

# Introduction to TAPS

## A guide to monitoring data traffic with Network Taps

### What is a TAP

Taps are network device splaced 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
- Reduce risk of a single point of failure. Fiber taps are completely passive, and copper taps are power fault tolerant
- Unlike SPAN ports, taps do not impact network switch performance
- Taps provide visibility for CRC's, runts, and fragments

### 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 with portable tools for troubleshooting

### Standard or Aggregation?

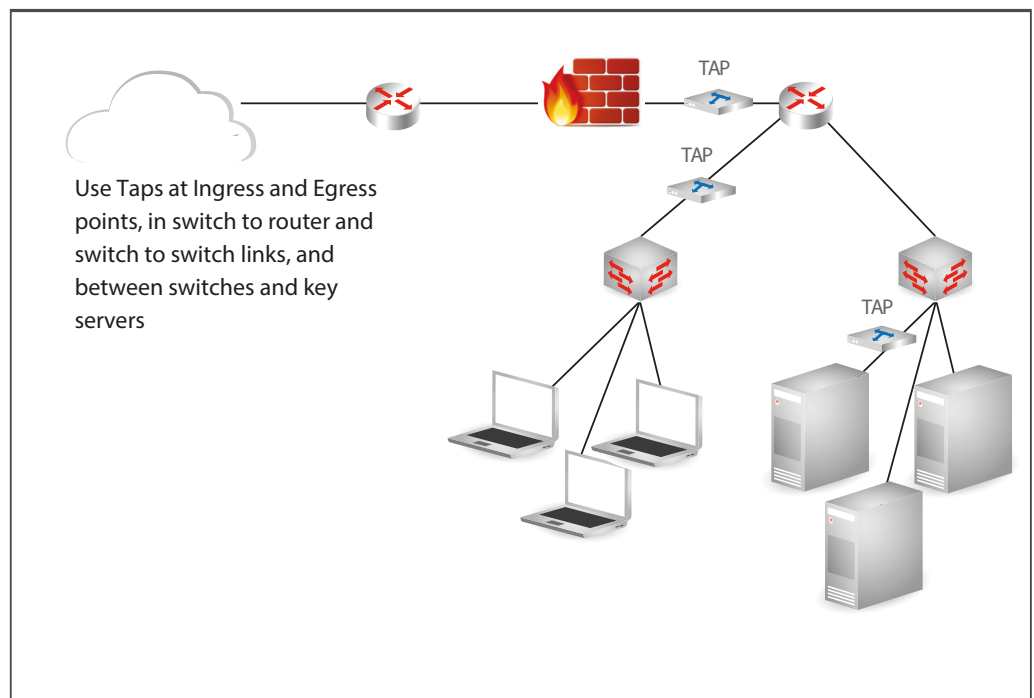
#### Use a standard duplex tap when:

- 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













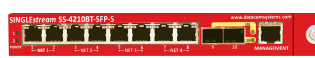
#### Use an aggregation tap when:

- 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



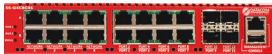





Network Taps are used in-line in network links, to provide non-intrusive monitoring access

Product	Photograph	Tapped Link and Monitor Ports Media Type	Speeds	Tap assembly port pairs	Monitor Ports	Port Types**	Agg
10-100 AT		Copper tap and copper monitor ports	10/100	1	2	10/100 RJ45: 1 copper tap and 2 copper Monitor ports	No
CTP-1000		Copper tap and copper monitor ports	10/100/1000	1	2	10/100,1000 RJ45: 1 copper tap and 2 copper Monitor ports	Yes
FTP 1000 Series		9 micron single mode; 50/62.5 micron Multi-mode	1G/10G	1	2	LC or SC 50/50 or 70/30 split ratio	No
FTP 2000 Series		9 micron single mode; 50/62.5 micron Multi-mode	1G/10G	2	2	LC 50/50 or 70/30 split ratio	No
FTP 4000 Series		9 micron single mode; 50/62.5 micron Multi-mode	1G/10G	4	4	LC 50/50 or 70/30 split ratio	No
FTC-24 Modular FIBERTap System		9 micron LBL 50 micron 62.5 micron	1G, 10G, 25G, 40G, 50G, 100G 40/100G SR4, 40G SR2, 10G/40G BiDi	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 /MPO for 40G, 50G, and 100G links	No
SS1204BT-BT-S		Copper tap and copper monitor ports	10/100/1000	1	2	10/100/1000 copper /1000 RJ45: 1 copper tap and 2 copper Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS1204BT-SFP-S		Copper tap and SFP monitor ports	10/100/1000 and 1G	1	2	10/100/1000 RJ45: 1 copper tap SFP: 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS1204SX-BT-S		Fiber tap and copper monitor ports	1G and 10/100/1000	1	2	1G SX LC: 1 fiber tap 100/1000 RJ45: 2 Monitor ports 100 Mbps RJ45: Management port	Yes
SS2206BT-BT-S		Copper taps and copper monitor ports	10/100/1000	2	2	10/100/1000 RJ45: 2 copper taps and 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS2206SX-SFP		Fiber taps and SFP monitor ports	1G and 10/100/1000	2	2	1G SX LC: 2 fiber taps 100/1000 RJ45: 2 Monitor ports 100 Mbps RJ45: Management port	Yes
SS2210BT-BT/SFP-S		Copper taps and SFP monitor ports	10/100/1000 and 1G	2	6	10/100/1000 RJ45: 2 copper taps and 4 Monitor ports SFP: 2 Monitor ports 100 Mbps RJ45: Management port Serial DB9F: rear console port	Yes
SS4210BT-SFP-S		Copper taps and SFP monitor ports	10/100/1000 and 1G	4	2	10/100/1000 RJ45: 4 copper taps 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 - used directly in-line in network links for non-intrusive monitoring access

Product Number	Photograph	Tapped Link and Monitor Ports Media Type	Speeds	Tap assembly port pairs	Monitor Ports	Port Types**	Agg
SS-G4C8C4S		Copper taps; copper and SFP+ monitor ports	100/1000 links; 100/1000 and 1G/10G monitor ports	4	12	4 copper taps, 8 copper any to any ports , and 4 SFP+ any to any ports supporting DAC cables	Yes
SS-G6C4C4S		Copper taps; copper and SFP+ monitor ports	100/1000 links; 100/1000 and 1G/10G monitor ports	6	8	6 copper taps, 4 copper any to any ports , and 4 SFP+ any to any ports supporting DAC cables	Yes
SS-G8C4S		Copper taps; SFP+ monitor ports	100/1000 links; and 1G/10G monitor ports	8	4	8 copper taps, and 4 SFP+ any to any ports supporting DAC cables	Yes
TS-1404		9 micron single mode; 50/62.5 micron Multi-mode	1G/10G	1	2	1 10G/1G Fiber Tap, 2 10G/1G SFP+ any to any SFP+ports, Management RJ45. Serial DB9F	Yes
TS-1406		9 micron single mode; 50/62.5 micron Multi-mode	1G/10G	1	4	1 10G/1G Fiber Tap, 4 10G/1G SFP+ any to any SFP+ports, Management RJ45. Serial DB9F	Yes
TS-2408		9 micron single mode; 50/62.5 micron Multi-mode	1G/10G	2	4	2 10G/1G Fiber Taps, 4 10G/1G SFP+ any to any SFP+ports, Management RJ45. Serial DB9F	Yes

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