MANAGED DATA NETWORKS: MANAGED SWITCH

Telstra Managed Switch addresses the growing importance of LAN reliability and performance for business operations. The growth of unified communications applications, Layer 2 Ethernet WAN solutions, and networking complexity from IT centralisation and virtualisation are key drivers of LAN importance.

By adopting the Managed Switch service, you can help improve LAN performance, simplify management and lower cost of ownership.

We can provide a full range of LAN management and reporting services tailored to suit your requirements. We support the complete LAN network lifecycle including network assessment, planning, purchase, design, deployment, as well as 24/7 monitoring and management. With continual investment in skilled people and the latest network management tools and systems, we can support your LAN environment across Australia, giving you more time to focus on core business.

Through tight integration with our Managed Router solution, the Telstra Next IP™ network and Telstra mobile network, you can gain a seamless view of your total data network to help reduce the risks around network convergence and deploying new technologies. We can also provide a seamless managed data platform for future business growth and productivity through capabilities such as Unified Communications, security and Telstra cloud solutions.

FEATURES AND BENEFITS

Managed Switch is an extension of Telstra's Managed Router service into your LAN infrastructure. Managed Switch supports traditional features such as Virtual LANs, as well as features highly applicable for Unified Communications such as AutoQoS, and Power over Ethernet (PoE) for powering IP phones and wireless devices. The service can also cover your existing switching equipment if we have accredited it.

Service Options	Benefits
Once-off procurement/rental of equipment	o Free up internal resources – remove the burden of managing the equipment lifecycle, third party vendors, suppliers and service arrangements
Once-off design and installation services	
Support for accredited Cisco and Juniper equipment	
Available as a bundle for a single monthly cost over a fixed term (MNS Smart Bundle)	o Improve financial outcomes – replace large capital expenditure with a consistent operating cost, and the expense of hiring, training and updating internal IT skills
Ongoing management including: o Monitoring, notification and restoration o Maintenance o Assurance o Lifecycle management (recommending alternate devices as devices approach end-of-life) o Management of third party vendors, suppliers and service arrangements o Backup and restore of configurations	o Maximise network performance – improve LAN ability to support productivity and collaboration
	o Boost growth and productivity – close integration with Telstra MDN offers a seamless platform for business growth and productivity through Unified Communications, security and Telstra cloud solutions
Day-to-day support o Dedicated Account Management Team o Skilled operational teams and field force	o Focus on core business – realign IT staff to higher value tasks and focus on strategic activities to meet current and future business needs.
Evaluations and accreditation activities o Performed for devices and systems	
Strategy and plan development o Provide network performance analysis o Recommend potential network changes	
Design consultancy o Assess the impact of introducing new business applications	

Product features

Features	Benefits
BaseT Ports supported	o 10/100 o 10/100/1000
10/100/1000 SFP Ports	Provides 10/100/1000 BaseT ports.
Autosensing on each port	Detects the speed of the attached device and automatically configures the port for 10- or 100-Mbps operation.
802.1Q Trunking	Allows the setup of separate VLANs with tagged and untagged framing. Trunking is used to save ports when creating a link between two devices implementing VLANs.
802.1D Spanning Tree (a Layer 2 link management protocol that provides path redundancy while helping prevent undesirable loops in the network)	Simplifies network configuration and improves fault tolerance
Multicast Management Support	Offers Internet Group Management Protocol (IGMP) snooping in hardware for management support.
Scalable Stacking	Cisco StackWise stacking creates a 32-Gbps switch interconnection. Stacking does not require user ports. Up to 9 units can be stacked together for a maximum of 468 10/100 ports, 468 10/100/1000 ports, 108 optical aggregation ports, nine 10 Gigabit Ethernet ports, or any mix thereof.
Stack Power	Power interconnect system that allows the power supplies in a stack to be shared as a common resource among all the switches. Cisco StackPower unifies the individual power supplies installed in the switches and creates a pool of power, directing that power where it is needed.
SPAN/Port Mirroring	Switched Port Analyser
Virtual LAN (VLAN) Feature	Enables networks, users or departments to be placed into their own virtual private LAN segment.
Media Access Control (MAC)-Based Port-Level Security	Helps prevents unauthorised stations from accessing the switch; Cisco fully supports the entire set of Requests for Comments (RFCs)
MAC Sec 802.1ae	802.1AE is the IEEE MAC Security standard (also known as MACsec) which defines connectionless data confidentiality and integrity for media access independent protocols
802.1x security	o IEEE 802.1x allows dynamic, port-based security, providing user authentication. o IEEE 802.1x with VLAN assignment allows a dynamic VLAN assignment for a specific user regardless of where the user is connected. o IEEE 802.1x with voice VLAN permits an IP phone to access the voice VLAN irrespective of the authorised or unauthorised state of the port. o IEEE 802.1x and port security are provided to authenticate the port and manage network access for all MAC addresses, including that of the client. o IEEE 802.1x with guest VLAN allows guests without 802.1x clients to have limited network access on the guest VLAN
Voice Virtual LAN (VLAN) Feature for IP Phones	Enables phones to be placed into their own VLANs without the need for end-user intervention. A user can plug the phone into the switch, and the switch provides the phone with the necessary VLAN information
Power over Ethernet (PoE)	Switches with internal power supply can power Cisco IP Phones and wireless access points (802.3af support)
Support for 802.1P QoS	Supports QoS based on the Institute of Electrical and Electronics Engineers (IEEE) class-of-service (CoS) and port-based prioritisation, allowing the switch to change the CoS settings of tagged packets on a per-port basis
Port-Based Reclassification for Queues on Each 10/100 That Are Configurable Using a Weighted Round Robin (WRR) Scheduler	Enables users to prioritise mission-critical traffic, such as VoIP and IP-based video applications over regular traffic

Management tiers

Choose from four management tiers, each with inbuilt flexibility that lets you customise the management level according to the individual site.

Features	Benefits
Basic Management The Basic Management tier is essentially an alerting service. This service tier does not cover switch maintenance and fault management by Telstra.	This service tier is ideal for organisations with in-house network monitoring expertise or where switches are not accredited by Telstra for proactive or reactive management.
Reactive Management With this tier, management is performed solely on a reactive basis – the switches are not proactively polled by Telstra. Consequently, you must contact the Help Desk when you detect a fault. For an additional fee, you can have access to an online performance reporting service plus monthly written analysis reporting.	This service tier is a cost-effective solution for smaller, non-critical sites.
Proactive Management Proactive Management provides comprehensive management including proactive monitoring and alarming of the switch, response, diagnosis and repair. It also provides configuration file assurance through daily back-ups.	This service tier suits organisations that do not have in-house management expertise or have sites where business continuity is essential.
Proactive Secure Management The Proactive Secure service tier is delivered by Defence Signals Directorate (DSD) cleared staff from ASIO T4 compliant facilities. Access to the online performance reporting is included in the service.	This service tier suits organisations with a high security requirement such as government agencies.

Reporting Options

We offer a range of additional, flexible reporting options either for selected sites or for the complete managed LAN network infrastructure. These reporting options may incur an additional fee.

Features	Benefits
Online Reporting Online Reporting lets you see data in near real time such as traffic utilisation, device metrics (CPU utilisation, memory usage, etc) interface utilisation, top-end reports, trend reporting and more.	Allows you to view reports and statistics to determine network performance.
Written Analysis Reporting Written Analysis Reporting lets you choose which network services are included and have either monthly or quarterly reports.	Provides a comprehensive analysis of the health of your LAN.

Additional services

Managed Wi-Fi Dedicated
Telstra Managed Wi-Fi Dedicated is a secure, fully scalable Wi-Fi solution that supports BYOD across public/guest and staff access and advanced security features to help ensure protection of corporate data.

Managed Wi-Fi Cloud
Managed Wi-Fi Cloud is a secure and flexible cloud-managed Wi-Fi solution that's ready-to-go. This solution provides secure network access for staff, guests and the public combined with tracking and analytics. It enables organisations to improve staff productivity, gain insight into visitor behaviour, and engage with their customers.

About Telstra

We provide network services and solutions to more than 200 of the world's top 500 companies. They rely on us to do business across 240 countries and territories and to enable greater productivity, efficiency and growth.

Our solutions offer the best of all worlds – skilled people and a rich portfolio of services delivered on our world-class Telstra Next IP® network and Telstra mobile network. To help ensure reliable performance, they're monitored and maintained from our dedicated centres using advanced management and operational systems. And they're backed by Telstra Enterprise-grade Customer Service® and one of Australia's largest and most qualified field and technical workforce.

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IT'S HOW
WE CONNECT