Introduction to TAPS

A guide to monitoring data traffic with Network Taps

What is a TAP

Taps are network device placed directly in-line on a network link. Copies of all traffic are then available for various types of monitoring tools.

Why use TAPS

- Secure 24/7 access for network tools to monitor and collect data
- Fiber taps are passive devices and copper taps are power fault tolerant, greatly reducing risk of single point of failure
- Unlike SPAN ports, taps do not impact network switch performance

Who Needs TAPs

Any organization with :

- Mission critical links that need 24x7 security monitoring
- Compliance requirements requiring uninterrupted data collection
- A need to non-intrusively access links wwwwith portable tools for troubleshooting

Standard or Aggregation?

Use a standard duplex tap when:

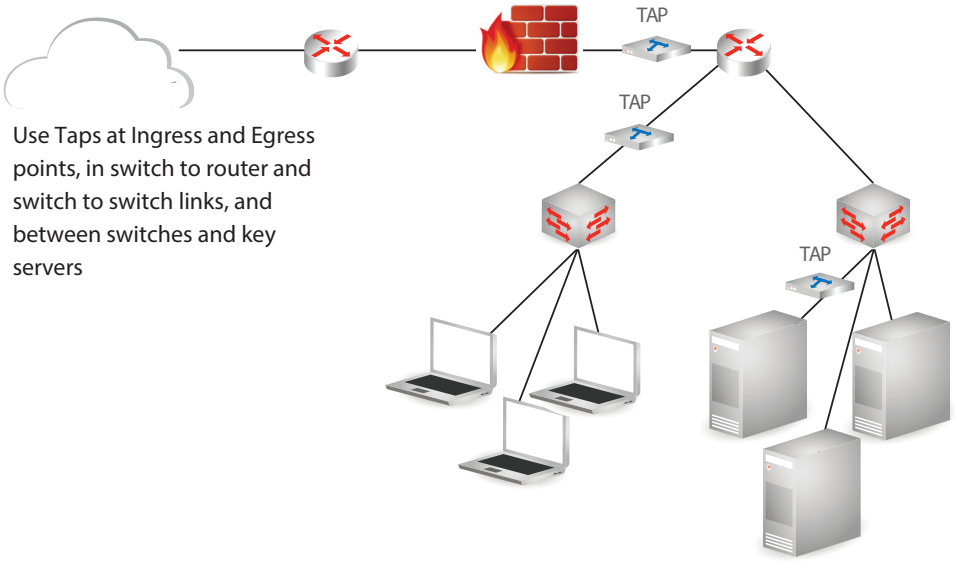
- Link has aggregate utilization spiking over 50%
- It is useful to see the Rx and Tx sides of the duplex conversation separately
- Monitoring tool has dual capture NICs and capability to recombine the data
- Tap monitor ports will be handed off to a Network Packet Broker for aggregation

Use an aggregation tap when:

- Monitoring tool has a single capture NIC but both sides of conversation must be seen
- Aggregate link utilization is typically always below 50%
- There is a need for both aggregated and non-aggregated output (aggregation Taps can be configured for either or both)
- Media conversion is needed - tap fiber links and send to copper tools or tap copper links and send to fiber tools

Where to place TAPs

Use Taps at Ingress and Egress points, in switch to router and switch to switch links, and between switches and key servers



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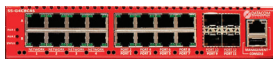
Network Taps are used in-line in network links, to provide non-intrusive monitoring access

Product	Photograph	Link Media Type	Speed	Inline	Tap assembly port pairs	Monitor Ports	Port Types**	Agg
10-100 AT		Copper	10/100	Yes	1	2	10/100 RJ45: 1 Tap pair and 2 Monitor ports	No
CTP-1000		Copper	10/100/ 1000	Yes	1	2	10/100/1000 RJ45: 1 Tap pair and 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
FTP 1000 Series		Fiber	1G/10G	Yes	1	2	LC , SC or MTP/MPO 50/50 or 70/30 split ratio 50, 62.5 or 9 Micron	No
FTP 2000 Series		Fiber	1G/10G	Yes	2	2	LC 50/50 or 70/30 split ratio 50, 62.5 or 9 Micron	No
FTP 4000 Series		Fiber	1G/10G	Yes	4	4	LC 50/50 or 70/30 split ratio 50, 62.5 or 9 Micron	No
Modular FIBERtap System		Fiber	1G, 25G 40G, 100G	Yes	Accepts 1 to 24 modules for up to 24 Tap port pairs	Accepts 1 to 24 modules for up to 48 Monitor ports (one Rx/Tx pair per link)	LC 50/50 or 70/30 split ratio 50, 62.5 or 9 Micron Also available in MTP for 40GSR and 100G SR links	No
SS1204BT-BT-S		Copper Input Copper Output	10/100/ 1000	Yes	1	2	10/100/1000 RJ45: 1 Tap pair and 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS1204BT-SFP-S		Copper Input. SFP Out-put	10/100/ 1000	Yes	1	2	10/100/1000 RJ45: 1 Tap pair SFP: 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS1204SX-BT-S		Fiber Input. Copper output	1G	Yes	1	2	1G SX LC: 1 Tap pair 100/1000 RJ45: 2 Monitor ports 100 Mbps RJ45: Management port	Yes
SS2206BT-BT-S		Copper Input Copper Output	10/100/ 1000 Full Duplex	Yes	2	2	10/100/1000 RJ45: 2 Tap pairs and 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS2206SX-SFP		Fiber Input. SFP Output	1G Full Duplex	Yes	2	2	1G SX LC: 2 Tap pairs SFP: 2 Monitor ports 100 Mbps RJ45: Management port	Yes
SS2210BT-BT/ SFP-S		Copper Input, SFP or Copper Output	10/100/ 1000 or 1GFull Duplex	Yes	2	6	10/100/1000 RJ45: 2 Tap pairs and 4 Monitor ports SFP: 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS4210BT-SFP-S		Copper Input SFP Out-put	10/100/ 1000 or 1G Full Duplex	Yes	4	2	10/100/1000 RJ45: 4 Tap pairs SFP: 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes

Notes:
Each network tap port pair shown on this page will tap one network link, 2 port pairs will tap 2 links, etc... Refer to product FASTstart guides for details on installation.
See datasheets for specific fiber types, connector types and split ratios available. Split ratios 50/50 and 70/30 are commonly used, other variations are available.

Network Taps are used in-line in network links, to provide non-intrusive monitoring access

Product Number	Photograph	Media type	Speeds	Inline	Tap assembly port pairs	Monitor Ports	Port Types**	Aggregation
SS-G4C8C4S		Copper taps; copper and SFP+ monitor ports	100/1000 links; 100/1000 and 10G/10G monitor ports	Yes	4	12	100/1000 RJ45: 4 Tap pairs and 8 Any-to-Any ports SFP+: 4 Any-to-Any ports 100 Mbps RJ45: Management port USB: front console port	Yes
SS-G6C4C4S		Copper taps; copper and SFP+ monitor ports	100/1000 links; 100/1000 and 1G/10G monitor ports	Yes	6	8	100/1000 RJ45: 6 Tap pairs and 4 Any-to-Any ports SFP+: 4 Any-to-Any ports 100 Mbps RJ45: Management port USB: front console port	Yes
SS-G8C4S		Copper taps; SFP+ monitor ports	100/1000 links; and 1G/10G monitor ports	Yes	8	4	100/1000 RJ45: 8Tap pairs SFP+: 4 Any-to-Any ports 100 Mbps RJ45: Management port USB: front console port	Yes
TS-1404		Fiber	1G/10G	Yes	1	2	1 10G/1G Network Tap. 2 Monitoring 10G/1G Any-to-Any. Management RJ45. Serial DB9F	Yes
TS-1406		Fiber	1G/10G	Yes	1	4	1 10G/1G Network Tap. 4 Monitoring 10G/1G Any-to-Any. Management RJ45. Serial DB9F	Yes
TS-2408		Fiber	1G/10G	Yes	2	4	2 10G/1G Network Tap. 4 Monitoring 10G/1G Any-to-Any. Management RJ45. Serial DB9F	Yes

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See datasheets for specific fiber, types, connector and split ratios available. Split ratios 50/50 and 70/30 are commonly used, other variations are available.