# TransNav Xpert

# **Element Management System**

## **Key Features**

- Complete network element performance monitoring
- Automated network element database backup and on-demand restoration
- Local and remote network element software-upgrade file downloads in less than one minute
- TL-1 northbound interface
- Third-party element management and display

Fast, One-Step End-to-End Connections

Connection management is a snap. All you have to do is use TransNav Xpert to select the appropriate network ingress and egress points. When you are ready, TransNav Xpert provisions the complete end-to-end connection, including drop sites and all pass-through sites. This lets you respond quickly to customer requests and dramatically cuts operating costs. Alsternately, you can establish the route manually by sending individual cross-connect commands to each network element. TransNav Xpert constantly keeps an updated view of the available resources so you or it can establish the best route for vour customers.

The TransNav™ Xpert Element Management System offers automatic end-to-end connection management, equipment group views and a multi-level facility. The TransNav Xpert contains network, isolated sub-network management, full alarm collection and correlation with group displays.

#### **Full, Centralized Control**

TransNav Xpert Element Management System (EMS) provides full, centralized control over the TraverseEdge™ 2020 and 206 platforms. It takes full advantage of the unique, built-in management capabilities of these products.

## **Simplified Configuration Management**

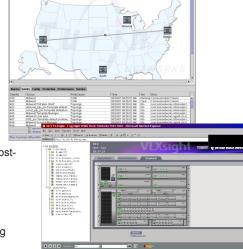
TransNav Xpert automatically discovers the configuration of your network. It learns what nodes, physical interconnections, and protection characteristics exist and creates the full end-to-end connection maps for

each subnetwork. Just identify a network or subnetwork from which TransNav Xpert needs to collect data and TransNav Xpert will take care of everything else. You don't have to identify each ring, linear span, or point-to-point connection. In addition, TransNav Xpert keeps track of any changes such as the addition or removal of individual nodes or entire subnetworks. So, when you add a new ring, TransNav Xpert takes care of collecting all the pertinent information for you – another time saver

Two versions of TransNav Xpert allow carriers to costeffectively implement full EMS capabilities for both smalland large networks:

#### TransNav Xpert PC

- A regional or CO-level EMS for small multi-ring networks with up to 32 nodes
- Supports full fault, configuration, performance, and security management for isolated and interconnected networks
- · Operates on a low-cost PC platform



#### TransNav Xpert

- An EMS for both small and large multi-ring networks containing up to hundreds of nodes
- Supports full fault, configuration, performance, and security management for isolated and interconnected networks
- Operates on a scalable, Unix-based, multi-user, server platform supporting PC and Unix GUI clients

TransNav Xpert PC provides the same EMS features as TransNav Xpert, but at a reduced cost, for carriers with smaller networks or for carriers who want regional EMS flexibility. Both provide informational reports for traffic utilization and network performance that can be configured to be emailed to the appropriate network operator. Email notifications can also be setup for user specified alarms or conditions.







# **TransNav Xpert Element Management System**

#### The Perfect GUI

The graphical user interface (GUI) presents network information in clear, easy-to-understand images and gives you point-and-click control simplicity. TransNav Xpert lets you group basic items such as network elements into functional groups. You can even combine groups into larger entities for subnetwork or network views. This lets you view various functional areas at a high level and drill all the way down to a facility on a port if necessary. Being able to manage multiple, isolated subnetworks means you don't have to install and maintain multiple management systems.

- TransNav Xpert lets you define how you want to manage your network
- TransNav Xpert provides 3rd-party icon support to manage other vendor network devices, such as M13 multiplexers, optical amplifiers, and even other SONET equipment
- TransNav Xpert is the perfect complement to your TraverseEdge 2020 or 206-based network and enhances your operations capabilities by speeding up management actions and reducing costs

#### **Network Support**

TL-1 protocol over a TCP/IP connection

TL-1 protocol over an IP-based VPN

Expandable to >1000 network elements

**Server Platform** (TransNav Xpert) Sun® platform

Solaris 8 or 9 operating environment

Java technology

Client Platform (TransNav Xpert) Windows NT, Windows 2000, or Windows XP operating system-based PC

Solaris 8- or 9-based workstation

#### Combined Server-Client Platform

(TransNav Xpert) Windows NT, Windows 2000, or Windows XP operating system-based PC

## **Graphical User Interface (GUI)**

Topology maps with user-defined groups, subnetworks, and networks

Equipment views

Point-and-click connection management

More than 15 concurrent user sessions

TL-1 command line interface available

Generic and 3rd-party network element support

#### **Fault Management**

All informational, minor, major, critical, and threshold crossing alarm collection

Individual and group-level alarm reporting

Historical alarm log

Configurable email alarm notification and performance reports

# **Configuration Management**

Automatic discovery of nodes, physical interconnections, protection characteristics, and full end-to-end connection maps

Automatic end-to-end connection management through built-in control mechanism

User-controllable cross-connects in individual nodes

Automatic network element database backup and on-demand restoration

Local and remote network element software download

#### **Performance Management**

15-minute and 24-hour data from network elements

User-definable data collection intervals

Rolling 30-day storage

#### Security Management

Login and password access controls

Customizable security levels based on desired functionality

