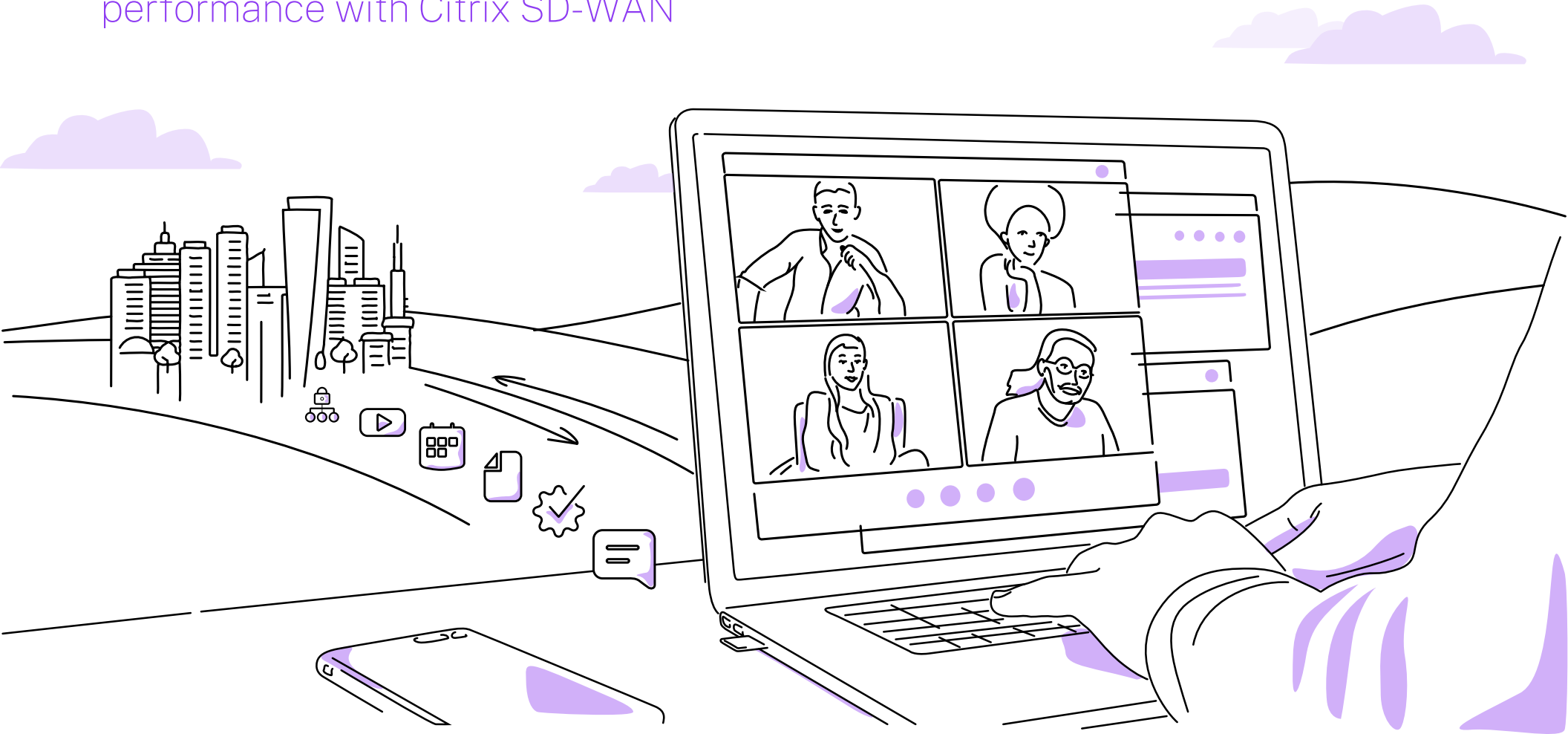citrix™

Microsoft

Maximize the employee experience of Microsoft 365

Get consistently fast and reliable Microsoft 365 performance with Citrix SD-WAN

Boost hybrid workforce productivity with a software-defined network

As the enterprise becomes increasingly cloud-dependent and distributed, it has come to rely on Microsoft 365 and Microsoft Teams for hybrid workforce productivity and collaboration. In 2020 alone, **Microsoft 365 usage surged by 17 percent and the number of monthly active users on Microsoft Teams grew over 89 percent.**[1] Yet few IT organizations today are set up to deliver the best experience for Microsoft 365. This means lost productivity and ultimately, business revenue.

But moving to a hybrid work model doesn't have to slow you or your network down.

The challenge for IT
is to provide the same user experience and performance of SaaS applications for all employees, regardless of their location— headquarters, branch offices, factory floors, call centers, or other remote sites.

The answer is Citrix SD-WAN,
a WAN edge solution that delivers local breakout of trusted, latency-sensitive Microsoft 365 and Microsoft Teams traffic to ensure optimal functionality at all times, from anywhere.

Here's how...

It's your network, not Microsoft 365

Microsoft 365 is optimized for the cloud, but for applications like Microsoft Teams to perform to their full potential, a new network paradigm is required to bridge the last mile to the Microsoft Global Network. Citrix SD-WAN accomplishes this by optimizing and shortening the connection between users and Microsoft network edges, minimizing latency, and inefficient routing.

"25 percent of business leaders that implement SD-WAN technologies see a reduction in network and WAN downtime."
— Aberdeen Group[2]

Why networking is the root cause

The main cause of poor Microsoft 365 performance is latency and congestion due to outdated legacy network architectures and bandwidth hungry protocols like SMB and MAPI.

Left unchanged, a traditional network topology that sends all network traffic between branch offices and the data center over the WAN can lead to poor Microsoft 365 performance. Backhauling or hairpinning Microsoft 365 traffic through the data center instead of directly to the nearest Microsoft 365 point of presence (PoP) is one of the most common culprits.

In contrast, Citrix SD-WAN provides local breakout to the closest Microsoft 365 POP as well as packet-based path selection and bi-directional QoS.

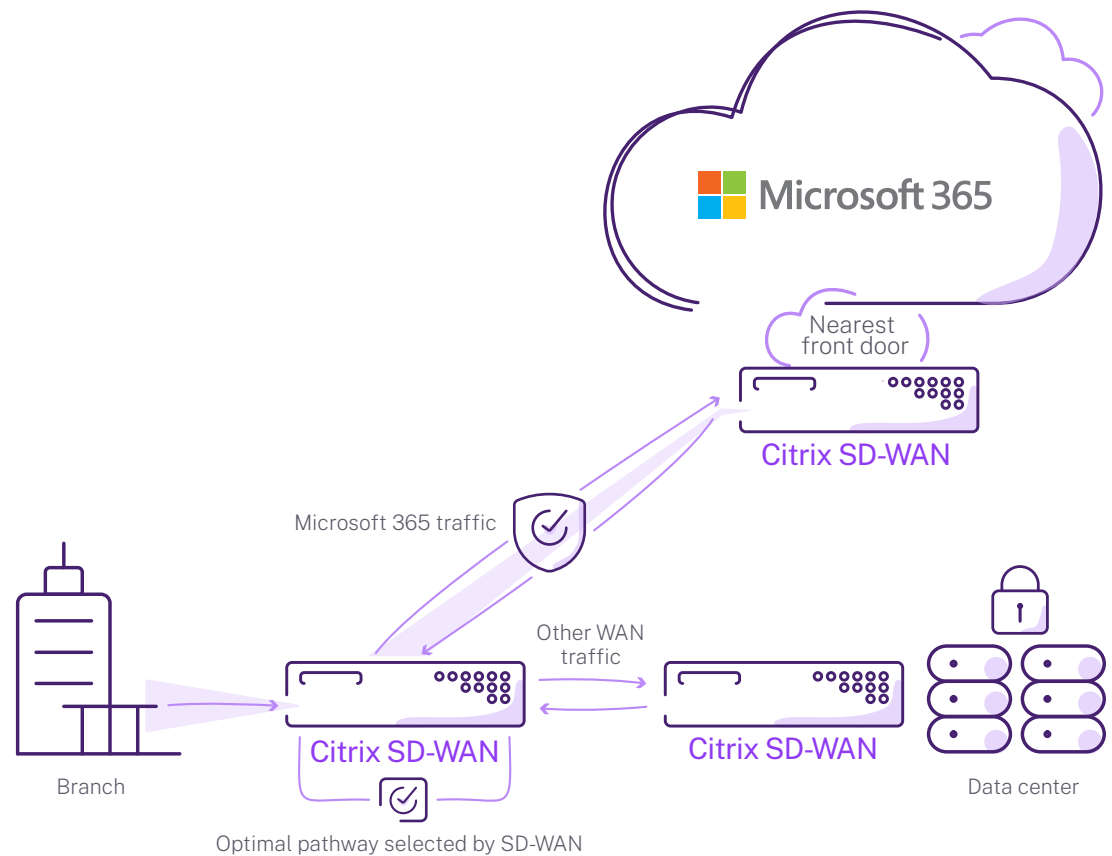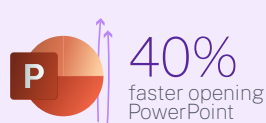Branch   All traffic   Data center

Citrix SD-WAN ensures the best Microsoft 365 experience

Citrix SD-WAN is modern software-defined networking solution that offers the best possible experience for SaaS, cloud, and Office applications. Citrix SD-WAN improves Microsoft 365 performance by first identifying and optimizing Microsoft 365 network payloads. Next, Microsoft 365 traffic is routed from the branch to the nearest Microsoft 365 front door, providing direct last mile connectivity.

This speeds up routing for trusted, latency-sensitive traffic like Microsoft Teams, Exchange, and SharePoint. What's more, Citrix SD-WAN adheres to Microsoft's Network Connectivity Principles and is a qualified and validated Microsoft 365 networking partner.

Microsoft has verified dramatic improvements with Citrix SD-WAN including:

2-5X faster upload speeds

3-10X faster download speeds

55% faster opening Word

40% faster opening PowerPoint

Microsoft 365

Nearest front door

Citrix SD-WAN

Microsoft 365 traffic

Other WAN traffic

Branch

Citrix SD-WAN

Citrix SD-WAN

Data center

Optimal pathway selected by SD-WAN

Microsoft Teams is equally reliant on network capacity and throughput

Bringing together people, content, and tools into a single integrated app, Microsoft Teams is a primary place where the modern hybrid workforce gets things done. Employee productivity depends on a high-quality Teams experience. Slow networks and legacy routing architectures can cause employees to struggle with audio disconnects, glitchy screen sharing, and slow content searches.

To ensure the best possible experience in Teams, networks should be designed to minimize latency by reducing the round-trip time (RTT) from client machines to the Microsoft Global Network — Microsoft's public network backbone that interconnects all of Microsoft's data centers around the world.

Citrix SD-WAN optimizes Microsoft Teams by identifying Teams traffic, categorizing it, and steering it directly to the Microsoft 365 cloud, thus avoiding unnecessary network hops that result in latency.

Citrix SD-WAN also optimizes the experience for employees using Microsoft Teams with Citrix Virtual Apps and Desktops. The Citrix Workspace app features a built-in HDX media engine that ensures optimized device and media handling, with audio, video, and screen sharing offloaded to the user's device.
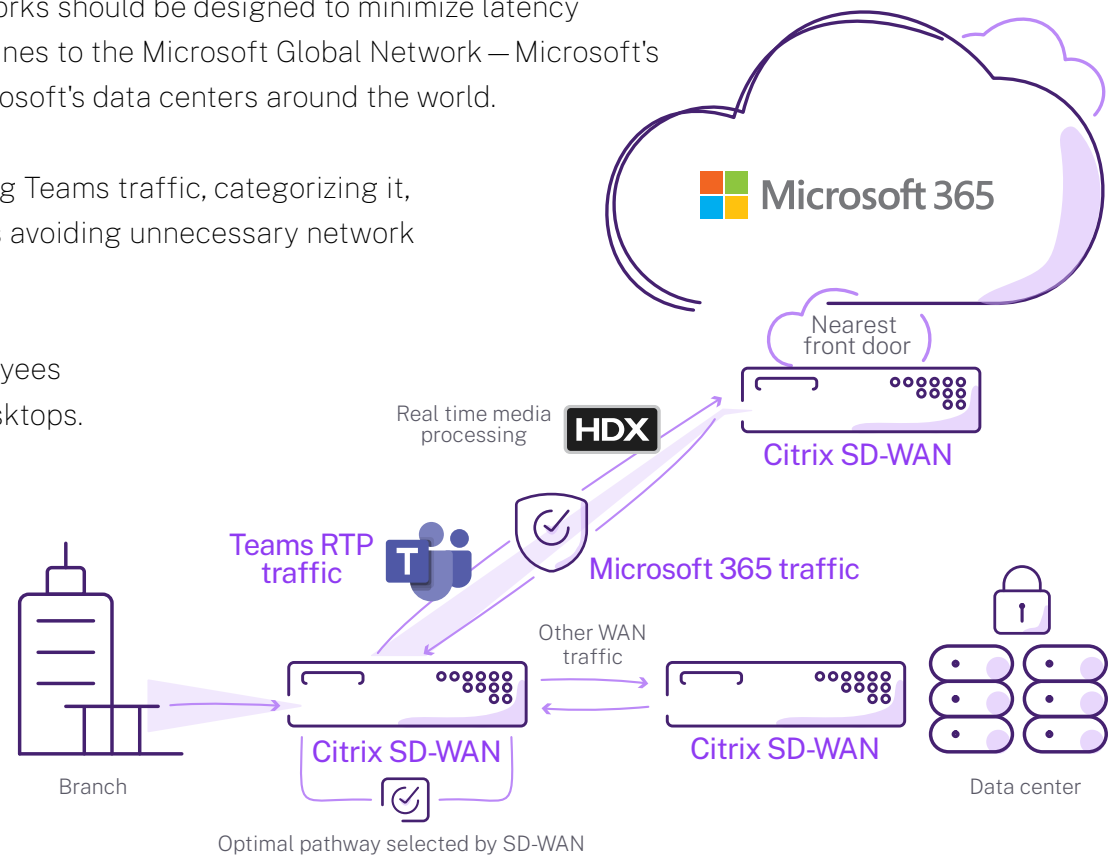
SaaS apps are also faster with Citrix Cloud Direct service

In addition to the inherent Microsoft 365 benefits offered by Citrix SD-WAN, other SaaS apps can be enhanced even further with **Citrix Cloud Direct** service. **Citrix Cloud Direct** service tunnels endpoint traffic to the front door of popular SaaS sites via PoPs hosted at major internet exchanges — turning traditional internet connections into SD-WAN-enabled WANs with QoS, link aggregation, and failover links.

Citrix Cloud Direct service delivers SD-WAN functionalities through reliable and secure delivery of all internet-bound traffic regardless of the host environment, i.e. data center, cloud, or internet. This level of performance is optimal for real-time communications such as Microsoft Teams voice and video, as well as accessing applications over large geographic distances.

With **Citrix Cloud Direct** service, enterprise-level SaaS is as simple as a subscription, providing direct peering to thousands of cloud and SaaS providers with a 99.99 percent guaranteed uptime SLA and latency less than 20ms for any cloud application.

Citrix SD-WAN cloud creates an enterprise-grade private network to bypass public internet with last mile optimization, sub-second failover, bi-directional QoS, and load balancing.

Optimize connectivity to SaaS

Workspace users

Branch, clinic, store, campus
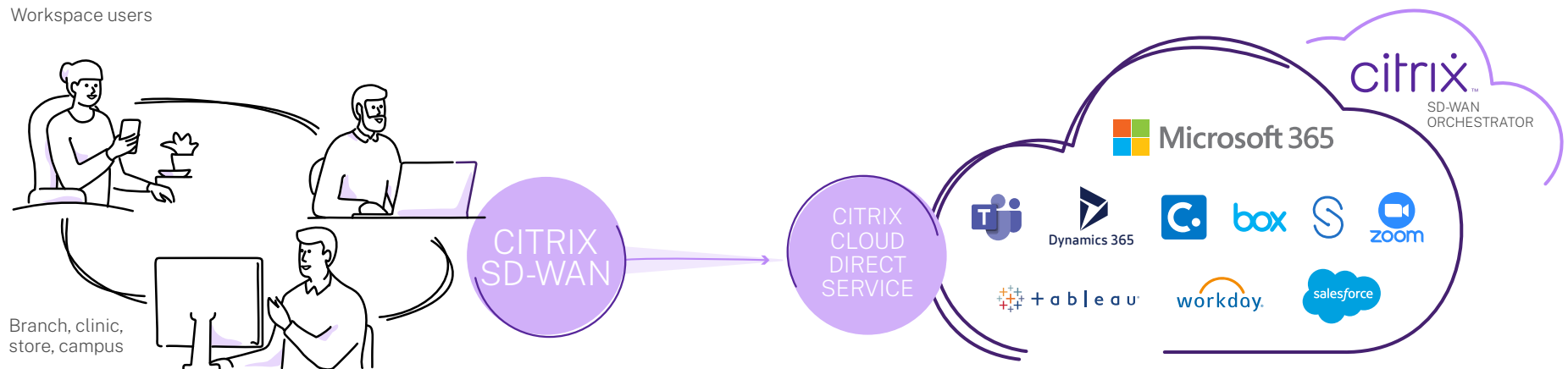
Four Citrix SD-WAN remedies for the WAN

Increase network reliability

Citrix SD-WAN reacts to small changes in network state in mere milliseconds, meaning even a couple of dropped packets can trigger a failover to a backup WAN connection. By quickly detecting and routing around network outages or poor-quality links, Citrix SD-WAN provides a reliable connection between users and their applications to prevent business downtime.

Deliver a better experience

Citrix SD-WAN integrates with Citrix HDX technology to ensure that collaboration apps like **Microsoft Teams** always perform at their best. Real-time traffic is prioritized ahead of background functions so virtual sessions stay responsive and voice and video always remain crystal-clear — even during sub-par network conditions.

Ensure SaaS app performance

Citrix SD-WAN Cloud Direct features PoPs strategically positioned near major SaaS and cloud services. By keeping traffic as close as possible with direct peering relationships to 150+ SaaS and cloud providers, the enterprise-grade access ensures the best experience, on every app, all the time.

Maximize ROI for your Microsoft investment

Citrix SD-WAN provides an automated on-ramp to Azure that seamlessly extends your network to the public cloud, while built-in point-and-click provisioning makes it easy to steer traffic directly to the cloud. Citrix SD-WAN also automates **Microsoft 365** traffic based on Microsoft's recommendations for reducing latency.

Citrix SD-WAN

Malux **citrix** **Microsoft**

Malux delivers an exceptional Microsoft 365 experience with Citrix SD-WAN and gains a competitive edge.

The company:

Established in 1972, Swedish firm **Malux** imports and exports lighting and electrical equipment for hazardous environments with branches across northern Europe.

The problem:

IT infrastructure had evolved into a mix of PCs, thin clients, and outdated hardware. Microsoft 365 applications were running slow with 40-50 milliseconds of latency making it difficult for employees to access the information they needed to be productive.

The solution:

Malux partnered with Citrix to develop a more secure, scalable, and agile IT infrastructure with Citrix SD-WAN and Workspace.

Rather than hairpinning traffic through Helsinki to get to the Microsoft 365 cloud, it is now optimized and sent directly to the edge nodes closest to the applications, resulting in an 80 percent reduction in latency for Microsoft 365 access.

▶ Read the entire case study here.

"When we turned on the Citrix SD-WAN VPX in Azure for Microsoft 365, our traffic started going to the Microsoft 365 front door in Amsterdam, latency went to under 10 milliseconds, a decrease of over 80 percent, and there was a significant improvement in the user experience."

— Aberdeen Group
CIO, Malux[3]

Modernize your network to deliver the best Microsoft 365 experience with Citrix SD-WAN

Distributed organizations increasingly rely on Microsoft 365, Teams, and other SaaS apps to enable the hybrid workforce. They need a modern enterprise network that delivers the best possible experience for these tools to keep employees productive. Citrix SD-WAN makes it easy to modernize your network architecture. By delivering an always-on virtual workspace with crystal-clear VoIP, Citrix SD-WAN enables you to maximize your Microsoft 365 investment, improve performance for latency-sensitive Office applications, and keep employees connected from anywhere on Microsoft Teams.

▶ Learn more about Citrix SD-WAN and Microsoft 365

▶ Request a demo

▶ Try Citrix SD-WAN in Azure
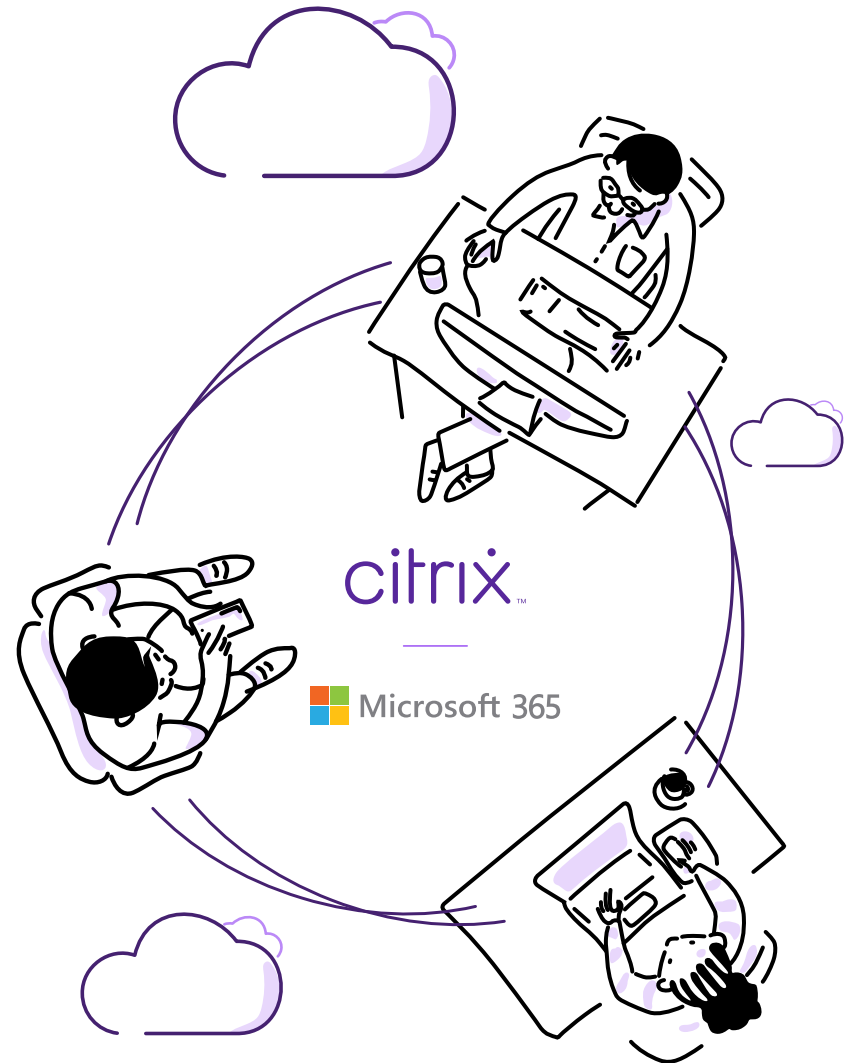
Sources:

1. Microsoft, Microsoft Cloud Strength Fuels Fourth Quarter Results, July 27, 2021
2. Aberdeen Group, SD WAN is the Right Path for Better Branch Network Performance, May, 2017
3. Citrix, Malux makes growth easy with Citrix