



WAN Link Performance & Strategy Report

****Location:**** Surat Sourcing Office, Surat
****Vendor:**** TATA COMMUNICATIONS LIMITED
****Link Type:**** Broadband
****Business Hours:**** 09:00–18:00
****Provisioned Speed:**** 100.0 Mbps

1. Usage Pattern Analysis

The link is significantly underutilized, with average usage at only 1.4% of its 100 Mbps capacity. Even during peak business hours, average usage is only 3.5 Mbps. Data shows that 95% of the time, usage remains below 8.1 Mbps. An abnormal, extreme usage spike was recorded, far exceeding the provisioned speed, which suggests a measurement anomaly or a severe, brief network event that requires investigation.

2. Capacity Planning Recommendations

The current 100 Mbps circuit is heavily over-provisioned for current and projected needs. Based on sustained usage patterns (95th percentile), we recommend resizing the circuit.

- ****Conservative:**** 9.7 Mbps
- ****Balanced (Recommended):**** 12 Mbps
- ****Aggressive:**** 3134 Mbps (Note: This is based on the data anomaly and should be disregarded.)

A balanced provisioning of ****12 Mbps****, with a plan to accommodate 15% growth (to 13.8 Mbps), would be sufficient.

3. Performance Risks & Bottlenecks

The primary risk is not from typical usage but from the identified anomalous burst activity. The peak usage was recorded at an impossible 2848 Mbps, indicating a potential misconfiguration or a security event causing a denial-of-service-like flood. While extremely rare (0.01% of the time), this behavior warrants further technical analysis to ensure network stability.

Conclusion

This link is severely over-provisioned; we recommend downgrading the circuit from 100 Mbps to ****12 Mbps**** to optimize costs without impacting performance.

Visual Insights

