

Technology Insider

SOFTWARE DEFINED NETWORKS – TIME TO BUY?

Today's global enterprises are facing mounting cost and performance challenges as they offer cloud and private hosted applications to their global locations. While they want consistency, quality and security, one network technology may not fit all their global locations. Sales offices, manufacturing facilities, warehouses, retail stores, mobile workers - this diversity could mean different network technologies to keep costs in line.

Today's enterprises should consider switching to a Software-Defined Network architecture. In a software-defined network, a network engineer or administrator can shape traffic from a centralized control console without having to touch individual switches in the network. The centralized SDN controller directs the switches to deliver network services wherever they're needed,

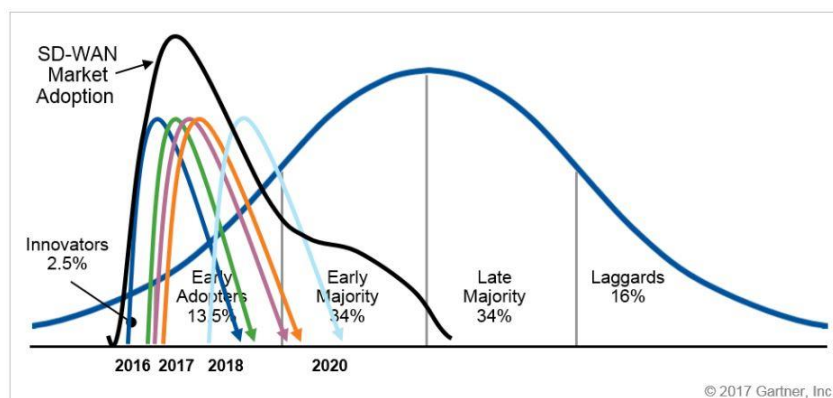
regardless of the specific connections between a server and devices. Software Defined Networking could be the answer for companies needing hybrid networks. As you can see from the Gartner graph below, adoption is on the upswing. SD-WANs have some very interesting benefits that companies should consider.

The first benefit is cost – SD-WAN can use a variety of access technologies including low cost internet and wireless. The second advantage is redundancy since SD-WANs can also use a combination of MPLS VPN, Internet and LTE as a single merged redundant solution. The speed to deploy WAN services is very fast – simply ship a preconfigured device to an internet connected site and it can be on the network with a few

SDN BENEFITS:

Provide your business with a solutions framework that offers:

- *Site by site flexibility – SD-WAN and non-SD-WAN sites may be combined on the same network*
- *MPLS and Internet-based VPN services can be combined to create a single dynamically-routed hybrid network*
- *Centralized management of business rules using a cloud-based orchestrator portal*
- *Rapid deployment of branch or new locations*
- *Can help reduce network management time and costs*





simple commands. SD-WAN devices vary from vendor to vendor and so do the features. Vendors range from the usual network hardware providers like Cisco and Juniper to the strong challengers like Barracuda, Citrix, and Riverbed. New players have entered the market like Silver Peak, Aryaka, Cradlepoint and Talari. And the high-profile startups like VeloCloud (purchased by VMware) and CloudGenix provide software that runs on virtual servers as well as physical appliances. Gartner provides a complete report of WAN edge hardware for those interested.

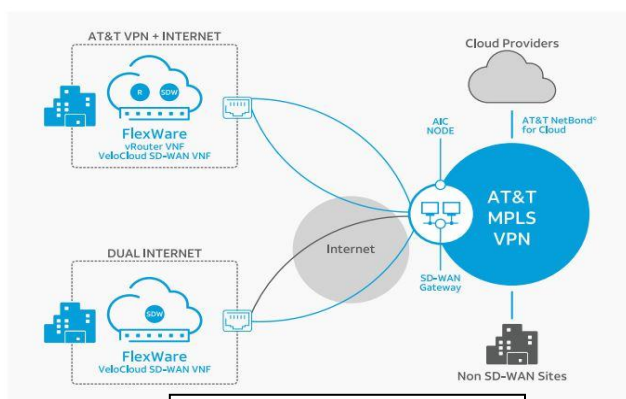
T-Systems North America has a new offering with fast deployment using Aryaka appliances and your network access provider of choice and it is being well received by its customers.

They call it the “Uncarrier” Network. AT&T offers a flexible hybrid network service offering using VeloCloud as the SD WAN product.

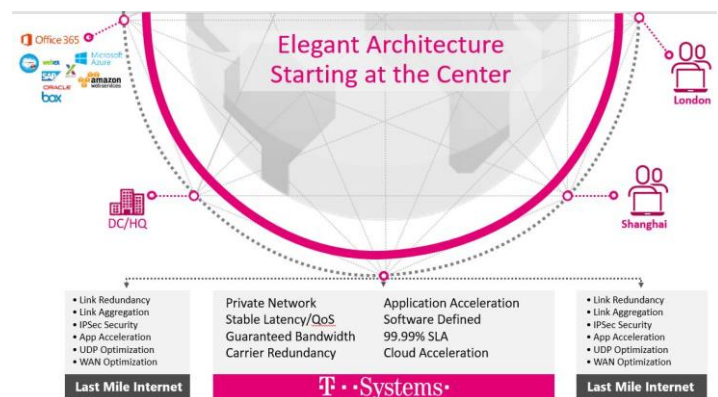
Now is the time to buy and try – especially for companies whose MPLS network is expensive and failing to meet the cloud performance criteria. Also, those companies who need fast turnups and better access to cloud services would be wise to get their feet wet now. My suggestion would be to buy the SD-WAN offering as a service from a reliable WAN service provider – complete with hardware. Owning the hardware could “box” a customer in – and result in full replacements as this technology continues to mature and more features are added.

By 2020, more than 60% of enterprises will deploy direct internet access in their remote locations due to cloud apps.

Gartner SD-WAN Study



ATT SDN Architecture



T-Systems Architecture

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