



Network Performance & Capacity Report

****Location:**** TCLROW-RO-MUMBAI, Mumbai

****Vendor:**** TCL

****Link Type:**** Internet Leased Line (ILL)

****Business Hours:**** 09:00–18:00

****Provisioned Speed:**** 50.0 Mbps

1. Usage Pattern Analysis

This link is significantly underutilized, with average usage at only 3% of its 50 Mbps capacity. Traffic is concentrated during business hours, but even the sustained daily peaks average less than 8 Mbps. However, the data reveals extremely high, short-lived bursts, with one anomalous peak reaching over 1500 Mbps. These rare events suggest unmanaged traffic, such as large, unscheduled data transfers.

2. Capacity Planning Recommendations

The link is heavily over-provisioned for its typical workload. Based on sustained usage (95th percentile), a much smaller circuit is sufficient.

* ****Conservative:**** 10 Mbps

* ****Balanced:**** 11 Mbps

* ****Aggressive:**** 1703 Mbps (Invalidated by provisioning limits)

We recommend a balanced approach, right-sizing the link to align with actual operational needs while allowing for growth.

3. Performance Risks & Bottlenecks

The primary risk is service degradation from intermittent, massive traffic bursts. These peaks, far exceeding the 50 Mbps limit, likely cause packet loss and disrupt other critical applications during the 104 minutes of observed congestion. This pattern indicates a need to investigate the source of these bursts and implement traffic shaping policies.

Conclusion

We recommend downgrading this link to a ****15 Mbps**** circuit to achieve significant cost savings while comfortably supporting current and future business-as-usual traffic.

Visual Insights

