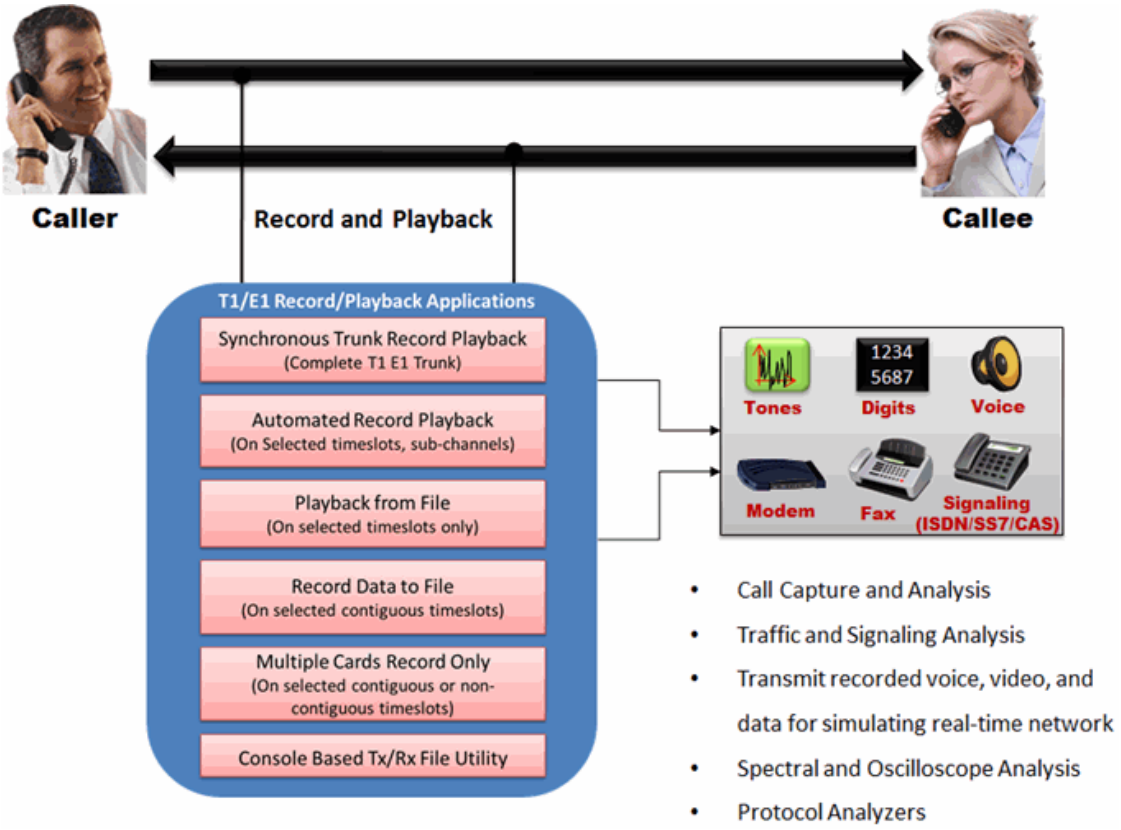
T1 E1 Transmit and Capture Application



Overview

Record and Playback application permits the user to transmit and/or capture any signal on T1 E1 lines with GL's T1 E1 PCI cards or USB T1 E1 units. Typical applications include transmission or capture of prerecorded video files, traffic loading applications and protocol analysis. Files of any length can be transmitted continuously (without loss) on the selected single/multiple timeslots. Continuous transmission of a single file is also possible.

Automated Record/Playback (ARP) is similar to the 'Playback File' and a 'Record Data to File' application, that makes it very easy for the users to run several transmit or receive operation tasks simultaneously. Automated Continuous Capture (ACC) is another similar application, which allows the user to capture data from a card as seamless chunks into several files of the specified size instead of one big block.

The Record and Playback application also includes Multiplexing / Demultiplexing Software to multiplex individual files on different timeslots into one aggregate output file and vice versa.

For more details, refer T1/E1 Record Playback Software webpage.

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Main Features

- Features available for Transmit Applications (Playback from File, ARP)
  - Full or Fractional bandwidth
  - Preparation of stimulus signals for test purposes
  - Traffic loading of switches/transmission equipment
  - Unique testing of signaling systems
  - Transmission of pre-recorded voice, video, or data
  - Testing of video compression equipment
  - Byte reversal, Invert Bit and Sync playback features
  - Broadcast File option to transmit same data on selected timeslots
- Features available for Receive Applications (Record Data to File/Multiple Cards, ARP, ACC):
  - Capture of anomalous events for Post Analysis
  - Analysis of voice band protocols, and protocol verification
  - 'Limited Capture' feature specifies the number of bytes to be captured
  - Recording and test of voice response systems
  - Simultaneous capture of data on one or more devices on selected timeslots
  - Simultaneous execution of transmission and reception in ARP
  - Capture options such as capture based on size and capture based on times can be set in ACC

Playback from File

The transmit file application permits transmission of a file on the selected timeslots. The capability is supported in both D4 (193S) and ESF (193E) framing formats for T1 and CAS and CCS modes in E1. This application allows Byte reversal, Invert Bit, Continuous file transmission, Broadcast File transmissions. Over-write TS-0 (For E1 system only). For E1 systems, if timeslots 1 to 31 are selected for transmission, timeslot 0 is omitted and timeslot 16 is overwritten in CAS mode but not in CCS mode.

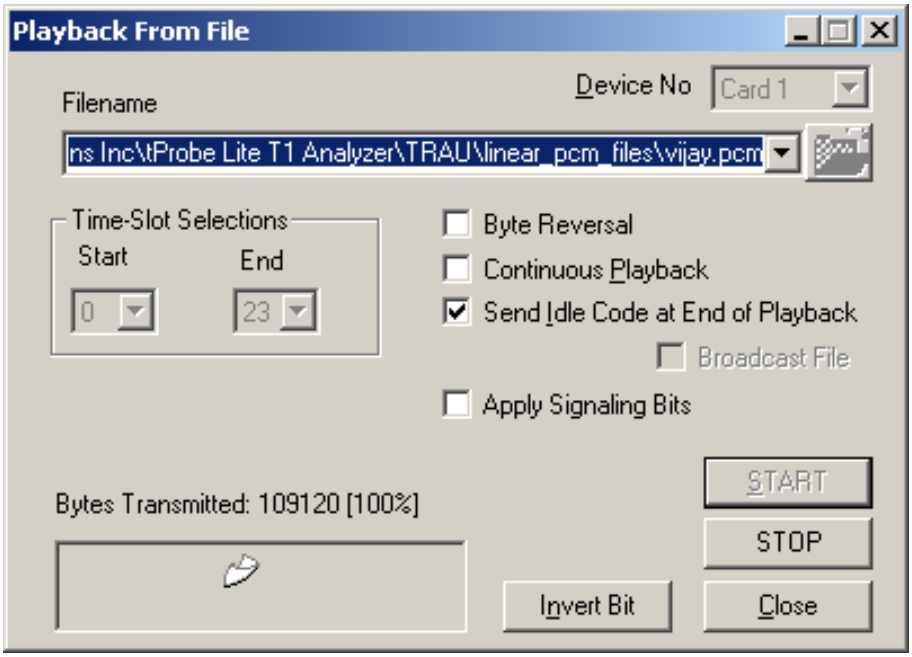

Figure: Playback from File

Record Data to File

The capture application permits capture of data directly from T1 or E1 timeslots to a file. Main features available are:

- Capture to a file from all or selectable contiguous timeslots ('Byte Reversal' option allows capture of bytes in reverse order)
- Limited capture (specific number of bytes) to a file from all or selectable contiguous timeslots with the help of 'Limited Capture' option of the application

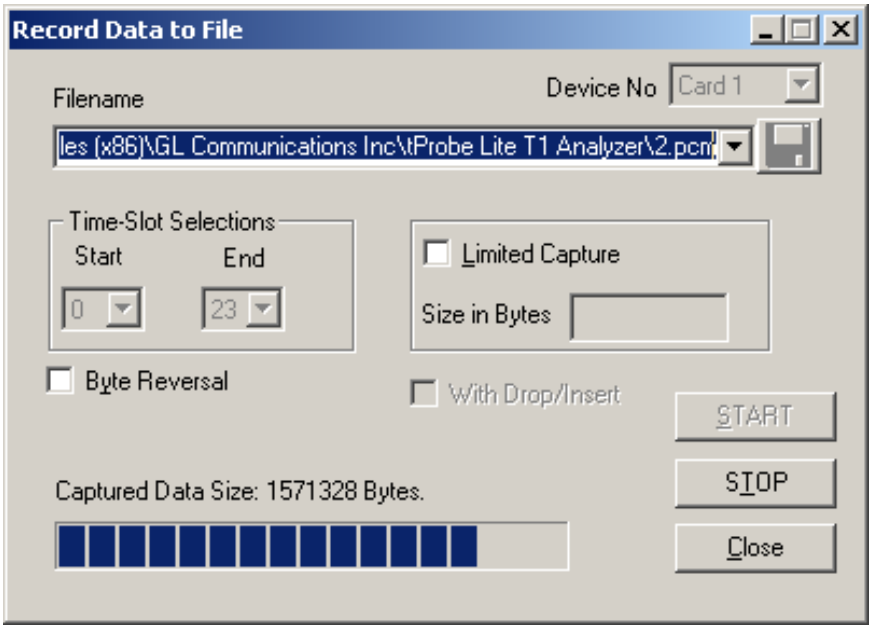

Figure: Record Data to File

Automated Continuous Capture (ACC)

This application provides the flexibility of capturing data as chunks of data in files of the same size instead of one big file. It includes two types of continuous capture options - capture based on file size and capture based on time.

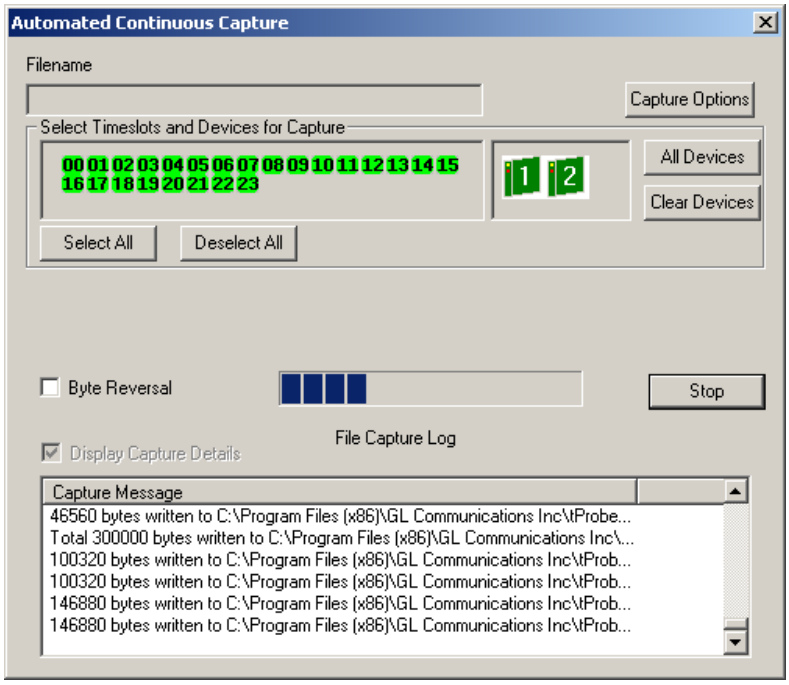

Figure: Automated Continuous Capture

Record from Multiple Cards

The application permits capture of data directly from T1 or E1 timeslots to a file on one or more devices simultaneously.

Main features available are:

- Options for selecting/deselecting all the cards and time slots when necessary
- Capture of data on non-contiguous T1 E1 timeslots. Bytes may be captured in reverse order or normal order
- Limited capture (specific number of bytes) to files from all or selected timeslots for the selected devices
- Bytes can be captured in reverse order or normal order

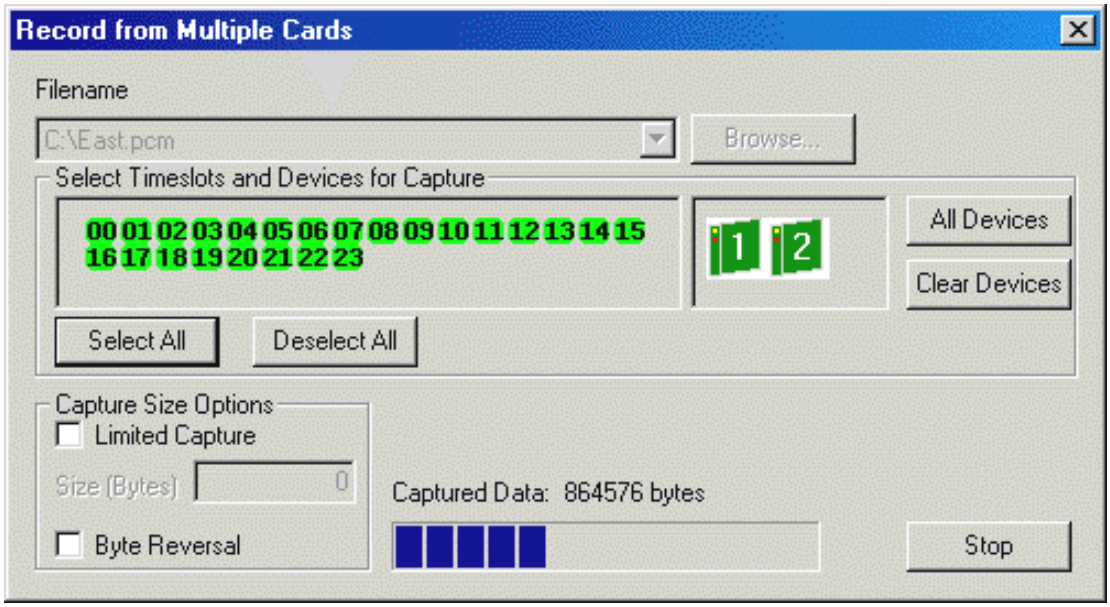

Figure: Record from Multiple Cards

Multiplexing / Demultiplexing Software (STE040)

This software provides the capability to multiplex individual files on different timeslots into one aggregate output file and the reverse process of demultiplex one aggregate file into individual timeslot files. The program is applicable to T1 E1 multiplex systems and is a companion software for the files transmit and the files receive programs available with the T1 E1 cards.

For more details, refer to Multiplexing / Demultiplexing Software webpage.

Automated Record/Playback (ARP)

This application is an extremely versatile application that runs several transmit or receive operation tasks simultaneously. The ARP application further supports sub-channel and multiple sub-channel streams for transmission and reception.

Load CTL option allows the ARP to be compatible with the earlier console-based Transmit/Receive File Utility application. The *.ctl files of Transmit/Receive File Utility can be opened in ARP for Transmission/Reception using the Load CTL Data. The opened files can be viewed in the task viewer.

Example of a CTL file:

NOINIT SYNC // adf

wait 500

rx1 0-0 Rxout.ula 12800

rx2 0-0 Sxout.ula 12800

tx2 0-0 Rin.ula 12800 // Limited tx

tx1 0-0 Sin.ula 12800 // Limited tx

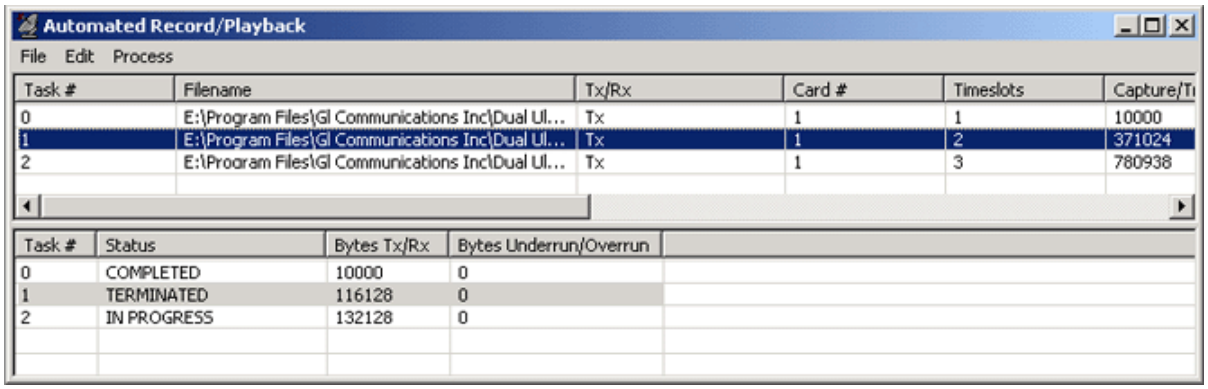

Figure: Automated Record/Playback

Buyer's Guide

Item No	Product Description
XX020	Record/Playback File Software (includes STE040 Mux / De Mux Software)

Item No	Related Software
XX022	DTMF/MF Detector and Generator Software
XX031	Call Capture and Analysis
XX019	Transmit/Receive File Utility Software
XX610	File based Record/Playback (Client side) ClientDataTxRx (Server side)
XX620	Transmit/Detect digits
XX634	Multi-Channel HDLC Emulation and Analysis and File based High Throughput HDLC Record/Playback
XX640	File based HDLC Record/Playback
XX650	File based HDLC Record/Playback over SA-bits
XX660	File based Record/Playback over FDL

Item No	Related Hardware
UTE001	Portable USB based Dual T1 or E1 Laptop Analyzer
HTE001	Universal HD T1 or E1 PCI Cards
PTE001	tProbe™ T1 E1 Base Unit
FTE001, ETE001	Quad and Octal T1 E1 Analyzer Boards
XTE001	Dual Express (PCIe) T1 E1 Boards
TTE001	tScan16™ T1 E1 Boards

For more details, refer T1/E1 Record Playback Software webpage.

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