

Network Surveillance Control Center



BEHIND VERISIGN'S SECURE SS7 NETWORK

In support of its nationwide SS7 network, VeriSign's Network Surveillance Control Center (NSCC) helps provide maximum performance, efficiency, and reliability for our customers' signaling traffic. The NSCC is staffed around the clock, every day of the year. A team of highly trained surveillance technicians, technical support specialists, network administrators, and provisioning professionals act as the guardians of our SS7 network.

Our NSCC staff receives comprehensive, stringent training and employs the most advanced tools to continually monitor, isolate, diagnose, and resolve network difficulties. Network management solutions from Agilent, acceSS7, NETeXPERT VSM, and HP OpenView have proven especially valuable in helping our NSCC professionals safeguard our customers' SS7 traffic.

Advanced Management Solutions

The acceSS7 solution provides VeriSign's NSCC with real-time, remote surveillance capabilities. From a central location, the NSCC has visibility into our entire coast-to-coast SS7 network. The acceSS7 surveillance and troubleshooting tools empower the NSCC staff to take immediate, decisive action from the moment a customer's link passes level-three testing. Then, data from acceSS7 gives NSCC professionals the power to pinpoint, diagnose, and resolve potential network service disruptions quickly and effectively. With greater visibility into the network, our NSCC professionals can field questions from customers and resolve hard-to-identify problems, such as possible loop conditions or congestion in the network, more quickly.

ACCESS7 FEATURES

- Traffic Monitor delivers a graphical view of network traffic in near real-time, and highlights the top ten (of 2000) most heavily loaded links in the network per link type (A link, B Link, C Link, etc.). Traffic Monitor displays levels of usage on specific message types (ISUP, SCCP, etc.) traversing the top-ten links. This gives NSCC staff vital information so they can address issues before they cause any service-related problems.
- Protocol Analysis is a troubleshooting application that details SS7 protocol and message types. It is a valued asset to troubleshooting signaling services, enabling visibility of the entire signaling path. The desired messages, which can be decoded down to the octet level of the protocol, are filtered out into a detailed session buffer that can assist in trouble isolation. The decoded messages can then be easily exported and faxed or emailed to a customer for their review.
- Call Trace is a troubleshooting application that captures SS7 messages based upon calling/called numbers (digits). The data output is the session buffer, which enables extensive trouble analysis for service-related trouble tickets.
- Status Monitor is a tool used to give a detailed and focused view of link and channel status (transmit/ receive portion of the physical layer of a link). It also provides important statistical information (such as erlang load) about a link or group of links.

NETeXPERT VSM

Agilent's flexible NETeXPERT VSM-based fault management system gives VeriSign the ability to streamline fault management processes and improve service to customers. It serves as the NSCC's alarm system, helping network operators to detect, isolate, and correct transmission facility and/or nodal hardware failures in the company's nationwide SS7 network. It has improved the NSCC's response time and effectiveness by giving the NSCC staff access to information about potential problems with route sets and links in our remote STPs.

NETeXPERT VSM FEATURES

- With intelligent monitoring, the NSCC staff has the ability to set thresholds that, once crossed, can trigger an action to take place. The management system monitors various SS7 devices and then increases the monitoring when a device's performance falls below a predetermined level. This reduces overhead traffic on the network and increases the system's performance.
- Through suppression of sympathetic alarms, NETeXPERT VSM provides the ability to isolate points of failure on the network to a root cause - dramatically reducing the number of network alerts that NSCC staff must view. This, combined with advanced filtering functions, allows alarms to be easily viewed, prioritized, and acted upon.

HP OpenView

The HP OpenView is an IP-centric fault management system that provides support of the VeriSign IP-backbone, and support of customers that may connect to our network via IP-based facilities.

Timely Resolution

Using a combination of network management tools such as Agilent's acceSS7 and NETeXPERT VSM, VeriSign has increased efficiency by up to 45% and reduced the average time between problem notification and resolution. Armed with powerful solutions, extensive training, and the ability to operate proactively, the VeriSign NSCC team is well prepared to safeguard its SS7 network, maximizing signaling performance, efficiency, and reliability for our customers.

LEARN MORE

For more information, please contact your VeriSign Account Manager, call our information center at 888.655.4636 or 1.912.527.4010, send an email to vts-mktginfo@verisign.com, or visit www.verisign.com/telecom.

ABOUT VERISIGN

VeriSign, Inc. (Nasdaq:VRSN), delivers critical infrastructure services that make the Internet and telecommunications networks more intelligent, reliable, and secure. Every day VeriSign helps thousands of businesses and millions of consumers connect, communicate, and transact with confidence.