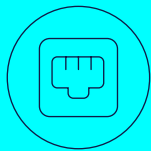

Ethernet



Vocus Ethernet brings you high performance, end-to-end layer 2 connectivity between your business locations. Vocus Ethernet is how smart businesses connect one office to another for 100% of their bandwidth and total reliability.

vocus.com.au

VOCUS

Our solution for you

Our best-in-class Ethernet services provide connectivity for business customers who require point-to-point or the flexibility of point-to-multipoint. These are delivered over our high-performance, carrier-grade network between locations throughout Australia and beyond.

We also provide Ethernet Multipoint Service (E-LAN), which delivers high-speed network connectivity, allowing you to easily link multiple office locations and data centres.

Why Choose Vocus

- Connected to more than 100 data centres in Australia
- An experienced fibre operations team that provides industry-leading, innovative solutions
- Full project management from order to delivery, including network design, facilities access, contractor management, civil works, and testing
- Optimised network design with low-latency strategic routes (e.g. Sydney CBD to ASX Data Centre)

Vocus Ethernet key features



Flexibility to grow bandwidth when needed



Scalability up to 10Gbps with nationwide and international coverage



Reliability backed by our commitment to service availability (SLA)



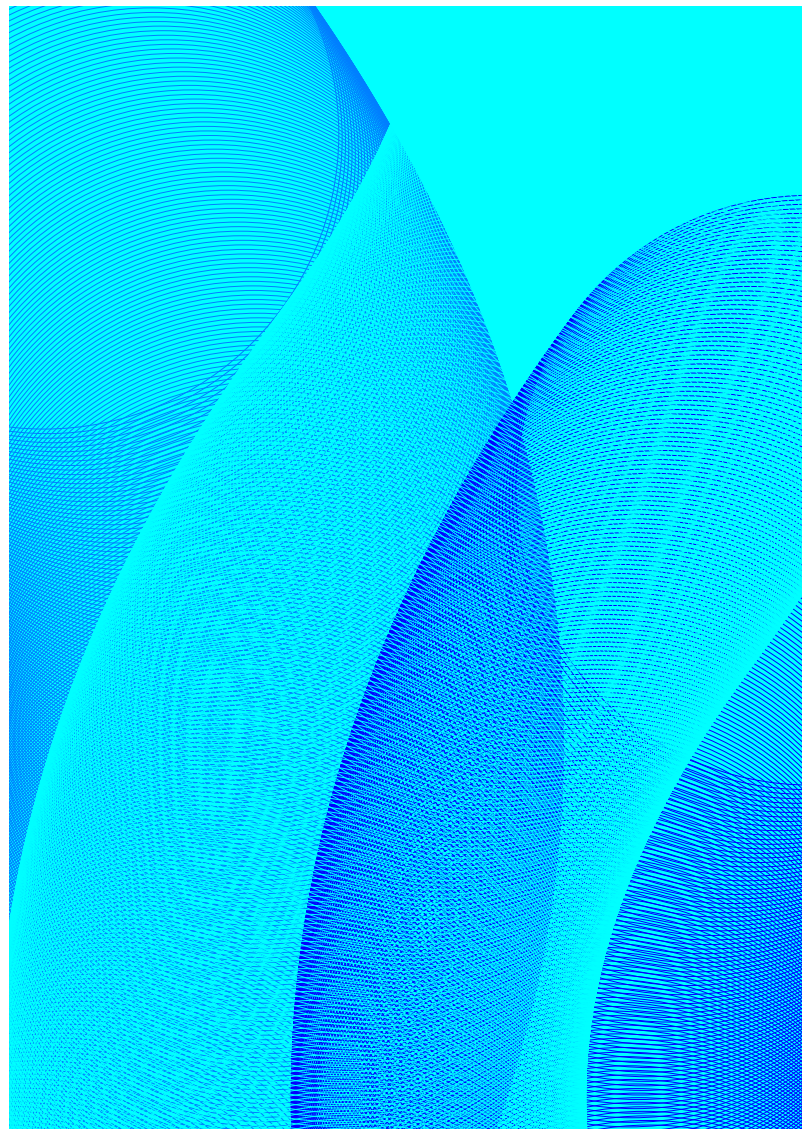
Security over our international MPLS network



Core protection included by default*



Access to Vocus' expertise in fibre to optimise your network



Features and Benefits

Vocus Ethernet is suited for medium- to enterprise-sized businesses that need a reliable, guaranteed connection to link multiple sites, such as offices and data centres, across locations.

Scalable bandwidth

- Scale bandwidth depending on your business needs, from 10Mbps to 10Gbps, in pre-defined increments

Simple integration

- Our Ethernet service is based on industry standards and allows for simple integration with your network

High performance

- Low latency and high availability, meeting the demanding requirements of today's enterprise applications

Flexible connectivity options

- Multipoint (E-LAN), point-to-point (E-Line EPL) and point-to-multipoint (E-Line EVPL) Ethernet connectivity

Support & Service Level Agreements (SLAs)

- Our range of products are supported by an experienced team of technical experts within our 24x7 Network Operations Centre
- Industry leading service levels under our service level agreement**

* Where available. Core protection excludes the access network component of the Ethernet service.

** This Ethernet service is subject to the Vocus Standard Terms and Conditions, and the Ethernet Service Schedule found at <http://www.vocus.com.au/legal-contracts>

Product specifications

Service attribute	Point-to-Point EVC (EPL)	Point-to-Multipoint EVC (EVPL)
MEF service types		
Supported Ethernet Standards	IEEE 802.3, 802.1Q, 802.1AD	IEEE 802.3, 802.1Q, 802.1AD
Service Level Availability*	99.95%	99.95%
UNI service attribute		
Physical Medium	IEEE 802.3-2002 Physical Interface	IEEE 802.3-2002 Physical Interface
Interface Speed	1Gbps for services ≤1000Mbps, 10Gbps for services >1000Mbps	1Gbps for services ≤1000Mbps, 10Gbps for services >1000Mbps
Mode	Full Duplex	Full Duplex
MAC Layer	IEEE 802.3-2002	IEEE 802.3-2002
Service Multiplexing	No	Yes, Supported
Bundling	No	Yes, Supported
All to One Bundling	Yes	No
CE-VLAN ID / EVC Map	All Service Frames at the UNI map to a single E-Line Service type EVC	Must specify CE-VLAN ID for untagged and priority Service Frames
Maximum number of EVCs	One	> 1
Bandwidth Profile Per Ingress UNI		
Committed Information Rate (CIR)	[SPEED IN Mbps PURCHASED] (MUST be ≤ UNI Speed)	[SPEED IN Mbps PURCHASED] (MUST be ≤ UNI Speed)
Committed Burst Size (CBS)	CIR/32	CIR/32
Excess Information Rate (EIR)	0	0
Excess Burst Size (EBS)	0	0
Layer 2 Control Processing	Action	Action
STP, RSTP, MSTP	Tunnel	Discard
Pause (802.3x)	Discard	Discard
LACP	Tunnel	Discard
Marker Protocol	Tunnel	Discard
Authentication (802.1x)	Tunnel	Discard
All LANs Bridge Management Group Block of Protocols	Tunnel	Discard
GARP Block of Protocols Tunnel	Tunnel	Pass to EVC
EVC Service Attribute		
EVC Type	Point-to-Point	Point to Multi-Point
Maximum MTU	9000	9000
CE-VLAN ID Preservation	Yes	Yes
CE-VLAN CoS Preservation	Yes	Yes
Number of CE-VLAN IDs accepted by EVC	No limit enforced by service	No limit enforced by service
Unicast Service Frame Delivery	Deliver Unconditionally	Deliver Unconditionally
Multicast Service Frame Delivery	Deliver Unconditionally	Deliver Unconditionally
Broadcast Service Frame Delivery	Deliver Unconditionally	Deliver Unconditionally