

Telstra SD-WAN

Respond to changing demands with agility

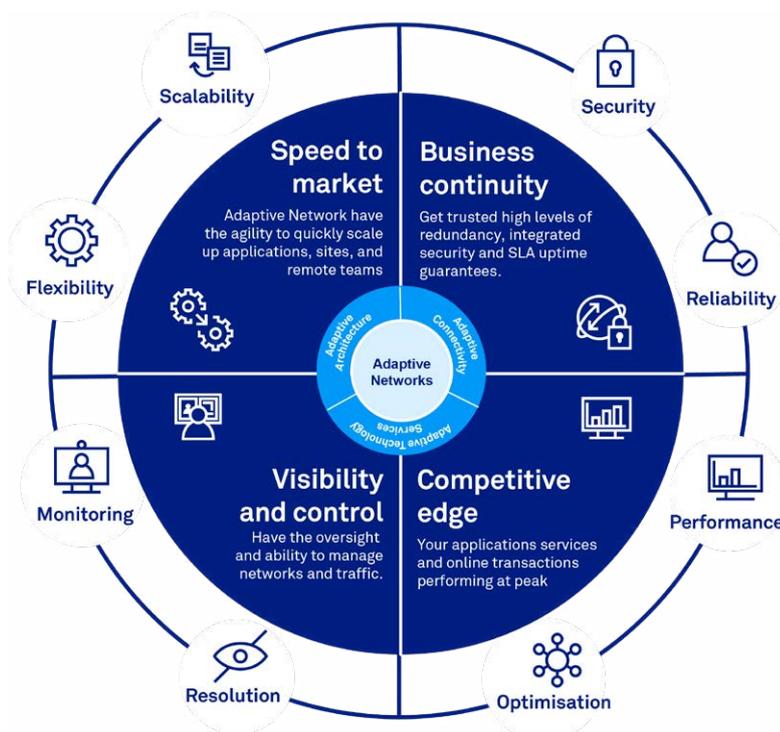
Rethink your network strategy to grow as your business does.

With Telstra Adaptive Networks, your network can be as agile as your business plan.

Our connectivity, software-defined services, professional consultation capabilities and network management services create a secure environment with the flexibility and control you need to innovate and manage change.

We want to deliver values such as **speed to market, business continuity, visibility and control, and competitive edge** — across three key components of Adaptive Networks, which are:

- **Adaptive Connectivity**, consisting of our WAN services like Internet, IPVPN and Cloud Interconnect.
- **Adaptive Architecture**, which includes SD-WAN, Network-on-Demand and Security.
- And **Adaptive Technology Services** with Professional Consulting Services and Managed Network Services.



These components can lead innovation for various industries, including recruitment, healthcare, manufacturing, mass media, transport and logistics, service, and aerospace, among others.

Adaptive Architecture is an essential subcomponent in your Adaptive Networks journey.

Telstra Adaptive Networks is a multi-solution and services proposition, with **Adaptive Architecture (which includes SD-WAN, on-demand networking platform and Security in its core capabilities) as one of its anchors**. These capabilities combine to create a digital business platform with the flexibility and control you need to help innovate and manage change.

In today's network-enabled, evolving business world, your networks face unrelenting pressure and you need to navigate ever-increasing uncertainties. Rethinking your network strategy can help your business thrive through change, today and into the future.

With Telstra, your network can be as agile as your business plan.

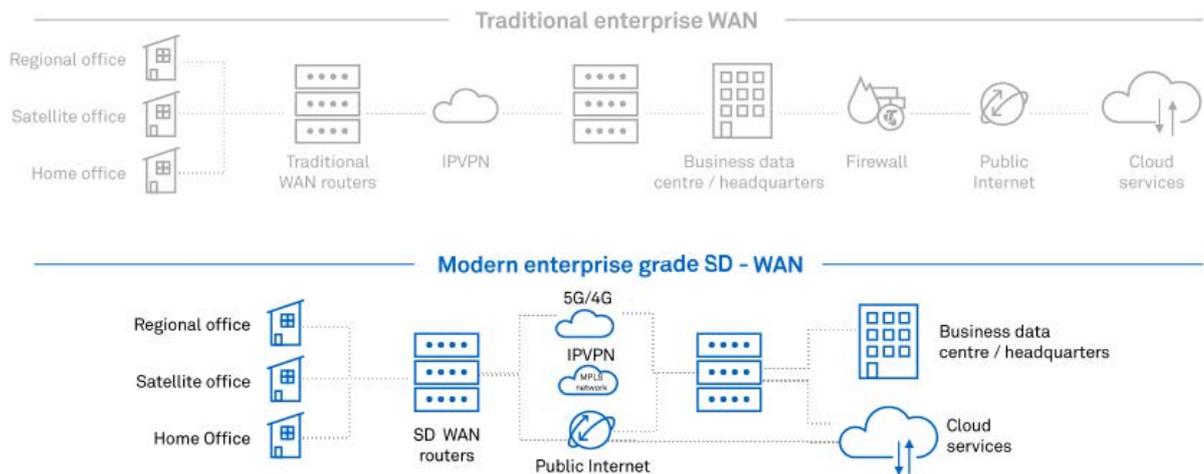
Our software-defined services, network connectivity, and professional advisory capabilities combine to create a secure environment with the flexibility and control you need to innovate and manage change.

Our capabilities help you to deliver brilliant user experiences, enhance employee productivity, ensure business continuity, and gain visibility of your network through a single dashboard with a range of connectivity options.

What is SD-WAN?

SD-WAN (Software-Defined Wide Area Network) brings together a range of different access technologies (e.g. an MPLS-based service - IPVPN, Internet, and wireless) as your WAN and uses software-defined networking (SDN) to prioritise traffic flow and intelligently route traffic with available bandwidth according to service.

How different is SD-WAN from traditional enterprise WAN when it comes to branch deployment?

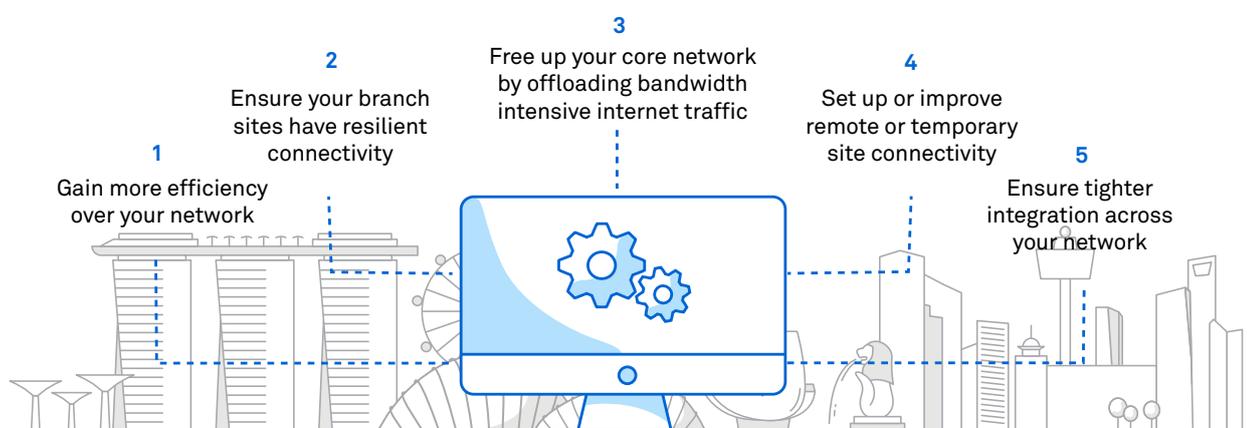


Why your business needs SD-WAN

SD-WAN is at the leading edge of software-based networking deployments. It offers significant business value by enabling you to maximise networking resilience, optimise bandwidth utilisation, and enhance application performance across your networks.

SD-WAN can empower your business to embrace emerging priorities in the digital landscape such as the increased internet use among your people, partners, and customers, SaaS-based applications, the adoption and integration of cloud services, and network resiliency that helps drive business continuity.

With faster applications, your workforce can collaborate better and be more productive. The increased level of bandwidth optimisation can help ensure mission-critical applications are always prioritised through the best path available.



“By 2024, to enhance agility and support for cloud applications, 60% of enterprises will have implemented SD-WAN, compared with about 30% in 2020.”

Magic Quadrant for WAN Edge Infrastructure, Gartner, September 2020.

How does Telstra SD-WAN work?

Telstra offers SD-WAN along with our managed network services, which leverages the latest technologies to manage end-to-end network infrastructure and services for global enterprises. We'll help evolve your network to be more efficient, secure, and agile, whilst giving you the freedom to focus on your core business.

With **Telstra Managed SD-WAN**, you can count on Telstra for project management, detailed design, ordering, provisioning, activation, and maintenance of your network infrastructure. This fully managed service includes providing hardware, software, networking, and transport services needed for business applications at your branch offices globally with the agreed service-level agreements (SLAs) for uptime and performance.

We also offer the **Co-Managed SD-WAN*** deployment model as another option for added management control, allowing you to make simple network operations and devices changes on your own through an online dashboard, while we manage the more complex aspects. Telstra takes care of incidents, problems, and complex changes.

*This is available to Cisco Meraki SD-WAN technology.

Our extensive global alliances give us the ability to provide smooth delivery of services in many places, including 24X7 proactive service management to help ensure your applications run at peak performance.

Telstra Managed Network Services	Premium Tier* (*available to subscribe with Telstra SD-WAN technology)
Supported SD-WAN Technology	Cisco Meraki SD-WAN, Cisco SD-WAN and VMware SD-WAN by VeloCloud
Network Commissioning	✓
24x7 Global Helpdesk	✓
Proactive Service Assurance	✓
IT Service Management <ul style="list-style-type: none"> Connectivity and network equipment / device restoration Trouble shooting and move, add, change, delete 	Telstra managed Telstra responsible
Telstra Connect - Web-Based 24x7 Online Reporting Service	✓
Written Analysis Reporting	Optional

 Benefits	 Features
<p>Drive efficiency Gain greater visibility into your application performance and control over your network routing options. Use existing bandwidth more efficiently by selectively using your IPVPN network for mission-critical applications and other access technologies for less significant traffic. This saves you the need to provision more links or extra capacity and better manage total cost of ownership. Simplify and streamline network management by offering access to—and control over—network technologies as a matter of policy rather than requiring manual configuration.</p>	<p>Transport-agnostic SD-WAN allows WAN traffic to be securely distributed over most carrier service offerings, including IPVPN, internet, and 5G/4G. This allows you to route your traffic through the most efficient channel without sacrificing application performance.</p> <p>Bandwidth augmentation with internet broadband access Use SD-WAN to meet your business demands by augmenting your existing IPVPN with internet bandwidth or replace it altogether with Enterprise-grade internet at any branch office to enable new services or high-bandwidth applications. This is ideal for those requiring temporary bandwidth extension.</p>



Benefits

Improve application performance

Enterprise productivity applications contribute to increased WAN bandwidth usage, but SD-WAN can extend the WAN into compatible public cloud infrastructures such as AWS and Microsoft Azure. Intelligent path selection and application-aware traffic prioritisation across multiple carriage options help improve application performance. Improve public cloud deployments by maximising performance to the doorstep of your cloud services such as Salesforce, Microsoft Office 365, and more.

Help reduce network downtime

Redundancy is key in a network environment to keep your business running. SD-WAN enables dynamic data traffic routing to the next best performing path in the event of an outage, helping minimise network downtime and disruption to your business. As a result, your branch operations become more resilient and redundancy simpler to manage, so you can scale your business quickly in response to business demands.

Help protect your business from vulnerabilities

Granular SD-WAN policy control through the cloud orchestration portal enables you to restrict access to chosen users and applications and deliver enhanced security options across the WAN. It can help protect your business from vulnerabilities and potential security breaches from the Internet by using a combination of encryption and security tools to help turn your public connections into a virtual private network as part of your WAN.



Features

Rapid site deployment through utilising local internet breakout

Deploy new branch office network onto your private network through zero-touch provisioning plug-and-play, eliminate the need to wait for local loop deployment, and accelerate your speed to market for new market expansion. SD-WAN provides dynamic routing with local breakout to the Internet and your workforce may consume applications and content much closer to their location.

Enhanced secure connectivity

Security is essential when private WAN traffic is delivered through public channels like the Internet. With SD-WAN, strong encryption techniques and strict access controls are used to help protect your WAN traffic and communication with cloud applications, remote offices, or data centres, over both the public internet and private IPVPN circuits.

Application-aware routing

SD-WAN dynamically forwards data packets by looking at the application type, performance, policies, and path status. By monitoring the network performance for jitter, packet loss, and latency, you can tune the network for business-critical services. Applications can be sent over the best-performing path based on policies. Traffic is load-balanced to maximise all available WAN bandwidth.

Central orchestration

Reduce complexity and achieve faster WAN deployment and management with centralised control. This feature also provides greater visibility (including application traffic, bandwidth usage, and device statistics) into your network.

Use case	Cisco Meraki SD-WAN	VMware SD-WAN by VeloCloud	Cisco SD-WAN
Hybrid-Cloud Deployments	Yes	Yes	Yes
Application Layer Routing	Yes	Yes	Yes
Direct Internet Access	Yes	Yes	Yes
Segmentation	No	Yes	Yes
Fully Featured Edge / Firewalling (IPS/IDS)	Yes	Roadmap	Yes
Single-Pane-of-Glass for all network devices LAN / WAN / WLAN / FW	Yes, based on full stack Cisco Meraki deployment	Yes via Telstra Connect	Roadmap
Guest Wi-Fi	Yes	Yes	Yes
Dynamic Routing Protocol Support (i.e. BGP on the LAN and WAN)	Single WAN only	Yes	Yes
Cloud Security Integration (Zscaler*/Palo Alto*)	Yes	Yes	Yes
Environment complexity	**	****	*****
Shared capabilities	Scalable to 10,000+ locations, zero-touch provision for easier and quicker deployment, template configurations, centralised management		

*Part of Telstra's ongoing enhancements

Get more with Telstra Adaptive Technology Services.

We can help on your journey to SD-WAN, with SD-WAN Discovery and Adoption Consulting Services, whichever path you take, help you understand the value of software-defined networking for your business.

Telstra can provide a one-stop-shop SD-WAN managed service. Through Telstra Purple, our experts will provide **technical advisory, design, deployment,** and **support professional services,** leading to either an in-house managed solution, or a solution we help you manage.

Global Carrier - grade network, infrastructure and Internet backbone	Industry Recognition	Strong alliance ecosystems	Telstra Innovation
<ul style="list-style-type: none"> • Twenty-six submarine cable systems—one of the largest and most diverse intra-Asia subsea network system, which delivers approximately a third of Asian IP traffic. • These services are underpinned by our extensive over 400,000 km of cable length network, with licences in Asia, Europe and the Americas and access to more than 2,000 Points of Presence (PoPs) in more than 200 countries and territories. • Access an ecosystem of clouds, data centres and partner services around the world with more than 36 global Programmable Points of Presence (POPs), directly integrated with over 2000 Telstra IPVPN POPs in 200 countries and territories. • The first foreign company licensed to provide connectivity and network services to China, and now operate data networks in 39 key cities and six data centres through our joint venture Telstra PBS in mainland China. 	<ul style="list-style-type: none"> • Telstra is ranked 3rd in 2021 Gartner Critical Capabilities for Network Services, Global for Intra-Asia/Pacific use case. • Leader in IDC MarketScape Asia Pacific Next Generation Telecoms Services 2020 Vendor Assessment • Consistently ranked amongst Asia's most peered IP networks by Oracle Dyn's Internet Intelligence 	 <p>The logos shown are: Cisco, Meraki, Equinix, Genesys, Microsoft, Riverbed, Palo Alto Networks, and VMware.</p>	<ul style="list-style-type: none"> • Our 'Always On' High Resiliency for Private Lines, the first automatic restoration service on Asia's busiest subsea routes, guarantees connectivity even in the event of a cable cut or damage due to a natural disaster. • Telstra Programmable Network (TPN) is the industry's first globally connected on-demand networking platform that enables businesses to be agile and adapt to changing demand.

About Telstra

Telstra is a leading telecommunications and technology company with a proudly Australian heritage and a longstanding, growing international business. Today, we operate in over 20 countries outside of Australia, providing data and IP networks and network application services to thousands of business, government, carrier, and OTT customers.

Interested?

Whether you're exploring new possibilities or needing support for your existing solutions, we're here to help.

Contact your Telstra account representative for more details.

Australia

 telstra.com.au

International

 telstra.com/international/SD-WAN

 tg_sales@team.telstra.com