

Zero Trust Network Access

Cloudflare Access verifies context (like identity and device posture) to secure access across your entire environment — no VPN required.

Simple, secure access for hybrid work

Fast, reliable Zero Trust Network Access (ZTNA)

Today's distributed work environment calls for a distributed approach to security. The "perimeter" no longer exists, and traditional remote access solutions like VPNs can't meet modern security or performance expectations.

ZTNA provides simple, secure access between any user and app, on any device, in any location by continually checking granular context like identity and device posture on a resource by resource basis. With an entirely new approach, there is no longer a "balancing act" between security and user experience. ZTNA enables your business by improving both.

It also makes organizations more agile and better able to navigate change, whether it be cloud migration, M&A activity, or innovating and scaling quickly. Cloudflare is the heart of a Zero Trust or security modernization strategy, delivering ZTNA on our global, programmable connectivity cloud.



Empower your business with modernized access

Strengthen user experience

Improve team productivity with modernized security that makes on-prem apps feel just like SaaS apps. No more slow, clunky VPNs or employee complaints.



Eliminate lateral movement

Reduce cyber risk and shrink your attack surface by granting context-based, least privilege access per resource rather than network-level access.



Scale Zero Trust effortlessly

Improve tech efficiency by protecting critical apps or highest risk user groups, then expanding Internet-native ZTNA to protect your entire business.

Top use cases for Access

Adopt Zero Trust and secure hybrid work

- VPN augmentation & replacement Access is faster and safer than traditional VPNs. Start offloading critical apps for better security and end user experience.
- Contractor access Authenticate third-party users like contractors with clientless options, social IdPs, and more.
- **Developer access** Provide privileged technical users secure access to critical infrastructure without performance tradeoffs.

Enable digital modernization

- Accelerate mergers & acquisitions Avoid a traditional network merge entirely. Integrate with multiple IdPs and provide per-app internal access during M&A.
- **Phishing-resistant MFA** Roll out strong authentication, like FIDO2-compliant security keys, everywhere.
- Secure DevOps workflows Protect service-to-service workflows with mesh/P2P connectivity, supporting bidirectional traffic.

Getting started with VPN augmentation & replacement

Prioritize critical apps or risky users for a ZTNA pilot to augment your VPN. Use clientless access for web apps or in-browser SSH to expedite testing. Adopt advanced capabilities over time to move toward full VPN replacement and maintain dynamic visibility as your network shifts.



Getting started with contractor (third-party) access

Provide smooth user experiences while mitigating risk from unmanaged devices. Configure simple authentication options for contractors — no end user software required. Adopt advanced capabilities over time to apply further data protection.



Connect third-party users quickly with clientless access

Isolate apps for further data protection*

**using capabilities across other parts of the Zero Trust platform*

How Access works

Cloudflare Access is a flexible aggregation layer that continuously verifies granular context like identity and device posture to provide simple, secure access to all of an organization's resources individually, creating a software-defined perimeter. When a user authenticates and meets all access policy criteria, Access issues a signed JSON Web Token valid for a specified session duration. We perform single-pass inspection on all user requests through our composable platform, and our centralized policy administration experience profilerates policy changes globally in seconds due to our unique Anycast network architecture.

Unified clientless and client-based operation handles all device types. We use one device client for all Zero Trust services that encrypts traffic to our network to maintain the privacy of our customers' data. We also provide simple, secure access to devices outside the enterprise through our clientless setup. Our ZTNA, DNS, & market-leading WAF and DDoS protection services work together to create and secure public hostnames accessible to third-party users and a hybrid workforce on any device. Our userless authentication options (tokens or mTLS certificates) also address automated service and IoT device use cases.

For Zero Trust controls, resources use public hostnames for reverse proxy to self-hosted apps (cloud/on-prem) or in-browser SSH/VNC, identity proxy to SaaS apps, or client/tunnel-based private routing via L4-7 forward proxy to any web or non-web (e.g., arbitrary TCP/UDP) resource within a private subnet. Our global network and app connector software combined support any compute environment—public cloud including Kubernetes and containers or legacy on-prem network resources—without requiring VM infrastructure and without throughput limitations unlike other Zero Trust vendors.

Third-party identity, endpoint, network on-ramp, logging/analytics, and SIEM tools are integrated into our dashboard alongside native options for our device client and analytics, enabling admins to stay agile and build alongside the tools they already use.



Access as part of Cloudflare's SSE and SASE platform

While SSE and SASE often involve a multi-year strategic journey, Cloudflare frequently sees organizations starting with ZTNA because it involves actionable and approachable steps for IT teams while demonstrating significant short-term business value. IT leaders seek to secure hybrid work, defend against threats, and protect their data on their path to consolidation, and they're increasingly choosing Cloudflare as their trusted partner.

Cloudflare's deployment flexibility and composable architecture enables any organization to protect and accelerate the performance of devices, apps, and entire networks to keep hybrid work secure and productive. For this we support agentless onboarding for end users, clientless web isolation to contain unsecure traffic, and a unified management dashboard that allows visibility into all security and network services, regardless of where admins or users are connecting from. The breadth of Cloudflare's global network enables security to be enforced closer to end users, minimizing latency and providing a slick employee experience. Our Anycast architecture helps route around Internet disruptions, keeping teams online and helping ensure business continuity.

With our unified SSE and SASE platform, shared context between our ZTNA, CASB, DLP, and SWG policies helps bolster security posture while simplifying implementation through a consistent admin workflow. The same identity and device posture attributes can inform both access policies for ZTNA and CASB as well as SWG policies, simplifying policy management across organizations.

ZTNA, RBI, and email security can also be used together to provide conditional access to resources while insulating users from malicious content (links, attachments) that they're exposed to across email and collaboration tools. Contractors and users on unmanaged devices can be provided limited access to corporate resources with user interactions (e.g. upload/download, copy/paste, keyboard input) disabled to prevent data compromise, and other L7 DLP policies can be applied to detect sensitive data.



What customers are saying



Cloudflare is named a Customers' Choice in the 2024 <u>Gartner® Peer</u> <u>Insights™</u> Voice of the Customer: Zero Trust Network Access²

"Cloudflare Access is an amazing alternative to traditional VPNs. Users just open their browsers and log in, without having to download and configure additional software."

— Platzi, Head of Cloud Engineering

"Cloudflare Access became available just in time to prevent us from having to go through the hassle of deploying a VPN. It was an easy choice for us, and it was shockingly simple to deploy."

— ezCater, Head of Security

"Access is much simpler and more secure than a VPN for limiting access to internal assets. We just activate it and add users. It just works!"

- Bitpanda, CTO and Co-Founder

"Before we implemented Cloudflare, preparing an application for safe deployment was a two-to four-week project. With Cloudflare Zero Trust, we save almost 90% of that time"

- Creditas, Network Engineering Team Lead

What analysts are saying

€IDC

Cloudflare named a Leader in 2023 IDC MarketScape for Zero Trust Network Access (ZTNA)

IDC cites Cloudflare's "aggressive product strategy to support enterprise security needs." We believe our recognition validates our approach to help businesses of any size get started with Zero Trust and secure access for any user to any resource, without VPNs.

Kuppingercole

Cloudflare named a Leader in 2024 KuppingerCole Leadership Compass for ZTNA

Through its 2024 ZTNA market analysis, KuppingerCole Analysts AG cited several Cloudflare strengths such as our fully integrated organically developed security platform, large global cloud infrastructure, and massive market presence.

Access capabilities

Creating/editing Zero Trust policies for secure access	
Granular, custom access policies	Centralized <u>policy administration</u> experience. L7 apps are secured at a <u>subdomain and path level</u> with <u>wildcard</u> and multi-hostname support, and support <u>CORS requests</u> . Policy changes proliferate globally in seconds. Includes <u>policy tester</u> .
Breadth of resources: What we can protect and how	Resources use public hostnames for reverse proxy to <u>self-hosted apps</u> (cloud/on-prem) or <u>in-browser SSH/VNC</u> , identity proxy to <u>SaaS apps</u> , or client/tunnel-based private routing via L4-7 forward proxy* to any web / non-web (arbitrary <u>TCP</u> /UDP) <u>resource within a private subnet</u> . Also supports resources/workflows with <u>bidirectional traffic</u> (e.g., VoIP/SIP or CI/CD pipeline).
Identity	Authenticate via all major enterprise and social <u>identity providers</u> (IdPs), including multiple IdPs concurrently. Can also use generic <u>SAML</u> and <u>OIDC</u> connectors. Supports (and can <u>enforce</u>) any IdP-provided AuthN method, <u>temporary AuthN</u> , <u>purpose justification</u> , re-AuthN intervals on global or per-app/policy <u>session</u> basis, and immediate session <u>revoke</u> option per-app or per-user. Can use <u>device client (WARP) as AuthN method</u> (cached identity per WARP session).
Device posture	Verify <u>device posture</u> using device client and third-party endpoint protection provider (EPP) integrations. Use service-to-service <u>integrations</u> to pull EPP risk scores into Zero Trust policies.
Contextual signals for policies	Configure <u>signals</u> like email group, IP ranges, geolocation, login method (e.g., MFA type, IdP type), valid mTLS or SSH certificate, service token, serial # list, device posture attributes, device client installed, session duration, SWG rule enforcement, or signals from <u>external API calls</u> . Can also reference <u>Microsoft Entra ID (Azure AD) conditional access</u> authentication contexts directly.
Other related support	 SCIM: Automatically provision/deprovision users for self-hosted and SaaS apps (examples for <u>Okta</u> and <u>Azure AD</u>) Internal DNS: Configure <u>local domain fallback</u> and resolve private network requests Split tunnels: <u>Include/exclude IPs</u> for private networking or running alongside a VPN mTLS authentication: <u>Certificate-based</u> authentication for IoT and other mTLS use cases App isolation: With a single checkbox, <u>isolate apps</u> in our lightning-fast remote browser*
On- and off-ramps	
App connector	<u>Simple orchestration</u> of our lightweight app connector (<u>Cloudflare Tunnel</u>) expedites connecting resources to Cloudflare, without requiring VM infrastructure and without throughput limitations. Includes <u>monitoring</u> , <u>virtual networks</u> (for IP overlaps), and <u>redundancy and failover</u> capabilities.
Device client: When to use	 <u>Clientless</u>: Extend Zero Trust policies to third-party users on unmanaged devices; also pairs well with <u>clientless RBI</u> and L7 <u>DLP policies</u>*. Supports web apps and in-browser SSH/VNC. <u>Client-based</u>: Our device client (Cloudflare WARP) extends secure access to private networks, enables service-to-service device posture integrations, and is <u>location-aware</u> to apply tailored policies for on-prem users. Can also connect any two or more devices running WARP to <u>create private networks</u>. Users can <u>self-enroll</u> or can deploy via <u>MDM</u>.
Extensibility and visibility	
Page customization	Upload custom HTML for block and app launcher screens to fit your branding or convey specific access instructions to streamline the end user experience.
Logging	<u>Comprehensive logging</u> for all requests, users, and devices. Can use <u>logpush</u> or API to integrate with existing SIEM, orchestration, and analysis tools. For unknown assets, our <u>shadow IT</u> for internal infrastructure passively catalogs unique traffic surfacing all origins.
Automation	Intuitive APIs and Terraform provider available to programmatically manage all aspects of a Zero Trust implementation. Also offer userless service token support for automated services.

*using capabilities across other parts of the Zero Trust platform

Why Cloudflare?

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Easy setup and management

Radically simplify the setup and operation of on-ramping traffic to private resources with app connector software and tunnel orchestration.



Seamless, always-on experience

Achieve peak end user performance and resilience to network outages with Cloudflare's global Anycast technology, ensuring reliability.



Rapid, early-adopter innovation

Keep up with the evolution of the Internet itself with a provider that constantly out-innovates its peers to make app access faster and more secure.

Let's discuss simple, secure access for your organization

Request a workshop



Not quite ready for a live conversation?

Keep learning more in our <u>SASE reference architecture</u>, or see how it works in an <u>interactive tour of our Zero Trust platform</u>.



1. 2023 survey: techvalidate.com/product-research/cloudflare/charts

2. Gartner, Voice of the Customer for Zero Trust Network Access, 30 January 2024, Peer Contributors. GARTNER, PEER INSIGHTS and The Gartner Peer Insights Customers' Choice badge are trademarks of Gartner, Inc., and/or its affiliates, and are used herein with permission. All rights reserved. Gartner Peer Insights content consists of the opinions of individual end users based on their own experiences with the vendors listed on the platform, should not be construed as statements of fact, nor do they represent the views of Gartner or its affiliates. Gartner does not endorse any vendor, product or service depicted in this content nor makes any warranties, expressed or implied, with respect to this content, about its accuracy or completeness, including any warranties of merchantability or fitness for a particular purpose.