# JDSU SAMComplete

Y.1564 based Service Activation Methodology
… **and more**

ITU-T Y.1564 Methodology Overview

Y.1564 Overview

- **Mainly an Ethernet Installation Tool**
  - Verifies multi-service SLA compliance
  - Good Test for Access Side of Metro Network

- **Ideal Use Cases**
  - Multi-Service LTE/4G Cell Site traffic
  - Triple Play Testers

- **New Y.1564 Terminology**
  - Bandwidth profiles
    - CIR – throughput committed to conform to KPIs
    - EIR – throughput may conform to SLA but may also be dropped entirely
    - CBS, EBS – data burst parameters

  - Key Performance Indicators (KPIs) or Parameters in SLA
    - Frame Delay (FD) – Latency
    - Frame Delay Variation (FDV) – Jitter
    - Frame Loss Rate (FLR)
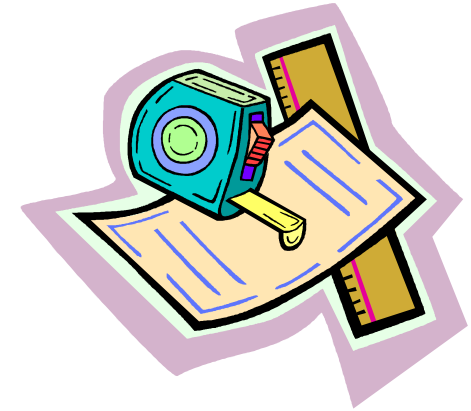
High-Level View of ITU-T Y.1564

- Objectives
  - To validate the typical SLA of Carrier Ethernet-based services
    - Against a Bandwidth Profile
    - Against KPIs
 - Offer a quick repeatable **Multi-Stream** test with pass/fail results

- Two Phase Test Methodology

  - Service Configuration Test
    - Each stream/service is validated individually
    - Results compared to
      - KPIs
      - Bandwidth Parameters

  - Service Performance Test
    - All services tested concurrently at CIR
    - Results compared to KPIs
      - Frame Delay (Latency)
      - Frame Delay Variation (Packet Jitter)
      - Frame Loss rate
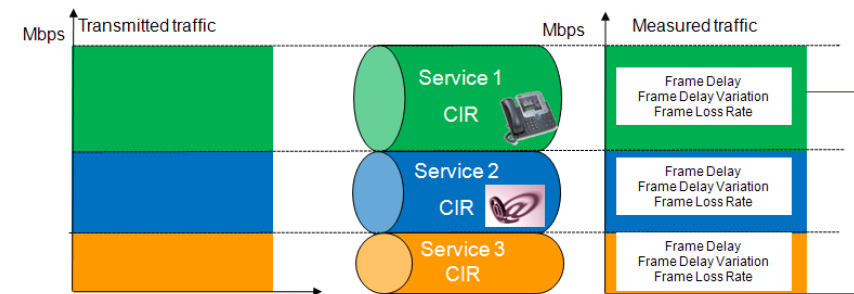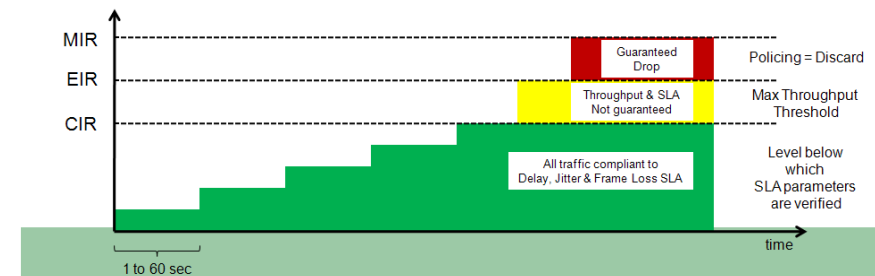
JDSU SAMComplete

- Y.1564 based Service Activation Methodology
- … **and more**

SAMComplete Key Benefits

(1) ***Boost customer satisfaction and network quality***
- ***reliable and repeatable***
- ***independent of technicians skill level***

(2) **Reduce OPEX for service delivery**
- **<u>faster</u> and more complete test execution**
- **Integrated with J-Complete**

(3) **Increase your ROI** (Return on Investment)
- **SAMComplete comes <u>for FREE</u> units running multiple streams**
- **Works on new units <u>and installed base</u> JDSU's MTS testers** (MSAM, 5800, Transport Module V3)

Three Easy Steps for Field Engineers …

1. Load Profile

2. Run Test

3. Create Report
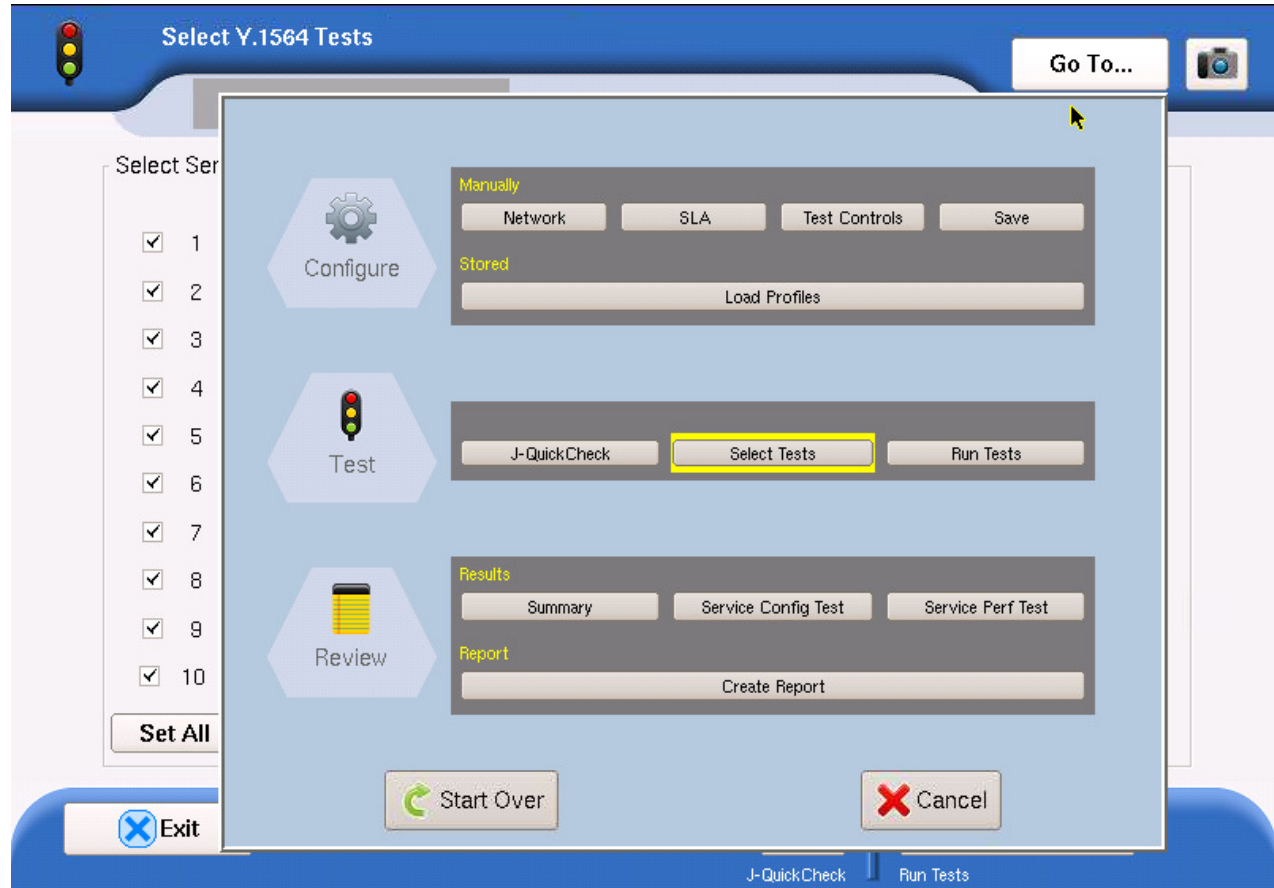
… Workflow Based Configuration for Easy Profile Creation & Troubleshooting

Time Saving Configuration and Execution

Work Flow Based Configuration for Easy Test Setup

Integrated J-QuickCheck
- Pre-test before starting
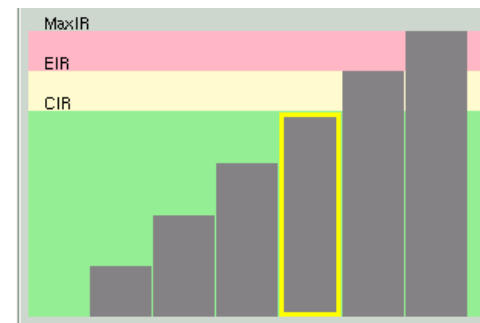- Saves time on end-to-end setup

Time Saving Throughput Test
- Start at CIR
- If CIR fails start at -0- and step up

Time Saving Troubleshooting
- RFC 2544 Zeroing-In Algorithm

Triple Play Stream Configuration
- Configure by # of TV or VoIP Streams
- Same as Triple Play Test

Time Saving
- Steps to CIR X Time per Step
- Ex: 3 steps x 60 seconds = 3 Minutes
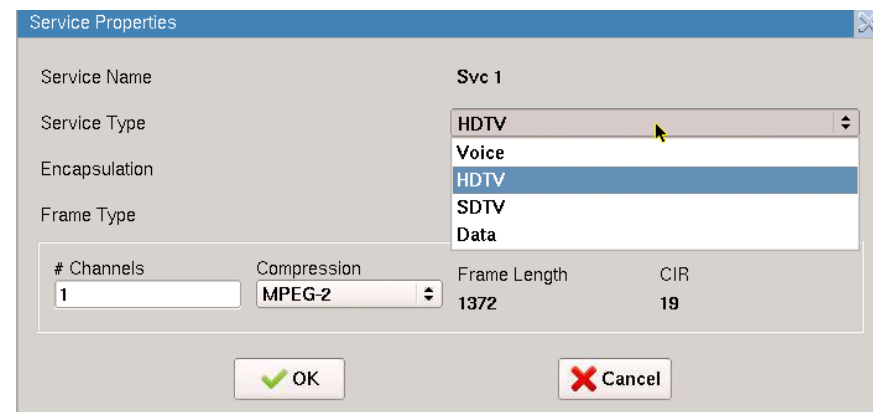
SAMComplete - taking a closer look

Three Easy Steps for Field Engineers ...

1. Load Profile

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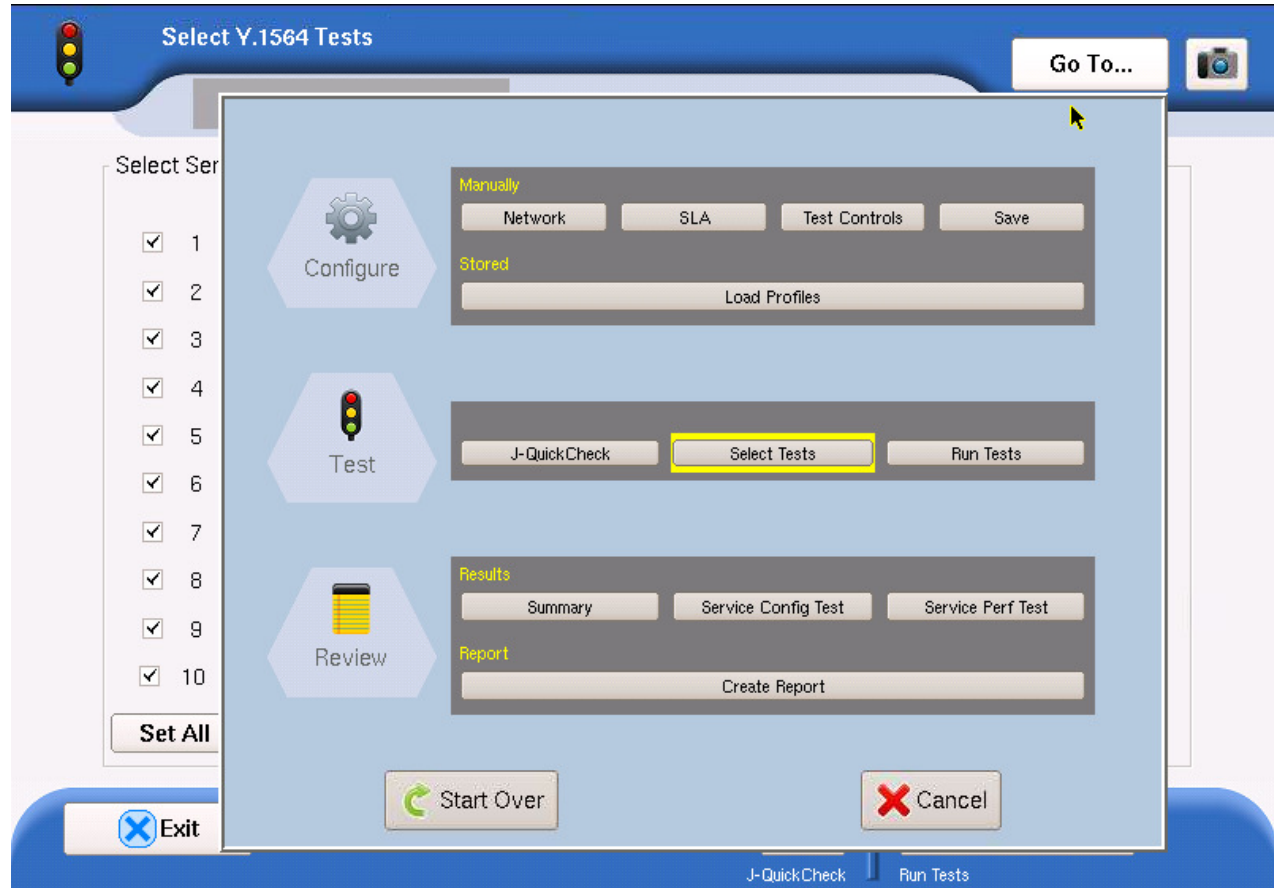
... Workflow Based Configuration for Easy Profile Creation & Troubleshooting

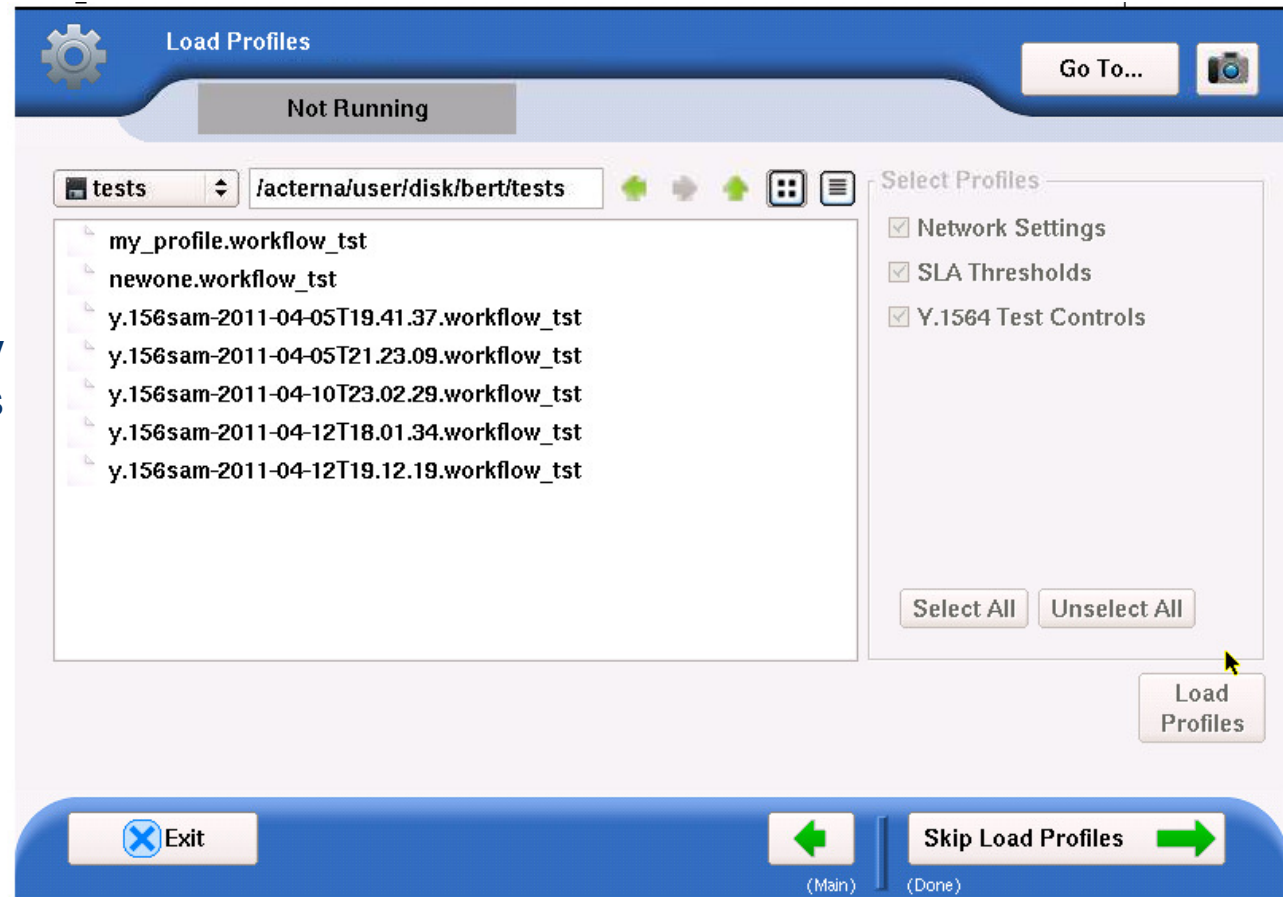# Step 1 – Intelligent Profile Loading

Load Network Profile Only
- Addressing
- Frame/Packet Length
- Priority Markings

Load Per Service SLAs Only
- Throughput Parameters
    - CIR, EIR. MIR
- Delay
- Jitter
- Frame Loss

Load Controls Only
- Test Durations
- Number of Ramp Steps

Step 2 – Run Test

Continuous & Easy to Understand Test Status
- Per Service
- Per SLA Parameter

Stop on Failure
- Avoid lost time

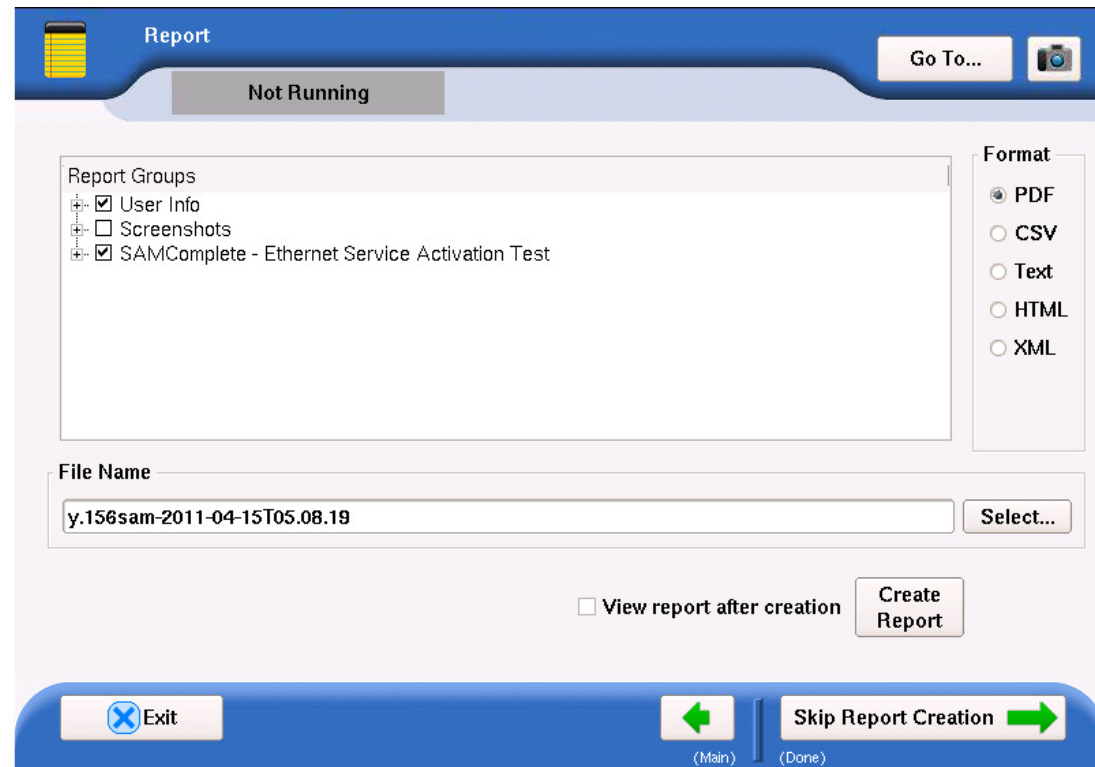# Step 3 – Create Report

Select Information to Save

Multiple File Formats
- PDF, CSV, Text, HTML & XML

View Report After Creation

Easy to Troubleshooting

Per SLA View

Per Step Drill Down

SLA Parameter Reminder

SAMComplete in the Network

Active loop or permanent loop

MUX

Metro Ethernet

MUX

Switch

SmartClass

1Gbps

1Gbps

SmartClass

Active loop or permanent loop

Customer LAN

MTS-5800

Mbps

Service 1 CIR

Service 2 CIR

Service 3 CIR

L2 Network

Switch

Switch
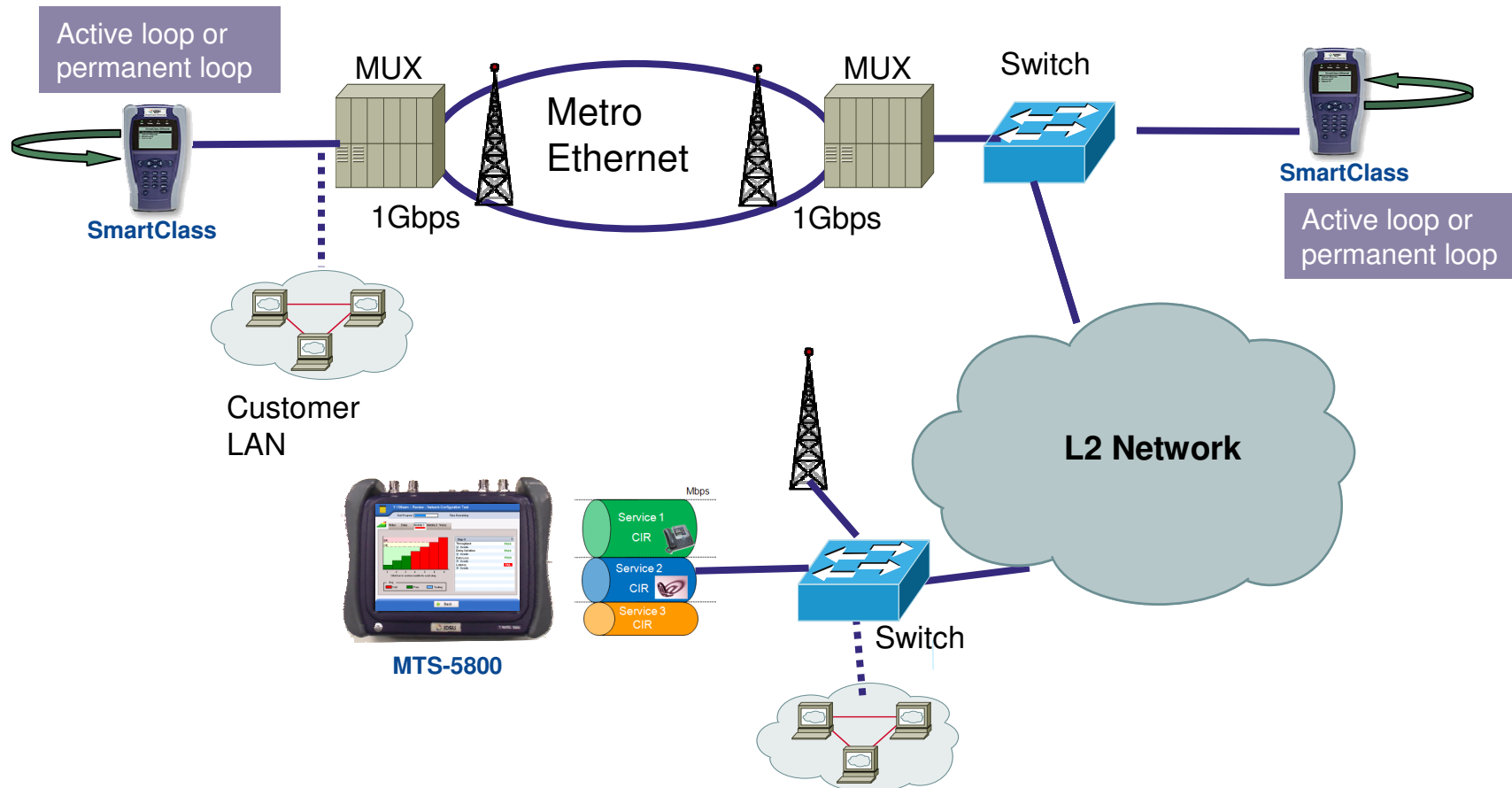
① *Initiate SAMComplete*

② *Test against an active or permanent loop*

You know us because you depend on our technology every day.