

Remote operation,
Automation, & Multi-site
Connectivity



Intrusive / Non-Intrusive
T3/E3 Testing



Central Client Access of
Multiple Server Sites



Process Complex and
Automated Tasks



Multi-Tasking Server
Architecture



Real-time Monitoring



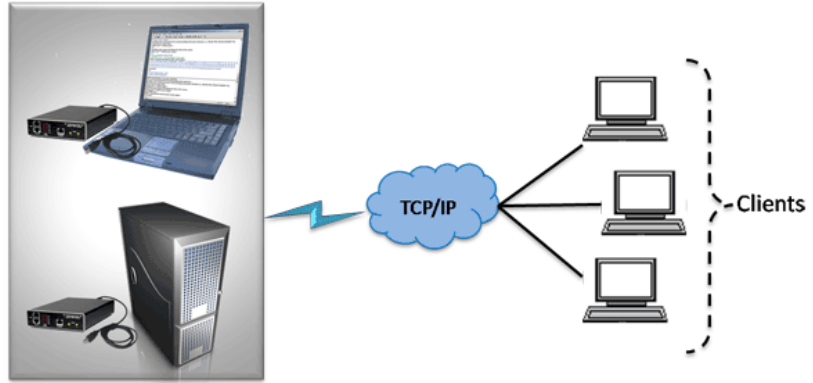
Intelligent Parsing and
Messaging



Customized TCP/IP clients



Windows Client/Server for T3/E3 Analysis



T3/E3 T1/E1 Ethernet
Analyzer Server

GL's Windows Client/Server software is a non-GUI based program for remote, scripted, and automated control of configuration, capture, transmission and more. T3/E3 Cards in a server mode can be easily controlled through software based clients at remote or local sites via TCP/IP sockets, thus allowing multi-site connectivity. Connectivity can be via Dial-Up, LAN, WAN, or more typically the Internet. The server software can run multiple tasks simultaneously at the request of the client software.

Server software runs multiple tasks simultaneously at the request of the client software. Server software runs under Windows 2000/XP and supports Portable USB T1/E1 Units platform.

For more details, visit <http://www.gl.com/t3-e3-windows-client-server.html>

Typical features include:

- Intrusive / Non-Intrusive T3/E3 Testing.
- Performance monitoring and testing of multiple site locations from a single client.
- Shared use of T3/E3 test equipment from multiple client locations.
- Ideal for automated testing on production lines.
- Uses the same intelligent parsing and messaging system used by GL's T1/E1 client-server.
- Simultaneous testing of high capacity T3/E3 systems through a single client.
- Integration of T3/E3 testing into more complex testing systems.
- Simple modifiable scripts to run various tests.
- Monitor, report, and record alarms locally or remotely.
- Wild card and sequential operators available in the command syntax, allows you to configure and control multiple elements of the test set using a fewer lines of commands.
- Free client software (with full source code) is available for download.
- Custom TCP/IP clients could be developed in any programming language to seamlessly integrate into your existing testing program.

Client applications that work with the Server are distributed freely and can be used as a template for more complex tasks. Currently clients are written in C++ scripting language. Clients can be run under any Windows® operating system.



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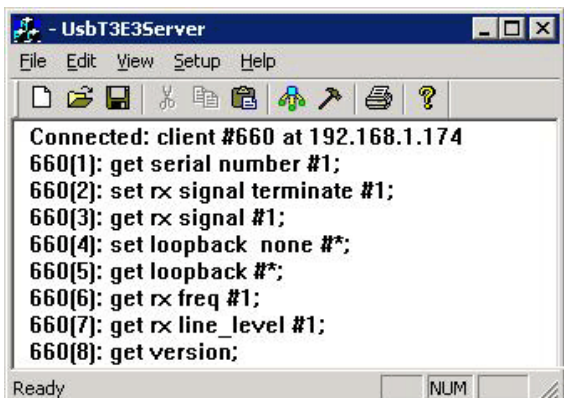
Web Page Address: <http://www.gl.com/> • E-Mail Address: gl-info@gl.com

GL Server Functions

The T3/E3 client program communicates with the T3/E3 server via TCP/IP-encapsulated commands and responses. The server performs 'actions' and 'tasks'.

- An 'action' is in response to a command initiated by a client. The server performs the action immediately and notifies the client of the result.
- A 'task' is more complicated, and usually involves real time generation and processing of data. Multiple tasks can be initiated without completion of previous tasks.

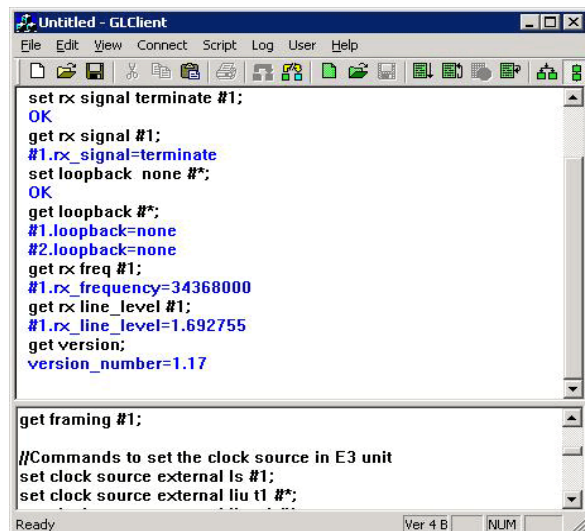
The server informs the client on tasks: started, status, complete, and so on. Typical tasks are get software version, rx signal settings, loopback settings, alarm monitoring, tx rx framing formats, FEAC messages, line level and signal frequency and others.



GL Client Functions

GL's client is distributed freely with server. Both commands and tasks are high-level functions, e.g. Rx signal settings, loopback settings, alarm monitoring, transmit receive framing formats, and so on.

- A client can initiate multiple tasks simultaneously or sequentially (queue up tasks in succession).
- All exchanges between the client and server are displayed and can be logged to a file for later viewing.
- All commands are simple and self-explanatory.
- Values returned from the server can be easily accessed and stored as user-defined variables.



Windows Client Server (WCS) Modules

WCS module TT3610/EE3610 - File transmission and reception

The Tx/Rx Files on unframed unchannelized T3/E3 (UsbT3E3FileXmit) is an optional WCS module that:

- Transmits data read from files
- Receives data to files
- Provides remote operation, automation, and multi-site connectivity

Sample Script for File and Reception:

```
run task "UsbT3E3FileXmit" using "QEND";  
inform task 1 "tx #1 'c:\usb_t3e3.bit' EOF";  
inform task 2 "rx #2 'c:\rx.dat' LIMIT 1000000";  
inform task 1 "start";  
inform task 2 "start";
```

WCS module TT3634/EE3634 - Multi-Channel HDLC Emulation and Analysis

The T3/E3 HDLC Tx/Rx Test (UsbT3E3HdlcTest) is an optional WCS module that:

- Sends HDLC frames with or without impairments
- Receives and verifies HDLC frames and optionally logs the errors
- Provides remote operation, automation, and multi-site connectivity

Sample Script for HDLC Emulation and Analysis:

```
run task "UsbT3E3HdlcTest:tx" using "QEND";  
inform task 1 "#1,2 SEQNUM FIXLEN 8 FRAMES 1200000  
FLAGS 200";  
inform task 1 "start";
```

Buyers Guide:

[TE3001](#) - Portable (USB) Dual T3 E3/T1 E1 Hardware Unit - requires TT3001 or EE3001

[TT3001/EE3001](#) - w/ T3/E3 Analyzer Basic Software

[TT3600/EE3600](#) - T3/E3 Basic Client Server Scripted Control Software

[TT3610/EE3610](#) - T3/E3 Client Server Tx/Rx File

[TT3634/EE3634](#) - T3/E3 Client Server High Throughput HDLC Tx/Rx Test

[TT3635/EE3635](#) - T3/E3 Client Server High Throughput PPP Tx/Rx Test

Related Hardware

[UT301 / UT302](#) - T3 Analysis PCI Card w/ Basic Software and Client / Server and Command Line Utility

[HUT001/HUE001](#) - Universal T1 or E1 card

[UTA001/UEA001](#) - Portable USB based Dual T1/E1 Laptop Analyzer



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