Network Performance & Capacity Report

Location: CHENNAI area-office-002-branch, CHENNAI a
Vendor: AIRTEL
Link Type: ILL
Business Hours: 09:00–18:00
Provisioned Speed: 20.0 Mbps

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1. Usage Pattern Analysis

The link shows a pattern of very low average usage but experiences frequent, intense bursts of traffic during business hours. While overall utilization is just 14.3%, the traffic is highly volatile, regularly spiking to maximum capacity. A single, extreme peak of over 3000 Mbps was recorded, which is likely a data anomaly. However, legitimate peaks that saturate the link are a daily occurrence.

2. Capacity Planning Recommendations

The current 20 Mbps circuit is severely under-provisioned for peak demand. The sustained daily peak average is 18.30 Mbps (91.5% of capacity), leaving no headroom. With a 9% monthly growth rate, performance will continue to degrade. We recommend an immediate upgrade to a 40 Mbps circuit to handle current peaks and support near-term growth.

3. Performance Risks & Bottlenecks

There is a significant risk of network congestion. The link was saturated (over 90% capacity) for more than 94 hours during the analysis period. The 99th percentile usage is 35.28 Mbps, confirming that critical traffic regularly exceeds the 20 Mbps limit. This results in packet loss, increased latency, and poor application performance for users.

Conclusion

This link is a performance bottleneck and requires an immediate capacity upgrade to a minimum of 40 Mbps.

Visual Insights

2 Hour Average Bandwidth Usage

Bandwidth Usage Distribution