

QWEST PRIVATE LINE Self-Healing Network Service

FAILURE-RESISTANT NETWORK KEEPS YOUR BUSINESS UP AND RUNNING

Qwest® Self-Healing Network Services (SHNS) provides business continuation, disaster recovery, and survivability through a failure-resistant telecommunications network. SHNS is designed to minimize network downtime and is ideally suited to a wide range of multi-location data, video, voice and Ethernet applications, for example:

- Tying together office locations, data centers, and access to carrier points of presence (POPs) in one secure, dedicated and protected network.
- Providing high bandwidth, protected and diverse connectivity to call centers and your customers.
- Enhancing your business continuity plan to protect assets.

DESCRIPTION

SHNS offers a service arrangement that provides high-capacity digital services between multiple customer-designated premises within a local access transport area (LATA) and a minimum of one Qwest wire center location. The service is designed to automatically detect service degradation or a single failure anywhere within the system and reconfigure itself around the point of failure to ensure a near-continuous flow of information between those locations that are within the survivable network.

FEATURES

- A broad spectrum of speeds (e.g., DS-1, DS-3, STS-1, OC-3, OC-3c (concatenated signal), OC-12, OC-12c, OC-48, and OC-48c, and 10 Mb Ethernet, 100 Mb Ethernet and one Gigabit Ethernet options, separately or in combination) to meet bandwidth requirements for networks of all sizes.
- Instantaneous rerouting of your transmissions within 50 milliseconds.
- 99.99 percent availability, with a bit error rate of 10⁻⁹, or one error in one billion bits.
- A range of system bandwidth capacities (155.52Mbps, 622.08 Mbps, 2.488 Gbps, and 9.95 Gbps data speeds) are available.
- Utilizing SHNS as a backbone, you can connect to multiple Qwest-provided services, including DS-1, DS-3, Digital Switched Service, and Switched Access Service.
- Performance monitoring—Customer-provided terminals provide access to detailed performance information and real-time status verifications.
- Drop-and-insert multiplexing enables you to predesignate the number of individual channels serving each location to meet your usage needs.
- Constant network monitoring—Qwest tracks each system with standard 24-hour alarm surveillance and/or performance monitoring.

OPTIONAL FEATURES

- Central office connecting channel (COCC) provides for connections to another SHNS ring or from the SHNS ring to any central office-based service that interfaces at the same bandwidth.
- Software reconfiguration capability (SRC) gives you the ability to reconfigure existing channels within the SHNS on a daily basis to suit the changing demands of your operation
- Transmux allows high-bandwidth circuits to be multiplexed into lower bandwidth circuits inside a SONET system.

BENEFITS

- Eliminates costly downtime—Because SHNS is provided in a ring configuration, it automatically detects service degradation or a single failure anywhere within the system and reconfigures itself around the point of failure to ensure a near continuous flow of information.
- Nearly instantaneous switch-to-protection path—within 50 to 245 milliseconds.
- Security and reliability—Each network is dedicated to a single customer and is engineered to the highest availability standard of 99.99 percent.
- Out of service credits—If a service interruption occurs and SHNS fails to switch to the protection path within one second, Qwest will credit you for an entire month's billing for the affected service.
- Customized solutions—Each system is designed to your specific requirements and precise network needs.
- Scalable and flexible—SHNS easily connects to other Qwest network restoral services, such as Self-Healing Alternate Route Protection (SHARP) and SHARP Plus services that add flexibility to your network. It can be expanded to include additional services, such as Asynchronous Transfer Mode (ATM), and can also support new technology with minimal reengineering and cost.

HOW IT WORKS

The SHNS ring configuration makes it possible for your network to remain functional in the event of a fiber cut. The service allows multiple circuit types, such as DS-1, DS-3, STS-1, OC-3, OC-3c (concatenated), OC-12, OC-12c, OC-48, and OC-48c, and 10 Mb Ethernet, 100 Mb Ethernet and one Gigabit Ethernet, to ride the SHNS separately or in combination, meeting your unique volume-transport needs. SONET technology ensures your network has the highest level of survivability available today.

WHY BUY FROM QWEST?

- SHNS harnesses the power of fiber optics, plus more than 100 years of experience delivering telecommunications, in one solution with unparalleled performance.
- Our service adds the highest level of security to a 100 percent dedicated private line. Qwest demonstrates commitment to the security of your high-speed digital access service by dedicating not only the circuit, but also the telecommunications equipment needed to provide your service. A combination of intelligent network elements and self-healing fiber ring topology is used to make your dedicated communications network failure resistant.
- Qwest adheres to the most stringent carrier-grade implementation, testing and configuration standards.
- Qwest has the most dense fiber footprint in its 14-state local service region.

OTHER PRODUCTS AVAILABLE FROM QWEST

In addition to Qwest Self-Healing Network Services, Qwest has an array of products to meet your communication needs, including:

- Qwest® GeoMax®
- Qwest® Synchronous Service Transport (SST)
- Qwest® Private Line DS-1 Service
- Qwest® Private Line DS-3 Service
- Qwest® Metro Optical Ethernet (QMOE)

Qwest® Corporation Self-Healing Network Service (SHNS) is available in the Qwest local service territory of AZ, CO, IA, ID, MN, MT, ND, NE, NM, OR, SD, UT, WA, and WY. Minimum one-year term of commitment and minimum of three nodes required. Early termination liability may apply.