

Redundant power supplies
Redundant power cords

Dual redundant fans

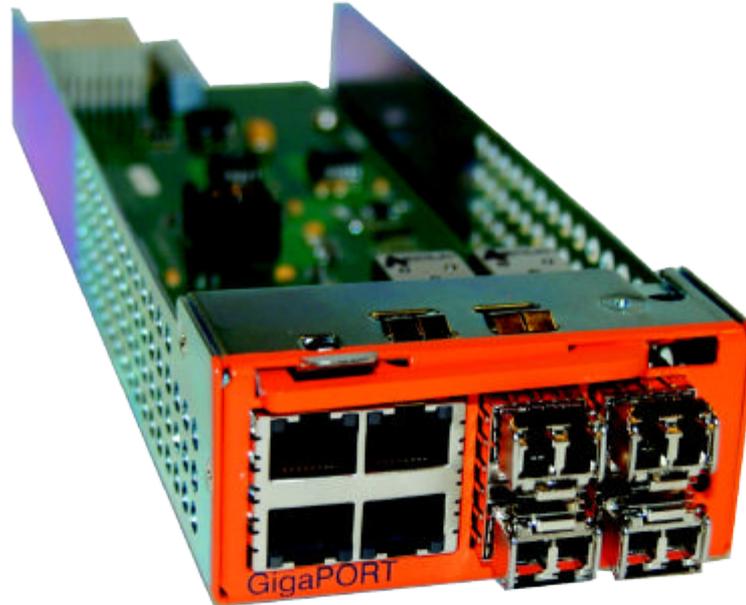


Rear panel view

GigaLINK 10 Gig
4 option port modules

gigamon.com

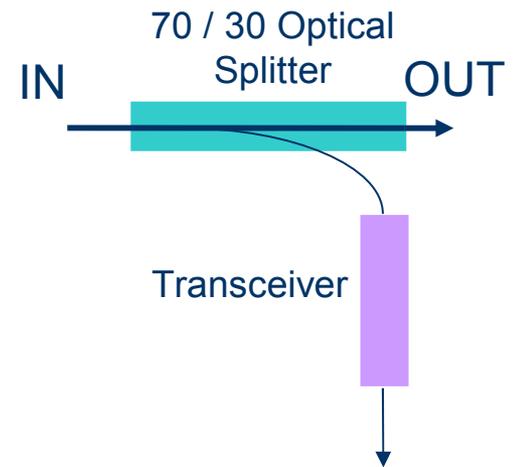
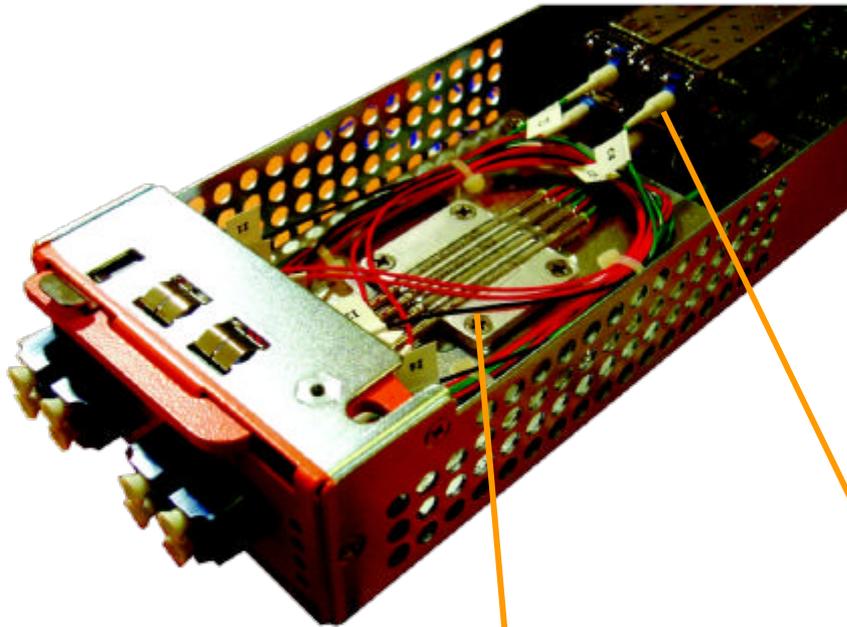
GigaPORT 4-port Expansion



10/100/1000 RJ-45
copper ports

Optional SFP
Transceivers

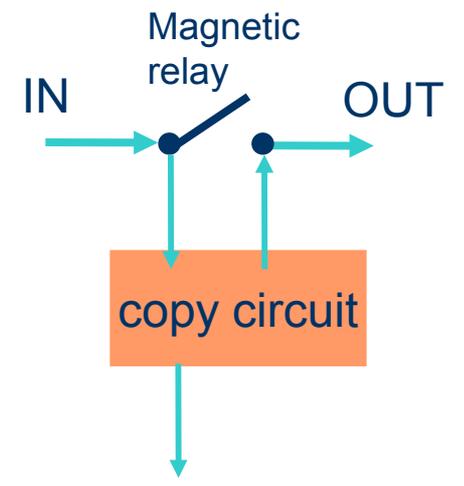
TAP-202 GigaTAP-Sx



Optical
Splitter (4x)

Transceivers (4x)

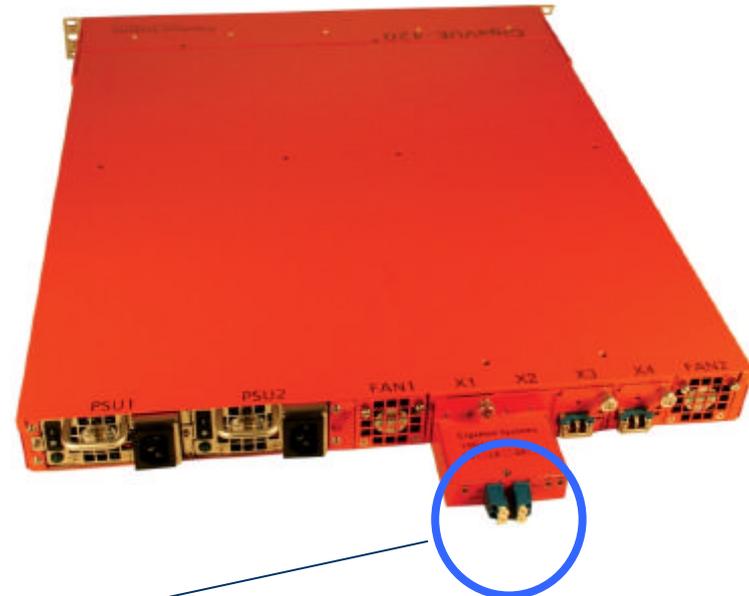
TAP-201 GigaTAP-Tx



Fail-Closed Relays

10GigaTAP for GigaVUE-420

- TAP-212 SR multimode Optical 50/50
- TAP-213 LR singlemode Optical 50/50
- TAP-214 ER singlemode Optical 50/50
- Available Oct 08



10GigaTAP

Occupies two rear panel 10G ports
Tap One or Two links per 420

Hardware Pattern Match Filtering

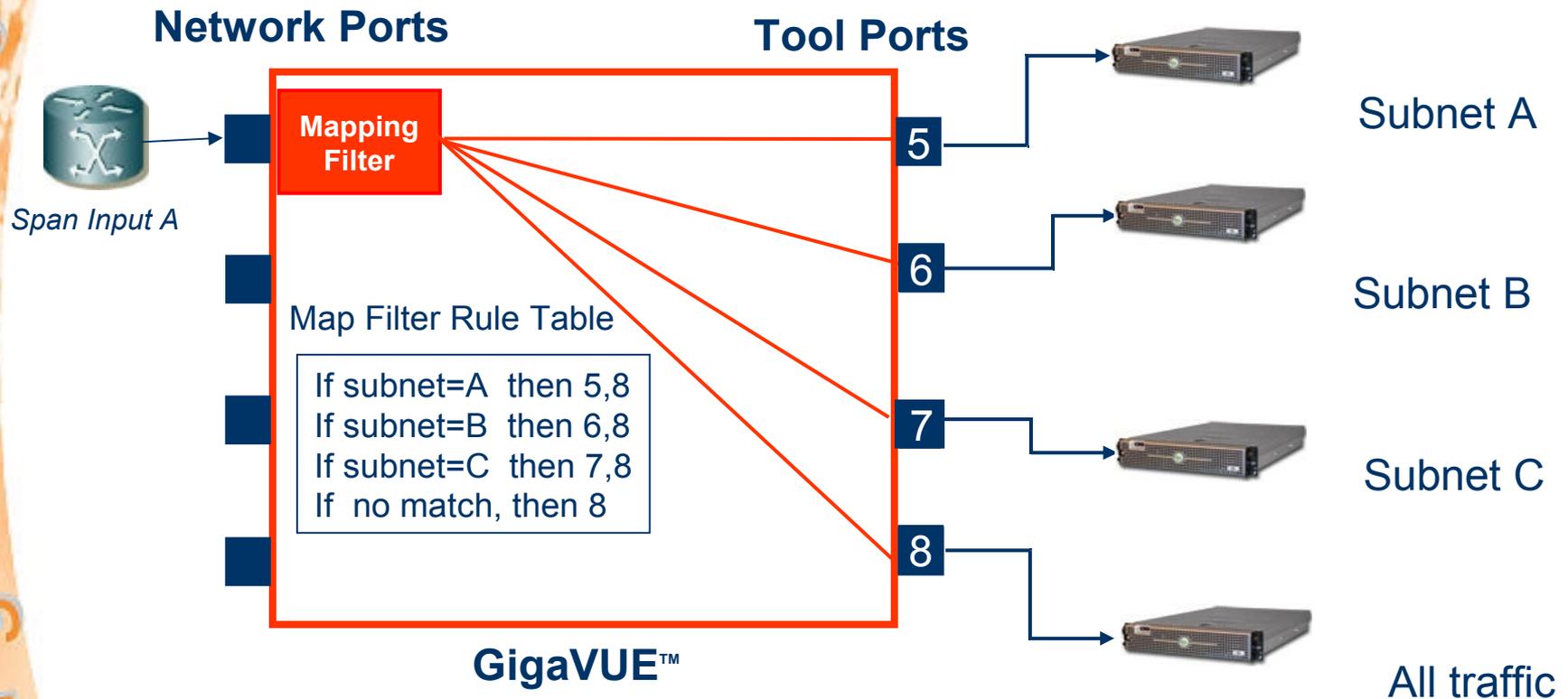
- A “filter rule” is based on a set of patterns in 128 Byte header
 - Allow or Block on pattern match
 - Boolean “and” or “or” patterns together
- Hardware Filtering to virtually eliminate latency
- Up to 4096 filter rules per system
- Filter rules may be based on predefined templates including;
 - MAC source or destination addresses
 - IP source or destination addresses (including IPv6)
 - IP subnets
 - Sessions, using source and destination IP address pairs
 - Ethertypes
 - VLAN id's
 - Application ports
 - TOS priority bits
 - Ranges of MAC addr's, IP addr's, VLAN id's, or application ports
 - Range masks featuring odd/even discrimination (RTP/RTCP filtering)
 - User defined bit pattern and offset

GigaVUE-420

Advanced Lawful Intercept Filtering

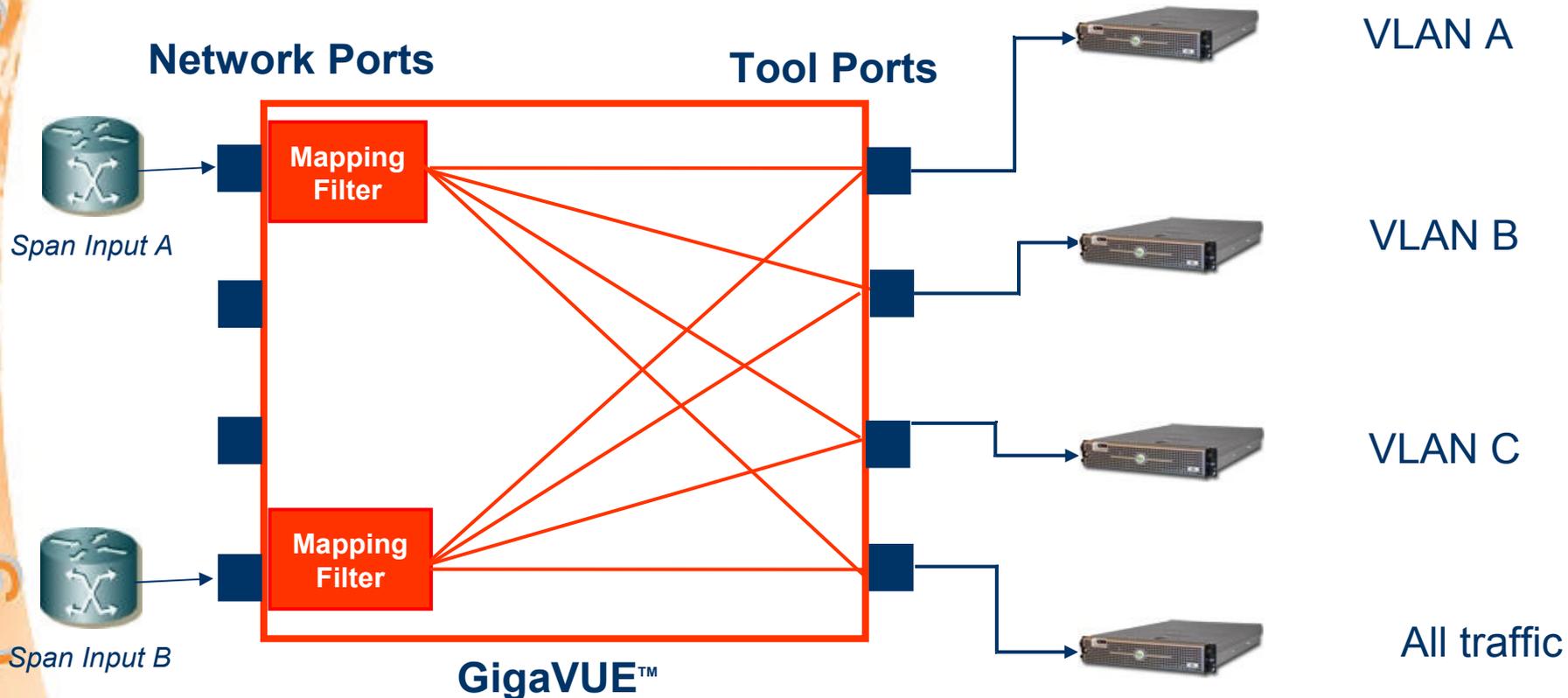
- **Phone number filtering**
 - Follows the phone call through multi-protocol changes from dialing to teardown
 - One number to/from one
 - One number to/from all
- **Email URL filtering**
 - One URL to/from one
 - One URL to/from all
- **CALEA or other lawful intercept application**

Mapping: Load-Sharing



- Multiple tools per rule
- Up to 120 rules per map
- Up to 10 tool ports per rule

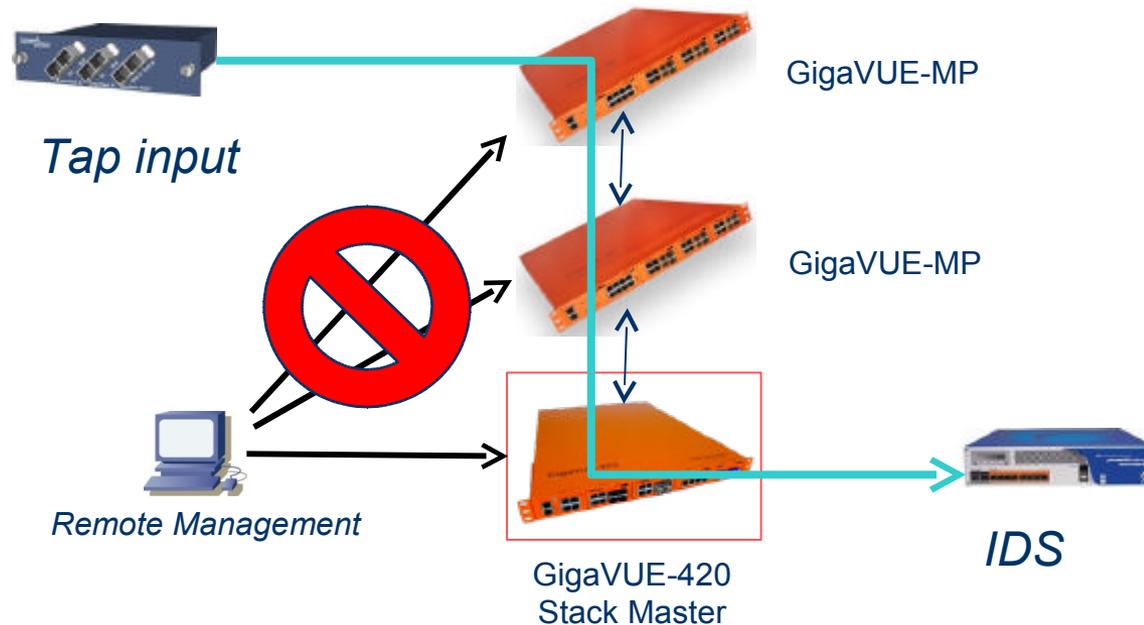
Load Sharing by VLAN from Multiple Sources



- Aggregate multiple data sources with Mapping

Master – Slave Stack Management

- “Master” GigaVUE relays commands to the stack
- Connect to Only one box in a stack
- Completes the cross box commands in remote box



Security Considerations

Authorized Users Only

- Password authenticated local users
- TACACS+ or RADIUS authentication for remote users
- SSH2 128 bit encrypted remote management interface
- Can not see data through management interface
- Users locked to individual ports
 - Can only manage their assigned ports.
- Event logging
- SNMP traps on security risk events



About Gigamon

Healthy, Growing Silicon Valley Company

- Over 1600 units shipped globally to over 400 major Telecom, Financial, Retail, Medical, Entertainment, Networking, Utility, Manufacturing, and Government Corporations
- Recently recognized by Frost & Sullivan as the Emerging Technology Company of the Year in the World Monitoring Market
- Founded July '03 by working partners, self-funded and managed
- Growth funded by revenue only
 - No VC funding – No Debt
- Shipping GigaVUE since May '05,
 - Profitable since Q3 '05





University & Healthcare
Hospitality

Fermilab

KEK

STANFORD HOSPITAL & CLINICS
Advanced Cancer, Medical Center

Berkeley
UNIVERSITY OF CALIFORNIA

Advocate Lutheran General

GEORGE MASON UNIVERSITY

Kasetsart University

APL

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BJC HealthCare

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HIGHMARK. BlueCross BlueShield

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Blue Cross BlueShield of Illinois

USAA

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HONDA
The Power of Dreams

Armstrong
Your vision. becomes reality.

BEST BUY

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lifelock
Photo

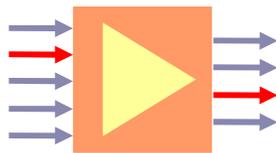
JCPenney

Target

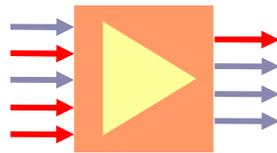
jcp.com

Gigamon Solutions

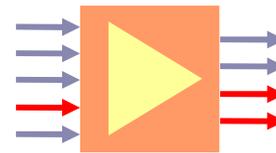
- **Aggregate** many links to any tool
- **Multicast** any link to many tools
- **Filter** data to map packets to tools
- **Save \$\$** Cap Ex and Op Ex budgets



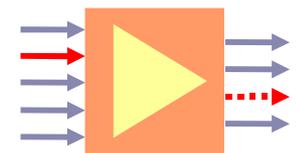
Any to Any



Many to Any



Any to Many



Bit-Mask Filtering