Aggregation: Telecommunications

How to aggregate high density 10G links for out-of-band monitoring

A large Telco in Spain needed to gain visibility into their 10G network to deploy a Forescout platform to reduce cyber and operational risk.

Pain point: A passive fiber TAP creates two monitoring ports. Tapping 60 links, gives you 120 10G monitoring ports. There are only 8 ports on the two Forescout appliances.

Goal: Gain complete situational awareness of their extended environment to reduce cyber and operational risk.

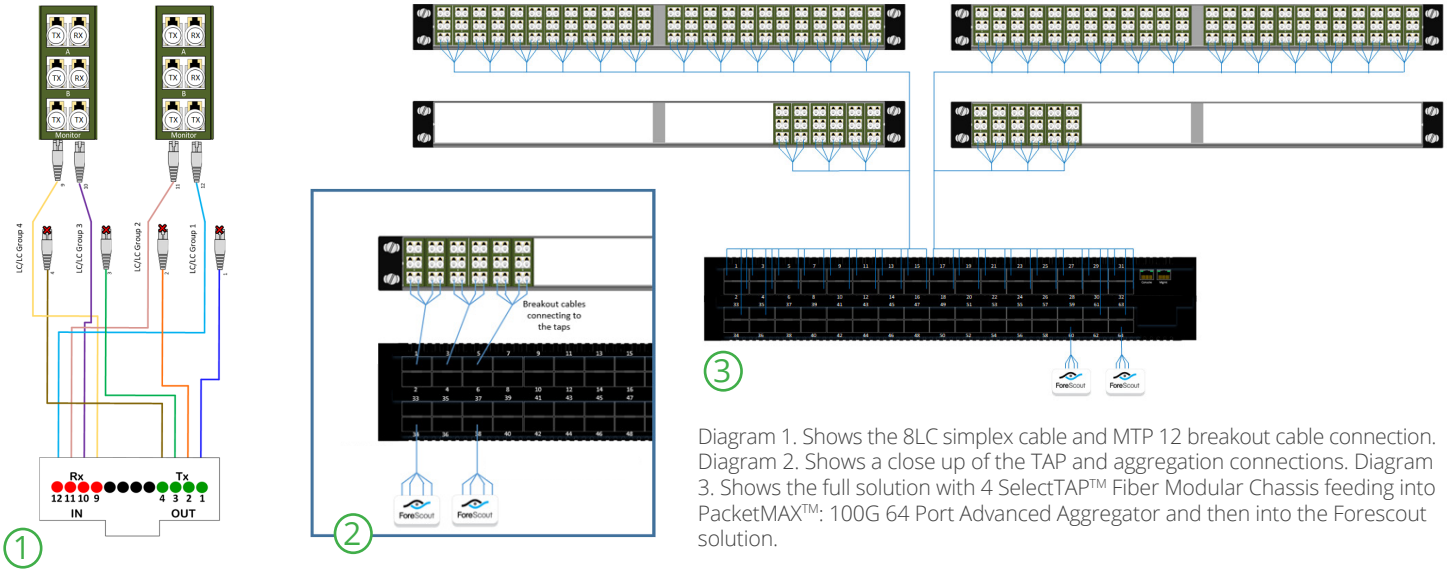

Diagram 1. Shows the 8LC simplex cable and MTP 12 breakout cable connection. Diagram 2. Shows a close up of the TAP and aggregation connections. Diagram 3. Shows the full solution with 4 SelectTAP™ Fiber Modular Chassis feeding into PacketMAX™: 100G 64 Port Advanced Aggregator and then into the Forescout solution.

Solution:
Garland Technology's SelectTAP™: Fiber Modular Chassis provides 60 passive TAPs in a 4U footprint [giving the capability to add another 36 passive TAPs in the current rack space]. These 120 links feed into Garland's PacketMAX™: 100G 64 Port Advanced Aggregator using multi-mode QSFP+ 40G for the 10G connection, which utilizes a MTP 12 to 8LC simplex breakout cable, for full duplex connections into two Forescout appliances.

In this scenario, a lot of competitors are utilizing two packet brokers performing aggregation, and then they're using interconnects between the two boxes. There is 120 gigabits of potential traffic and a lot of these smaller packet broker aggregators can't have 120 gigabits of interconnect traffic between them.

The ideal situation is to take all 120 links into a single device, at which point you can load balance and filter out traffic that isn't needed, to ensure that all the packets are going to the Forescout boxes.

Value:

- Simplified cabling
- Cost effective aggregation, load balancing, filtering solution
- Ability to monitor 192 10G ports in a 6U footprint
- High density 10G solution
- Scalable, modular solutions for future growth