

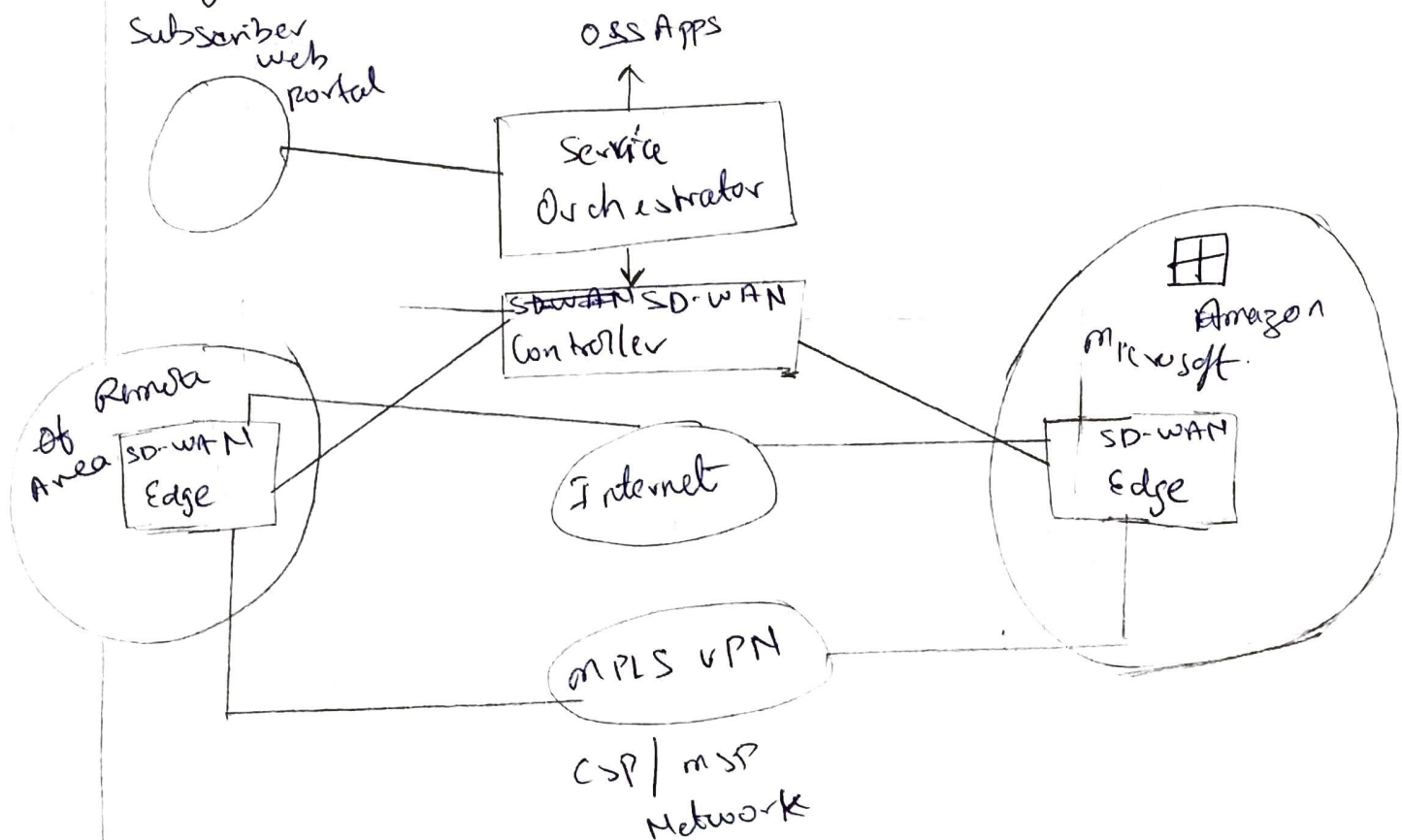
CAE-2 FOG 4 CLOUD

⑥ → SD-WAN uses an abstracted architecture for its network.

→ In an abstracted architecture, the network is divided into 2 parts.

- ① Control plane
- ② Forwarding plane

→ It can connect several branch locations to a central hub office / connect multiple locations in a large huge campus.



→ There are 3 main components to this virtualized network

① SD-WAN Edge:- It is where the network endpoints reside.

② SD-WAN Orchestrator:-

→ ~~the~~ virtualized manager for network, overseeing traffic.

③ SD-WAN Controller

→ Centralizes management and enables operators to see the network through a single pane of glass

④ On-premise SD-WAN

→ Plan where the H/W resides on-site.

⑤ Cloud Enabled SD-WANs:-

→ connects to a virtual cloud gateway over the internet

⑥ Cloud Enabled with backbone SD-WANs:-

→ Gives organizations/campus an extra backup by connecting the network.

Benefits.

- ① Increased bandwidth at low cost
- ② Centralized management across all branch networks
- ③ Full ~~loss~~ visibility into the network

- ⑧ → In today's world who we might have heard of about "cloud" / "cloud storage". As they are now fast growing data storage storage.
- Nearly 90% of all of broadband users acknowledge that this tech. exists.
- But with emergence ~~sec~~ security becomes vital to ~~st~~ ~~seem~~ ~~it~~ secure the ~~stor~~ storage from outer threats.
- ~~Though~~ Though the prevalence of the cloud has added ease, accessibility it's ~~brough~~ brought with it a slew of new threats & risks.
- Like I said, ~~securi~~ security becomes vital.

→ We sh keep in mind how these 2 application of
→ the Security threats and it's solution.

① Absence of Adequate Encryption:-

The risk:-

→ Cloud Computing is often subjected to monitoring and eavesdropping by external sources like common Man-in-the-Middle (MitM) attacks.

The solution:-

→ we can prevent this risk by encrypting ~~communications~~ communications.

② Feeble Security Management:-

→ The risk

→ With Security management it will be more complicated subjected to external threats and risks.
→ It includes failure to engage strong authentication measures

The Solution:-

→ You have to synchronize data and use proper identity ~~manag~~ management service

PART-A

- ① ~~HW~~ It refers to abstracting network resources that were traditionally delivered in H/W com S/W
- ② It is a data forwarding technology that ~~increases~~ increases the speed and controls the flow of network traffic.

③ ~~Control~~
~~Control Plane~~

③ Control Plane

Forwarding Plane
(Data)

- ① Responsible for building and maintaining the forwarding table
- ② makes decision about where traffic will be sent
- ③ It's packets are destined / locally originated by router itself

Responsible for actual forwarding of IP Packet

Forwards traffic to the next hop along the path

These packets go through the router.

④ It uses IoT technologies and strategies that allow for more efficient IT architectures. This means that physically consolidating multiple data centers.

⑤ Following are the advantages:-

① Enables users to easily gather access, process.

② Can search for a large no numbers of sensor data from ~~several~~ several types of applications by using ^{the} computational ~~IT~~ IT storage resources of the cloud.