

What is Cloud VPN & How It Works?

TechRounder PDF Edition

Live article: <https://www.techrounder.com/security/what-is-cloud-vpn-how-it-works/>

By Vipin PG | Published May 25, 2022 | Updated March 8, 2026 | Format: Explainer | 4 min read

In brief

Organizations are welcoming remote work with open arms, and hence the conversations around the term VPNs have gained significant traction lately. The need for sensitive data encryption has also become essential for the enterprise-level corporate network.

Organizations are welcoming remote work with open arms, and hence the conversations around the term VPNs have gained significant traction lately. The need for sensitive data encryption has also become essential for the enterprise-level corporate network. One of the most popular ways companies are trying to protect their internet traffic from malicious activities is via an enterprise Cloud VPN.

The corona pandemic has shed light on how the traditional VPNs failed to meet the escalating demands of the corporate market - especially for employees who are working remotely. With Cloud VPNs, remote workers can easily access protected endpoint VPNs on the company network by establishing a secure connection of their public network with this endpoint.

What is a Cloud VPN?

The hardware-based point-to-point VPN does not satisfy the needs of today's new-age teams of remote employees. Hence, enterprises need to venture outside their territory to spot the potential growth points in many organizations' VPN infrastructures. Cloud VPNs are the answer to all their queries. As a result, the cloud VPN market is expected to grow from US \$2.7 bn to US \$8.7 bn between 2019 to 2026.

A cloud VPN is a globally accessible network from which sensitive information is accessed securely by employees across the globe. Since many enterprise-level companies are already using cloud-based solutions, integrating a cloud VPN will add an added protection layer to your corporate infrastructure - giving them the flexibility and reliability they crave.

How do Cloud VPNs work?

VPNs provide an extra protection layer onto networks transitioning from private to public networks and vice versa. Cloud VPNs are a more advanced and efficient form of VPNs that provide remote and protected access to employees from almost anywhere. The cloud solution works by enhancing the following layers of network security:

Cloud Security

A "common liability model" is deployed in a cloud VPN. Although the VPN service provider introduces the main framework, it also falls under the responsibility of the consumer to maintain safe access to the network infrastructure.

Remote Access

Employees from different time zones can leverage the cloud-based remote access VPN methodology. In addition, the infrastructure provides the users with the flexibility of securely joining the corporate network through their public network.

Data Encryption

Due to the VPN's data coding and tunneling processes, all the confidential company information sent over a cloud VPN is encrypted. These protocols help hide sensitive information, which may pose a threat if exposed.

Types of Cloud VPNs

Given below are three types of Cloud VPNs that help secure exchange between a public and private network:

Remote access VPNs

Remote VPNs help cut down on expenses by benefitting from local automatic dial frameworks of Internet Service Providers. Furthermore, remote access helps secure the user's intranet and extranet over a joint networking framework with broadband connectivity features.

Intranet VPNs

Customers and remote branches are linked over a joint infrastructure using Intranet VPNs. This helps provide a secure network connection, eliminating the expenses of WAN networking. Also, they help ensure system access is available for the enterprise client's workforce.

Extranet VPNs

Extranet VPNs help connect the outside people with the corporate enterprise network over a joint network architecture. The difference between intranet and extranet is that extranet VPNs allow outside people to attain safe access to the enterprise network.

Benefits of using Cloud VPNs

Cloud VPNs ensure data is easily accessible by the remote workforce - especially if most of your employees are at different locations all around the globe. However, while traditional VPNs have filled the communication gaps between employees working remotely, they do not support the bandwidth required by the complex IT infrastructures of today. Enter the Cloud-based VPNs that have revolutionized the traditional networking approach completely.

Given below are four major benefits of using Cloud VPNs:

Cloud Access

As companies rely more on a remote workforce, cloud-based solutions fulfill their needs more effectively. The method used by traditional VPNs caused delays in communications since all the network traffic had to first pass through the company's network. With straightforward cloud access, everything is faster and easier as employees can remotely reach the organization's cloud, making communication a lot more efficient.

Universal Accessibility

Traditional VPNs had their limitations as they caused delays and communication gaps, making coordination difficult with remote employees. Cloud-hosted VPNs, in contrast, are not affected due to geographical locations and enhance the overall network execution.

Versatility

The cloud-based service providers make network adaptation easier, especially for organizations with frequent network architecture alterations. Flexibility is challenging and time-consuming in the traditional hardware-based VPNs, as configuring hardware is more complicated than software-based solutions.

Adaptivity

Unlike hardware-based VPNs, the cloud-based VPN is more adaptable and does not limit the organization's linkage numbers. The bandwidth yields and can be easily enhanced on an as per need basis.

Conclusion

As the world is slowly transitioning toward cloud-based solutions, software led-approaches have become the de facto method to meet the growing remote workplace demands. Enterprise Cloud VPN solutions provide an on-premise VPN framework that saves multinational companies from deploying extensive hardware infrastructures.

To lead the way in the new era of cutting-edge technologies, it is high time you invest in cloud-based VPN solutions, enabling easy access to corporate network systems and their resources.

References

1. nordlayer.com - cloud-vpn - <https://nordlayer.com/cloud-vpn/>
2. forbes.com - sites / tjmccue - <https://www.forbes.com/sites/tjmccue/2019/06/20/benefits-of-a-vpn/>
3. techradar.com - vpn / virtual-private-networks - <https://www.techradar.com/vpn/virtual-private-networks>