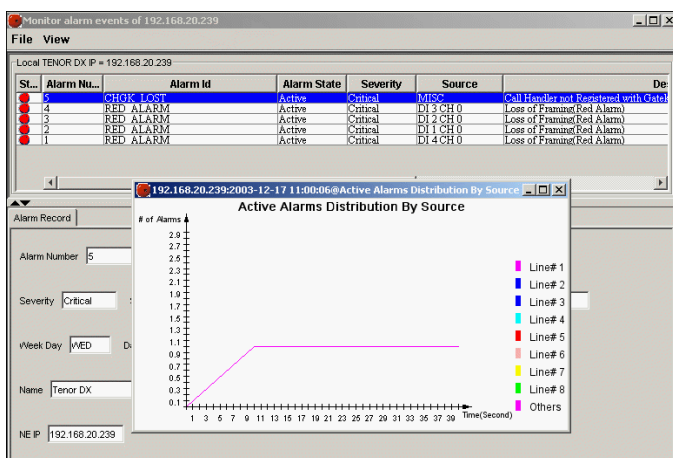


Tenor[®]Monitor

New Flexible Graphical User Interface (GUI) Monitors Tenor Network



- ◆ User friendly GUI
- ◆ Monitor Alarms
- ◆ Monitor Call Events
- ◆ Monitor CDRs
- ◆ Collect, Sort and Analyze Data
- ◆ Create charts
- ◆ Navigation Tree
- ◆ Web-based Online Help

Tenor Monitor Alarm Events Screen shot. Chart depicts status, alarm number, ID, state, severity, source and description.

Tenor Monitor software is Quintum's extremely flexible, most user-friendly tool for monitoring alarms, call status, and CDRs on a Tenor-based network in real time. The Tenor Monitor offers a host of features that allows network managers to monitor up to 1,000 alarms, 10,000 call events and 10,000 CDRs on Tenor equipped VoIP networks, right from their desktop.

The **Tenor Monitor** allows managers to collect, sort and analyze a vast amount of data. It offers a directly accessible navigation tree, built-in email capability, online debug tracers, easy to use chart management and a content-sensitive web-based online help function.

Tenor Monitor provides a rich set of VoIP network monitoring capabilities including:

- ◆ Alarm monitoring, which provides alarm viewing, collecting, and reporting via statistical tables and line charts;
- ◆ Call monitoring, which includes call viewing (auto display or on demand), continuous call event collection, and call management which can include monitoring start time and duration;
- ◆ CDR Monitoring, including viewing, collection and reporting.

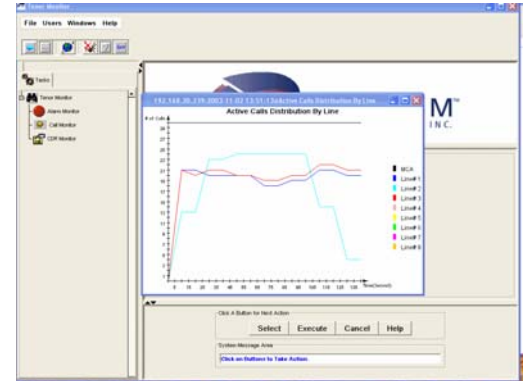
Functionality allows users to control the refresh time, record buffer size, pre-schedule monitor start times, duration and/or end times. Users can get a one-time snapshot of currently active alarms or calls on a specific Tenor.

A comprehensive way to monitor all Tenors in VoIP networks

The Tenor Monitor can monitor up to three Tenor VoIP switches simultaneously, each of which has an embedded Tenor Monitor Agent that can handle up to eight simultaneous Tenor Monitor sessions. The Tenor Monitor Client can display up to 18 real time sessions at one time.

A vast amount of data can be placed into comprehensive statistical line charts and tables, with multi-column sorting capability. The records are color-coded to easily determine the criticality of the alarm, call state and disconnected cause code. Double clicking on any column header will sort the column data in ascending or descending order.

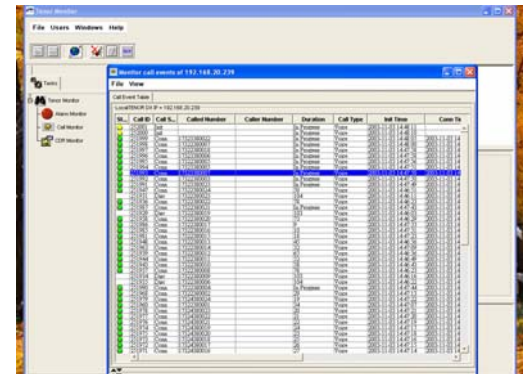
Quintum Tenor Monitor provides a centralized real time Alarm, Call Event, and Call monitoring with comprehensive statistical line charts and tables with multi-column sorting capability.



Charts can be created for such criteria as: active call distribution by line, by call state, call path, active calls vs. active IP calls, call duration, etc.

User Controllable Monitoring Parameters: Display refresh time, Record Buffer Size, Monitoring Start Time and Duration,

High Performance Call Event and Call Detail Record Collecting: Provides real-time Call Event and CDR registration to a Tenor. The Tenor will send Call Event Records and Call Detail Records in real time back the Call and CDR Monitor. Run time buffers are used to store all records.

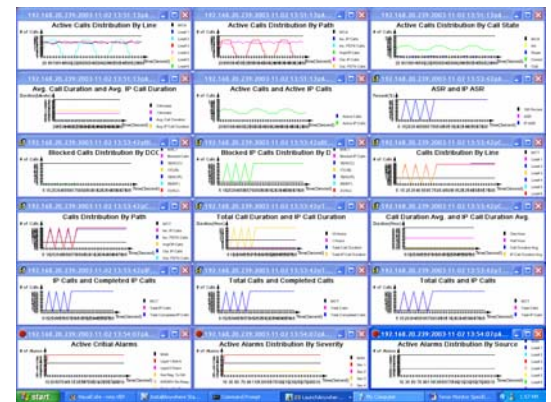


Content-Sensitive Web-based Online Help: Providing content-sensitive web-based online help via a Help button. After a user clicks on the "Help" button and drags the cursor to a particular object on the screen, the system will display the corresponding HTML help page. It also provides a Help menu for the user to access the Table of Contents of the online help document.

CDR Table showing Call ID, Called #, duration of the call, Initiation Time, Connection Time and Disconnect Time.

Cut-through Tenor CLI Interface: This feature provides a telnet Command Line Interface (CLI) to a Tenor simply by entering the IP address of a Tenor.

Quintum's new Tenor Monitor is Quintum's solution to a network manager's dream of having a set of VoIP network monitoring tools that will allow them to oversee, address and improve their Tenor VoIP network conditions in a real time manner.



Charts can be created for a variety of call states and alarms, and can be manipulated and sorted simply by clicking on a column.