CLOUDFLARE

EBOOK

The CIO's guide to WAN transformation

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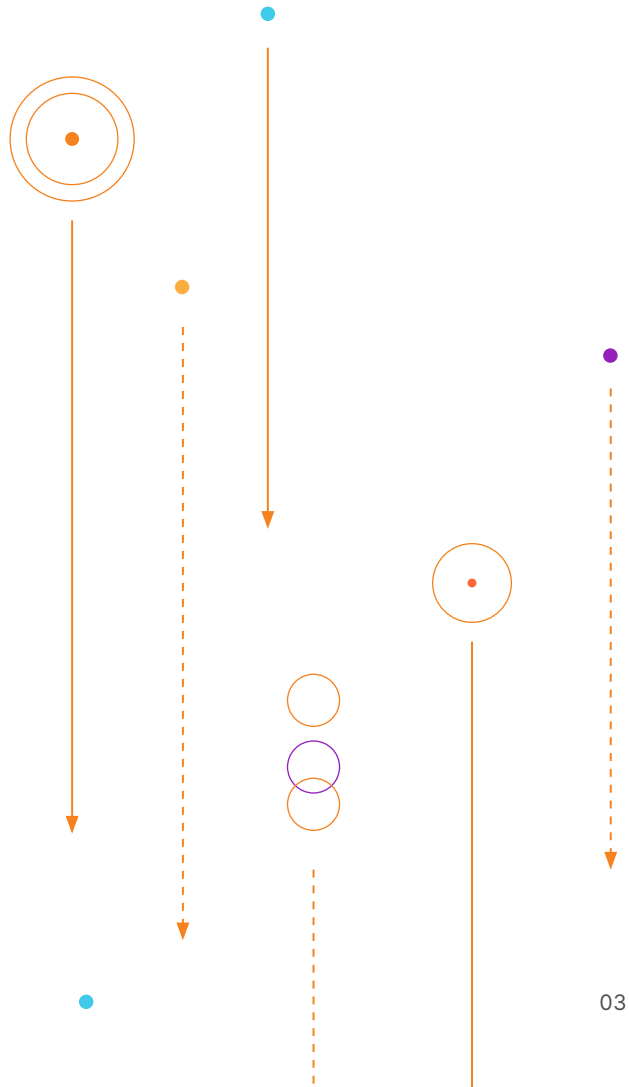
1 Why legacy WANs fail

Employees need to be able to work from anywhere. And they need to do so securely.

Legacy WANs and SD-WANs can't keep up with hybrid work, SaaS usage, and cloud computing. Here's how to transform your WAN for today's distributed, hybrid-cloud world.

The employee user experience is crucial to productivity and retention. But today, with apps and data hosted anywhere — the cloud, remote data centers, and on-premise — corporate networks are strained to the breaking point.

The 2020 COVID-19 lockdowns were a forcing function for remote and hybrid work, and performance issues were highlighted when employees came back into the office after the pandemic and found their apps work a lot slower, compared to app usage on home networks.



Why legacy WANs fail

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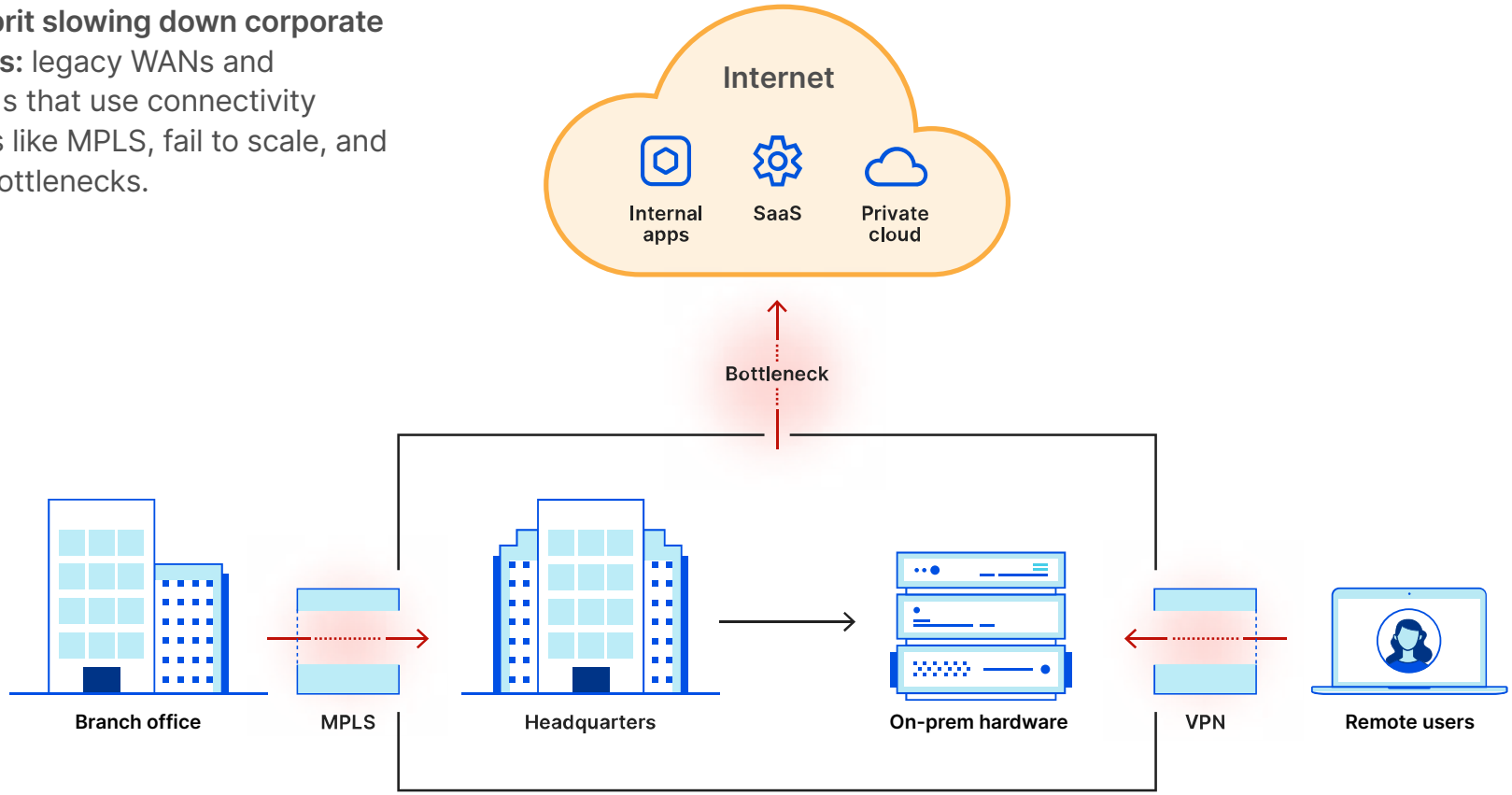
The culprit slowing down corporate networks: legacy WANs and SD-WANs that use connectivity methods like MPLS, fail to scale, and create bottlenecks.

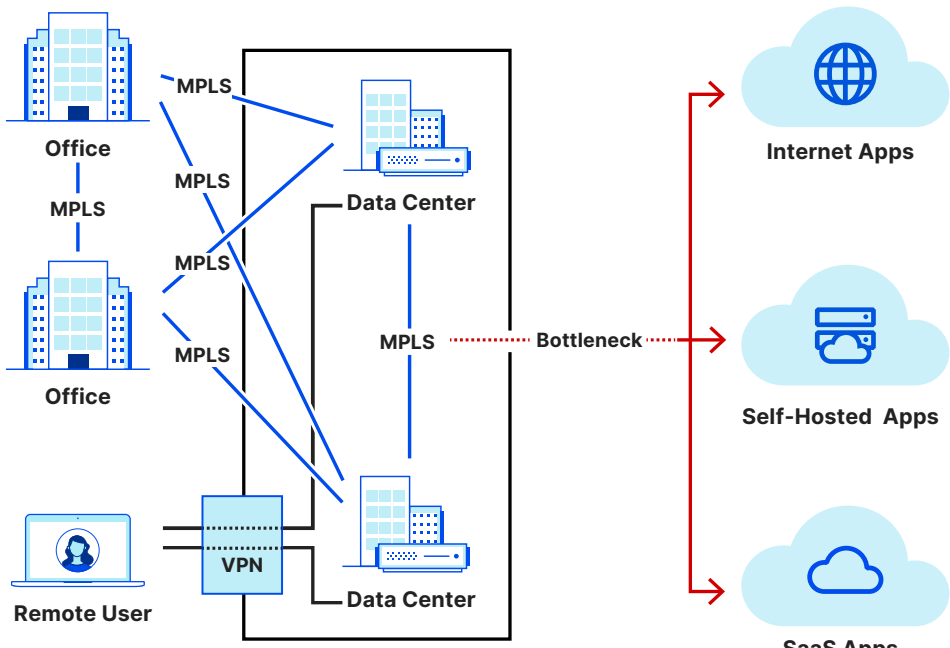


Why legacy WANs fail

Legacy WANs typically:

1. Are expensive.
2. Are not flexible.
3. Are slow.
4. Do not scale easily: Scaling requires purchasing more equipment and configuring leased lines.
5. Require long-term commitments: This leaves organizations locked in, even when a network no longer meets their needs.
6. Require separate security configurations.

As a result, legacy WANs no longer meet the needs of a modern business.



An example of a complex legacy WAN architecture and the bottlenecks it can create

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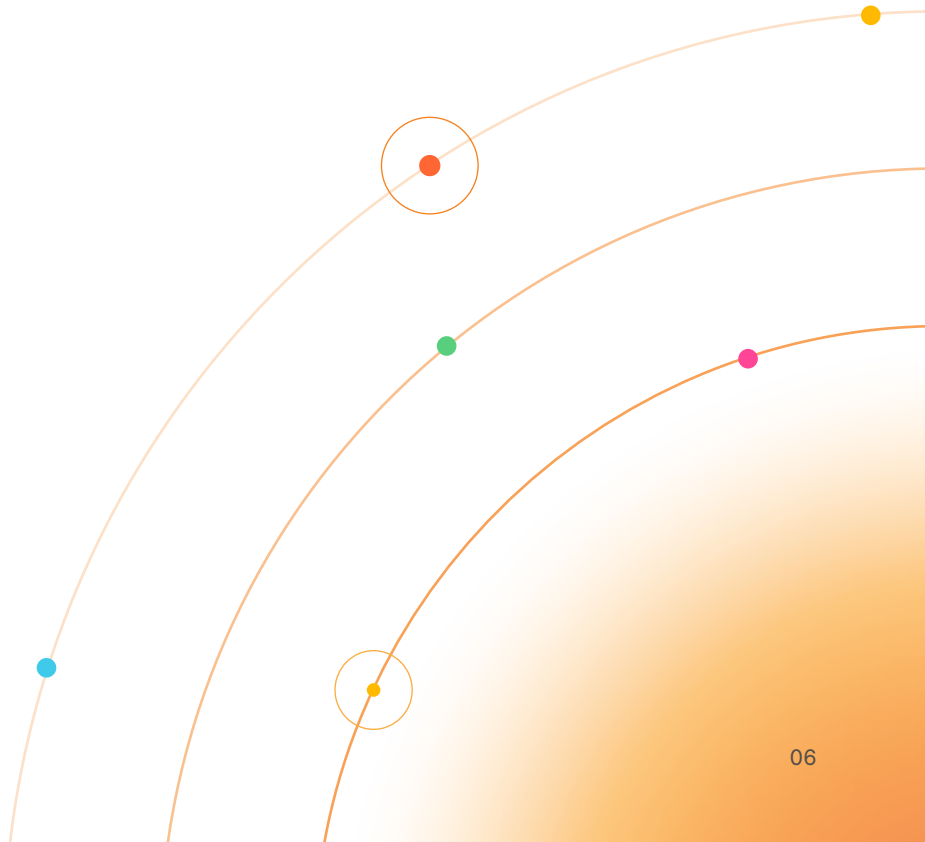
Because of these challenges, CIOs are questioning continuing investment in traditional WAN infrastructure and looking to new models and frameworks for transforming their legacy WANs.

The new model that has emerged is called Secure Access Service Edge (SASE), a convergence of both software-defined networking and intelligent security.



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2 SASE: What the new model looks like

The components of SASE:

WANaaS: Performant connectivity from anywhere to anywhere.

Secure Service Edge (SSE): The network is intelligent enough to understand user identities and endpoint health.

Key benefits of SASE:

Cost savings

By moving capex to opex, eliminate hardware maintenance costs.

Operational simplicity

Use a single solution for network access instead of multiple connectivity methods.

Workforce productivity

Less time spent on configurations, ease of use for users to access the applications they need.

Improved security posture

All devices, users, and requests validated and monitored for attacks and exfiltration.

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3 Migrating from legacy to modern architectures

WAN to SASE: 5 steps to prepare

WAN to SASE: 7 steps to migrate

Here's how you can rapidly migrate to this new model in two phases, **without disrupting access to applications and data.**

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WAN to **SASE**: 5 steps to prepare

1. Network, security, infrastructure, and application project management teams should document the current state and future state of the network.
2. Map all combinations of future traffic flows: device type/user profile/ application/enforcement technology/Zero Trust rules.
3. Invite vendors, partners, and providers for discussion to validate the design and identify technology readiness to support traffic flows and architecture.
4. Carry out budgeting exercises and a business plan to map current pain points with solutions and pricing.
5. Form a special project team that includes project managers, engineering point of contact from all technical groups, local site contacts, escalation team, stakeholder representatives, business owners.

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WAN to **SASE**: 7 steps to migrate

1. Identify bridging point between transitioned and non-transitioned locations.
2. Create user acceptance test (UAT) to ensure users can access their applications as expected.
3. Develop a migration schedule to ensure minimal business impact.
4. Prepare to connect to your network-as-a-service solution.
5. Check all connections. Ready for cutover.
6. Start the cutover window. Production traffic will stop traversing MPLS paths. Perform UAT before and after cutover.
7. Disconnect MPLS. Retire legacy VPNs.

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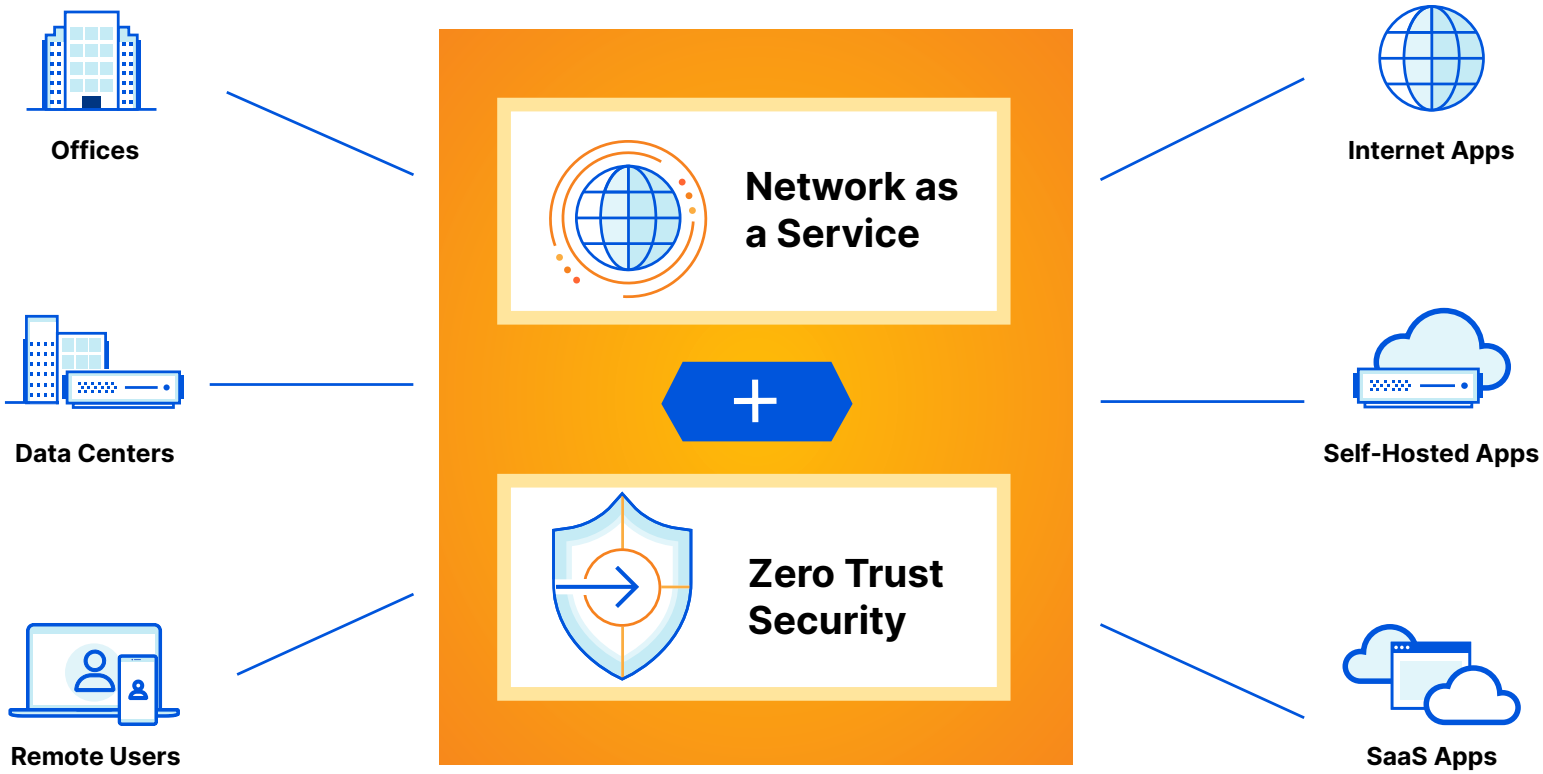
The result:

Your business runs on a flexible network with lower TCO, better productivity, lower helpdesk ticket volume, and security natively built in.



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4 Transform your WAN **today**

Ensure your internal users can securely access all applications without impacting performance. Transform your WAN today.

Contact Cloudflare to get a complimentary consultation on WAN transformation.

Contact now