


E-BOOK

# Solving Home Office Challenges in Today's Cloud-Connected Environment with Adaptiv Networks



An aerial view of a city skyline, likely New York City, with a network of glowing yellow lines and nodes overlaid on the image, representing a cloud-connected environment.

The coronavirus pandemic has forced millions of employees to work from home, and with the right home office connectivity, many workers have proven they can remain productive. Companies ranging from Facebook to Slack to Microsoft and Google have set up plans to let much of their staff work from home permanently.<sup>1</sup> But can teleworkers remain productive using standard residential connectivity provided by their home Internet Service Provider (ISP)?

The global coronavirus pandemic unexpectedly forced millions of employees to suddenly WFH full time in 2020. By using their residential internet connections, these workers have, by and large, proven the viability of a distributed workforce. While many job functions benefit from face-to-face interactions, business cloud applications and unified communications and collaboration tools support remote staff productivity while keeping them safe. Thus, leading many employers to consider working from home as a long-term solution. Employers can minimize risks and potentially reduce office space expenses. Home office workers spend less time commuting, and many report improvements in work-life balance. Business leaders who embrace remote work viability must recognize that high-quality home office connectivity is essential to optimizing telework productivity.

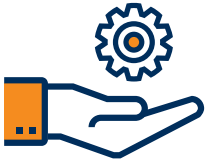
**42%** of US Labor Force was working from home full-time.

Stanford Institute for Economic Policy Research, June 2020

Employers face four common challenges when connecting home office users: the quality of real-time voice and video communications, the availability of IT support, the reliability of cloud applications, and the security of corporate data. This eBook helps business and IT managers, along with those who are new to the home office environment, explore solutions that can resolve the challenges of creating an efficient home office network that ensures excellent business productivity.

<sup>1</sup> <https://www.cnn.com/2020/05/22/tech/work-from-home-companies/index.html>

## 1

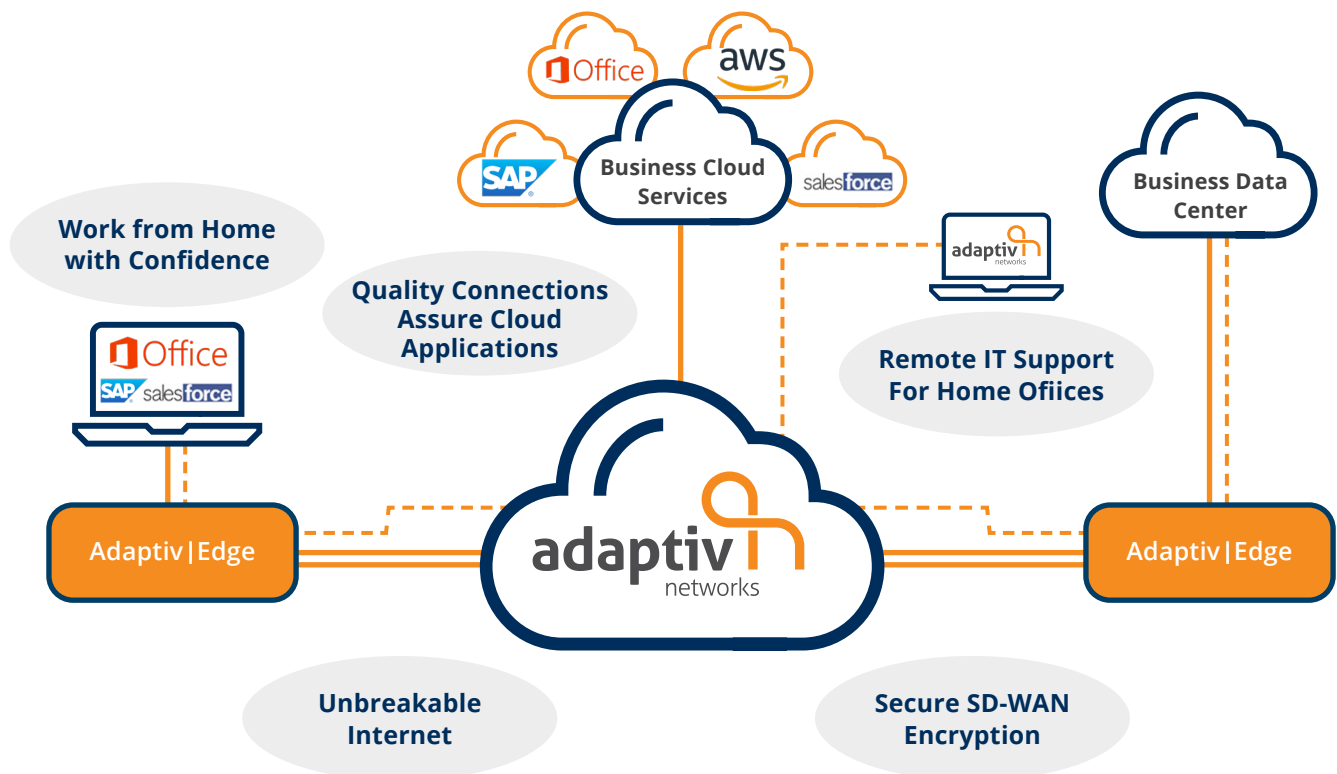


## Providing IT Support for Home Workers

When it comes to remote workers, business IT teams have little control over the home worker's infrastructure because the IT teams do not provide their connectivity at home. The residential ISP connectivity varies greatly, even by the same provider.

So, how can businesses ensure high-quality networking for their remote employees? Using innovative SD-WAN technology, Adaptiv Networks offers a solution that provides business-grade connectivity for the home office as an affordable cloud-managed service.

The service is deployed by installing an Adaptiv | Edge device at the home office with zero-touch provisioning. Network connectivity, link health, and application performance are continuously monitored with remote monitoring and management provided through the Adaptiv | Cloud portal. As part of the managed service, role-based access is available for IT support staff to ensure that the distributed workforce is getting the network performance and IT support they need to remain productive. Interactive dashboards and charts show network health for each home office, with clear visualizations of the user's quality-of-experience for their ISP links and business-critical cloud services.



In addition to home office network visibility, the Adaptiv | Cloud portal also provides remote troubleshooting and repair tools that ensure connectivity and application performance issues can be identified and resolved quickly.

## 2



## Eliminating Downtime for the Home Office

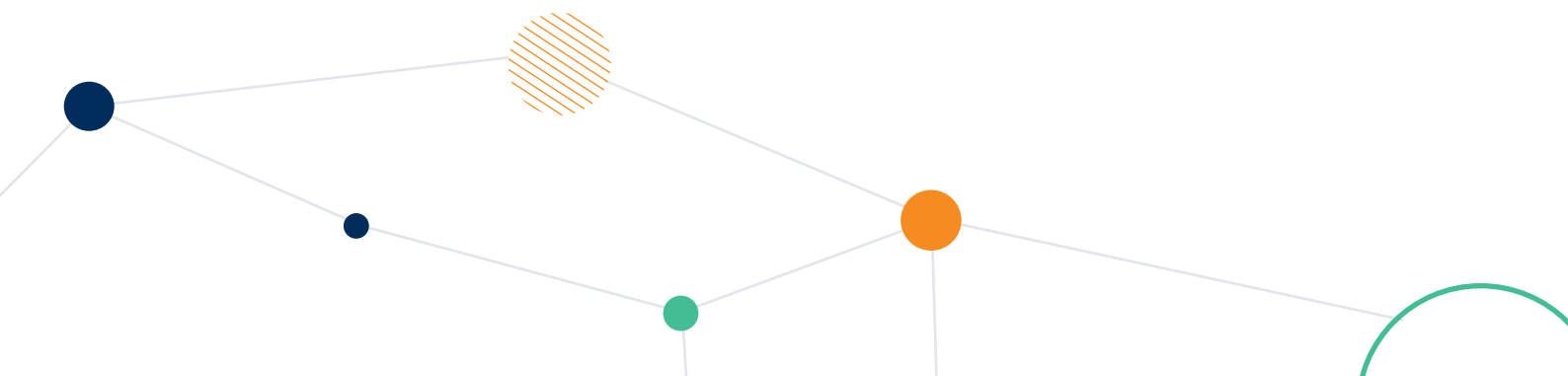
Another issue that the home office worker faces is network downtime. In most cases, the teleworker leverages their residential ISP for connectivity. Depending on the link type – fiber, cable, or DSL – the home network becomes more susceptible to outages than the typical business site.

**Connect to any ISP  
with Adaptiv Networks'  
Intelligent Edge Device.**

To mitigate downtime, home users can leverage a mobile wireless cellular connection such as 4G as a temporary backup when their wired network goes down. The challenge with this scenario is that completing the “switch over” to the mobile connection is typically a manual task. Manual failover takes time, which results in lost productivity because, when the link fails, calls drop and cloud applications stop working.

Switching to the cellular internet connection works for a temporary solution, but 4G service typically has a slower speed and higher latency, resulting in less productive workers. For home office workers who are less technical, they may struggle through the process of completing a manual switch-over and may not recognize it is time to switch back when their primary link returns to good operational health.

Adaptiv Networks offers cost-effective home office solutions that can leverage any type of secondary internet link to ensure connectivity is always available to the WFH employee. In this approach, the intelligent Adaptiv | Edge device continuously monitors the link health of connections to ensure an always-on experience. When the device detects a link is not responding, business-critical traffic instantly transitions to the backup connection with no dropped calls and no disruption of business cloud applications. Similarly, the Adaptiv | Edge device detects when the link returns to service and automatically resumes using the primary link to provide an unbreakable internet connectivity experience for the home office.



## 3



## Protecting Cloud Performance

Traditional residential broadband services are notorious for having high jitter and dropped packets. When this occurs, the home office network will struggle to deliver quality for voice, video, and real-time sensitive applications. For latency-sensitive applications, retransmission is not possible. When packets don't arrive on time, there will be gaps or distortions in voice calls, and the video call image may freeze or show strange blocks of colors on the screen.

**Patented technology from Adaptiv Networks prioritizes traffic flows over the network to deliver high quality of experience.**

Adaptiv Networks offers intelligent home office networking solutions that reserve bandwidth and properly prioritize business-related data streams ahead of general internet traffic. While others in the home are gaming or streaming videos, Adaptiv's patented bi-directional QoS technology prioritizes voice, video, and other business-critical applications to maintain a high quality of experience. This prioritization ensures teleworkers can have high-quality Unified Communications experiences and use applications like Zoom or Microsoft Teams to make video calls with confidence.

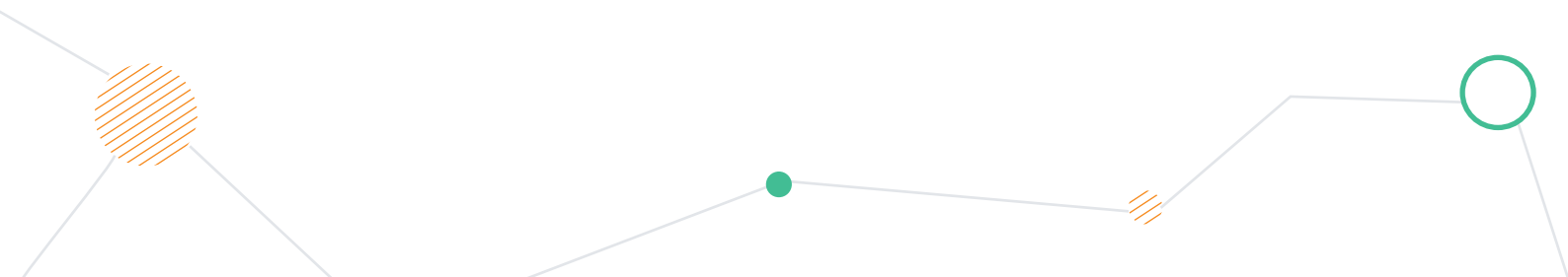
## 4



## Ensuring Data Stays Secure

Network and data security are paramount in today's always-connected world. Businesses need to know that the connectivity for their home based employees provides secure access to corporate data centers. With the bad guys continually seeking to steal valuable corporate secrets, businesses use encryption-based VPNs to secure network access and ensure private data transfer. The challenge with VPN access is that it can be complex to manage.

For organizations that rely on remote VPN access, the growing number of teleworkers creates additional overhead for the corporate IT team to support VPN users. Adaptiv Networks offers home office SD-WAN solutions that provide automated end-to-end encryption as part of the managed service. Adaptiv | SD-WAN solutions maintain a private data exchange for the WFH user over any residential internet connections and scales easily to support all your home office employees with no additional overhead on the corporate IT team.



## About Adaptive Networks

Adaptive Networks is the creator of powerful, software-defined wide-area networks (SD-WANs) for the most challenging locations requiring high availability for business-critical application traffic. Businesses rely on Adaptive Networks' cloud-managed SD-WAN to provide secure, high-performance, and highly reliable networking for their voice, data, and video communications needs. Adaptive Networks serves more than 500 customers, with more than 8,000 sites deployed through an ecosystem of more than 100 Partners globally. The company has a large portfolio of SD-WAN-focused patents.

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