WAN Link Performance & Optimization Report

Location: Pantnagar_Watches, Pantnagar
Vendor: JIO
Link Type: ILL
Business Hours: 09:00–18:00
Provisioned Speed: 50.0 Mbps

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1. Usage Pattern Analysis

The link is significantly underutilized, with average usage at only 2.7% of its capacity. While usage is higher during business hours, it remains very low overall. A critical anomaly was observed: an extreme, short-lived usage spike of 992 Mbps. This irregular behavior requires immediate investigation as it far exceeds the circuit's limit. The overall usage trend is stable with no projected growth.

2. Capacity Planning Recommendations

The 50 Mbps circuit is heavily over-provisioned for daily operational needs. Based on sustained usage patterns (95% of the time, usage is below 6.10 Mbps), we recommend rightsizing the link for cost efficiency.
- **Conservative:** 7.3 Mbps
- **Balanced (Recommended):** 9 Mbps
- **Aggressive:** 1092 Mbps (skewed by anomaly)

We suggest a new provisioning speed of **10 Mbps**.

3. Performance Risks & Bottlenecks

Despite low average use, the link experienced congestion, exceeding 90% of its capacity for a total of 185 minutes. The primary risk is the extreme burst traffic pattern, which suggests a potential equipment misconfiguration, policy flaw, or security event that saturated the connection.

Conclusion

We recommend downgrading this link to **10 Mbps** to align with actual business needs and achieve significant cost savings, pending an investigation into the cause of the peak usage anomaly.

Visual Insights

2 Hour Average Bandwidth Usage

Bandwidth Usage Distribution