

## Unit 11 Reflection

This week I considered the role of Software Defined Networks (SDN). In this network architecture, it seems the functionality traditionally found in networking hardware devices is shifted into software. The move brings with it several benefits, such as flexibility, reduced maintenance costs and improved security hardening because software can be updated far more quickly than hardware devices can. Therefore, if new threats emerge, it is possible for the SDN to quickly adapt to the threat via software updates to their Intrusion Detection system (IDS) or other anomaly checks. I was intrigued to read about this network architecture paradigm and think that it is very much becoming a part of organisations' infrastructure (Cisco, 2021).

The second interesting network architecture was the idea of Clean-Slate ID locator where the resolution of network addresses which logically groups named nodes together. I consider this architecture silly because it is similar, *conceptually* to network subnets, work group names or global domain names and implementation-wise, it resembles the software pattern known as the visitor pattern (Büttner et al., 2004). The introduction of Network Function Virtualisation (NFV) was a decent read because it ties in with the SDN architecture where SDN abstracts the underlying network hardware which itself could be virtualised by NFV which abstracts the underlying servers, cloud infrastructure or telecoms infrastructure.

The team and I worked on revising our executive summary content. The experience was a great collaboration between all members but an exhausting number of weeks. This task was particularly uninteresting due to the lack of any viable vulnerabilities identified on the website. It is fine to run tools against a secured website, but to use numerous tools and uncover nothing exciting like data leakage or denial of service, was tremendously uninspiring. I felt glad that as a team we managed to review, revise, and submit this piece of work and be done with it.

## References

- Büttner, F., Radfelder, O., Lindow, A. & Gogolla, M. (2004). Digging into the Visitor Pattern. In SEKE:135-141.
- Cisco (2021). 2021 global Networking Trends Report. Available from <https://www.cisco.com/c/en/us/solutions/enterprise-networks/networking-technology-trends.html> [Accessed 20 Feb. 2021]