Is the Service Quality meeting your Expectations?

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Networks in Transition: Fixed-Mobile IP Convergence

Consumers
- Personalization

Business
- Collaboration & Productivity

Connected Home
- Mobility
- Enterprise Networks
- Broadband Data
- Entertainment

IMS
- Voice
- Video

Enabling New Experience!

Connecting – Users with apps; apps with networks and networks with each other
Delivering and Managing Network & Service Quality: Key Pieces of the Puzzle

Deliver rapid trouble identification, segmentation, isolation and SLA assurance
What Service Assurance Is

- Service Quality Impacts the Business
- Tests and Monitor Service Quality Directly
- Deriving Service Quality from Element Status & Performance is Hard

FCAPS Functions:
- Security
- Configuration
- Accounting
- Fault
- Performance

Provide Assurance Functions of Performance and Fault Management

TMN Layers

Service Quality Impacts the Business
Tests and Monitor Service Quality Directly
Deriving Service Quality from Element Status & Performance is Hard

Provide Assurance Functions of Performance and Fault Management
Proactive Testing

- Continuous, Repeatable, Reliable, Accurate, Representative
- Suitable for Measuring SLAs and Service Objectives
- Isolate the Problem

Test the Service, not the Server

Proactive Monitoring

- Measures Customer’s True Experience & True Behavior
- Correlated Views, End-to-End
- Detailed Traces for Diagnosis

Monitor the Service, not the Circuit

Presentation Layer

KPI & KQI Engine

Test in Network

Monitor near Users

Monitor near Servers
Example: Ethernet Mobile Backhaul Turn-up through Operational Monitoring

- EtherSAM Y.1564 for Turn-up Frame loss, delay, throughput, burstability, frame delay variation
- Ethernet OAM standards (802.1ag, and Y.1731)

On-Demand Service Performance Test (In-Service or Out-of-Service)

24x7 In-Service Monitoring (Availability, Loss, Delay, Delay Variation)

1. CONSTRUCTION
2. SERVICE TURN-UP AND BURN-IN
3. SERVICE MONITORING
4. SERVICE TROUBLESHOOTING
Standards Based Segmented and End-to-End Monitoring & Service Assurance
Service Assurance Users

Network Operations
- Monitor network quality; troubleshoot degradations
- Verify network configuration changes.

Network Planning / Traffic Engineering
- Monitor network loading trends.
- Plan network restructuring

Service Management
- Monitor adherence to SLAs
- Isolate SLA non-conformance.

Customer Care
- Determine subscriber service status
  - Initiate needed subscriber tests

Business Managers / Marketing
- Monitor service uptake & marketing campaign effectiveness
Network & Service complexity is increasing, Network Operations require

- A highly efficient turn-up testing, troubleshooting, performance monitoring and service assurance framework to keep the cost down and improve efficiency

- In order to ensure performance, service delivery and quality of experience (QoE), complete visibility and access to key interfaces is essential