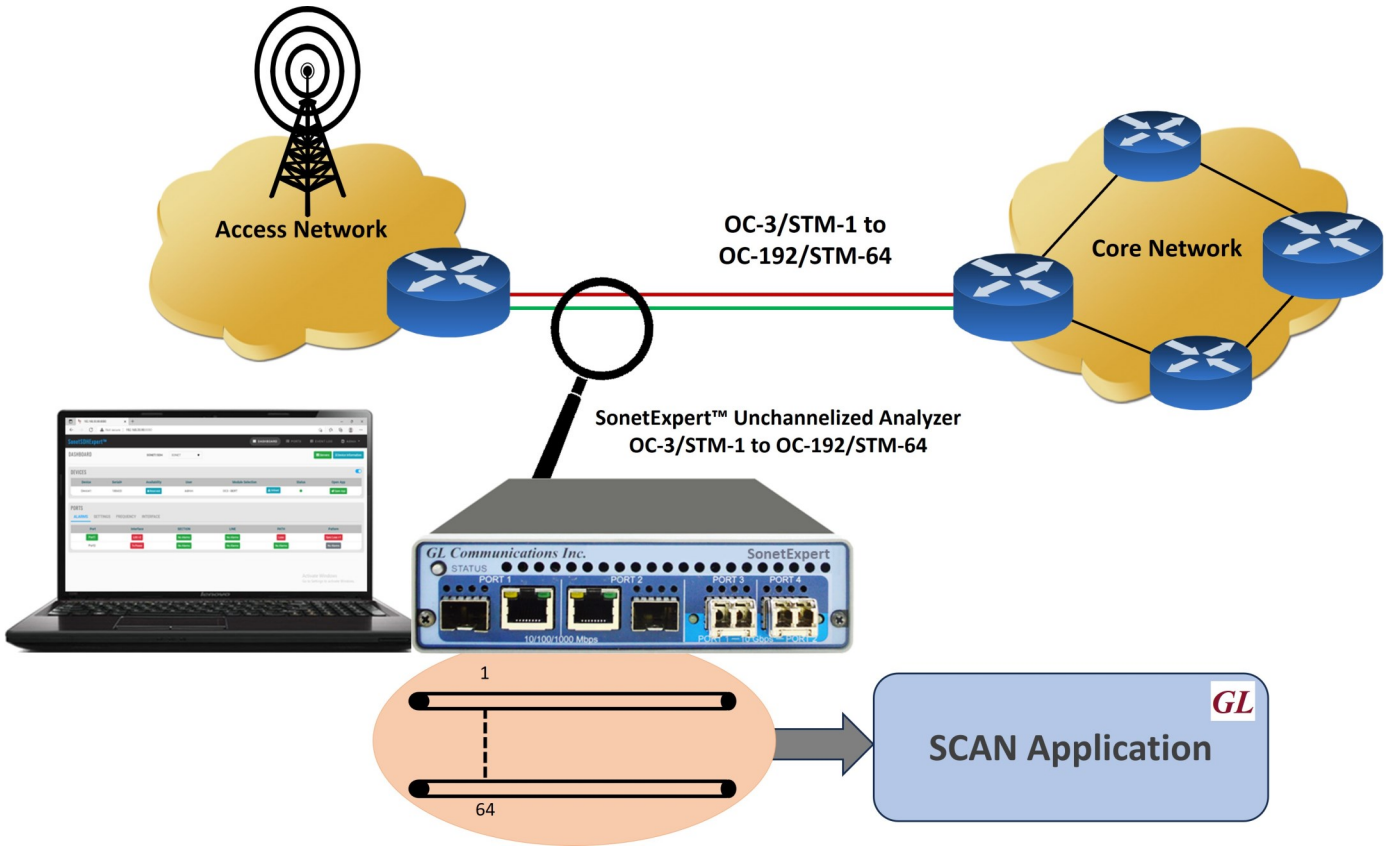
SonetExpert™ (SDH) Unchannelized SCAN Application

(Scan incoming SONET/SDH traffic and identify the traffic structure)



Overview

GL's SonetExpert™ Unchannelized application includes the SCAN feature which scans the incoming traffic on SONET/SDH interfaces, identifies and displays the traffic structure. The results of the SCAN application are displayed in an intuitive multi color graphical display, which clearly shows the sub channels within the main pipe. Traffic structure up to STS-3c is identified and displayed in the main display with different colors indicating equipped or unequipped channels. Upon clicking any equipped channel, further details of the subchannel like the sub structure up to the T1 E1 level is also displayed. The SCAN feature gives a complete overview of the incoming SONET/SDH traffic in an easy and intuitive graphical display. Helps technicians to quickly identify the structure of unknown SONET/SDH traffic.

Main Features

- Scans the incoming traffic on SONET/SDH interfaces, identifies and displays the traffic structure
- Scan application supported on OC-3/STM-1, OC-12/STM-4, OC-48/STM-16 and OC-192/STM-64 rates
- Traffic structure up to STS-3c is identified and displayed in the main display, with different colors clearly indicating equipped or unequipped channels
- Provides complete overview of the incoming SONET/SDH traffic in an easy and intuitive graphical display and helps technicians to quickly identify the structure of unknown SONET/SDH traffic
- User selectable SONET or SDH terminology supported on both the ports independently

For more details on SCAN application, visit SonetExpert™ Unchannelized Analyzer webpage.

GL Communications Inc.

818 West Diamond Avenue - Third Floor, Gaithersburg, MD 20878, U.S.A

(Web) www.gl.com - (V) +1-301-670-4784 (F) +1-301-670-9187 - (E-Mail) info@gl.com

SCAN Application

SonetExpert™ scans incoming SONET/SDH traffic, analyzes the frames, detects and reports the traffic structure of the incoming traffic down to the T1 E1 level. It identifies the various sub pipes within the main pipe, and also the entire structure of each sub pipe down to the T1 E1 level.

- Graphical display of the traffic structure for easy visualization
- Identifies and displays sub channels down to T1 E1 level
- Indicates **Equipped (display channel details)** and **Unequipped** sub channels in different colors for easy identification
- User selectable SONET or SDH terminology supported on both the ports independently

Below are the results of scanning incoming traffic on OC-192. The SCAN displays that the OC-192 contains four OC-48 pipes within, and display details of each of the four OC-48s in a separate tab.

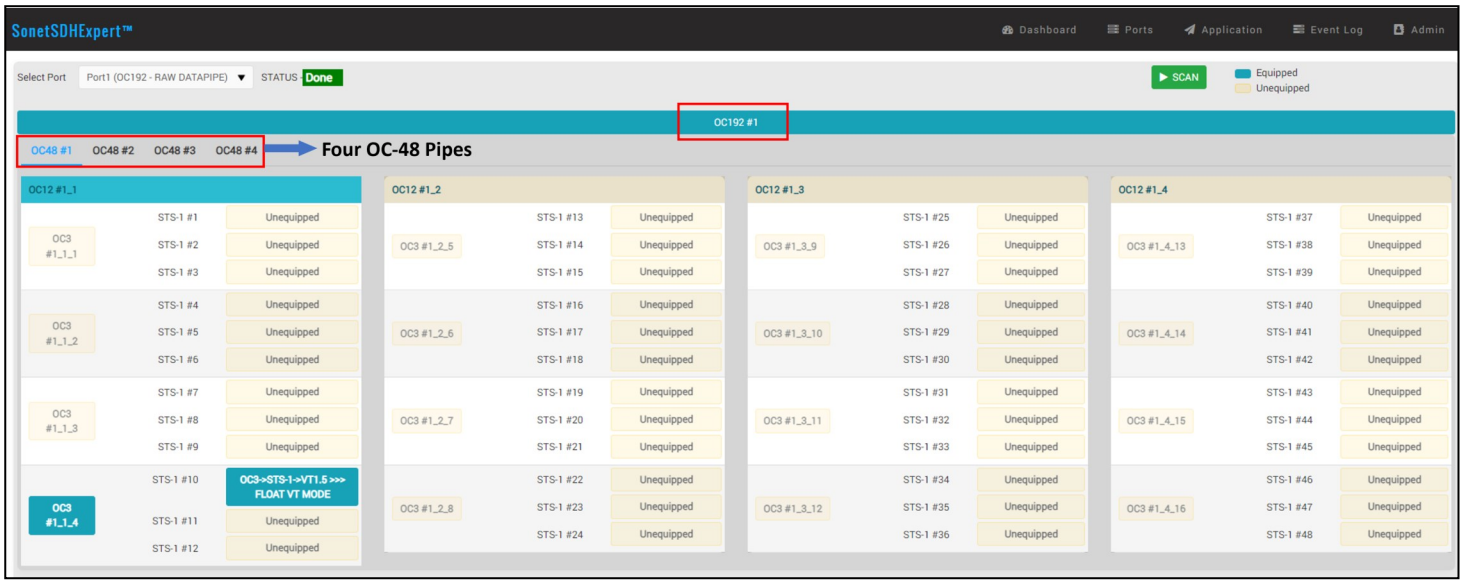


Figure: OC-48 in Separate Tab

SCAN Application (Contd.)

- For each OC-48 further displays details of the OC-12s, and in turn details of the OC-3s within the OC-12s down to the STS-1 level.
- For each STS-1, it display the details of traffic structure contained within the STS-1.
- The equipped channels are marked as shown below.

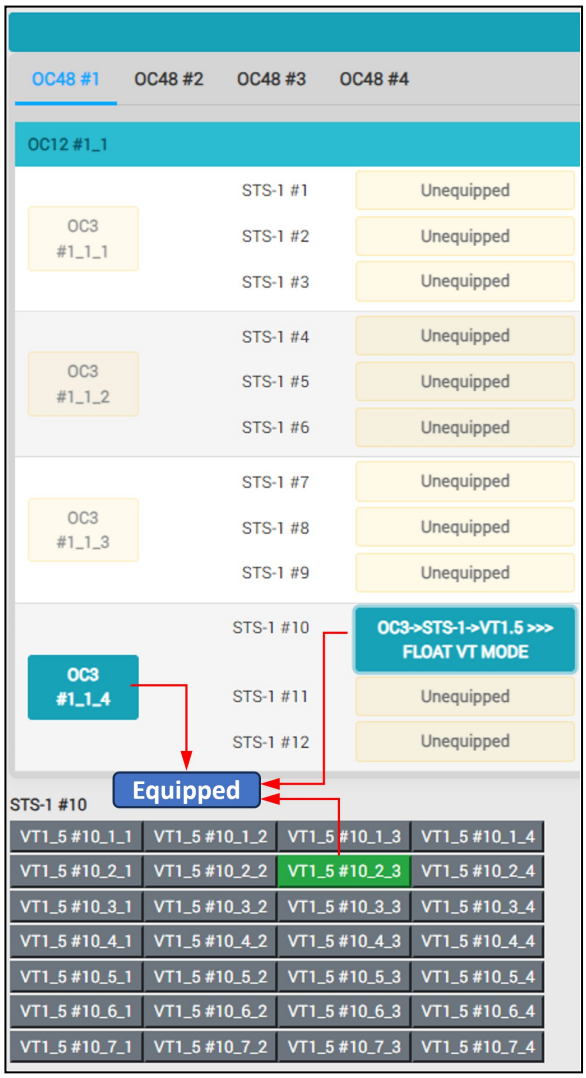


Figure: OC-48 Substructure

In this scenario, OC-48#1 contains an equipped channel -> OC-12 #1 (OC-12 #1_1) -> OC-3 #4 (OC-3#1_1_4) -> STS-1 #1 (STS #10 overall STS numbering). The STS-1 #1 is equipped channel, which contains VT1.5s within it. Upon clicking the substructure button, the detailed substructure will be displayed. It shows twenty eight VT1_5 channels and within it the VT1_5 on Row2, column 3 is equipped as shown in **Green**. Unequipped channels are displayed in **Grey**.

The SCAN result also supports concatenated format. The below displays the concatenated OC-192 traffic with a single pipe containing STS-192C signal.

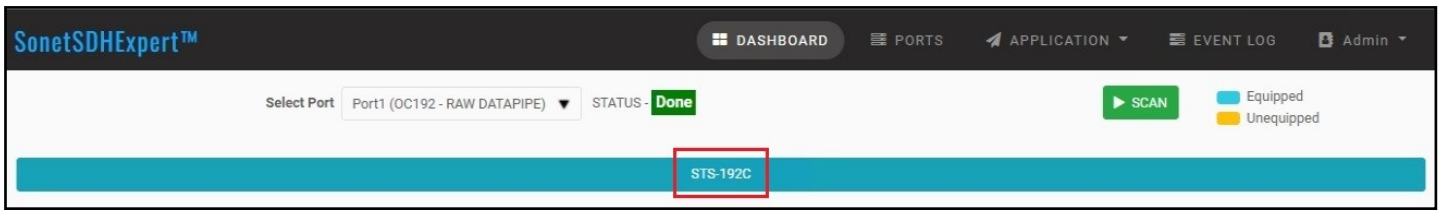


Figure: SCAN Results in Concatenated Format (OC-192)

SCAN Application (*Contd.*)

The SCAN application provides option to change the terminology (SONET/SDH) at anytime. The below shows the SCAN result of SDH.

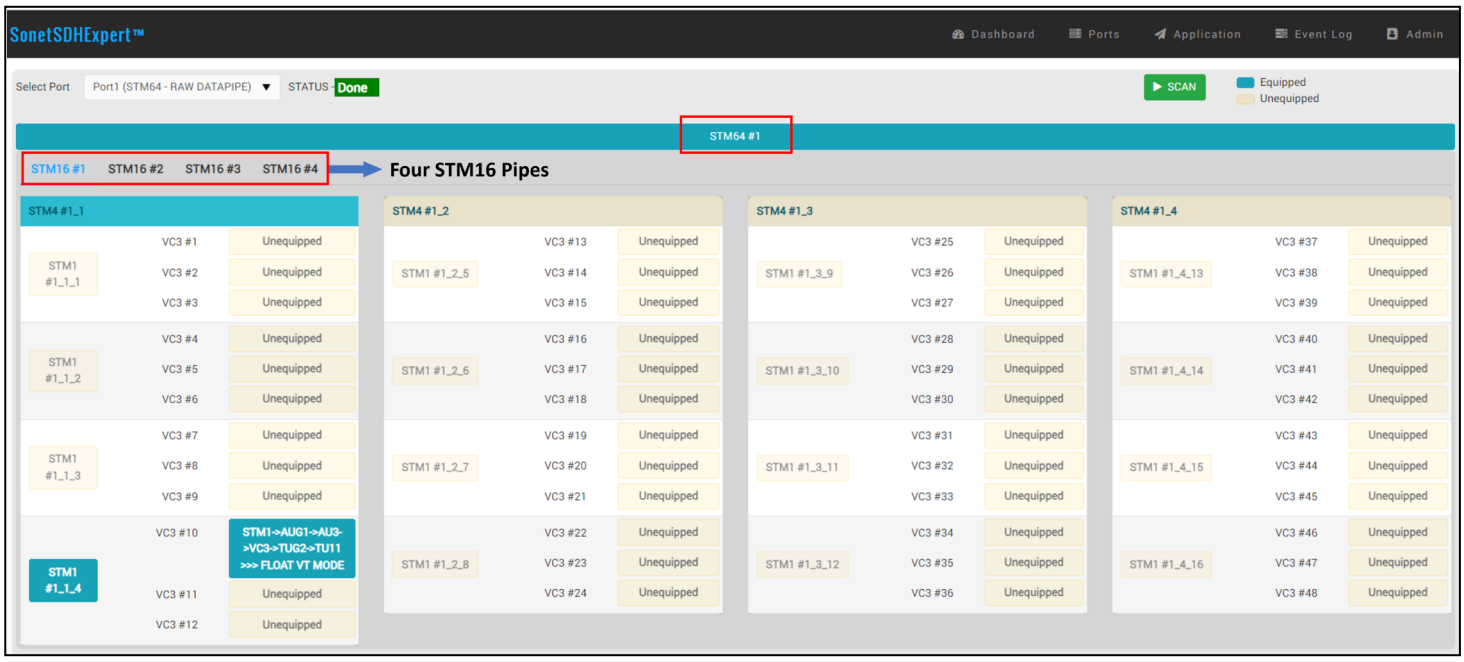


Figure: STM-16s in Separate Tab

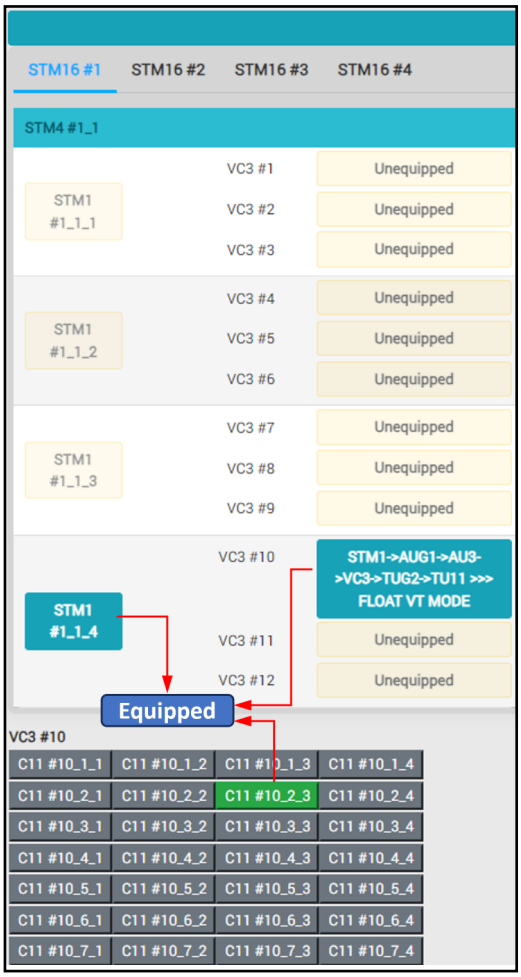


Figure: STM-64 with Substructure

Buyer's Guide

Item No	Product Description
SEU100	SonetExpert™ Dual OC-3/12 STM-1/4 USB Unit **Accessories** Includes OC-3/OC-12/STM-1/STM-4 SFPs (customer preference of MM or SM) USB Cable 3.0 (1) Power adapter +12 Volts, 3 Amps (1)
SEU901	SonetExpert™ Unchannelized BERT for OC-3/STM-1 and OC-12/STM-4 Rates
SEU902	SonetExpert™ Unchannelized BERT for OC-3/STM-1, OC-12/STM-4, OC-48/STM-16, and OC-192/STM-64 Rates
SEU300	SonetExpert™ Unchannelized OC-3/STM-1 and OC-12/STM-4 ATM Monitor, BERT, Tx/Rx Test
SEU301	SonetExpert™ Unchannelized OC-3/STM-1 and OC-12/STM-4 PoS Monitor, BERT, Tx/Rx Test
SEU302	SonetExpert™ Unchannelized ATM Record Playback for OC-3/STM-1 and OC-12/STM-4
SEU303	SonetExpert™ Unchannelized PoS Record Playback for OC-3/STM-1 and OC-12/STM-4
SEU304	SonetExpert™ Unchannelized ATM Protocol Analysis for OC-3/STM-1 and OC-12/STM-4
SEU305	SonetExpert™ Unchannelized PoS Protocol Analysis for OC-3/STM-1 and OC-12/STM-4
SEU503	SonetExpert™ Unchannelized RAW Record Playback for OC-3/STM-1 and OC-12/STM-4 includes SCAN feature
SEU315	SonetExpert™ Unchannelized Packet Data Analysis (PDA) for PoS

Item No	Optional Applications
SEU110	SonetExpert™ Upgrade to PXN100
SEU120	SonetExpert™ Upgrade to PXN101
PXN100	PacketExpert™ 10GX
PXN101	10G option for PXN100
PXN00	Optical Multiport Tap/Repeater
PXN01	Multi-rate Multimode SFPs and FO Cables
PXN02	Multi-rate Singlemode SFPs and FO Cables

Note: PCs which include GL hardware/software require Intel or AMD processors for compliance.

For more information, visit SonetExpert™ Unchannelized Analyzer webpage.