

Ethernet

Asia-Pacific Cables



Global Secure Layer

Asia-Pacific Ethernet Network



Ethernet key features

Point-to-point and multipoint

Providing you with a secure connection to one or more data centres - locally, nationally and globally.

Low latency routes

Global Secure Layer provides carrier-grade low-latency private ethernet services, connecting your network together via the shortest viable paths.

Carrier-diverse options available

GSL acquires terrestrial and subsea cable capacity from multiple fibre carriers allowing us to provide hardware & carrier-diverse cable paths on key routes.

Flexible and scalable carrier-grade network

With international coverage, our carrier-grade network will accommodate all business needs providing 100Mbit-10Gbit.

Secured end-to-end

Our dedicated, secure and privately managed connection uses data centres in major local and international locations.

Technical information

Service Details	Parametres
Service Locations	As illustrated in Ethernet map
Data	Unlimited
Access Types	<ul style="list-style-type: none">• Direct cross connects in our PoP's• Fabric services<ul style="list-style-type: none">» Megaport VXC» Equinix EIE» IXAU VLL» Packet Fabric VC Services can be connected with a mixture of access types
Interface Speed	100Mbps - 100Gbps (100Mbps increments)
Service Hand-Off	1G*, 10G, 25G**, 40G***, 100G***
Connection Options	Optical: Single Mode Fibre Optical: NTU Virtual: Fabric services
MTU	> 9000 exact MTU provided per circuit during delivery
Design Specifications	Latency optimised design. We opt to take the lowest latency path for primary circuits where applicable, with failover circuits for diversity and redundancy.
Service Features	<ul style="list-style-type: none">• Point to point• Point to multipoint• Transparent C-VLAN passthrough
Diversity	Available <ul style="list-style-type: none">• Unprotected and protected options• BiDi or multiple cross connects
Technical Support	Available 24/7 via the GSL Portal
SLA (Standard)	99.95% (where service is delivered over direct cross connect)
*NTU required ** Available in certain sites, speak with our team *** Additional costs involved	

Our solution

At Global Secure Layer, we provide secure, dedicated point-to-point or multipoint links of up to 10Gbit. GSL provides carrier-grade redundancy with private, reliable and low-latency paths. With data centres in major local and international locations, we ensure your business is globally connected.

Global Secure Layer can provide extended reach options to major cities within Australia (Sydney, Brisbane, Melbourne, Adelaide and Perth) and New Zealand (Auckland).

The below Latency Matrix outlines the expected 'router to router' latencies between sites.

Oceania latency matrix

Latency Matrix - (Optimal Path)						
Cable: Oceania						
A/Z Side	Brisbane	Sydney	Melbourne	Adelaide	Perth	Auckland
Brisbane		11.9ms	21.7ms	30.9ms	58.3ms	36.9ms
Sydney	11.9ms		9.8ms	19ms	46.4ms	25ms
Melbourne	21.7ms	9.8ms		9.2ms	36.6ms	34.8ms
Adelaide	30.9ms	19ms	9.2ms		27.4ms	44ms
Perth	58.3ms	46.4ms	36.6ms	27.4ms		71.4ms
Auckland	36.9ms	25ms	34.8ms	44ms	71.4ms	

Los Angeles <> Sydney

HAWAII CABLE

- The Hawaiki submarine cable is the fastest and largest link between New Zealand, Australia, Hawaii and mainland United States.
- The cable spans 15,000km and is a carrier-neutral solution.
- The Hawaiki cable has a design capacity of 67 Tbps.
- The cable offers low-latency and high speed connectivity, meeting the growing demand for bandwidth in the Pacific region.

Global Secure Layer can provide extended reach options for our customers using the Hawaiki cable. With available options extending across Oceania and North America, our Ethernet solution will ensure our customers stay internationally connected into major global hubs.

The below Latency Matrix outlines the expected 'router to router' latencies between sites.

Latency Matrix - (Optimal Path)					
Cable: Hawaiki					
A/Z Side	Sydney	Brisbane	Melbourne	Adelaide	Perth
Los Angeles	133ms	144.9ms	142.8ms	152ms	179.4ms

Tokyo <> Sydney

JGA-NORTH & SOUTH CABLE

- The JGA-N & JGA-S Cable connects Tokyo, Japan to Sydney, Australia.
- The subsea cable spans 9,700km.
- The JGA-N & JGA-S Cable has up to 24 Tbps of capacity.
- The cable offers low-latency and high connectivity between Sydney, Australia and Tokyo, Japan.

With available options extending across the Asia-Pacific region, our Ethernet solution will ensure our customers stay internationally connected into major global hubs.

The below Latency Matrix outlines the expected 'router to router' latencies between sites.

Latency Matrix - (Optimal Path)					
Cable: JGA-N & JGA-S					
A/Z Side	Sydney	Brisbane	Melbourne	Adelaide	Perth
Tokyo	98.6ms	110.5ms	108.4ms	117.6ms	145ms

Tokyo <> Singapore

TGN-IA CABLE

- The TGN-IA cable is a private intra-asia cable and is deliberately designed to avoid areas prone to earthquakes and other hazards.
- The TGN-IA cable spans 6800km, consists of 4 fibre pairs linking Singapore, Hong Kong and Japan. It has additional connection to the Philippines, Vietnam & Guam.
- The cable has a design capacity of 3.84 Tbit/s.
- The intra-asia cable offers a low latency direct route between Singapore and Tokyo at 67ms.

Latency Matrix - (Optimal Path)			
Cable: TGN - IA			
A/Z Side	Singapore	Perth	Adelaide
Tokyo	67ms	112.8ms	140.2ms

Singapore <> Perth

ASC CABLE & INDIGO WEST

- The cable can offer an approximate 30% reduction in latency from Sydney to Singapore.
- The ASC is a 4,600km submarine cable linking Perth, Western Australia to Singapore.
- The cable fibre network can deliver up to 60 Tbps of capacity.
- The ASC cable system is based on repeated 100G technology using DWDM in the 1550nm window.
- The Indigo West cable spans 9200km.
- The Indigo West cable can deliver up to 36 Tbps of capacity.

The below Latency Matrix outlines the expected 'router to router' latencies between sites.

Latency Matrix - (Optimal Path) Cable: ASC & Indigo West						
A/Z Side	Perth	Adelaide	Melbourne	Sydney	Brisbane	Auckland
Singapore	45.8ms	73.2ms	82.4ms	92.2ms	104.1ms	117.2ms

Tokyo <> Los Angeles

UNITY CABLE

- The Unity Cable is a linear 9620km Trans-Pacific submarine cable system connecting Japan and Los Angeles.
- The cable has up to 7.68 Tbps of capacity.

The below Latency Matrix outlines the expected 'router to router' latencies between sites.

Latency Matrix - (Optimal Path) Cable: Unity		
A/Z Side	Los Angeles	New York
Tokyo	97ms	158ms

For further information on any of our Ethernet cables, please contact the Global Secure Layer team.