

Seminar 3 - TCP/IP v ISO/OSI

“Would the Internet we have today be much better if it was based on the ISO/ OSI 7-layer model rather than TCP/IP? “

Also, consider the availability, influence and impact of server and desktop tools and environments and where they came from (Commercial sources vs. Open source).

Seminar 3 Preparation

According to Business Software Alliance (N.D.). “Open Source is a software-licensing model where the source code of the software is typically made available royalty-free to the users of the software, under terms allowing redistribution, modification and addition, though often with certain restrictions.”

According to Business Software Alliance (N.D.). “Commercial Software is the model where the software developed by a commercial entity is typically licensed for a fee to a customer (either directly or through channels) in object, binary or executable code.”

Russell (2006) mentions that from “a technology standpoint, consider the following quote: “On one side you have something that’s free, available, you just have to load it. And on the other side, you have something which is much more architected, much more complete, much more elaborate, but it is expensive.”

My personal opinion is that the internet would not be better today as engineers around the world will have to abide by standards set out the developers of the OSI/ISO models.

According to Sheldon (2021), “the Internet layer of TCP/IP does not take advantage of sequencing and acknowledgment services that might be present in the data link layer of OSI model. The responsibility is of the transport layer in TCP/IP model.

“Considering the meanings of the two reference models, the OSI model is just a conceptual model. It is mainly used for describing, discussing, and understanding individual network functions. However, TCP/IP is firstly designed to solve a specific

set of problems, not to function as a generation description for all network communications as OSI model.”

References

Business Software Alliance (N.D.). Open Source and Commercial Software, An In-depth Analysis of the Issues. Available from: https://www.wipo.int/edocs/mdocs/copyright/en/wipo_ip_cm_07/wipo_ip_cm_07_wvw_82575.pdf [Accessed 01 December 2021].

Russell, A.L. (2006) ‘Rough Consensus and Running Code’ and the Internet-OSI Standards War. IEEE Annals of the History of Computing. Available from: <https://www2.cs.duke.edu/courses/common/compsci092/papers/govern/consensus.pdf> [Accessed 01 December 2021].

Sheldon (2021) TCP/IP vs. OSI: What’s the Difference Between the Two Models? Available from: <https://community.fs.com/blog/tcpip-vs-osi-whats-the-difference-between-the-two-models.html> [Accessed 01 December 2021].