Explain the meaning of a Virtual Private Network. Are VPNs truly secure? Comment.

Your Discussion should be a minimum of 200 words in length. Please include a word count.

According to (Angelo, 2019), a VPN (virtual private network) is like a secret tunnel within the internet that keeps your data safe and secure. It's used by companies like IBM and American Express to exchange confidential info, like credit card details and financial stuff, without worrying about cyber threats.

When a user connects to a VPN, their internet traffic is routed through the VPN server, which then encrypts the data before sending it to its final destination. This means that even if someone were to intercept the data, they would not be able to decipher it without the encryption key. Additionally, the user's IP address is masked, making it difficult for third parties to track their online activities

The cool thing is that VPNs join networks of all sizes and make it easier to manage without needing a ton of hardware and software. There are also different types of VPNs, like Site-to-Site and Remote Access, which cater to different connectivity needs.

Overall, VPNs are a pretty affordable and effective way to keep your online activities safe, whether you're a small business or an individual working from home.

According to (Jadhav & Sheth, 2021), it is clear that not all VPNs are truly secure. There are several security risks associated with using VPNs, such as logging, data leaks, weak privacy policies, badly-configured encryption, malware attacks, usage of traditional protocols like PPTP, and IP addresses being used as exit nodes. These risks can compromise the security and privacy of users, especially when using free VPN services. Therefore, it is important for individuals and organizations to carefully evaluate and choose a VPN provider that offers strong security measures and privacy protection.

**Reference**

Angelo, R. (2019). Secure Protocols And Virtual Private Networks: An Evaluation. *Issues in Information Systems*, *20*(3).

Jadhav, R. R., & Sheth, P. S. (2021). VPN: Overview and Security Risks. *Int. J. Adv. Res. Sci. Commun. Technol*, *7*(1), 305–309.