

# Turnium Key Benefits for Voice, UCaaS, and CCaaS

Interest in SD-WAN increased dramatically in 2020, in part because of the COVID-19 pandemic. Some of the top reasons for choosing SD-WAN include high availability, reliability and cost reduction.



## High Availability

Turnium's advanced link or circuit aggregation allows multiple circuits from multiple carriers to be treated as a single virtual Internet link with bandwidth stacked or bonded into one large data "pipe" at each site or location.

Provides improved bandwidth and redundancy. Link aggregation delivers built-in and seamless sub-second failover across the bonded circuits. Using multiple carriers delivers highly available network infrastructure.

Allows critical applications to be survivable as failed links are removed automatically (and added back, once recovered) and session IP addresses are preserved, so calls and session-based connections are maintained.

## Reliability

Delivering quality voice and video services using packet prioritization techniques is not a new concept. Traditional telecoms companies use bandwidth reservation in their networks to set aside bandwidth for prioritized packets coming from customer LAN.

Turnium SD-WAN enables packet prioritization across all circuits in the SD-WAN, including internet circuits. Turnium's link aggregation technology also sends packets across links according to their performance, this eliminates the need for Forward Error Correction and the associated increase in network traffic.

## Cost Reduction

Turnium ensures end-users' experience is not affected by potentially unreliable circuits. The Bandwidth Adaptation capability in Turnium automatically adjusts link characteristics to overcome the impacts of jitter, latency and packet loss. Maximum link speeds can also be managed through link (or leg) tuning to eliminate degradation due to link saturation.

But a quality end-user experience isn't just about bandwidth and failover. Turnium's ability to manage network and internet connections increases customer acquisition and retention by providing a more consistent, higher quality service and leading to a reduction in trouble tickets opened related to internet issues such as time-of-day congestion, latency, or jitter.

## Technical Benefits

Turnium also offers multiple technical benefits for UCaaS providers:

- Provides built-in QoS to mitigate quality issues and virtually guarantee optimal voice and video quality.
- Offers security via network segmentation, increased visibility, data encryption and centralized provisioning. (Customer premise and core network nodes are also foundational elements of secure access service edge, or SASE.)
- Supports multiple connection types, including (but not limited to) cable, DSL, fiber and wireless LTE/4G/5G.
- Offers an easier way to increase bandwidth as business locations and models change.