



Network Performance & Capacity Report

****Location:**** AHMEDABAD-CFA-branch, Ahmedabad

****Vendor:**** JIO

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

****Business Hours:**** 10:00–18:00

****Provisioned Speed:**** 10.0 Mbps

1. Usage Pattern Analysis

The 10 Mbps link is significantly underutilized, with average usage at only 4.4% of its capacity. Traffic peaks appropriately during business hours. However, we have observed brief but extremely high usage spikes, with a recorded peak of 84.64 Mbps. These anomalies are very short-lived, as usage remains below 2.41 Mbps for 95% of the time.

2. Capacity Planning Recommendations

The link is currently over-provisioned for sustained operational needs. We recommend right-sizing the circuit based on the following data-driven strategies:

- ****Conservative:**** 2.9 Mbps

- ****Balanced:**** 4 Mbps

- ****Aggressive:**** 93 Mbps

A ****5 Mbps**** plan is recommended, accommodating the balanced strategy with a buffer for future growth.

3. Performance Risks & Bottlenecks

The primary risk stems from the extreme usage bursts that exceed the 10 Mbps limit. While the provider may currently allow this bursting, these events—totaling 378 minutes above 90% capacity—create a high risk of packet loss and application slowdowns, impacting business operations during critical moments.

Conclusion

We recommend downgrading the link from 10 Mbps to 5 Mbps to align with actual usage patterns and optimize operational costs.

Visual Insights

