



****Location**:** BBK-Tanishq Store, Kolkata

****Vendor**:** BHARTI AIRTEL LIMITED

****Link Type**:** ILL

****Business Hours**:** 10:00–21:00

****Provisioned Speed**:** 4.0 Mbps

1. Usage Pattern Analysis

Overall link utilization is low at 12%, with traffic concentrated during business hours. However, the connection is defined by a pattern of extreme usage spikes, with a maximum peak recorded at nearly 10 times the provisioned speed. This indicates that while the link is often idle, it is subjected to intense, short-duration data demands.

2. Capacity Planning Recommendations

The current 4 Mbps capacity is adequate for sustained average loads (2.60 Mbps) but is severely under-provisioned for peak demand. The 99th percentile usage already reaches 6.96 Mbps. Given the aggressive monthly growth rate of 72.20%, a capacity upgrade is strongly advised to prevent future performance degradation.

3. Performance Risks & Bottlenecks

The primary risk is severe network congestion. With usage frequently exceeding the 4 Mbps limit—resulting in nearly 50 hours of congestion—the link is a bottleneck. These bursts beyond the contracted speed likely cause packet loss, slow application response, and poor user experience, impacting critical store operations.

Conclusion

The link requires an upgrade to at least 10 Mbps to reliably handle frequent peak usage bursts and accommodate rapid growth.

Visual Insights

