



WAN Link Performance & Optimization Report

* **Location:** Chennai-CFA, Chennai
* **Vendor:** BHARTI AIRTEL LIMITED
* **Link Type:** ILL
* **Business Hours:** 09:00–18:00
* **Provisioned Speed:** 20.0 Mbps

1. Usage Pattern Analysis

The link is significantly under-utilized, with average usage at just 0.11 Mbps (0.6% of capacity). The usage trend is stable with no projected growth. Despite low overall use, the link experiences infrequent, sharp bursts of traffic. For 99.9% of the time, usage remains well below 50% of the provisioned capacity, indicating no sustained demand.

2. Capacity Planning Recommendations

The current 20 Mbps circuit is heavily over-provisioned. Based on a 95th percentile usage of 0.35 Mbps, which represents typical peak demand, we recommend right-sizing the link.

* **Conservative:** 0.4 Mbps
* **Balanced (Recommended): 1 Mbps**
* **Aggressive:** 2 Mbps

A balanced 1 Mbps circuit provides ample headroom for current usage and future growth.

3. Performance Risks & Bottlenecks

While the link is mostly idle, brief traffic spikes have peaked at 22.31 Mbps, exceeding the provisioned capacity. These bursts, though lasting only 45 minutes in total, can cause temporary packet loss and performance degradation for the applications causing them. This behavior suggests a misconfigured process rather than a need for higher bandwidth.

Conclusion

The link should be downgraded to **1 Mbps** to align capacity with actual business needs and achieve significant cost savings.

Visual Insights

