# STM-1 Mux and Traffic Capture/Analysis (63 E1 over STM-1 Multiplexer)

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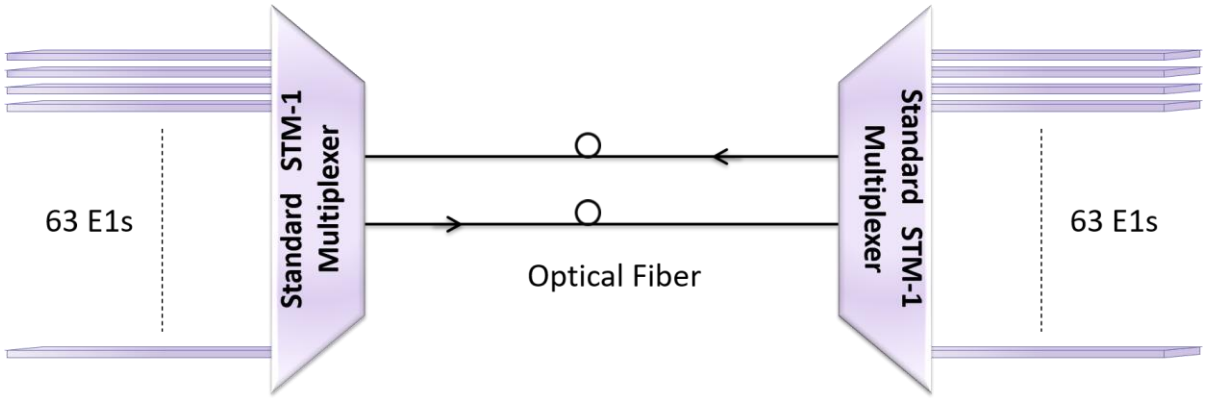
# STM-1 Mux Demux (SME063)

- Cost effective access to all 63 E1's in an STM – 1 optical signal; two are required to non-intrusively access both directions of the optical signal
- Standard 63 E1 Mux Configuration for point-to-point applications
- ITU-T G .703 compliant E1 ports, 75Ω/120 Ω options, with on-line error monitoring and loop-back function
- 1U height, 19" rack mount size, high integration, compact design
- Topologies supported include point to point, chain, ring, hub, and mesh
- ADM (Add Drop Mux) function is NOT included
- Optional 2 STM -1 optical interfaces for protection switching - one redundant, one online
- Optical interface supports ALS (Auto Laser Shutdown) function

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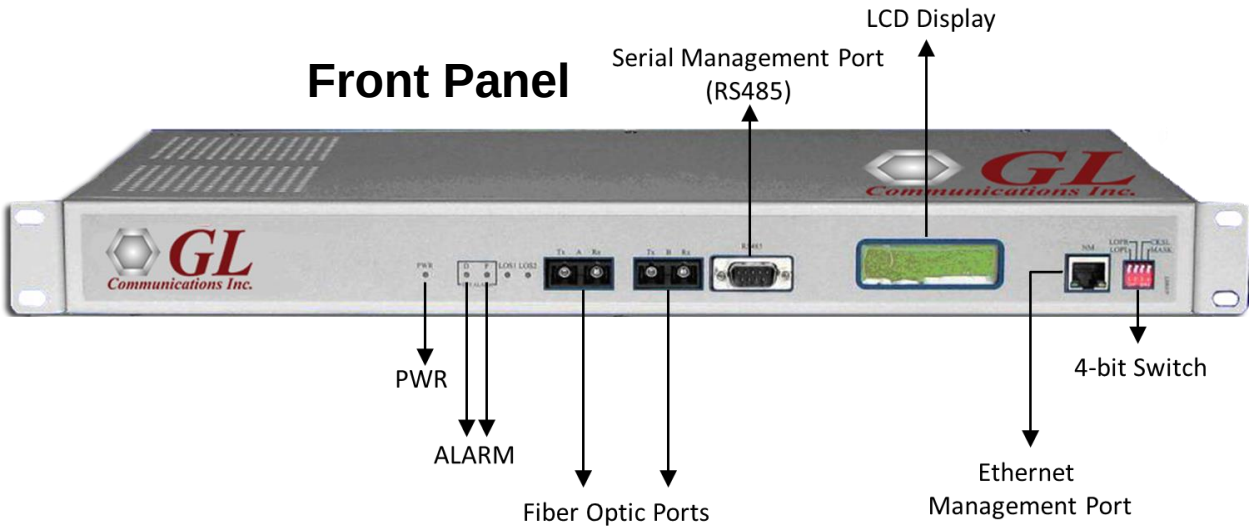
# Key Features

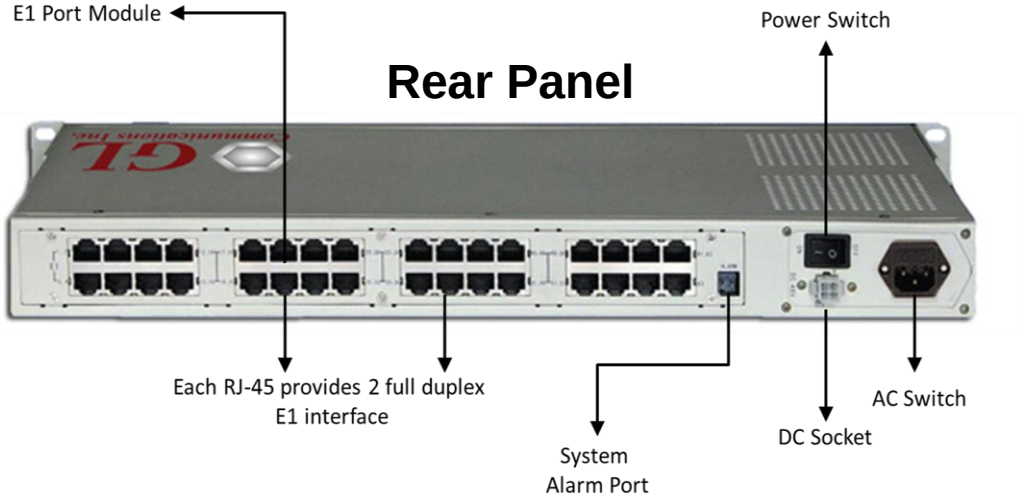
- Inter-works with popular SDH products of various vendors – Motorola, Lucent, and Huawei
- Supports TUG3-TUG2-TU12 tributary channel numbering and time slot numbering
- Supports internal, STM-1 line clock, external and tributary clocking modes
- LCD display for system configuration and alarm
- Supports remote power-off alarming function
- Supports online upgrading
- Easy commissioning and maintenance, high reliability

# Hardware Interfaces

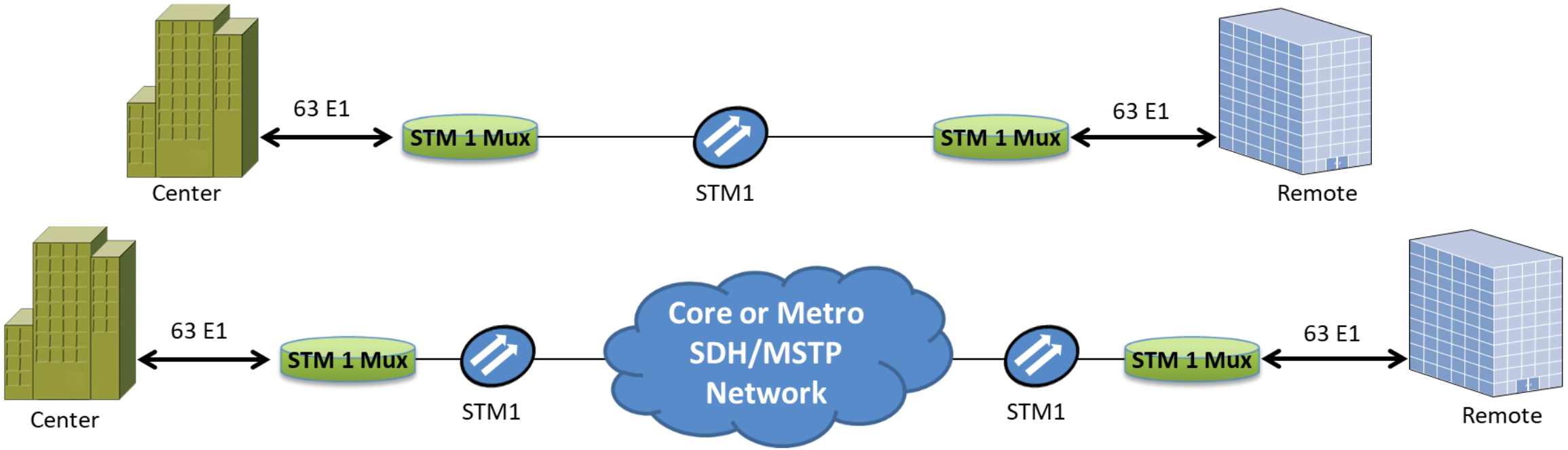
## Front Panel



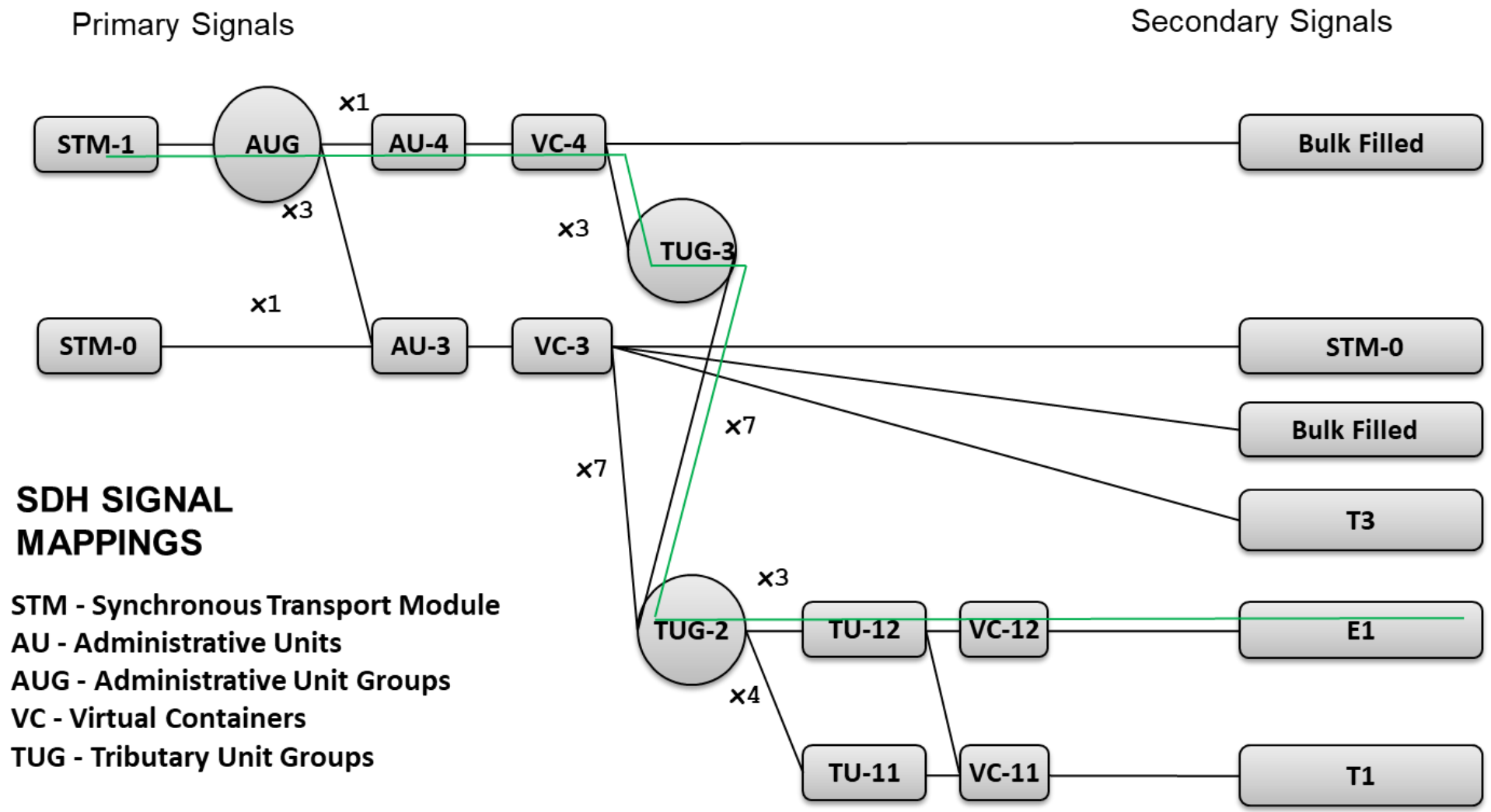

## Rear Panel



# Point-to-point Application of STM-1 Mux



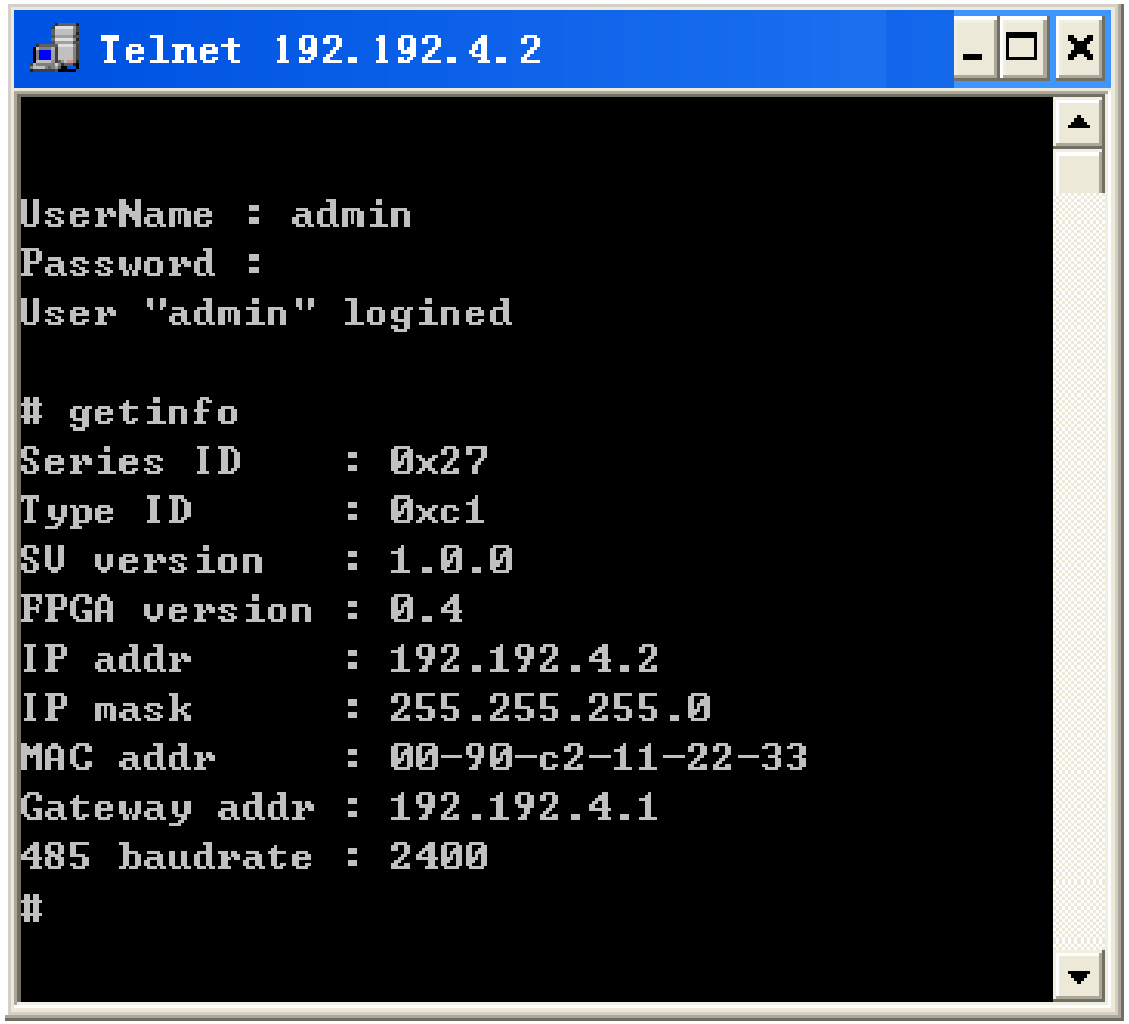
# TUG3-TUG2-TU12 Tributary Channel Numbering



# Network Management Software

- 63 E1 over STM-1 multiplexer can be managed configuring parameters using Telnet commands

**Telnet Settings**

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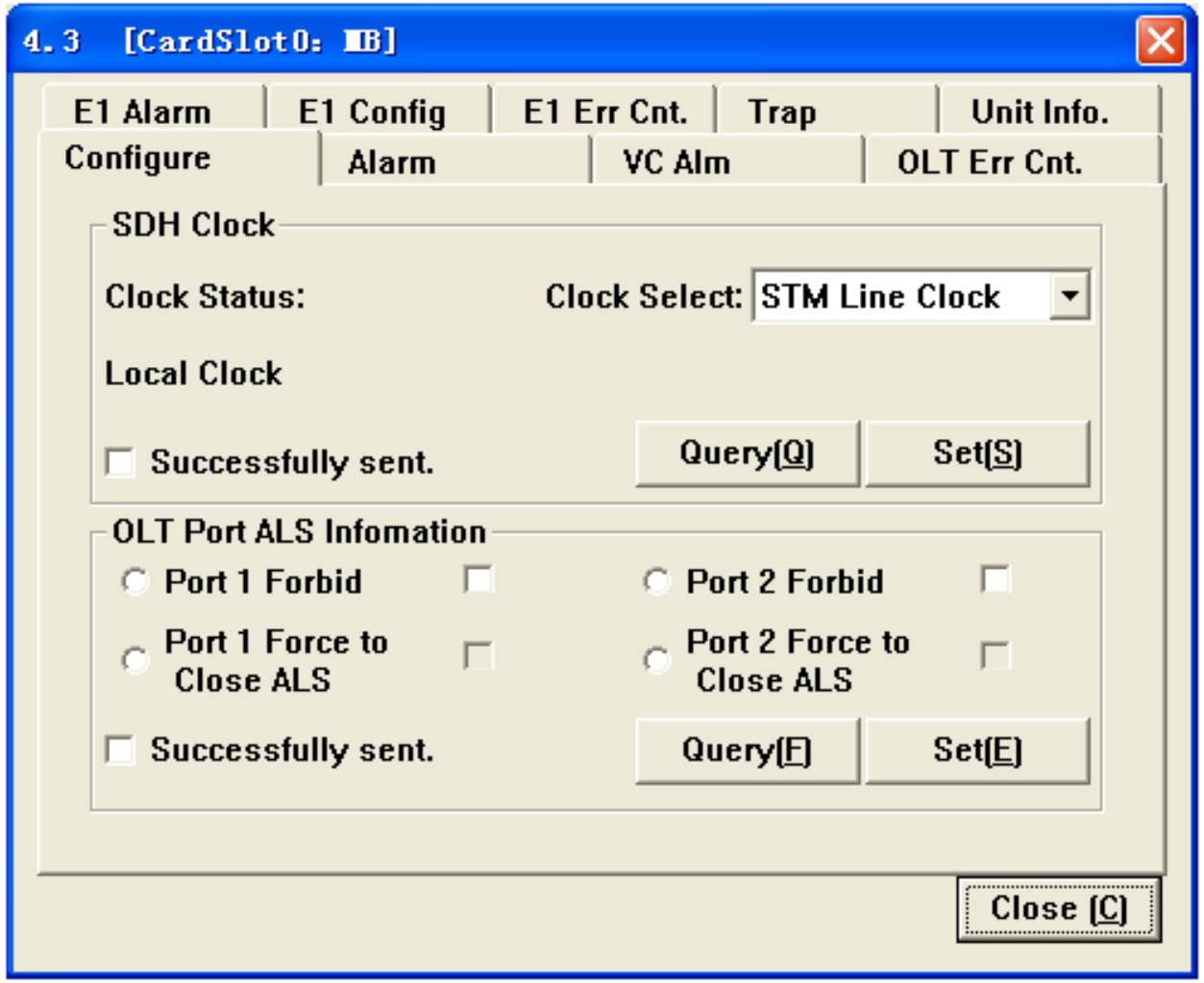
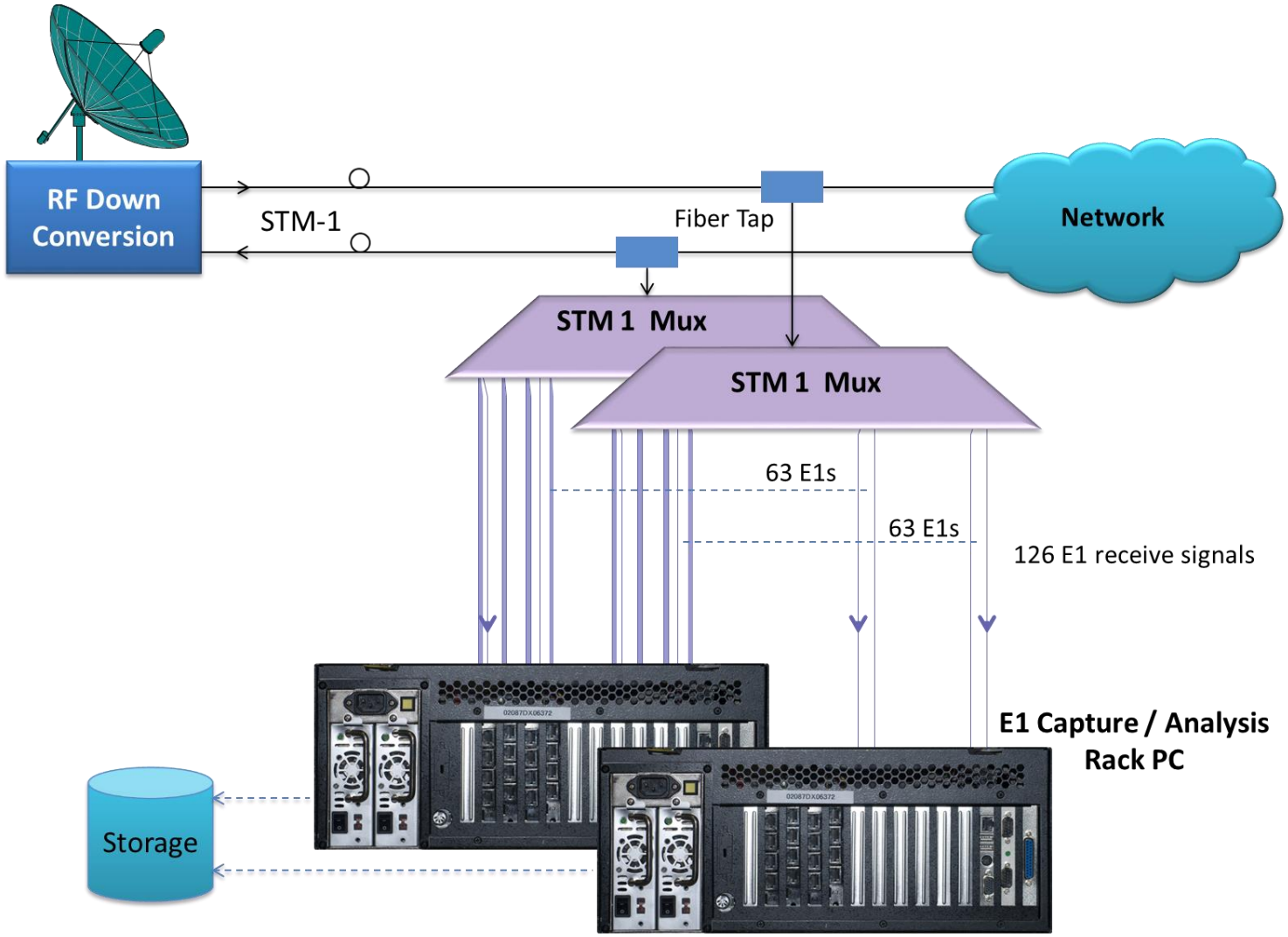
# Network Management Software (Contd.)

- Used to control various SDH parameter settings, loop-back controls, status, alarm monitoring, and others



# Typical Application with GL's Quad, and Octal E1 Analysis Cards




Dual/ Quad/ Octal E1 Cards in Rack PCs

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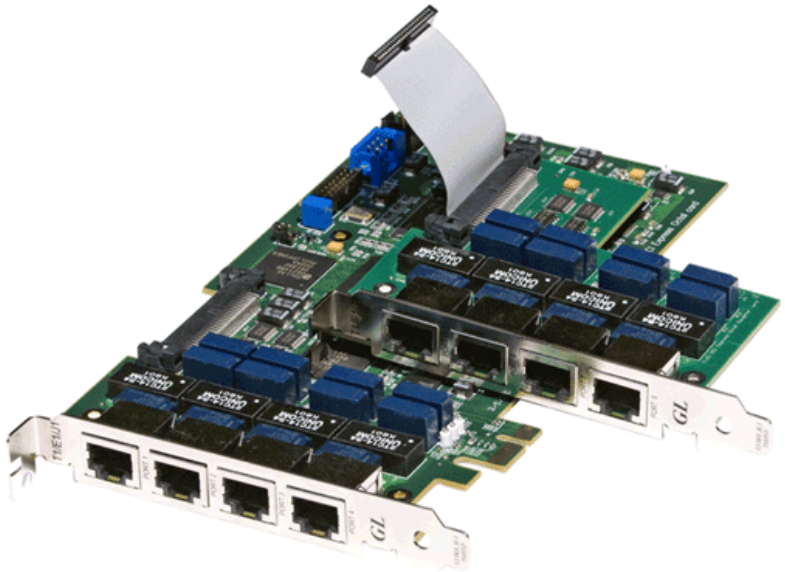
# GL's Dual, Quad, and Octal T1 E1 Cards

**QUAD T1 E1 Board**



**OCTAL T1 E1 Board**

**OCTAL T1 E1 Boards on Rack PC**

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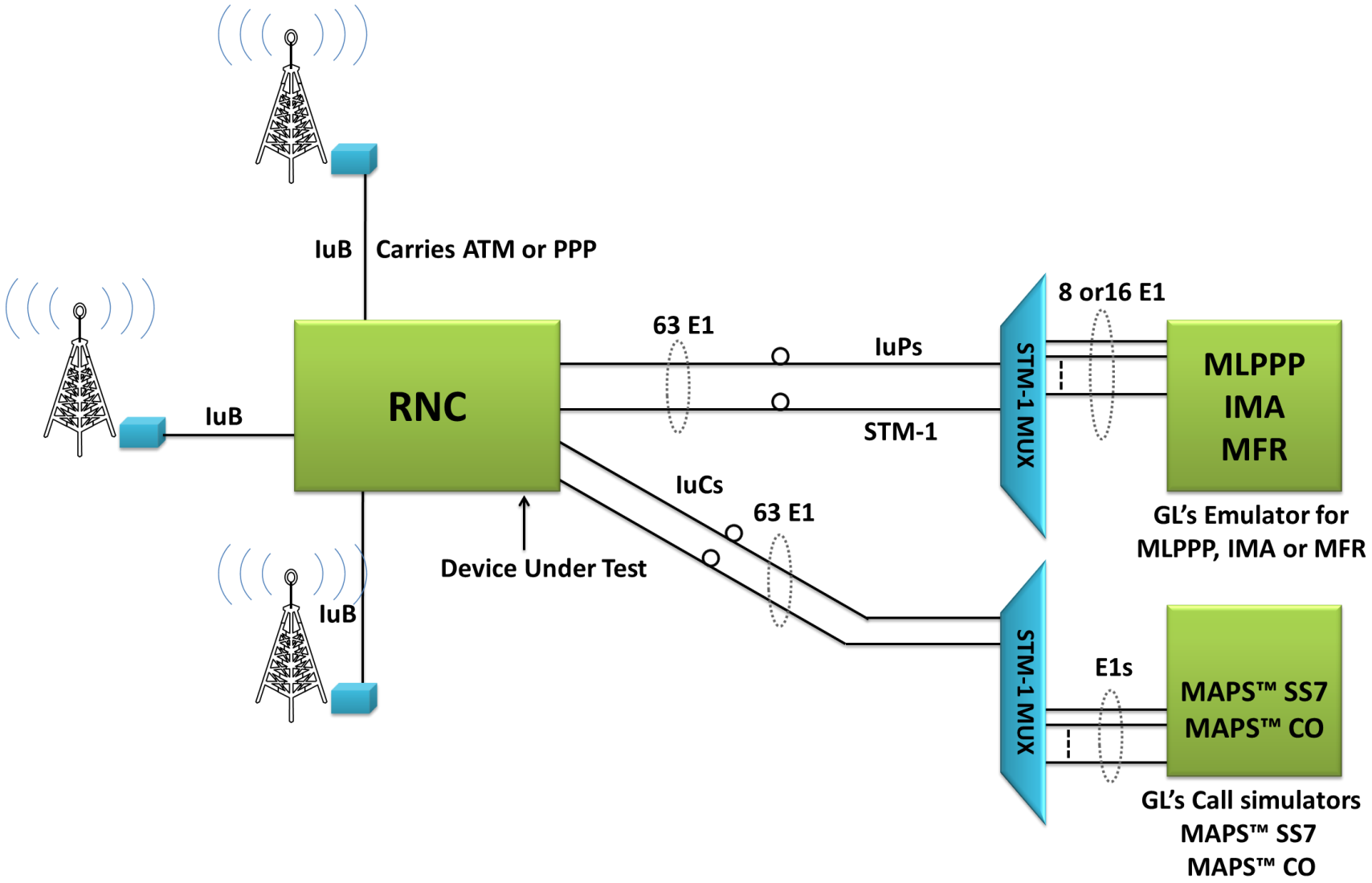
# Typical Application with GL Applications (MAPS™ SS7, MLPPP, MFR Emulators)

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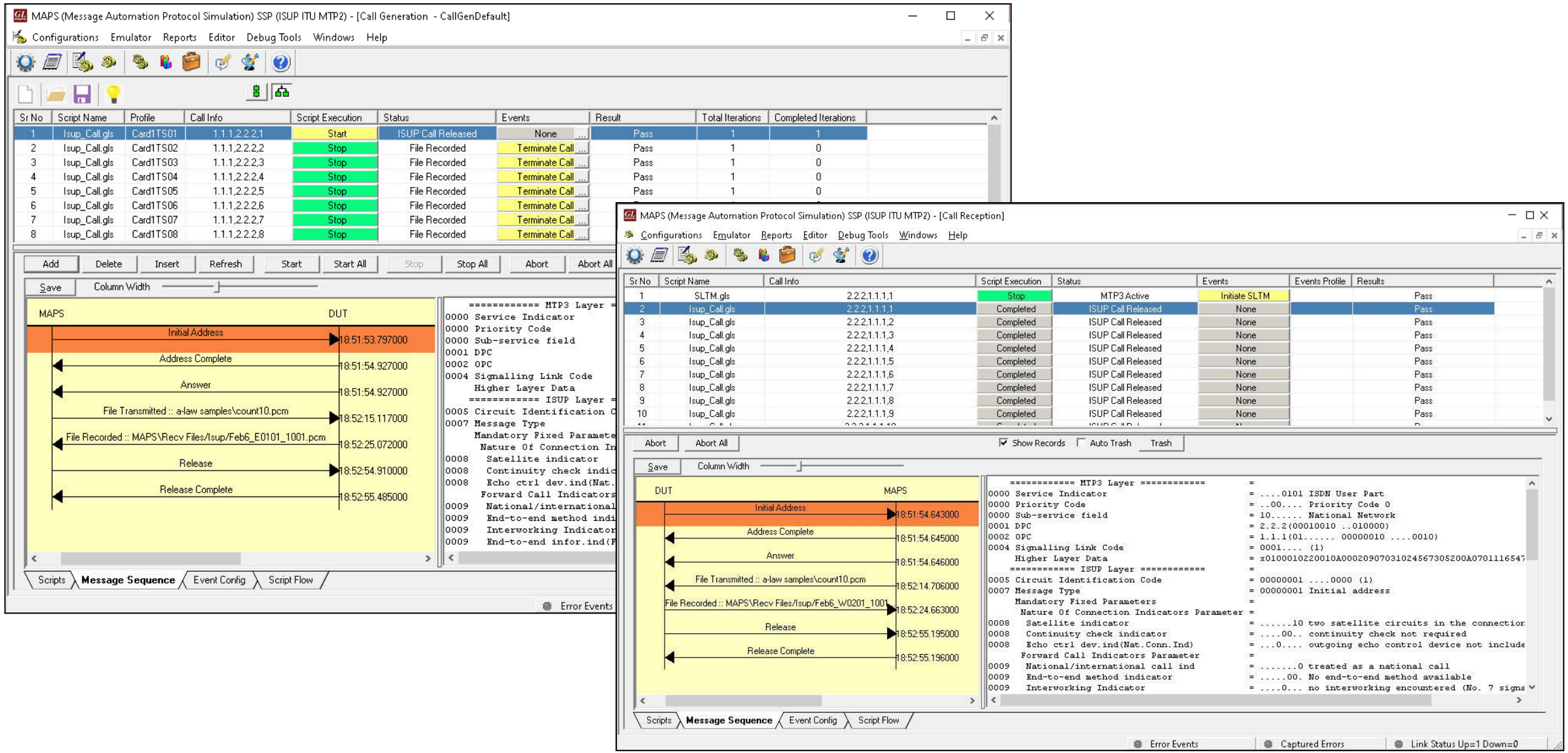
# MAPS™ SS7 Call Simulation

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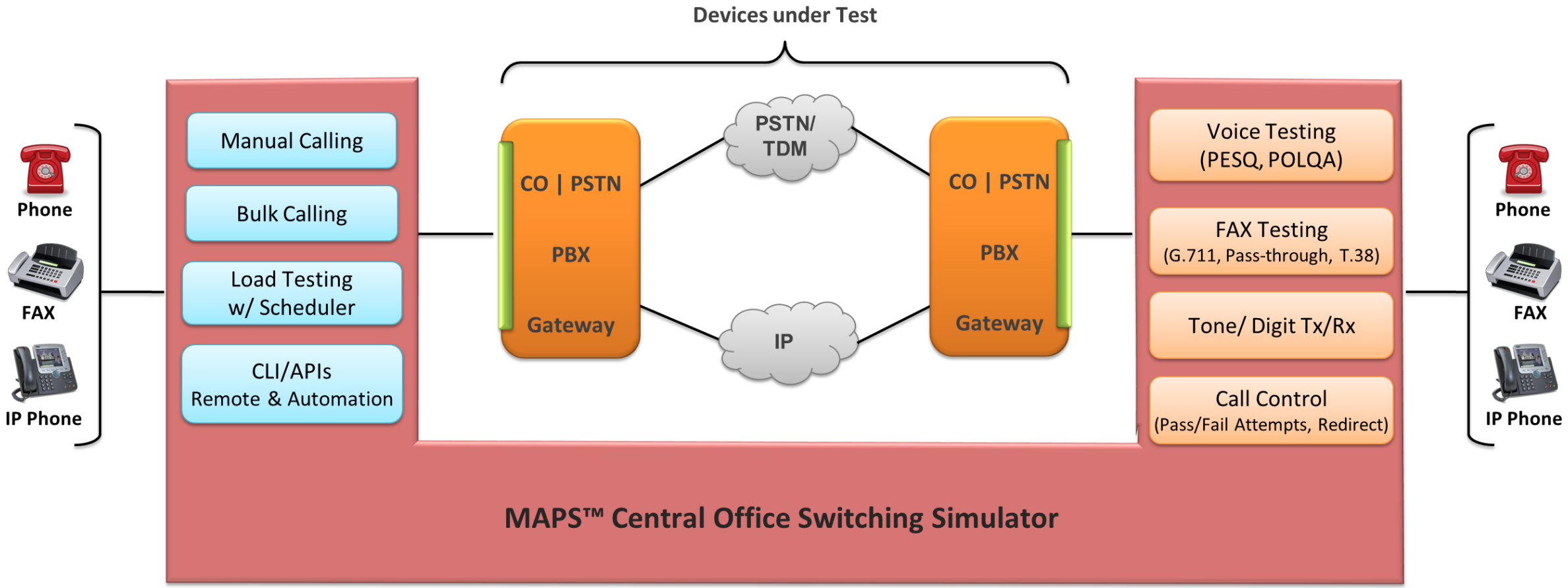
# MAPS™ CO Call Generation and Reception

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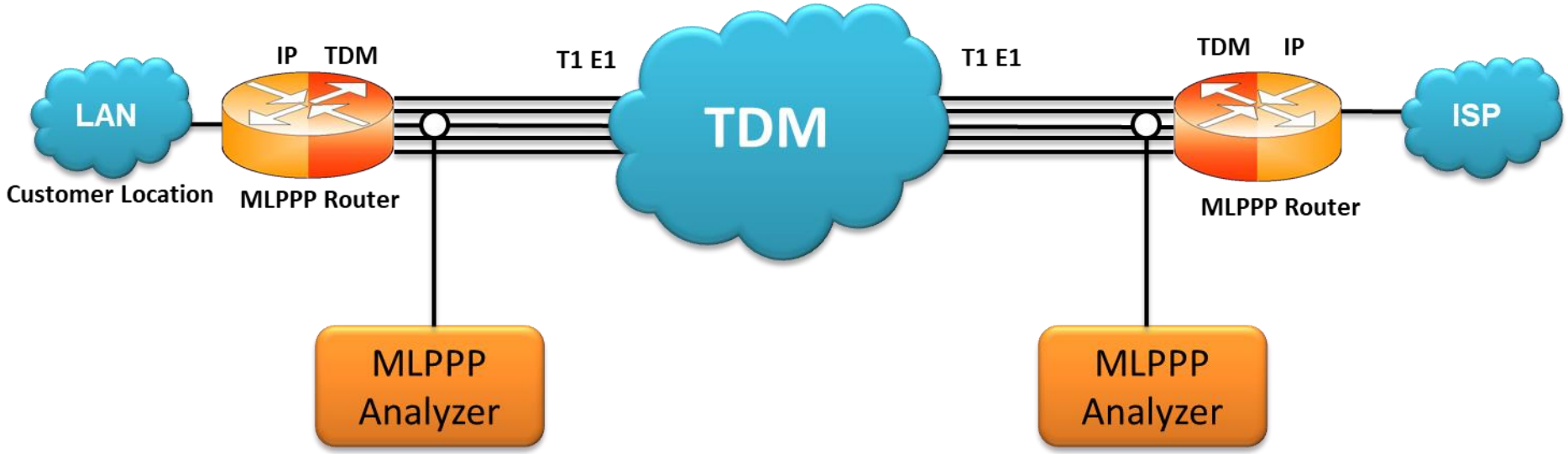
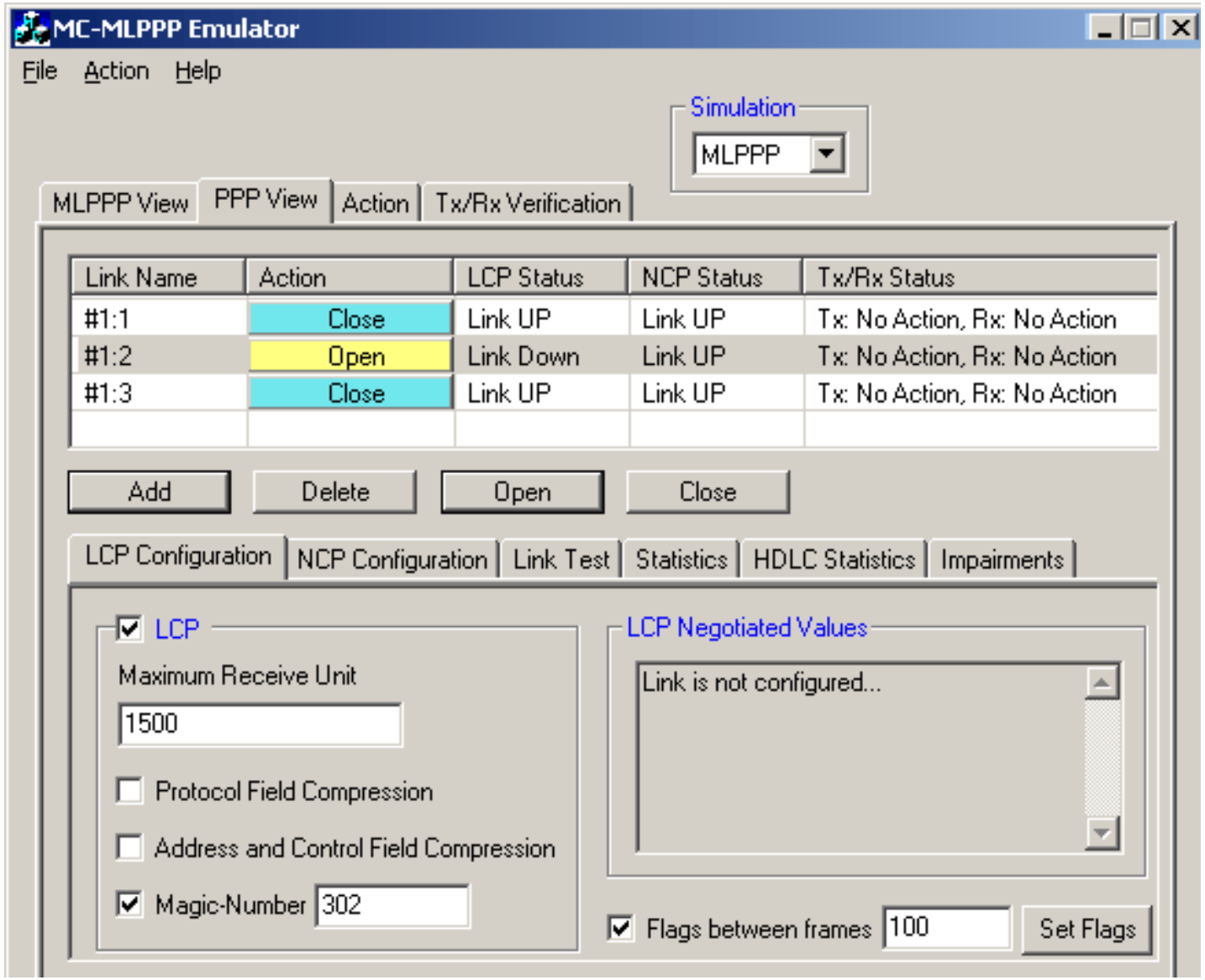
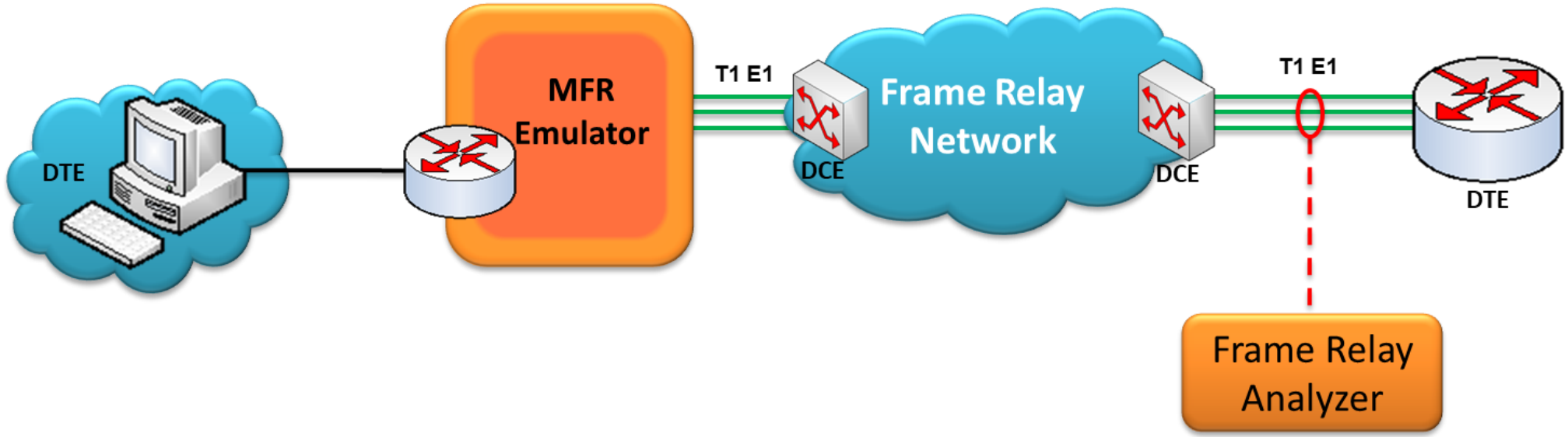
# MLPPP Emulation using Client Server



# Multi Link PPP Emulation using Client Server (XX636)



# Multi Link Frame Relay Emulation Using Client-Server

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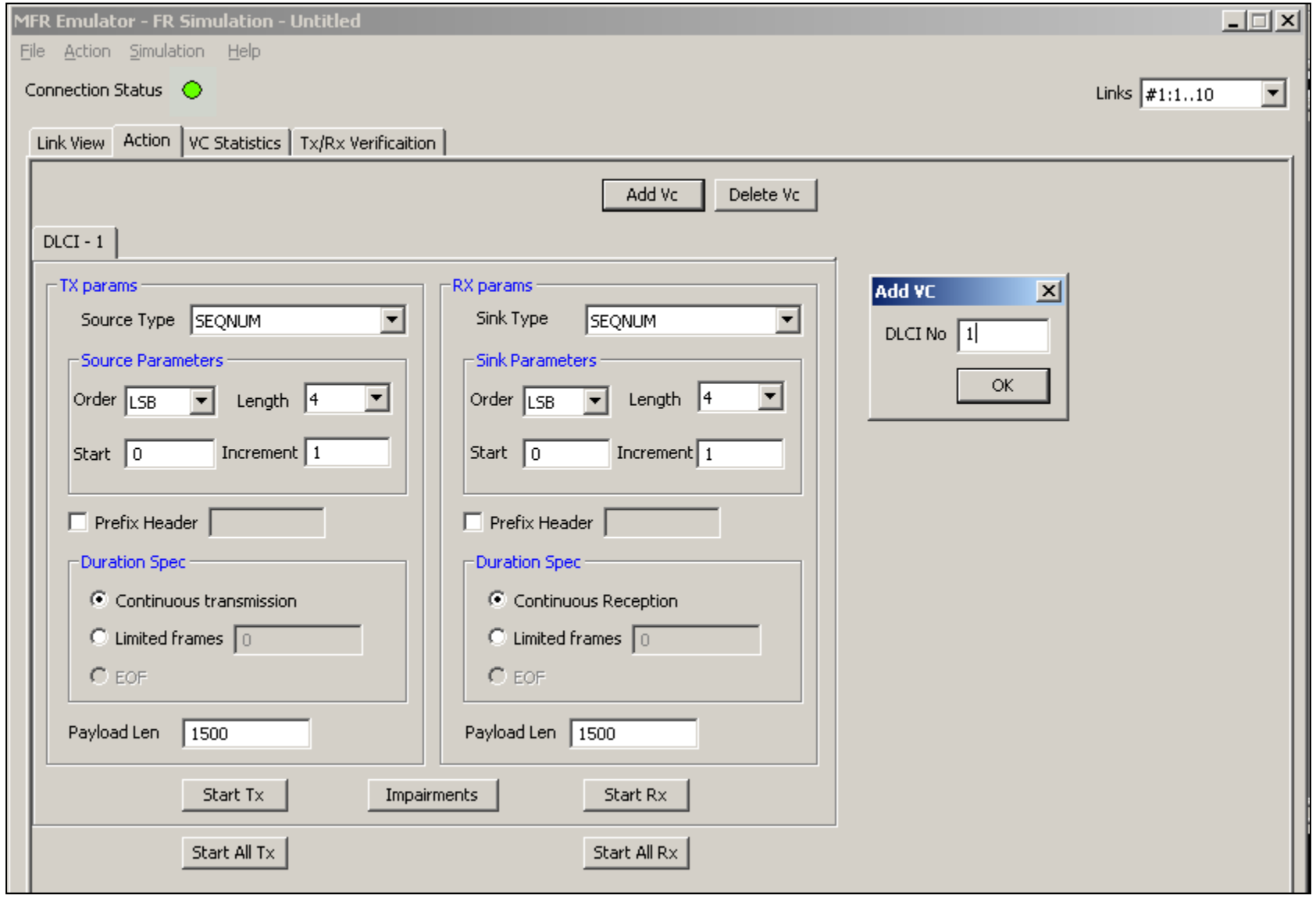
# MFR Emulator

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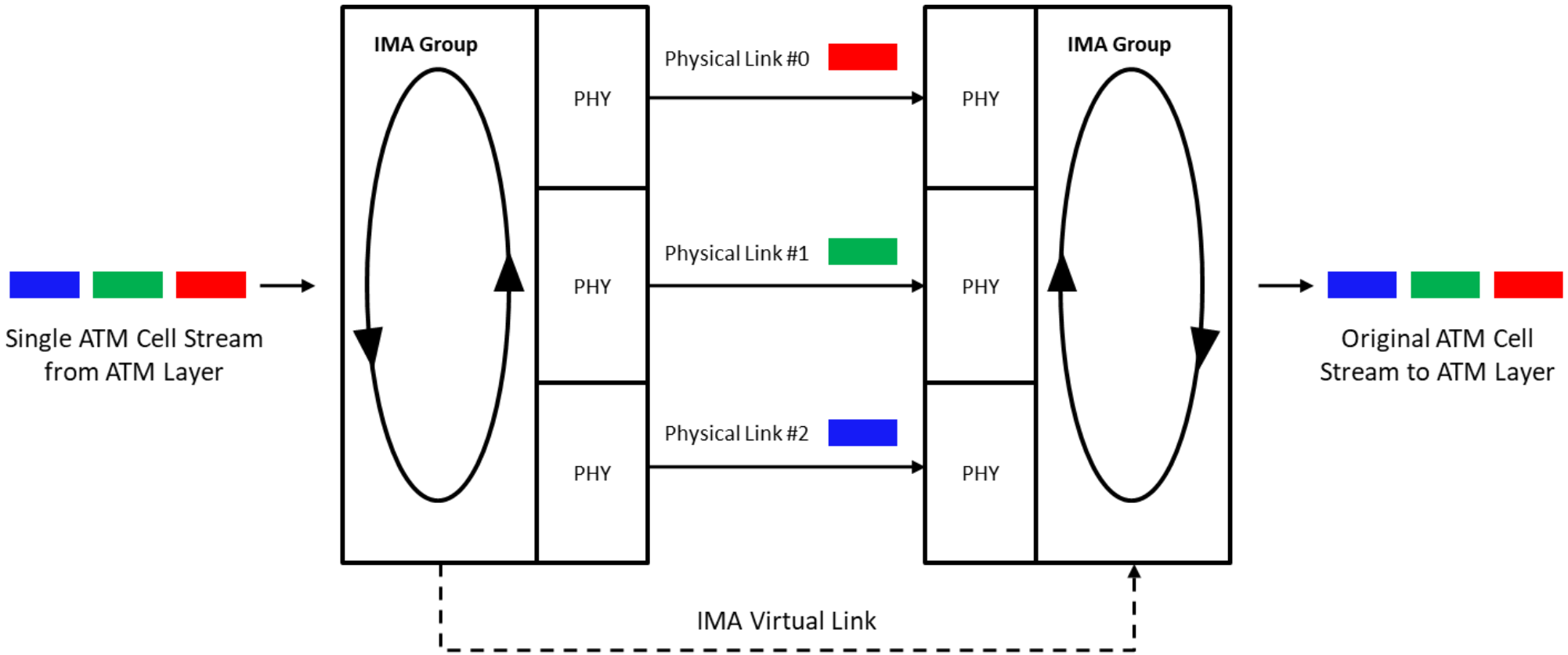
# Inverse Multiplexing for ATM (IMA) Emulation using Client-Server




Tx direction: cells distributed across links in round robin sequence
Rx direction: cells recombined into single ATM stream

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# Thank you