Master Thesis — Vendor-independent Software-defined Networking — Beyond the Hype

Background
Software-defined Networking (SDN) has long been a promising technology with potential to change both the economics of networking and the way we manage our networks. SDN will provide new ways to automate parts of today's network configuration, particularly within the context of cloud environments. While SDN has been touted for many years, its large-scale application has been limited, and it appears that proprietary solutions continue to dominate.

Thesis Description
The primary target of this investigation is to examine the applicability of SDN within Ericsson's current & future engineering environment. This will mean that you will examine:

- Background and goals of SDN
- Reality of SDN today (state of standardization, vendors — both proprietary and hardware vendor-independent, use cases where it's used, etc.)
- How SDN is used today in our engineering environment, use cases for SDN that are applicable to our environment, tools for SDN automation that we could/should use, examples of their use in our networking infrastructure, and steps to introduce SDN where it would provide the “most bang for the buck”.

Qualifications
This project aims at students in electrical engineering, computer science, computer engineering or similar. Background in ICT technologies and data networking is desirable.

Extent
1-2 students, 30hp each

Location
Ericsson AB Mjärdevi, Linköping

Preferred Starting Date
Spring 2019

Keywords
ICT, networking, operations, SDN, standardization

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