



WAN Link Performance & Capacity Report

Location: Madurai_Branch, Madurai

Vendor: TCL

Link Type: ILL

Business Hours: 09:00–18:00

Provisioned Speed: 10.0 Mbps

1. Usage Pattern Analysis

The 10 Mbps link is exceptionally underutilized, with an average usage of only 0.06 Mbps (0.6% of capacity). Usage patterns align with business hours but remain minimal. However, the analysis reveals a critical anomaly: brief but extreme usage spikes, with a recorded peak of 15.08 Mbps. These bursts, while infrequent, represent significant, short-lived demand.

2. Capacity Planning Recommendations

The link is severely over-provisioned for typical business needs, as 95% of the time usage is at or below 0.10 Mbps. A significant downgrade is recommended to align costs with actual requirements.

* **Conservative:** 1 Mbps

* **Balanced (Recommended):** 2 Mbps

* **Aggressive:** 5 Mbps

A 2 Mbps circuit would provide ample capacity for regular use and moderate bursts while generating substantial cost savings.

3. Performance Risks & Bottlenecks

The primary performance risk is network congestion during the observed usage spikes. Peaks reaching 150% of the provisioned speed will cause packet loss, high latency, and application timeouts. While these events are rare (totaling 16 minutes), they create severe, temporary bottlenecks impacting user experience.

Conclusion

The link should be downgraded to a **2 Mbps** circuit to reduce operational costs, with a recommendation to investigate the cause of the extreme peak usage.

Visual Insights

