WAN Ethernet: Enterprise SLA Option

Ensuring Network and Circuit Quality from Customer Premise to Customer Premise

The Enterprise SLA Option delivers what enterprises want—Ethernet with customer premise to customer premise monitoring and service level agreements (SLA). Tata Communications delivers on the requirement for a single telecommunications provider to monitor the Ethernet service, end-to-end, regardless of whose network the service travels. This unique solution delivers:

- Customer premise to customer premise monitoring of all facilities, regardless of ownership
- A strong Layer 2 SLA
- In-line monitoring
- A redundant solution for rapid Mean Time To Repair (MTTR)
- On-demand reporting

Ethernet's inherent flexibility is especially relevant in today's competitive business environment. The Enterprise SLA Option enhances this flexibility—with an SLA from within one meter of the customer's equipment at each end, on a global scale. With greater coverage and improved management, the Enterprise SLA Option ensures peace of mind and reduced downtime to achieve the best results.

End-to-End Monitoring

To ensure the highest levels of reliability and accuracy, Tata Communications installs network interface devices (NIDs) at each end of the network. Data is collected from the NIDs every five minutes, allowing Tata Communications to provide constant, end-to-end monitoring of the circuit. In addition to monitoring, this configuration also facilitates rapid diagnosis if network issues occur. This end-to-end capability delivers highly accurate service measurements in line with customer traffic for performance statistics that accurately reflect the customer's traffic flow and experience.

Key Differentiators

- Devices are installed within one meter of customer equipment
- Actual circuit flow is monitored—not a shadow route
- SLA performance variables are proactively managed before thresholds are crossed
- Historic information shows trend analysis for total customer commitment
- Globally available

Features

The Tata Communications Enterprise SLA Option is based on a calendar month. Supported SLA schedules include service uptime, packet delivery ratio, latency (round-trip delay), and jitter (one-way delay variation). In addition to SLA measurements, daily minimum, average, and maximum throughput (usage) statistics are available to diagnose traffic usage and trends. Reports can provide up to 30 days of data in both graphical and tabular format.

Network Interface Device Details

Single unit dimension: 5.34" W x 5.80" D x 1.60" H (13.56 cm x 14.73cm x 4.06 cm)

Operating temperature	32°F to 122°F (0°C to +50°C)
Relative humidity	max. 95% (non-condensing)
Input voltage	auto-sensing: 90 VAC to 264 VAC
Input current	< 1.6A RMS at 90 VAC
Input frequency	auto-sensing: 47 – 63 Hz

SLA Details

Tata Communications' Enterprise SLA Option provides:

Service Uptime
- Protected circuits – 99.9%
- Hybrid circuits – 99.7% (portions of circuit are protected and portions are unprotected)
- Unprotected circuits – 99.5%

Packet Delivery Ratio
- 99.97% of frames will pass through the network

Latency (Round-Trip Delay)
- Measurement of the actual circuit path
- Latency target is calculated based on the actual path

Jitter (One-Way Delay Variation)
- Not to exceed 15 ms.

Equipment Details

Tata Communications sends equipment for the Enterprise SLA Option directly to the customer. The equipment includes two NIDs at each site—a working NID and a standby NID for quick MTTR activities—copper cabling, and a mounting bracket. Both NIDs are installed side-by-side in 1 RU of customer supplied space, using customer supplied AC power. Tata Communications delivers global implementations, supporting multiple international plugs. After installation, the customer will contact Tata Communications to configure the NID units remotely. Requiring only minimal customer involvement, the Enterprise SLA Option provides a cost-effective solution for end-to-end monitoring and maximum flexibility on a global scale.

During operation, the NID collects performance metrics and returns this information, using a specific VLAN, back to Tata Communications. The customer cannot use the same VLAN used to collect the performance metrics. During operation, the NIDs generate and pass frames between themselves in order to calculate and maintain this performance data.

For More Information

For more information about the Enterprise SLA Option or other Tata Communications' Ethernet services, please visit www.tatacommunications.com.