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Hi Michael

Thank you for your well-articulated post around the different firewalls. Proxy firewalls certainly has its advantages and drawbacks. Andress (2014) mentions that companies place a heavy emphasis on proxy firewalls protecting end users from receiving spam via e-mail as well as visiting malicious websites. One of the issues arising from proxy firewalls is the introduction of network delay as a result of their filtering and inspection capabilities (Andress, 2014). Hayajneh et al. (2013) further states that due to the deeper traffic examination that proxy firewalls perform, jitter (variation in delay of received packets) and reduced throughput (actual payload received per unit time) is introduced into the network. While proxy firewalls are effective in many ways, they can certainly have an impact on employee productivity in the workplace.

Various types of firewalls are necessary and play an integral part in protecting networks. However, only making use of firewalls in today's era simply aren't enough to protect a network. Attackers have gained immense experience and have become highly skilled at bypassing firewalls using techniques such as port forwarding and spoofing as well as encryption (Klein, 2021). Encryption prevents deep packet inspection allowing attackers who have learnt how to use SSL (Secure Socket Layer) and TLS (Transport Layer Security) to pass through firewalls without being detected (Klein, 2021).

List of References

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Klein, D. (2021). Relying on firewalls? Here's why you'll be hacked. *Network Security* 2021(1): 9-12. Available from: [https://doi.org/10.1016/S1353-4858\(21\)00007-6](https://doi.org/10.1016/S1353-4858(21)00007-6) [Accessed 16 September 2021] 25-28 Sept. 2011 2011. 232-236.