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Software Defined Networking Topology Service [1]

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Traditional networks, while using stable and proven technology, don?t always provide enough agility for modern computing environments. Software Defined Networking is a new paradigm meant to improve this shortcoming, decoupling the control plane (the logic deciding about where traffic is sent) from the data plane (the network devices that forward traffic to the intended destination). The openlab collaboration with Brocade gives CERN the opportunity to experiment and investigate the potential of the SDN technology for improving its network services. To take the correct decisions, the control plane logic (also denoted as SDN controller) must be aware of the paths that are available in the network. The outcome of the project is a good understanding of the topology services offered by the OpenDaylight controller and their reactivity to network changes, complemented by a software module that maintains an up to date network topology graph. This graph can then be used by higher level SDN applications (such as Brocade?s BFO) to make optimal routing decisions.

Report on ZENODO:
Document on ZENODO [2]

Links
[1] http://openlab-archive-phases-iv-v.web.cern.ch/publications/technical_documents/software-defined-networking-topology-service
[2] https://zenodo.org/record/164643