



TimeScan

Management of Synchronization Networks

KEY FEATURES

- Comprehensive FCAPS Functionality
- Easy to Use Graphical Interface
- Remote Management of Sync Networks
- Low Cost of Ownership
- SNMP Connector (North-Bound)

INTRODUCTION

TimeScan (formerly known as TimeScan NMS NT) is a powerful management platform for accessing and controlling synchronization networks. Its intuitive graphical user interface (GUI) enable operators to monitor and control the network through icons and simple point and click operations, from remote locations.

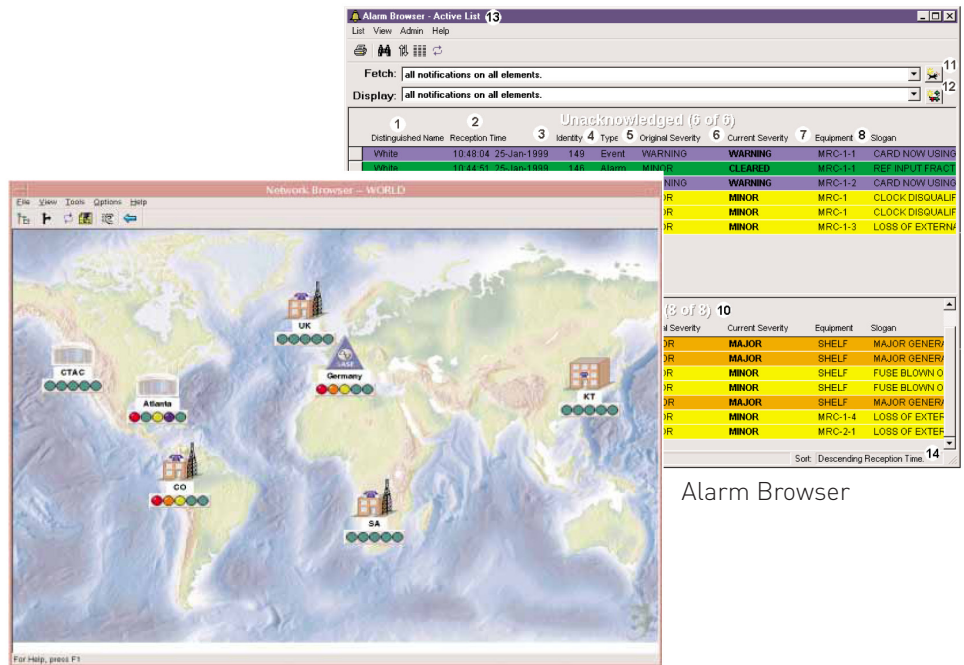
Logical and geographical network topologies are clearly illustrated on a multi-tiered hierarchy. Unlimited zooming levels support standard or user-customized maps and icons, control room layouts and accurate representation of the synchronization elements as well as their composite cards.

FAULT MANAGEMENT

Fault management is a key reason for deploying a remote management system. TimeScan reports alarms and events occurring on any synchronization element in the network rapidly.

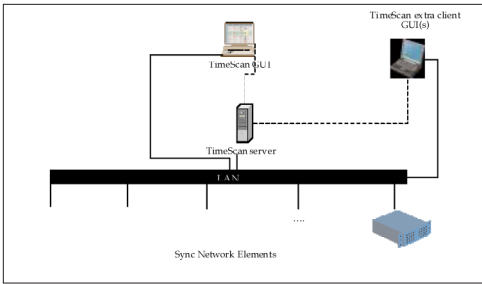
TimeScan's intuitive display icons indicate an alarm at any topology level, so that the problem could be identified rapidly.

Degraded synchronization network performance or hardware failures can be quickly identified, before they become a threat to the network. Comprehensive alarm management functions allow quick viewing of alarms, alarm acknowledgements, logging, archiving and complete forwarding control between element and network levels.

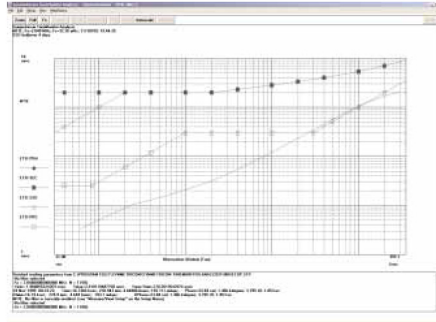


Alarm Browser

Network level view with alarms represented at the highest level of the network, and the alarm browser allowing sophisticated sorting and filtering functions.



TimeScan Sync EMS



Detailed performance monitoring through the TimeMonitor Option

CONFIGURATION MANAGEMENT

TimeScan's GUI allows a user to rapidly drill down complex multi-layered network topologies, to reach to the element level and examine a graphical representation of its status and configuration at the card and port level rapidly. The element presentation supports a physical view allowing management operators to guide maintenance staff. Logical views illustrate the current operational state of the network element within the network hierarchy. Both views not only provide status information to the operator, but also provide access for configuration actions. Detailed configuration capabilities are supported through sophisticated GUI tools. Users may place, move and delete icons, maps or elements on the screen when setting up or re-configuring the network and its topology (as long as their security levels allow such operations).

PERFORMANCE MONITORING

Monitoring performance parameters on key network facilities and elements is the first step to keep a synchronization network free of problems. TimeScan provides this capability in order to thwart threatening situations from developing. TimeScan can present graphical MTIE, TDEV and phase performance parameters of any network element. In addition, this data can be compared across time with different synchronization network elements, even against user created templates of 'masks' or industry standard 'masks'. This data collection could be done on a user selectable schedule. TimeScan may also be used to collect data that can then be fed into Symmetricom's sync and timing performance measurement system, TimeMonitor, for detailed analysis. The TimeMonitor software may be used in conjunction with TimeScan as an optional software add-on for advanced performance measurement and analysis capabilities.

SECURITY MANAGEMENT

Access control and security are essential to sophisticated management systems such as TimeScan. TimeScan provides an extensive and sophisticated security sub-system catering to a network operation center's ability to support multiple operators. The security sub-system allows the operators to configure authority for different users and to create and maintain profiles. An unlimited number of profiles can be supported. Each profile may be scoped to define access authority to a granularity down to individual actions on given elements. TimeScan makes it possible to customize authority profiles to suit the requirements of different policies or to enforce "fire walls" for virtual network management.

SNMP CONNECTOR

Synchronization management may be called on for root-cause analysis of a problem in the network or to understand the real reasons behind an alarm. As such, a connector to conduit alarms and traps to a network level management system is indispensable. Symmetricom's SNMP connector option accomplishes just that with a patent pending MIB design. This design ensures that all sync network elements can be accessed using one SNMP MIB and connector.

Specifications

RECOMMENDED HARDWARE CONFIGURATION

The following is the recommended configuration for a Windows XP/Vista Business system:

- Pentium or compatible 3 GHz or greater
- 4 GB RAM
- 40 GB or greater hard disk
- CD-ROM drive
- Graphics card with support for Direct X 9
- 20" VGA monitor (supporting 1600 x 1200)

SOFTWARE

The following software items are required:

- TimeScan NMS 8.8 CD-ROM
- Microsoft Internet Explorer 5.0 or higher
- Operating Systems:
 - Window Vista Business
 - Windows XP professional Service Pack 2 / Service Pack 3

Client Configuration: (PC compatible running Windows XP or Windows Vista)

Processor: Pentium II CPU 700 MHz

RAM: 256 MB

Hard Disk Space: 300 MB available