

Collaborative Discussion 1 – Peer Response 1 – Selfresponse

In review of the well-argued aspects of my fellow students, it can be stated that firewalls cannot be viewed as complementary functions, but rather as complementary ones. Firewalls offer protection against malicious access to individual computers and local networks at different levels and can therefore only offer the highest possible protection through a sensible combination (Müller-Quarde, 2014).

This can be argued especially under the aspect of the “zero trust architecture” and the ongoing development of mobility options for end devices and the increasing possibility of a device accessing different networks (Samaniego & Deters, 2018). Since, for example, an initially uncorrupted laptop can operate in a secure LAN and can be infected with corrupted software through physical transport and logging into an insecure network, a renewed access of this device represents a potential danger for the first-mentioned LAN.

It is the responsibility of all participants in a network to ensure that it remains secure in the future. The past shows, however, that the human factor is a significant factor in security gaps, despite increased efforts by companies to educate people about how to handle end devices, how to secure them and how they can be protected (Greenwood, 2021). From this it can be concluded that the “Zero Trust” aspect represents a necessary system structure in order to guarantee the greatest possible protection for all participants in a network.

References:

Greenwood, D. (2021) Applying the principles of zero-trust architecture to protect sensitive and critical data. FEATURE. Available from: <https://reader.elsevier.com/reader/sd/pii/S1353485821000635?token=AB92EC494BF34F6B7CAF1EFCC350A23C8E7D8351E6CAF782B9EE8CEB069299FCF4D33220FA41EECE03DFD1C5F3E0DAEB&originRegion=eu-west-1&originCreation=20210926104003> [Accessed: 26.06.2021]

Müller-Quade (2014) Sichere Kombination von Firewalls. Karlsruher Institut für Technologie. Available from: https://www.sek.kit.edu/downloads/Datenblatt_Sichere_Kombination_von_Firewalls_DE_FINAL_neu.pdf [Accessed: 26.09.2021]

Samaniego, M. & Deters, R. (2018) Zero-Trust Hierarchical Management in IoT. *IEEE International Congress on Internet of Things (ICIOT)*. 88-95. Available from: <https://ieeexplore.ieee.org/abstract/document/8473444> [Accessed: 26.09.2021]