SDN

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SDN

Software defined networking is a type of architecture of networks, this kind of architecture allows to divide the management of the network from the infrastructure of the underlying network, this allow administrators adjust the flow of traffic in the whole network.

SDN search for minimize the complex of statics defined networks also automate network functions and speed up implementation of apps and services.

How it works?

A SDN has three layers: application layer, control layer and infrastructure layer all of them connected through communication APIs ascending and descending.

Application layer.

This layer includes network applications and functions as firewalls. Traditional networks us a specific device for this functions but a SDN uses the controller for manage data behavior.

Control layer.

The control layer manages politics and traffic flow through the network.

Infrastructure layer.

This layer only contains the physical switches.

Figure 1 contains a graphical representation of the SDN architecture as envisioned by the ONF.

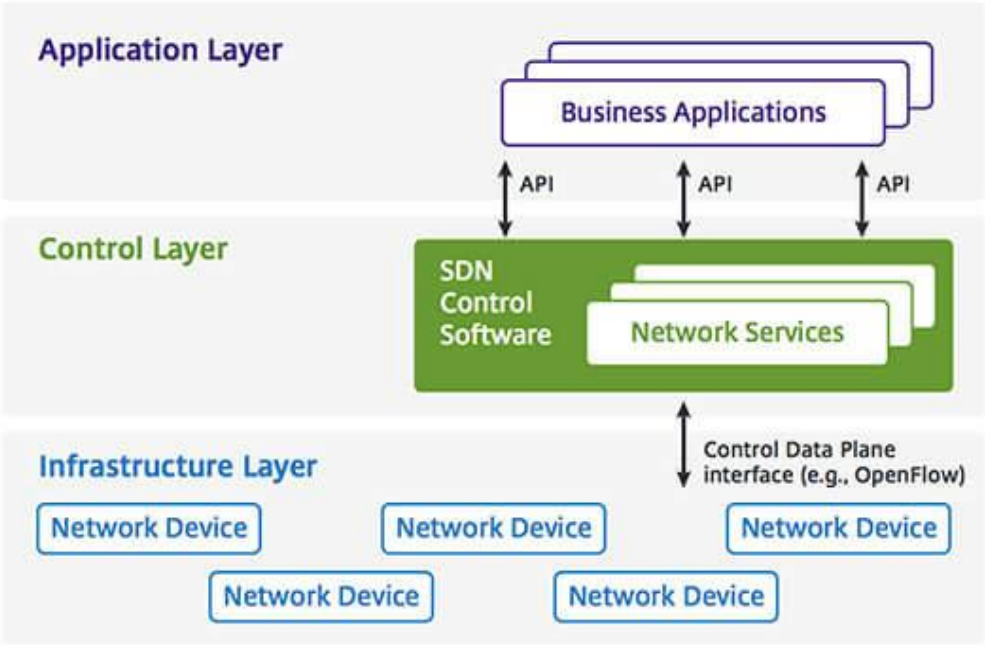

Figure 1: The SDN System Architecture
Source: ONF

There are 4 categories that SDN can make a difference in an organization

1) Network programmability: SDN allows that network behavior be controlled by the software, this software is located beyond the network devices that provide physical connectivity.
2) Centralize intelligence and control logically: SDN are based on centralized networks topology that allows the administration and intelligent control of network resources.
3) Network abstraction: services and apps that use SDN technology they abstract from underlying technologies.
4) Opening: the SDN architecture allows interoperability of providers.

With all the information presented I can say in my own words that SDN is a type of network architecture that allows us implement a network with special and unique configuration such configurations are make to improve the services, apps and security of a network and also allows program a network with special features with all said we can say that SDN are a great option for big companies.