Product Brief: TWAMP Smart SFP™ Gigabit Ethernet TWAMP reflector

Overview

Designed in conformance with the Small Form Factor Pluggable 20-pin Multi-Source Agreement (MSA), TWAMP Smart SFP™ uses standardized protocols at various operational layers to monitor and troubleshoot a network:

- IP layer service monitoring using TWAMP Light according to RFC5357
- Physical layer monitoring via remote DDMI digital diagnostics monitoring retrieval,

The integrated OAM capabilities are complemented with Gigabit Ethernet wire speed with a low latency.

TWAMP Smart SFP™ is available in a wide range of optical and reach applications: duplex, single, or bidirectional with reaches up to 80 km at industrial temperature range.

An API is available to facilitate integration in existing equipment and management systems. This management interface allows for configuration and monitoring of relevant parameters. The Smart Device Manager (SDM), a Web based application with an intuitive user friendly GUI, is available for configuration of key parameters.
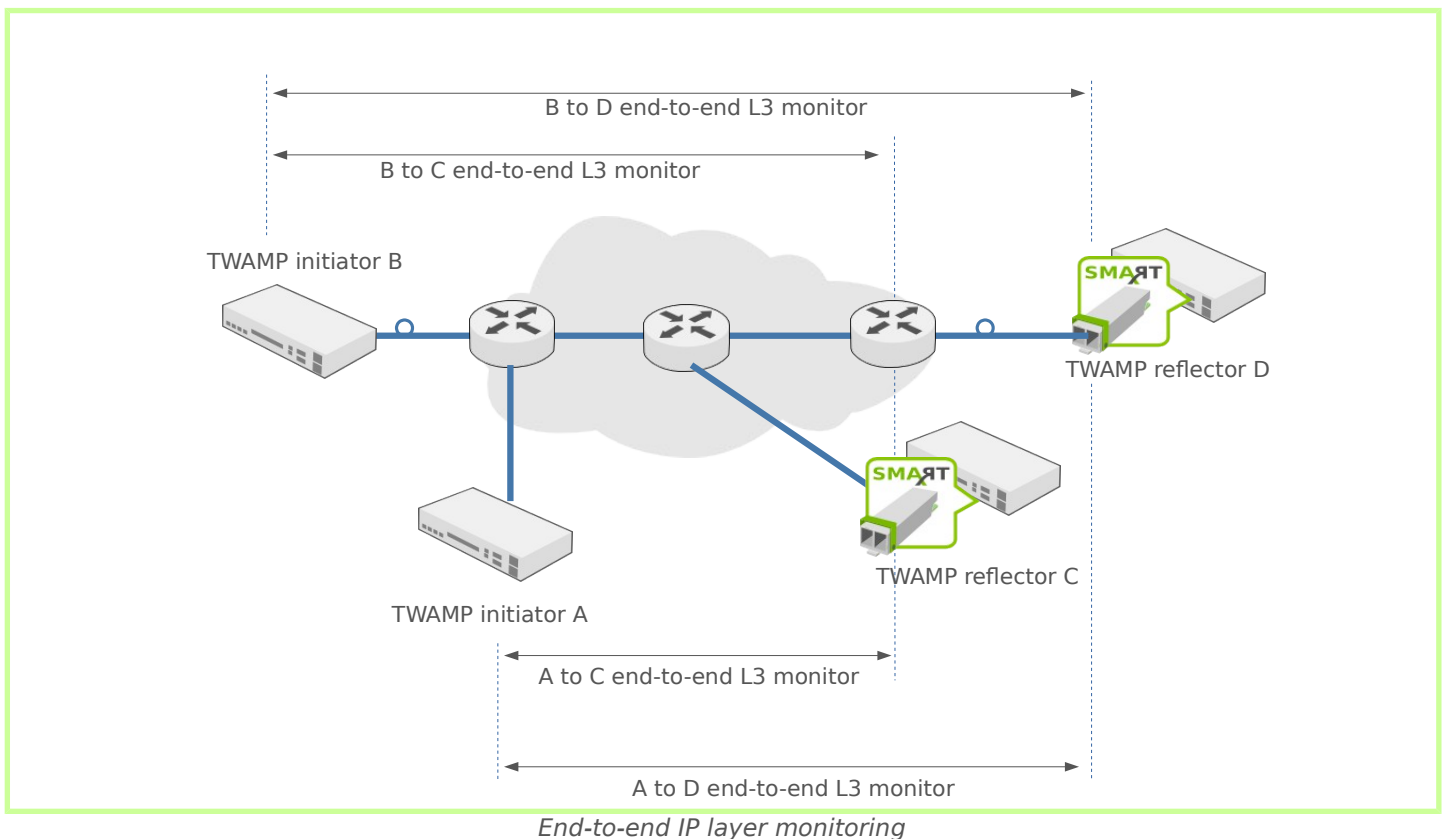
Application Highlights

- TWAMP Light Reflector
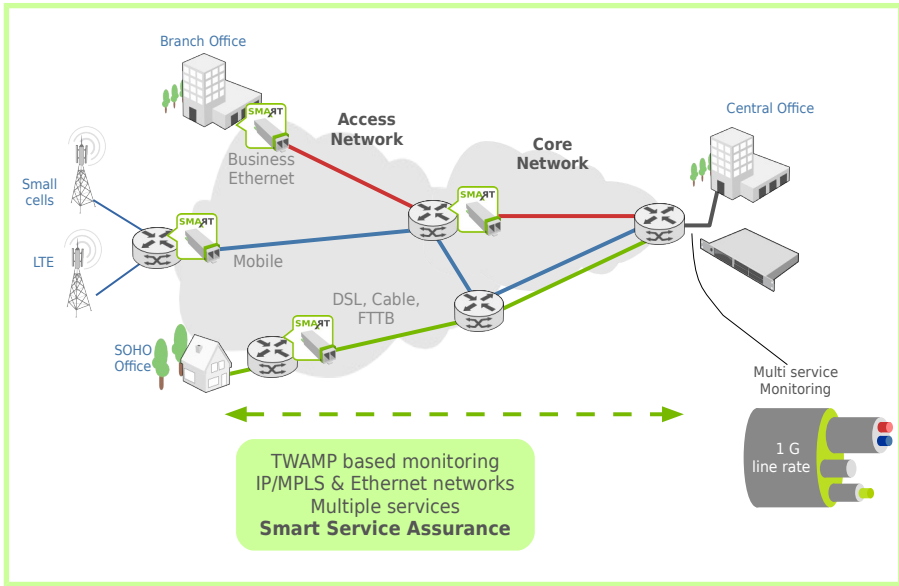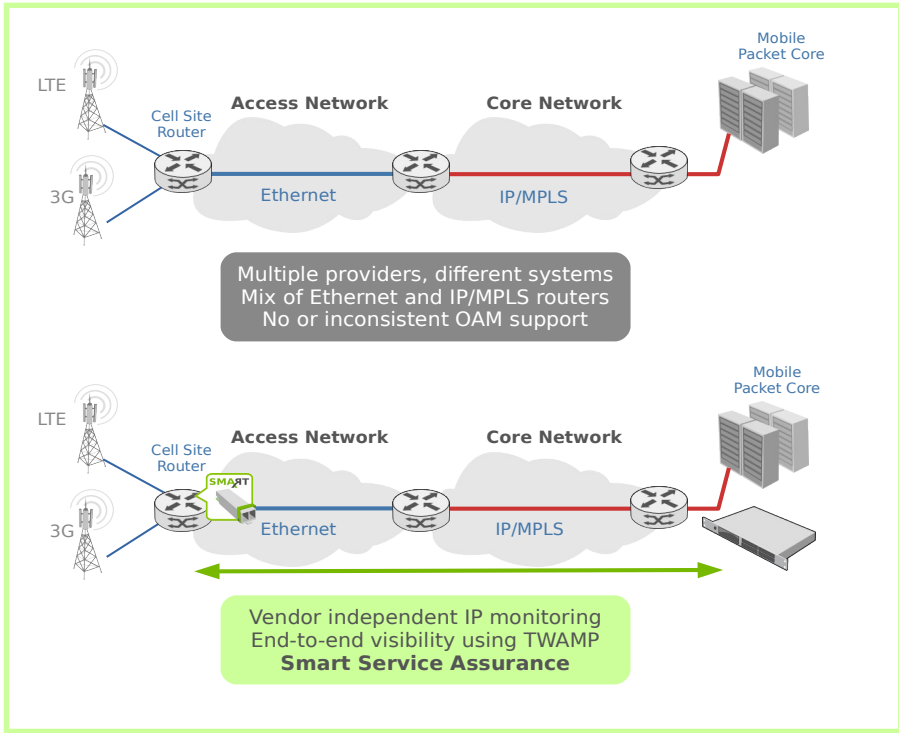- Layer 3 Delay Measurement
- Layer 3 Loss Measurement

Benefits

- Compact size
- Available in wide range of optics
- Industrial Temperature range
- Low Carbon footprint
- Total cost reduction

Applications

End-to-end IP layer monitoring

Networks, with equipment not supporting the TWAMP protocol, can be upgraded using the TWAMP Smart SFP™. Standards compliant TWAMP initiators can be used to add measurement points for two way loss and delay. As multiple sessions are supported, up to 8 measurements to a single TWAMP Smart SFP end point can be run in parallel.

Multiple providers, different systems
Mix of Ethernet and IP/MPLS routers
No or inconsistent OAM support

Vendor independent IP monitoring
End-to-end visibility using TWAMP
Smart Service Assurance

TWAMP based monitoring
IP/MPLS & Ethernet networks
Multiple services
Smart Service Assurance

Features

- Up to 8 TWAMP Light Reflector RFC5357 sessions
- Near wire speed reflector performance
- IPv4 (RFC791) and ARP (RFC842)
- SFP INF-8074 compliant[1]
- DDM SFF-8472 compliant
- Software API for remote management
- Remote access to Digital Diagnostics Monitoring
- Transparent to Synchronous Ethernet (from optical interface to MSA system side)
- Link Pass Through – Link Loss Forwarding
- Low latency and wire speed GbE throughput
- Upgradable Protocol processor

Interfaces

- Compatible with SFP electrical MSA
- LC connector type
- Wide range of optical transceiver options
  - Duplex or bidirectional fiber
  - Various optical reaches, up to 80 km
- Available operating temperature ranges:
  - Industrial: -40°C to 85°C

Contact Information

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1   Exception: power consumption exceeds MSA limit

OE SOLUTIONS   AimValley