



Networkforyou

Subscribe to our
You Tube Channel



Networkforyou



**Welcome
To
Network for you
SD WAN**



Networkforyou

Email us:
networkforyou4@gmail.com

1 of 6

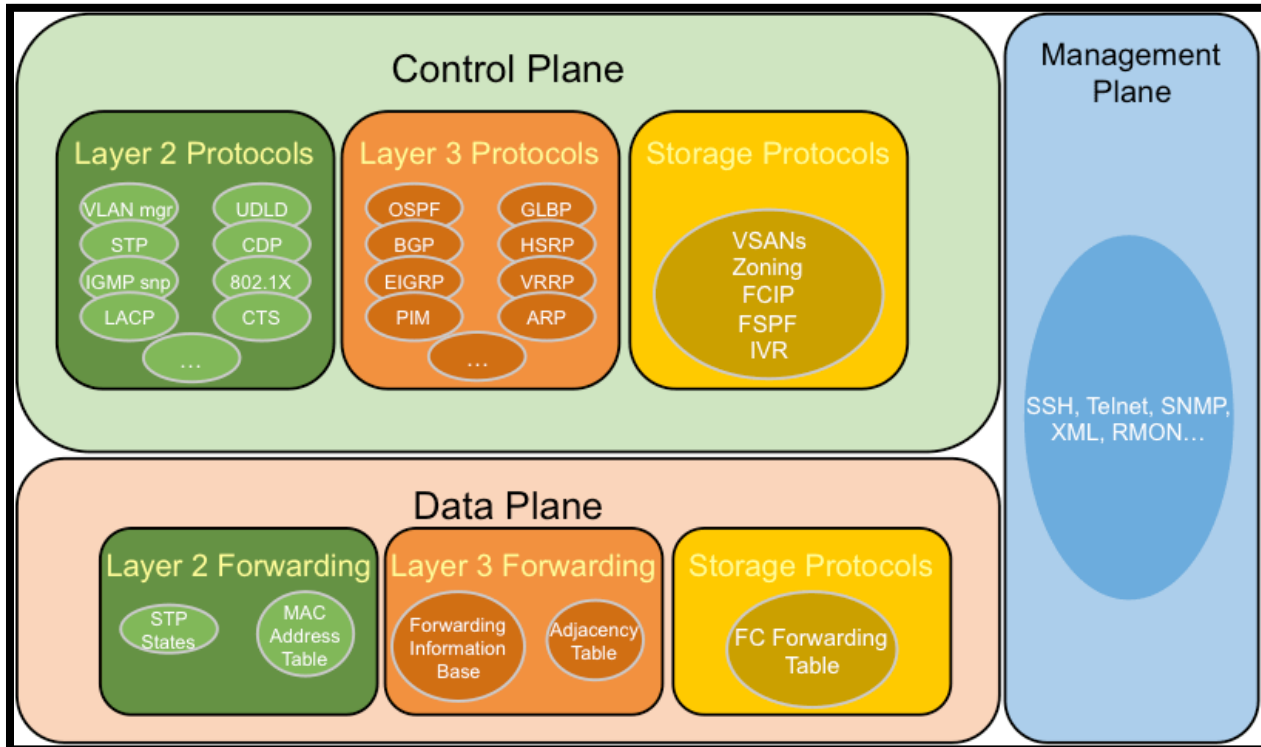
WhatsApp Us : +918143809578



SDN (Software Defined Networking):

Software Defined Networking (SDN) is a network architecture approach that enables the network to be intelligently and centrally controlled or programmed by using software application.

Before starting SDN we need to have idea about Router and switch Plan so let discuss about that.



Control Plane: The control plane is responsible for exchanging routing information building the arp table etc. As given below the responsible of control plan.

- Learning MAC address to build a switch MAC address table
- Running STP to create a loop free topology.
- Building ARP tables
- Running routing protocols like OSPF, BGP, EIGRP etc. to build routing table.

Data Plane: Data plane is responsible for forwarding traffic and it relies on the information that get from control plan. Here is some task that take care by Data Plan is given below.

Email us:
networkforyou4@gmail.com

2 of 6

WhatsApp Us : +918143809578



Management Plane: Is used for access and management of our network devices. Like using Telnet, SSH or console port etc.

- Telnet
- SSH
- Console

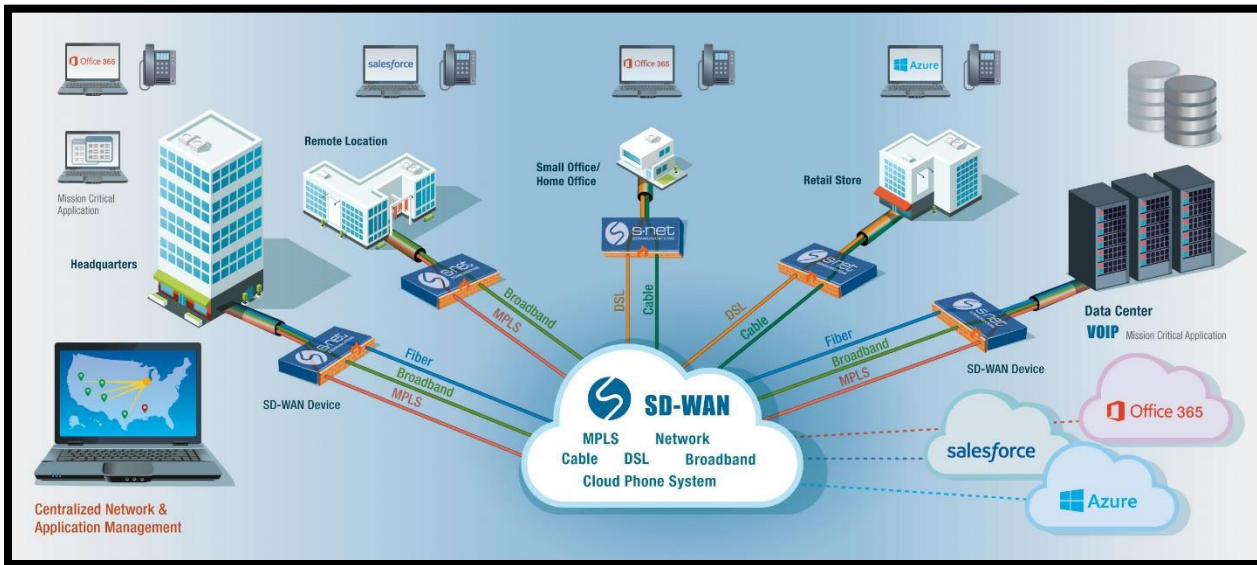
SD-WAN:

- SD-WAN is applying Software-Defined Networking (SDN) to your WAN part of the network.
- Software-Defined Networking-WAN part that connects multiple networks through Internet.
- Software-Defined Networking-WAN you will administer and control the WAN by a software.
- Contains multiple layers to achieve this approach Application, Controller & Infrastructure.
- The SD-WAN lower costs and reduce risks with simple WAN automation and orchestration.
- The SD-WAN leverage a transport-independent WAN for lower cost and higher diversity.
- Enhance application visibility and use that visibility to improve performance with intelligent.
- Provide end-to-end WAN traffic segmentation & encryption for protect critical enterprise.
- SD-WAN Networks offer zero-touch deployment with advanced network security services.
- SD-WAN is a new architectural approach to building Wide Area Networks (WANs) internet.
- Applications & network configuration are isolated from the underlying networking services.
- Networking services can be reconfigured, added, or removed without impacting network.
- SD WAN Provides automated setup of WAN connectivity between sites
- Traffic flow control is application aware
- Monitoring and Failover is automated
- Automated, standardized setup of connectivity between sites
- Lower cost
- More Flexibility and easier to migrate WAN services
- Integration with the latest cloud and network technologies

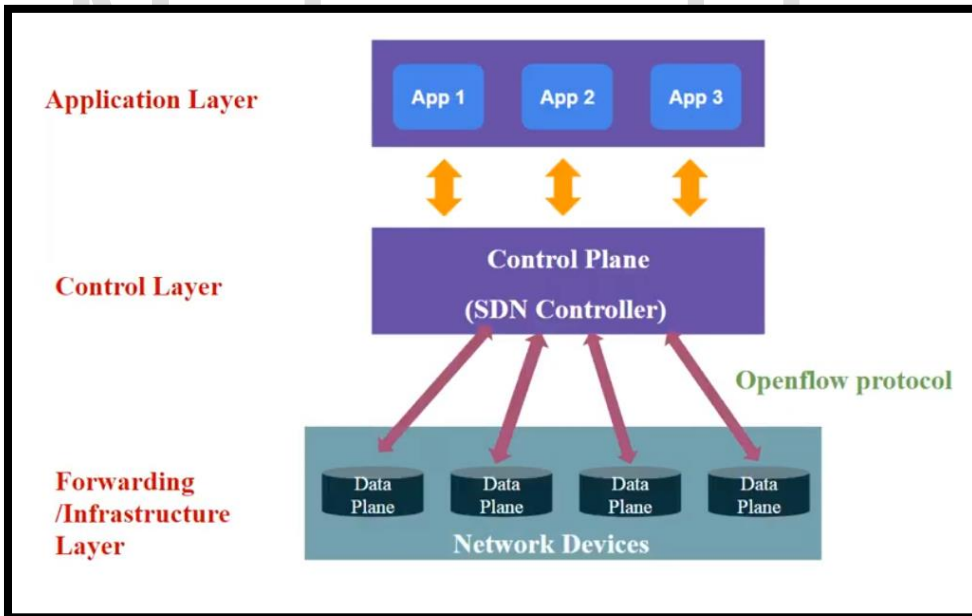
Email us:
networkforyou4@gmail.com

3 of 6

WhatsApp Us : +918143809578



SDN Network Architecture:



- We can say with SDN we can use a central controller for the control plane.
- It can be Physical Hardware device or Virtual Machine.

Email us:
networkforyou4@gmail.com

WhatsApp Us : +918143809578



Traditional WAN and SD-WAN:

- In Traditional Wide Area Network (WAN) each network device has its own control plan.
- Configuring, modifying, upgrading management and Monitoring is done Box-by-Box.
- In Traditional Wide Area Network (WAN) Automation is more difficult & long process.
- In Traditional Wide Area Network (WAN) new Installation requires from scratch efforts.
- Software-Defined Networking Wide Area Network (SD-WAN) is centralized Management.
- In SD-WAN through Software you be able to run and administrate an entire network.
- Software-Defined Networking Wide Area Network (SD-WAN) Automation is easy (API).
- Software-Defined Networking new devices automatically finds an initial configuration.

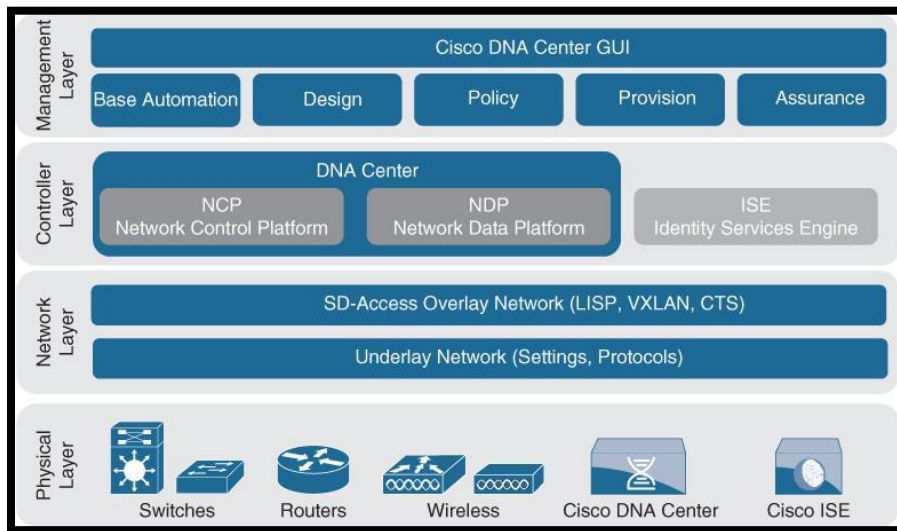
SD-Access:

- Software-Defined Network Access is applying SDN solution to your access Layer network.
- When Software-Defined Network SDN controls and automates a simple campus network.
- In SD-Access and thus, there will be a controller (Ex: Cisco DNA Center, Cisco APIC-EM).
- SD-Access networks improve upon traditional physical networks by enabling host mobility.
- SD-Access network improve network automation, network virtualization, & segmentation.
- It replaces manual network device configurations with network device management.
- Through single point of automation, orchestration, and management of network functions.
- SD-Access replaces manual network device configurations through use of Cisco DNA Center.
- Improve performance of the network, endpoints, & applications, including encrypted traffic.
- Software-Defined Network Access provides host mobility for both wired & wireless clients.
- With SD-Access it is easier to segment the network to support guest, corporate, facilities.
- With SD-Access it is easier to segment the network and IoT-enabled infrastructure.

Email us:
networkforyou4@gmail.com

5 of 6

WhatsApp Us : +918143809578



Networkforyou

Email us:
networkforyou4@gmail.com

6 of 6

WhatsApp Us : +918143809578