

OPTIMISING HYBRID CLOUD DEPLOYMENTS WITH A SOFTWARE-DEFINED NETWORKING PLATFORM

Equipping the enterprise to embrace digital transformation

Digital transformation is both a challenge and an opportunity for enterprise businesses. To overcome the challenges and grasp the opportunities, businesses need to put themselves at the heart of vibrant digital ecosystems, where they can leverage the power of interconnection. As digital transformation drives the distribution of services and controls closer to customers, employees, partners and ecosystems, 85% of enterprises are embracing multicloud¹ for better agility, flexibility and performance. Equinix and Telstra have extended their partnership to help enterprises take control of their digital strategy by building a digital edge via a multicloud strategy.

Telstra's proven extensive network coverage, implementation and consulting services empower businesses with a migration roadmap that best matches their divergent workloads to multiple clouds. To seamlessly and securely connect workloads to multiple clouds, the joint solution leverages Equinix Cloud Exchange Fabric™ (ECX Fabric™) to directly, securely and dynamically connect distributed infrastructure and digital ecosystems globally on Platform Equinix® via Telstra Programmable Network (TPN), a software-defined network.

Together, we've radically simplified cloud connection by focusing on an automated experience to leading Cloud Providers, as well as opening up the connection possibilities visible to a user while ensuring that your business can privately, securely and directly exchange digital information with your customers, partners and providers irrespective of location, and deployed with a few clicks of a button.

Leveraging software defined networking with API integration we created a world-first integration to offer customers an automated cloud and network connectivity experience for leading cloud platforms Amazon Web Services, Microsoft Azure, Oracle Cloud and Google Cloud Platform, rapidly reducing the time to establish on-demand private connectivity to just a few minutes. Additionally, customers have access to 170+ cloud service providers in 38 markets, all delivered over the lowest latency high performance network in APAC².

With a single data centre provider connecting to one network platform – users can greatly simplify their complex IT environments, while benefiting from on-demand, scalable pay-as-you-go cloud and network services.

This provides unprecedented choice of cloud, region and connectivity for hybrid workloads, required by today's diverse IT environments.

What is TPN?

As the first global software defined network built on OpenFlow, Telstra Programmable Network (TPN) was designed to help businesses embrace digital transformation and quickly respond to customers and changing market dynamics with next generation agility, flexible consumption of services, and automated provisioning of network services. Today, TPN provides a growing range of network; security, cloud and application services that can be managed via a customer portal with a single unified view or customer systems interfaced via APIs.

1. Source: Rightscale 2017 State of the Cloud Report

2. Telstra achieved the highest score for **Low Latency Networks** and **High Capacity Networks** from 2015 to 2018 in **Gartner Critical Capabilities for Network Services, Asia Pacific**

Match divergent workloads to multi-clouds

Continuous innovation from cloud service providers presents enterprises with a dizzying array of cloud technologies and choices. With varying application workloads requiring different types of cloud services—private, public and hybrid—enterprises face the challenge of deciphering which cloud provider and cloud types are right for their organisations—both now and in the future. Other challenges include:

- Unpredictable user experience due to network variances
- Difficulty delivering cloud apps to globally dispersed customers, employees and partners
- Complexity of managing architecture, compliance and governance with cloud compute and data lake consumption across multiclouds

Equinix and Telstra jointly solve these challenges with ECX Fabric and Telstra Programmable Network (TPN).

As a leading networks and connectivity provider, Telstra has deployed infrastructure inside Equinix data centres in more than 38 markets globally, and together we support enterprises in their digital transformation journey.

Telstra's high-performance network and sophisticated portfolio of connectivity solutions is combined with direct access to the cloud providers and the largest industry ecosystems on Platform Equinix. This allows businesses around the world to create a "digital edge - closest to users, clouds and networks" to create secure high performance connections.

Why Telstra and Equinix?

- **Solve bigger problems for customers to reach everywhere**
Expand in to new markets with ease. A single data centre provider with global coverage, combined with flexible, on-demand bandwidth between locations and cloud service providers.
- **Cloud and network on-demand**
Self-serve platform to manage connectivity into multiple connections, select bandwidth size and service term on demand. Data centre space can also be provisioned per demand.
- **Secure connectivity in a few clicks**
Secure, reliable bandwidth between data centres provisioned on the fly.
- **Elastic connectivity with flexible charging**
Real-time on-demand activation of bandwidth flows and bursts.

Telstra Programmable Network with ECX Fabric

Enterprises need a new level of interconnectivity for multicloud access and co-location across globally dispersed sites and varied networks. Powered by ECX Fabric, TPN is a software defined network that eases the journey to multicloud, while providing the following benefits:



Faster time to market sharpens competitive edge



Highly available, low-latency connections accelerate performance



Secure, direct connections that bypass the internet



Mix and match clouds to varied workloads



Maximize benefits with a hybrid approach



Leverage cloud resources for migration and consolidation

Together, Equinix and Telstra deliver expertise—from design to deployment to migration—to optimise application performance and enhance user experience.



Faster time to market sharpens competitive edge

Place strategic control points next to users, clouds and networks to shorten time to market and gain an instant competitive edge to meet customer demand.

With a network provisioned in a few clicks, and cloud solutions delivered through a single port, enterprises gain a shorter time-to-market window—days instead of months— that offers an instant competitive edge when delivering new products and services to eager customers. Achieve the flexibility, scalability, agility and connectivity of starting with your preferred cloud, then add new or switch cloud providers in minutes using a simple self-serve web portal or APIs.



Highly available, low-latency connections accelerate performance

Obtain secure, private cloud connections to public/multi-clouds with extremely high availability and low latency.

ECX Fabric brings together cloud service providers and users, enabling them to establish affordable, private, high-performance connections within Platform Equinix. By directly connecting to multiple clouds, you can optimise your cloud strategy and maximise application performance to reach everywhere, interconnect everyone and integrate everything. Being milliseconds from the cloud, your data is easily accessible at the digital edge, which can be repatriated to a local private cloud as you grow. Delivered over Telstra's lowest latency and high performance network in APAC², application performance won't be compromised.



Secure, direct connections that bypass the internet

Leverage a secure private network to eliminate public internet's quality of service issues and ensure operational reliability.

Avoid the unpredictable quality of service over the public internet by directly flowing your traffic to the public/multi-clouds over ECX Fabric via a secure, private network, TPN.



Mix and match clouds to varied workloads

Choose the right mix of clouds for your application workloads, data and region

Direct access to multiple clouds provides flexibility to choose the right mix of clouds for your workloads on hand. For example, you can run an analytics application in Amazon Web Services (AWS), but use Microsoft Azure to cloudburst from existing on-premises Microsoft infrastructure during a spike in demand for cloud capacity, delivered over a burstable, on-demand network.



Maximise benefits with a hybrid approach

Enjoy benefits offered by both private and public cloud services with hybrid or multiclouds.

Private cloud services allow businesses to retain control, but do not offer the low-cost, pay-per-use compute flexibility and scalability of public cloud services. Conversely, public cloud services provide flexibility and scalability, but require relinquishing control with data placed with cloud providers. Instead of relying on a single cloud type to meet all your needs, blending private and public resources with hybrid or multiclouds connectivity offers the best of both worlds. With pay-as-you-go cloud and network, this solution further optimises your business' IT budget.



Leverage cloud resources for migration and consolidation

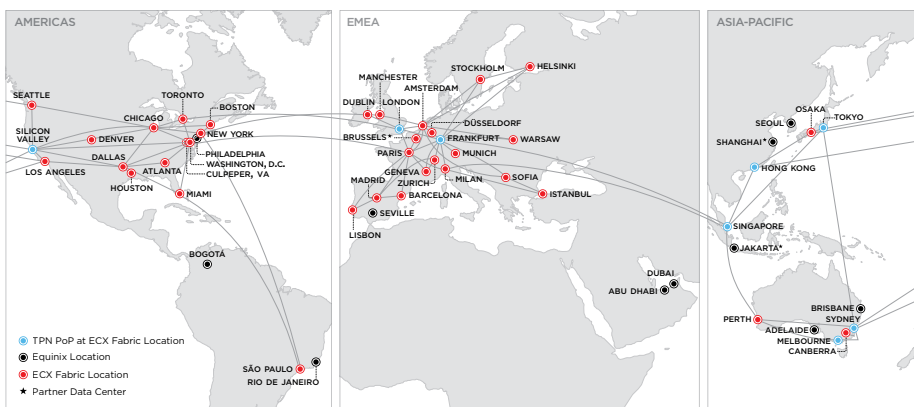
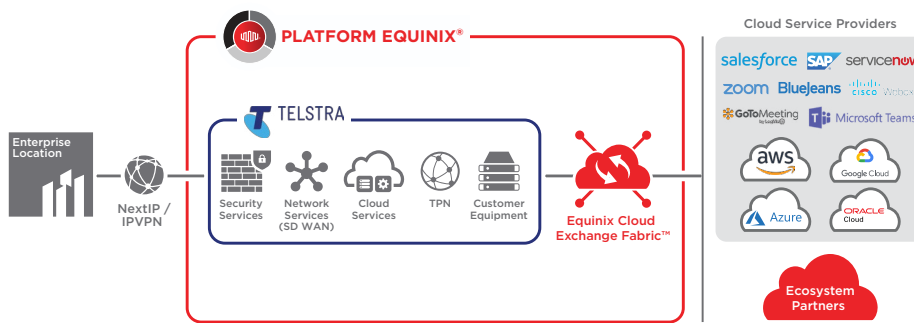
Use temporary cloud resources when migrating or consolidating data centres.

Maintain operations in the cloud as old data centres are decommissioned. Maintain the flexibility to keep using temporary cloud resources or move your data to a new data centre.

2. Telstra achieved the highest score for **Low Latency Networks** and **High Capacity Networks** from 2015 to 2018 in **Gartner Critical Capabilities for Network Services, Asia Pacific**

Our solution

Through flexible consumption of services and automated provisioning, Telstra Programmable Network empowers organisations to embrace digital business, providing the agility to adapt to rapidly evolving business requirements and changing market dynamics. This is complimented by Platform Equinix which provides the critical interconnection between the industry's largest ecosystems of service providers in key markets around the globe.



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 services to thousands of business, government, carrier and OTT customers. Telstra Enterprise is a division of Telstra that provides data and IP networks and network application services, such as managed networks, unified communications, cloud, industry solutions and integrated services. These services are underpinned by our subsea cable network, one of the largest in the Asia Pacific region, with licenses in Asia, Europe and the Americas, and access to more than 2,000 Points-of-Presence around the world.

[Telstra.com](https://www.telstra.com)

About Equinix

Equinix, Inc. (Nasdaq: EQIX) connects the world's leading businesses to their customers, employees and partners inside the most-interconnected data centers. On this global platform for digital business, companies come together across more than 50 markets on five continents to reach everywhere, interconnect everyone and integrate everything they need to create their digital futures.

[Equinix.com](https://www.equinix.com)

Engage with Equinix

Contact us at

ap-partner@ap.equinix.com

John Slater Foley

jslaterfoley@ap.equinix.com



Global reach: The Telstra international network and professional services paired with 200+ Equinix International Business Exchange™ (IBX®) data centres provide true global coverage to simplify expansion into new markets.



Services: We partner with leading managed service providers and technology partners to solve business problems for end-customers. We help customers at every step of their transformation to digital business models.



Clouds: We connect customers to more than 350+ cloud service providers through Platform Equinix. Telstra provides managed private and secure hybrid multicloud solutions at Equinix locations close to global cloud providers.



Interconnection: The Telstra network is connected to the Equinix global interconnection platform, allowing companies to scale their digital business, keep pace with shifting markets and find new growth opportunities.



Ecosystems: Equinix unlocks opportunity for Telstra to access a variety of ecosystems such as finance (capital markets, payments, and insurance), healthcare, content and digital media, cloud and IT Service Providers.