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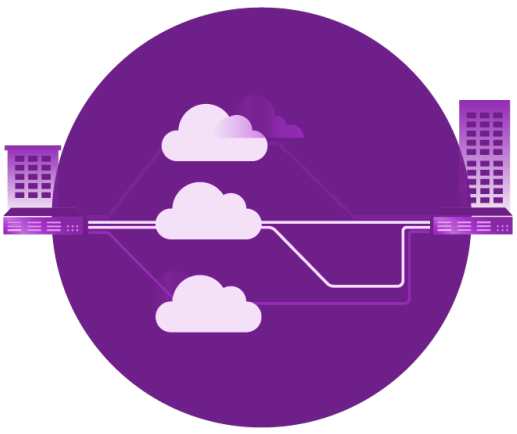
# SD-WAN:
## The new heart of telecommunications

## Unless you have been “living under a rock”

**(regarding telecommunications)** for the past two years, the chances are that you have heard the term **SD-WAN** quite a lot lately. The truth is that **SD-WAN** has become the new center of attention for all players in the Telecommunications world, much like Cloud Solutions five years ago.

I found it easier to start by defining what SD-WAN is not. SD-WAN is not a new medium of data transmission, nor is it a new communications protocol, or as some providers advertise, the "MPLS Killer." SD-WAN is no more and no less than the convergence of about a dozen different technologies, many of which have been part of the Telecommunications Industry for decades. The crucial difference is that now when all these technologies are applied together, they represent a great advance in terms of reliability, information security, flexibility, deployment speed and the most important, a cost reduction of up to 90% compared to traditional solutions such as MPLS.


We are talking about technologies such as data compression, strong encryption, protocol acceleration, temporary storage (caching), load balancing, automatic commuting of traffic from a failed link to another (failover), Virtual Private Networks (VPN), link aggregation (bonding), to mention just a few. All of them available since many years ago. However, when we can have all of them integrated into a single coherent solution that is easy to implement and manage, with the ability to add Dynamic Routing capabilities that always select the best possible route between two points of the network (think of WAZE™ for your Data), Auto-Configuration which reduces human intervention, and most importantly, we add a Central Intelligence -that in SD-WAN jargon we call The Orchestrator-, then we have a new way to connect geographically dispersed locations, in a safe, fast, flexible and efficient way, at a fraction of the cost; in one word SD-WAN.



The impressive cost reduction could be sufficient reason to explain the exponential adoption of SD-WAN, but if we analyze it in more detail, we will learn that SD-WAN debut as a mainstream telecommunications technology, was perfect timing. With the explosion of the Cloud, IoT, and even the acceleration of the integration between OT ("Operations Technology") and IT, the need to have constant and uninterrupted, secure, high capacity and reliable communications with not hundreds but tens of thousands of devices, have made SD-WAN the new defacto standard for any modern telecommunications design.

If we add the ability to deploy complex solutions globally in weeks instead of months, and the simplicity of installing, configuring and managing all the solution with very little human intervention, then it becomes evident why SD-WAN is now the new heart of telecommunications.