



## REMOTE WORKING CHALLENGES

# What challenges are you facing managing remote user growth and access in today's current and very unique environment?

Below are the top 6 challenges identified by enterprise customers and best practices to address each challenge

### CHALLENGE 01

## VPN Oversubscription

#### Recommendations

##### Analyze what your VPN Concentrator can tell you

Flow, packet capture, SNMP polling, and syslog messages - all of which can help you manage VPN oversubscription

**Pay particular attention to ports associated with VPN Usage**  
e.g. OpenVPN (1194) or SSL VPN (TCP/UDP 443, IPsec/IKEv2 UDP 500/4500)



### CHALLENGE 02

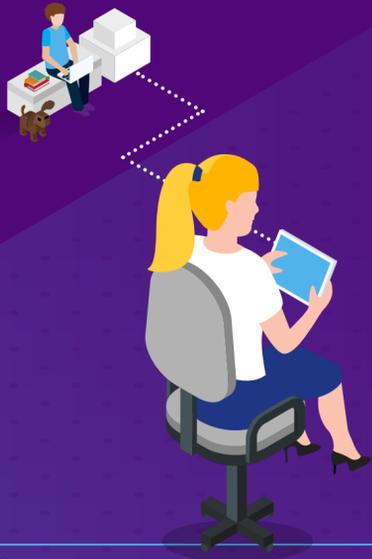
## Bandwidth and Connectivity Monitoring

#### Recommendations

**Leverage flow-based volumetric data like NetFlow/IPFIX**  
Understand changing bandwidth demands, traffic distribution, and personal versus business traffic

**Confirm or validate QoS configurations are aligned with your business priorities**

This will ensure that the important traffic is not affected during high bandwidth utilization conditions



### CHALLENGE 03

## Remote Application Performance

#### Recommendations

##### Leverage VIAVI End User Experience (EUE) scoring and Application Dependency Mapping (ADM)

By monitoring EUE and using ADM, you can isolate the domain of network performance issues to quickly pinpoint root cause

##### Measure your End User Experience manually

Alternatively, metrics like bandwidth, packet loss, and latency can be leveraged to measure End User Experience



### CHALLENGE 04

## Security and Personal Devices

#### Recommendations

**Revisit the security posture of the personal devices of newly remote employees**

##### Leverage behavioral analysis techniques such as VIAVI Observer's host and service profiling

Identify unexpected or suspicious activity and ensure sensitive data and services are adequately secured

**Double down on security and awareness training for employees and deploy anti-phishing software**

Remote workers may combine personal email/browsing with work tasks and be more vulnerable to phishing attacks and ransomware



### CHALLENGE 05

## Web Conferencing Performance

#### Recommendations

##### Make sure your organization is aware of how to collect metrics from your web conferencing tool

This includes Mean Opinion Score (MOS), jitter, packet loss, round trip time, drop failure rate, and more

**Ensure endpoint devices and drivers are up to date**



### CHALLENGE 06

## Split Tunneling

#### Recommendations

##### Leverage split tunneling to optimize traffic flow

Give users the best experience in terms of network performance

##### Be cognizant of security issues with split tunneling

Be sure to weigh the security implications when making the decision to implement split tunneling as your remote users' traffic may not be protected

##### Inverse split tunneling

If your VPN solution offers inverse split tunneling, consider letting your audio and video go direct if the server is not on your internal network to avoid IP audio and video degradation

