

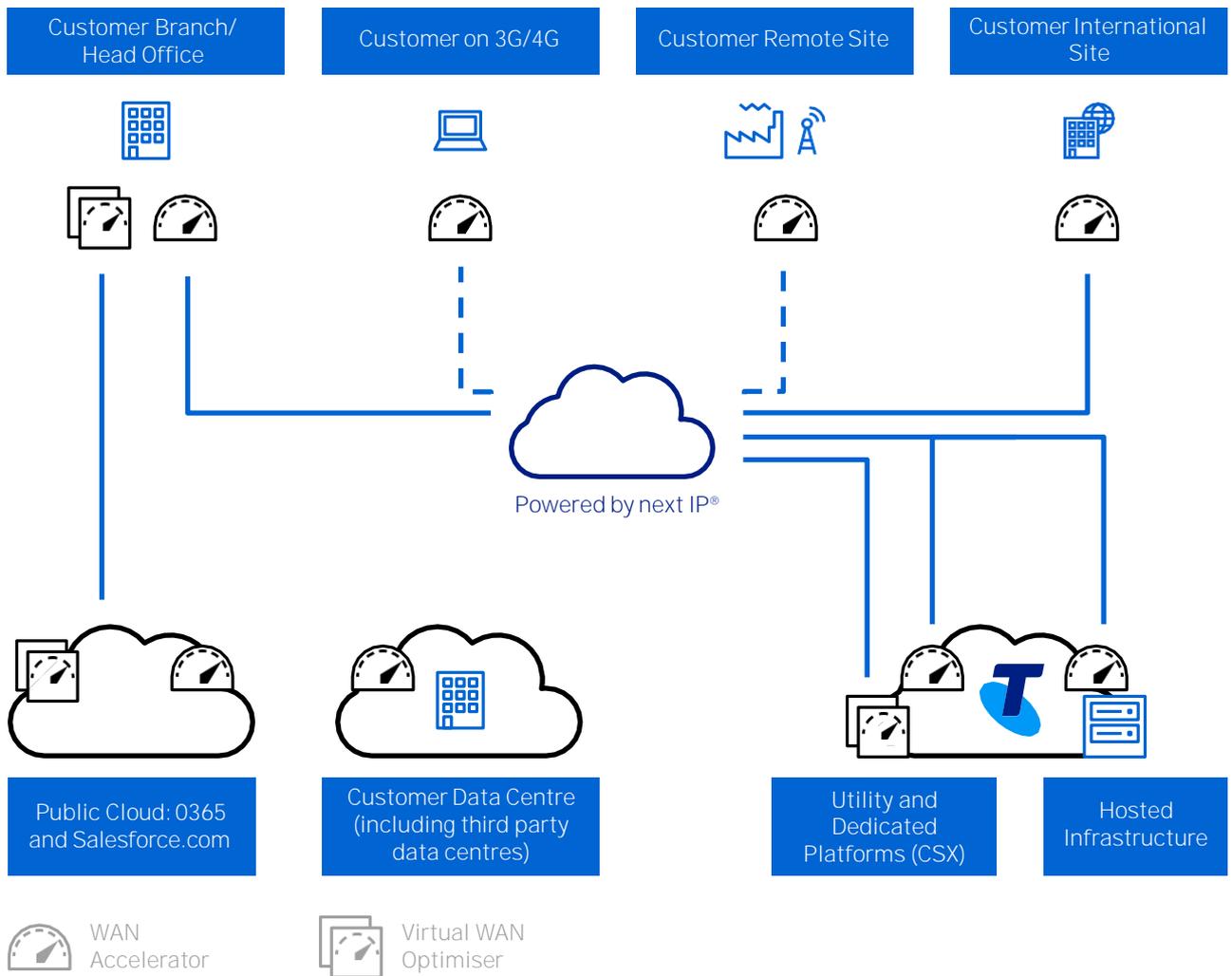


Optimise Your
Network's
Bandwidth

Managed WAN Optimisation can be a cost-effective way to optimise your **network's** bandwidth by reducing redundant traffic. Using a range of techniques and technologies, the WAN Optimisation service increases your available network capacity for more applications, not just from your branch, head office or data centre, but also from the Telstra cloud and over the internet. It can also improve visibility, helping you detect network performance issues that impact your business.

Through our management, you can accelerate application performance without tying down your internal team or adding another layer of complexity.

Before we design your WAN Optimisation solution, our consultants will perform an expert assessment of your environment. We will then provide a solution using either Cisco or Riverbed technologies. You can deploy the WAN Optimisation virtual or physical appliances either in your branch sites, data centre or in the Telstra cloud.



Features	Benefits
On-premises virtualisation	
<ul style="list-style-type: none"> You can use a virtual platform on top of your WAN Optimisation appliances to deploy branch services such as Windows and Linux servers or any other compatible VMware compliant application. Available on a number of device types via Cisco Virtual Blades or the Riverbed Services Platform. We can deploy the virtualised Riverbed Steelhead Mobile Controller for Mobile WAN Optimisation on a dedicated device or on the Riverbed Service Platform. You can deploy Cisco WAAS Express, a cost-effective software-based WAN Optimisation solution on a Cisco Integrated Services Router 2. Or you can install a Virtual Riverbed Steelhead on your own servers. Either way we can manage the virtual optimisation appliance for you. 	<ul style="list-style-type: none"> Consolidate IT infrastructure to minimise complexity and costs by reducing your server and network appliance footprint in branches and data centres. Improve security by centralising data and applications. Allow mobile staff to have a better user experience on their laptops or computers.
Cloud add-on	
<ul style="list-style-type: none"> A virtualised WAN Optimiser can be provided on the Telstra cloud infrastructure to accelerate traffic to and from your Virtual Server Shared and/or Virtual Server Dedicated with all management and support provided*. We can configure the Riverbed Steelhead Cloud Accelerator feature on Steelhead appliances. Physical WAN Optimisers can also be located in selected Telstra data centres. 	<ul style="list-style-type: none"> Consolidate infrastructure – centralise data, workloads and applications to save costs by moving to the Telstra cloud. Optimise the performance of your cloud hosted or SaaS applications to branch offices to improve productivity – even over the internet^. No need to purchase, install, deploy, maintain and manage virtualised WAN Optimiser appliances at your site.
Additional Riverbed-only options	
<ul style="list-style-type: none"> Riverbed Interceptors can be installed in your data centres and managed by us to load balance high volume traffic requirements. We can support Riverbed for Telstra Satellite services using the Skipware protocol. 	<ul style="list-style-type: none"> Provides optimum performance of multiple WAN Optimisers. Remote branch sites accessed through Telstra Satellite can experience improved application performance.
Additional Cisco-only options	
<ul style="list-style-type: none"> Akamai Connect: Cisco WAN Optimisers can accelerate public internet traffic through Akamai Connect licenses. 	<ul style="list-style-type: none"> Save bandwidth and improve performance of web content and cloud based applications.
Management	
<ul style="list-style-type: none"> Our managed service provides either proactive or reactive incident monitoring and event management, as well as service assurance, equipment lifecycle management and operating system software management. Our consultancy services can help assess your service and recommend actions when application or network changes affect the performance of your WAN Optimisation solution.** 	<ul style="list-style-type: none"> Access to skilled resources so you can free up staff for more strategic activities. Support business continuity plans. Better visibility and control of costs. Specialist expertise to help ensure your applications and networks run at their peak.

Advanced techniques and technologies	
<ul style="list-style-type: none"> • Data compression – advanced compression algorithms such as L-Z, Huffman. • Visibility and prioritisation of time sensitive applications. • Intelligent caching – the devices can store large data patterns and files at each network end, to save repeat transmissions of entire data strings and files. • TCP flow optimisation – TCP variable packet sizing is forced to transmit maximum packet sizes across the WAN at all times. • Application protocol optimisation eliminates the need for multiple handshakes as applications send data across the network. • Online access to reporting of: <ul style="list-style-type: none"> – applications traffic mix – application acceleration percentage for CIFS, exchange, HTTP – bytes dropped out (number) – compression (%) – compression throughput (Kbps) – packets dropped out (number) – TCP acceleration (%) – TCP acceleration throughput in (Kbps) – WAN throughput in (Kbps) – WAN throughput out (Kbps). 	<ul style="list-style-type: none"> • Helps reduce data volumes to free up valuable bandwidth for your applications. • Time sensitive applications can be given priority to help meet user demands. • Improves response times. • Avoid the cost of network upgrades. • Increase network efficiency. • Improve data throughput across your network. • Ability to optimise your encrypted traffic (need to integrate with your encryption keys). • Near real-time visibility of network usage and performance via a secure portal. Specific detail of the online reports will vary depending on your preferred WAN Optimisation device (Cisco, or Riverbed).
Flexible reporting	
<ul style="list-style-type: none"> • Ability to purchase and install a dedicated Cisco Central Manager, or a dedicated or virtual Riverbed Central Management Console. • The Riverbed solution also provides the option of a shared Central Management Console with access to monthly reports generated by us. • WAN Optimisation written report: get a detailed analysis of how your WAN Optimisation solution is performing. 	<ul style="list-style-type: none"> • Gain insight and control of solution performance through real time management.

* Only on the CSX platform.

** A Move/Add/Change request needs to be submitted to us to implement changes.

^ For select Software-as-a-Service applications such as salesforce.com and Office 365.

Additional services

Storage Centralisation

Storage Centralisation is changing the way branch data is typically stored and protected. It's a simple, cost effective method to manage and secure rapidly growing data volumes.

This solution enables you to move your data from branch offices to a central data centre while allocating data to the branch site on demand in near real time.

Proof of Concept testing

Telstra can provide a Proof of Concept for selected customer sites for an agreed period for qualified customers, supported by a report analysing pre and post-optimisation metrics.

Consultancy Services

With our Application Performance Consulting or Network Application Assessment service, we can help you re-tune or re-evaluate your WAN Optimisation solution when you add new applications or sites to your network.

For further information about these services (including pricing) please talk to your Telstra account executive.

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 leading Telstra Mobile Network and the Next IP® network. To 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.

Things you need to know

Telstra Managed WAN Optimisation is an optional, value-added service available only to Telstra Managed Data Networks customers.

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Contact your Telstra account executive

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 <http://www.telstra.com.au/enterprise>