SAMTEST

PERFORMANCE MONITORING FOR IP & ETHERNET SERVICES

Veryx

KEY FEATURES

- Active performance monitoring using synthetic frames
  - Layer 2: IEEE 802.1ag/ITU-T Y.1731
  - Layer 3: ICMP, UDP Echo
- Auto-diagnostics on SLA violation
- Fault isolation/correlation, path trace, and path changes
- Centralized data store, distributed PM Initiators
- PM Reflectors for both Layer 2 and 3
- Flexible deployments - Choice of physical and virtual PM initiators / reflectors
- On-demand diagnostics
  - Layer 2: IEEE 802.1ag/ITU-T Y.1731
  - Layer 3: ICMP, UDP Echo, TWAMP

APPLICATIONS

- Business Ethernet Services
- Cloud & Data Center Interconnect,
- Mobile backhaul

KEY BENEFITS

- Vendor independent
  - Zero integration, no inter-operability issues
- Reduces MTTR
- Maximizes customer retention and gain market share
- Enhances quality and builds customer loyalty
- Supports both Layer 2 and Layer 3 services

SAMTEST Active Performance Monitoring - Overview

Veryx SAMTEST provides comprehensive standards aligned provides comprehensive standards aligned IP and Carrier Ethernet service performance monitoring. SAMTEST active performance monitoring (APM) is industry's first MEF 35.1 compliant tool for Service Assurance and is far superior to monitoring capabilities provided on NIDs.

SAMTEST provides device independent monitoring, it will perform reliably even when NIDs fail. SAMTEST performs monitoring of layer 2 service links using synthetic SOAM frames and layer 3 service links using ICMP and UDP Echo.

SAMTEST Active Performance Monitoring - Components

SAMTEST APM solution includes SAMTEST Controller and Veryx performance monitoring (PM) Initiators.

- SAMTEST controller is centrally located and accessed using a web interface.
- PM Initiators generate synthetic SOAM frames for layer 2 and ICMP and UDP Echo packets for layer 3 service links. SAMTEST supports monitoring using PM Initiators (physical or virtual) placed at suitable aggregation nodes.
- Veryx PM Reflectors augments performance monitoring in legacy networks.

SAMTEST APM supports continuous, periodic and on-demand monitoring with configurable monitoring interval and frame sizes. Whenever SAMTEST APM detects SLA violation, it not only raises suitable alarms, but also provides further insights on the violation to facilitate quick resolution of issues.

Figure 1: VT-201-L Initiator/Reflector

SAMTEST also offers virtual PM Reflectors and Initiators to support service provider transition to NFV based networks. Figure 2 shows a sample deployment of SAMTEST for monitoring using virtual PM Reflector along with physical initiators.

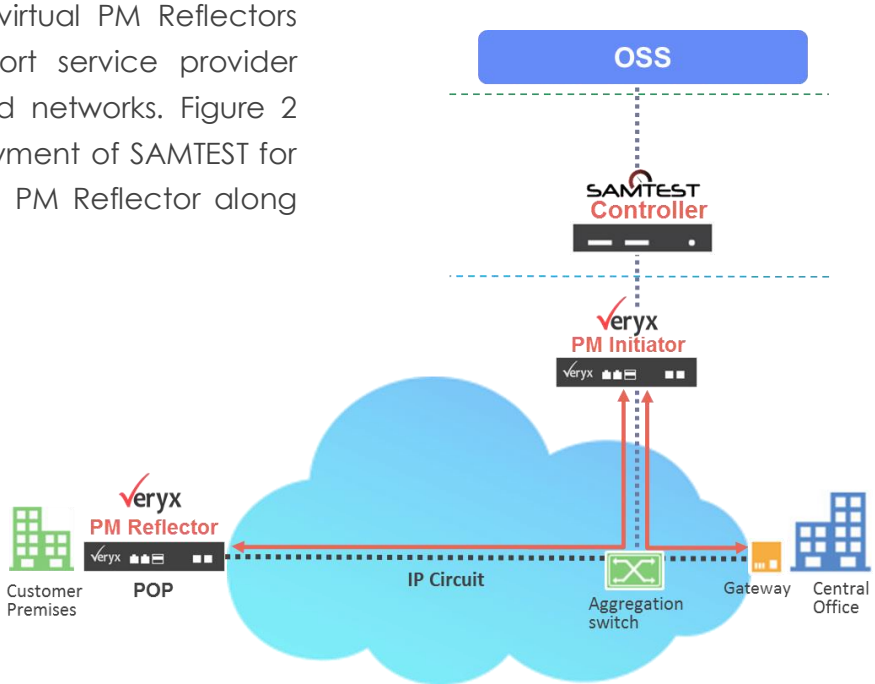

Figure 2: Monitoring IP Circuits using Veryx PM Reflectors and Initiators

Reporting and Integration with OSS

SAMTEST reports address the needs of a broad audience from technical to executive levels to provide comprehensive insights into SLA performance at various levels.

SAMTEST's Northbound RESTful API interface facilitates easy integration with existing OSS and back office systems.

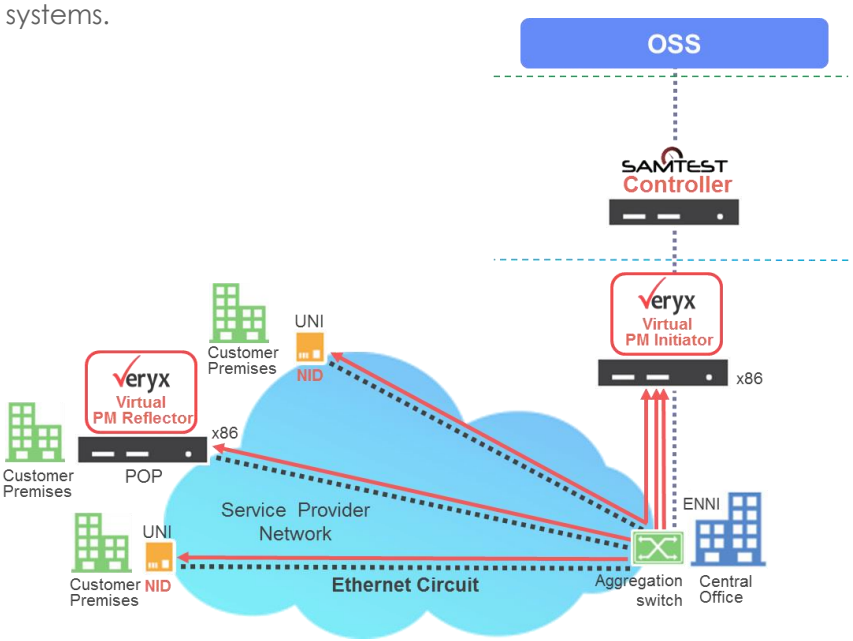

Figure 3: Monitoring Ethernet Circuits using Veryx Virtual PM Initiators and Reflectors

On-demand Diagnostics

SAMTEST supports on-demand diagnostics for enhanced troubleshooting in live networks.

SAMTEST performs diagnostics and standards based measurements at Layer 3 using ICMP, UDP Echo, TWAMP and at Layer 2 using IEEE 802.1ag/ITU-T Y.1731.

Figure 4: SAMTEST performance monitoring dashboard and analytics

Features

Monitoring Features
Active Performance Monitoring: ▪ Layer 2: IEEE 802.1ag/ITU-T Y.1731 ▪ Layer 3: ICMP, UDP Echo
Continuous, periodic and on-demand monitoring
Performance Parameters: FD, FDV, MFD, FDR and FLR (as per MEF 10.3)
Frame sizes: 80/128/256/512/1024/1518 Bytes
Monitoring interval – 100ms/1s/10s
Upto 1000 circuits monitoring per port
Upto 25000 circuits monitoring per controller
Alarm generation on SLA violation
Auto diagnostics on SLA violation
Network behavior logging during SLA violation
Fault isolation/correlation, path trace, and path changes
On-demand diagnostics : ▪ Layer 2: IEEE 802.1ag/ITU-T Y.1731 ▪ Layer 3: ICMP, UDP Echo, TWAMP

Physical PM Reflector and Initiators

Physical PM Initiator/Reflector
Dimensions
5.78"D x 7.7"W x 1.61"H (147mm x 196mm x 41mm)
Weight
2.2 Lbs.

Interface and Indicators
Front I/O
1 x VGA Port, 3 x USB ports, 2 x Serial COM, Fanless Test port options: 1 x RJ-45 (10/100/1000Mbps)

Power
Power Supply
AC to DC, AC 90 to 240 VAC Input, DC 12V/5A 60W
Consumption (max.) 11.43W

Environmental
Operating temperature
0 to 50 degree Celsius
Regulatory
FCC and CE Certified

Virtual PM Reflector and Initiators

Virtual PM Initiator/Reflector
vCPU: 2, Memory: 2 GB, HD Space: 4 GB
KVM and VMWare ESXi 6.0 hypervisors

For more information

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Partnerships

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About Veryx Technologies

Veryx Technologies is a leader in IP and Carrier Ethernet testing and offers comprehensive range of test solutions to enhance the Carrier Ethernet service assurance. Veryx provides innovative testing, automation and monitoring solutions for network service providers, cloud service providers, data centers, Enterprise IT and network equipment vendors. Leading service providers and equipment vendors rely on Veryx solutions for network testing, performance monitoring and equipment testing applications for technologies such as Carrier Ethernet, IP, Cloud, SDN, NFV and Smart Networks.

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