

# SD-WAN

When it comes to providing the best products, services and great customer experience to users, almost every organisation has a similar list of priorities: cloud, mobility, big data and the Internet of Things.

**What is the common denominator?** It's the network. The success of any digital transformation depends on the agility, quality and performance of the network that it relies on, in particular the Wide Area Network (WAN).



## DEFINING SD-WAN

The Software-Defined Wide Area Network (SD-WAN) applies software-based network technology to WAN connections in order to simplify branch networking and assure optimal application performance over large geographic distances. It attempts to shift traditional network control into the cloud through the use of software.

## WHY BUSINESSES NEED SD-WAN

The ability to adapt or respond quickly to the changing business environment and market needs forms the basis for an organisation's competitive advantage. But agility in business responsiveness, will require the same in its supporting IT infrastructure.

- Organisations need the ability and flexibility to access applications and data residing in enterprise data centres, corporate premises or within public, private or hybrid cloud using a combination of connections including 4G, Ethernet and NBN.
- With the increased use of Software as a Service (SaaS) applications in the cloud, businesses need secured direct access to Internet-hosted applications without the need to access a centralised internet service.
- Businesses need to simplify complexity and shorten implementation at branch or remote sites to accelerate business operations and to support more work done at the edge of network without an exorbitant cost on the network.

Networks are no longer just boxes and cables, they are essential to connect people, resources and applications, translating into agility, productivity, performance and control. By adapting a dynamic network architecture to accommodate the increasing shift to run workload-intensive applications on its network, organisations can avoid bandwidth bottlenecks that will stifle innovation.

## THE BENEFITS OF SD-WAN

SD-WAN offers a more agile network that is not only easier to deploy and manage but at the same time provides scalability and security.



### Increased agility

Quickly adapt to changing needs including adding access to cloud-based services, setting up new sites or remote offices, and the dynamic routing of all traffic to optimise application and data delivery.

Make quicker changes according to business needs, whether bandwidth, capacity or on-demand services. Enable multiple links, devices and services to coexist and interoperate with existing solutions and make the site agile.



### Simplified deployment

Simplify branch infrastructure with the ability to insert network services at branch sites, in the cloud or in data centres. Activation, configuration and ongoing management are all handled in the cloud with SD-WAN.



### Enhanced visibility

Simplify deployment of services, eliminating the need for many single function devices onsite. Consolidate monitoring across multiple WAN links with central management and control, enabling enhanced provisioning across business policies, traffic and remote remediation.



### Reduced footprint

Eliminate the need, and associated costs, with problem identification and remediation by no longer needing to send out trained technicians to assess issues and repair them onsite.

SD-WAN can best help businesses to leverage the power of their network through four key areas:

- Cloud infrastructure and services**  
 More organisations are moving their applications and workloads to the cloud. This requires an agile network to support their business needs and control the path that traffic takes over their network. Organisations can complete tasks more efficiently and direct crucial resources elsewhere – and optimise investment.
- Unified Communication as a Service**  
 Demands from a mobile workforce and modern workplace are redefining how organisations design networks to provision enough bandwidth for voice and videoconferencing data. SD-WAN enables a high-quality UCaaS experience, while enabling organisations to prioritise traffic and network connectivity over public, private and hybrid networks. This facilitates a better user experience with the enhanced voice quality, speed and flexibility needed to connect, communication and collaborate with each other.
- Business applications**  
 Accelerate application performance and control traffic priority over the network to deliver a better user experience. By being able to dynamically prioritise application traffic across the network, SD-WAN solves the challenges that most organisations face with traditional network architectures and quality of service.  
  
 With SD-WAN, organisations have an unprecedented amount of control over performance and bandwidth allocation of the applications on the network.
- Security**  
 SD-WAN enables visibility into the use of applications, extending the WAN perimeter from the cloud to the branch by applying network-wide business and security policies, as well as cloud security services.

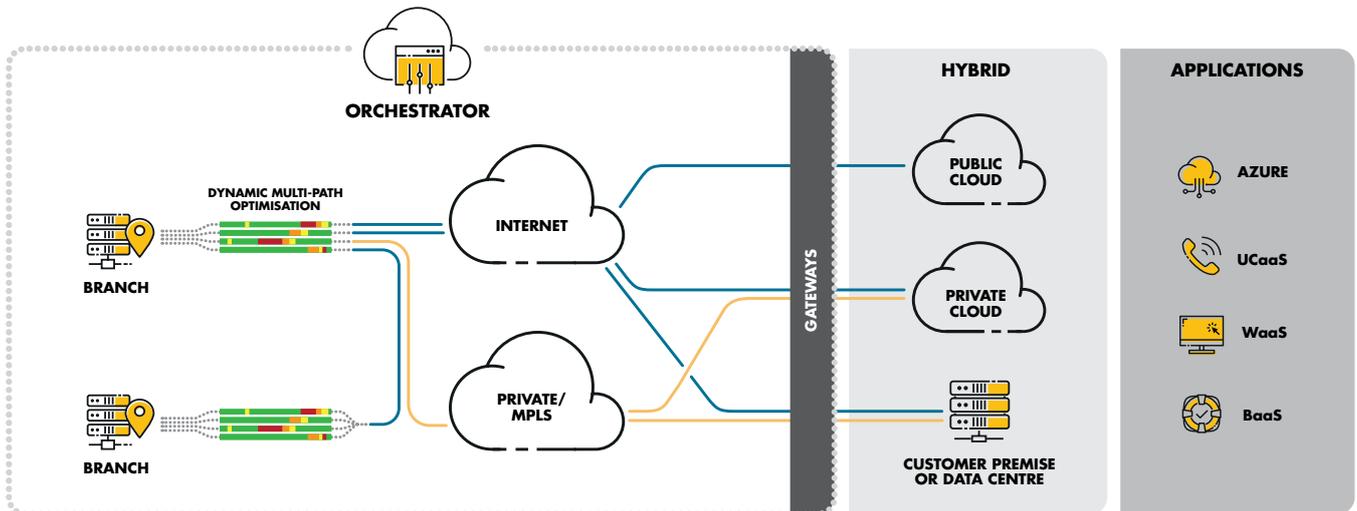
## FEATURES AND FUNCTIONS

SD-WAN offers organisations:

- Unified elastic transport**  
 Enables a secure, high-performance WAN between an organisation's sites and virtual gateways deployed at the edge. The SD-WAN overlay controls both hybrid and Internet-connected sites.
- Virtualise service delivery**  
 Multiple virtualised network functions can be deployed on standardised customer premise equipment to reduce appliance footprint. Service agility is improved with faster implementation and reduced operational costs.
- Policy-based automation**  
 By consolidating monitoring across multiple WAN links with a cloud-delivered orchestrator, organisations can define business policies, configure and enable remote remediation.
- Improved application performance**  
 The Dynamic Multi-Path Optimisation network technology enables organisations to steer traffic optimally over multiple network accesses based on business priority to improve application performance. The control and visibility of network issues, service levels and network capacity, to deliver a high quality and capacity WAN via a virtual overlay across multiple links, including private and Internet broadband is managed via this software-based technology.

## ABOUT NEXON

Nexon Asia Pacific has been providing dynamic IT solutions to clients from mid-market businesses, public and non-profit organisations since 2000. We support clients with highly skilled professionals spread across Australia with solutions including cloud services, unified communications, managed security, business continuity, high-performance network and business applications.



SD-WAN architecture in a hybrid cloud environment.

To learn more about SD-WAN, call us at **1300 800 000**, email us at [enquiries@nexon.com.au](mailto:enquiries@nexon.com.au), visit [nexon.com.au/sd-wan](http://nexon.com.au/sd-wan)