



# Five steps to peak application performance

How the right network, management and tools can boost application performance across your whole organisation.

As applications become more pivotal to business, and more applications are hosted in the cloud, bandwidth requirements are steadily growing. And as your business expands to more locations, you need those applications to perform at their peak in every one. Productivity depends on it.

Telstra has looked closely at the way networks and applications work together, and identified five ways to get better performance from your apps. Either individually or as part of a holistic application performance framework, they represent a cost effective way to help bring apps up to speed and boost productivity – without tying down your ICT team with unneeded complexity.

## Why application performance matters

As businesses move their critical applications into the cloud – latency, chatter and network congestion are becoming big challenges. 55% of businesses see cloud-based applications as the greatest challenge with regards to application performance.<sup>1</sup>

At the same time there is increased growth in end-users taking advantage of shadow IT and multi-device usage to boost productivity. This has led to an increase in IP traffic at a compound annual growth rate of 23% from 2014 to 2019.<sup>2</sup>

Constantly increasing bandwidth is no longer a sustainable option and 64% of businesses prefer to implement better network governance and tools to measure and predict performance rather than throw money at additional capacity.<sup>1</sup>

## What you can do to boost application performance

Our network team have identified five simple stages in the delivery of peak application performance. Separately, each can deliver results. But it's when all five work together that you can achieve superior application performance.

### 1. Help ensure network availability

It doesn't matter how much bandwidth your network has if your network isn't running. The first stage to help ensure peak application performance is to choose a network designed to the highest level of availability. Telstra's Next IP® network has a unique triple path topology connecting Australia. With two levels of redundancy, it's designed to 99.999% target availability – which is why it's the network we use ourselves.

### 2. Prioritise your traffic flow

Class of Service policies are critical to ensuring the most critical applications are recognised and given priority by your network. We offer six levels of traffic prioritisation, with real-time priority queuing to help ensure demanding applications like video conferencing and voice over IP with reduced latency and jitter.

### 3. Maximise your network configuration

With the pace of innovation accelerating, every enterprise can benefit from specialist network expertise. We can reduce the cost and complication of network management, while allowing you to take immediate advantage of new network technologies – and get the most out of them.

### 4. Assure your applications

Application Assured Networking™ gives you deep visibility into your network, allowing you to set policies that help ensure mission-critical applications have the right bandwidth at the right time.

Options include:

- **AAN Reporting** – Allows you to schedule regular reports through Reporting Only Events, helping you understand what needs to be done to improve application performance, and predict the cost of new applications, such as video conferencing, IP telephony, or ERP and CRM solutions hosted in the cloud.
- **Turbo events** – Turbo events allow you to increase bandwidth for selected applications at selected times – reducing cost as you only pay for the bandwidth you use.
- **Discard events** – Discard events allow you to block selected applications from your network. (For example, YouTube and social media applications.)

### 5. Optimise your Wide Area Network

As applications run over larger and larger networks, latency is a critical factor in network performance. WAN optimisation helps reduce latency by reducing the amount of data that needs to travel over the network in the first place. In fact, some WAN optimisation solutions can reduce data on the network by between 65% and 95%.<sup>3</sup>

Because WAN optimisation works without increasing bandwidth, it can be an extremely cost-effective solution for enhancing application performance. We support Riverbed and Cisco WAN optimisation solutions that include intelligent caching, scalable data referencing, data and header compression, packet coalescing and enhanced TCP transport.

1. InfoVista and BT "Meeting the Network Demands of Changing Generations – Benchmark Report"; 2016, [http://pages.infovista.com/WP-Benchmark-Report-BT.html?utm\\_source=linkedin&utm\\_medium=generalshare](http://pages.infovista.com/WP-Benchmark-Report-BT.html?utm_source=linkedin&utm_medium=generalshare)

2. Cisco Visual Networking Index 2015. 3 <http://www.youtube.com/watch?v=6mAP70cO4WM>

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