



## Network Performance & Capacity Report

**\*\*Location:\*\*** HYDERABAD-SmartLAB-Wearables, HYDERABAD

**\*\*Vendor:\*\*** TATA COMMUNICATIONS LIMITED

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

**\*\*Business Hours:\*\*** 09:00–18:00

**\*\*Provisioned Speed:\*\*** 100.0 Mbps

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### 1. Usage Pattern Analysis

This 100 Mbps link is significantly underutilized, with average usage at only 1.9% of its capacity. Traffic is concentrated during business hours but is characterized by highly irregular and intense bursts. Despite the low average, an anomalous peak of over 1200 Mbps was recorded, indicating unmanaged, high-volume data transfers that far exceed the link's physical capacity.

### 2. Capacity Planning Recommendations

The link is heavily over-provisioned for its typical, sustained demand (95th percentile is 8.38 Mbps). We recommend right-sizing the circuit to align with actual usage and achieve cost savings.

\* **\*\*Conservative:\*\*** 10.1 Mbps

\* **\*\*Balanced (Recommended):\*\*** 13 Mbps

\* **\*\*Aggressive:\*\*** 1347 Mbps (distorted by outlier peak)

A new provisioning speed of **\*\*15 Mbps\*\*** is suggested to accommodate current peak patterns and future growth.

### 3. Performance Risks & Bottlenecks

The primary risk is severe, intermittent network congestion. Data shows the link was saturated for nearly 5 hours (292 minutes). The extreme usage peaks indicate severe packet loss and application performance degradation are occurring during these events. The high monthly growth rate suggests these disruptive bursts may become more frequent.

### Conclusion

This link should be downgraded to **\*\*15 Mbps\*\*** to optimize costs, and the source of the extreme traffic bursts must be investigated to ensure service stability.

## Visual Insights

