



WAN Link Performance & Sizing Report

****Location:**** Bhubaneswar CFA, Bhubaneswar

****Vendor:**** Bharat Sanchar Nigam Ltd

****Link Type:**** DBB

****Business Hours:**** 09:00–18:00

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

1. Usage Pattern Analysis

The 50 Mbps link is severely underutilized, with average usage at less than 1% of its total capacity. While traffic is five times higher during business hours (09:00-18:00), it remains consistently low. The primary anomaly is the presence of brief but extremely high-speed traffic bursts that far exceed the provisioned limit.

2. Capacity Planning Recommendations

The link is significantly over-provisioned for current needs. Sustained peak usage (95th percentile) is only 2.49 Mbps, suggesting a much smaller circuit would be more cost-effective. A data-driven provisioning strategy is as follows:

- ****Conservative:**** 3 Mbps
- ****Balanced:**** 4 Mbps
- ****Aggressive:**** 212 Mbps

We recommend the balanced approach, with an added buffer for future growth.

3. Performance Risks & Bottlenecks

The primary risk is not sustained congestion but sudden, intense traffic spikes. The observed peak of 193 Mbps on a 50 Mbps circuit creates a significant bottleneck, causing packet loss and temporary service degradation for all users during these moments.

Conclusion

We recommend downgrading this link to a new provisioned speed of ****5 Mbps**** to align costs with actual usage while proactively accommodating projected growth.

Visual Insights

