



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.

OUR SOLUTION FOR YOU

Our Ethernet services, point-to-point (E-Line EPL) and point-to-multipoint (E-Line EVPL), are the best in class carrier grade services. These are delivered over our very own high-performance, carrier-grade network to give you reliable, end-to-end connectivity between office locations—in 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.



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

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

WHO IS IT FOR?

Vocus Ethernet suits medium to enterprise-sized business needing a reliable, guaranteed connection to link up multiple locations such as offices and data centres.



Medium Business

100 - 500 Staff



Large Business

500+ Staff

FEATURES AND BENEFITS

SCALABLE BANDWIDTH

- Scale your bandwidth depending on your business needs from 10 Mbps to 10 Gbps, 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

24 HOUR SUPPORT DESK

- The Vocus Service Centre provides ongoing end-to-end monitoring around the clock for our national network, ensuring optimal service availability. 24x7 onshore technical support provides you the assistance you need, if you ever need it

SERVICE LEVEL AGREEMENT

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

** 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>

ETHERNET 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 |

ETHERNET NETWORK OVERVIEW

POINT-TO-POINT - MEF TYPE: ETHERNET PRIVATE LINE (EPL)

- Point-to-Point only
- All to one bundling (Q in Q equivalent)
- Transparent to Subscriber CoS IDs
- High performance LAN extension or network backhaul
- Bandwidth purchased is applied to the EVC



POINT-TO-MULTIPOINT - MEF TYPE: ETHERNET VIRTUAL PRIVATE LINE (EVPL)

- Used to create Point-to-Multipoint networks
- Supports Service Multiplexing
- Multiple Subscriber VLAN's can be mapped to single Provider EVC
- Transparent to Subscriber CoS IDs
- Bandwidth purchased is applied to the EVC

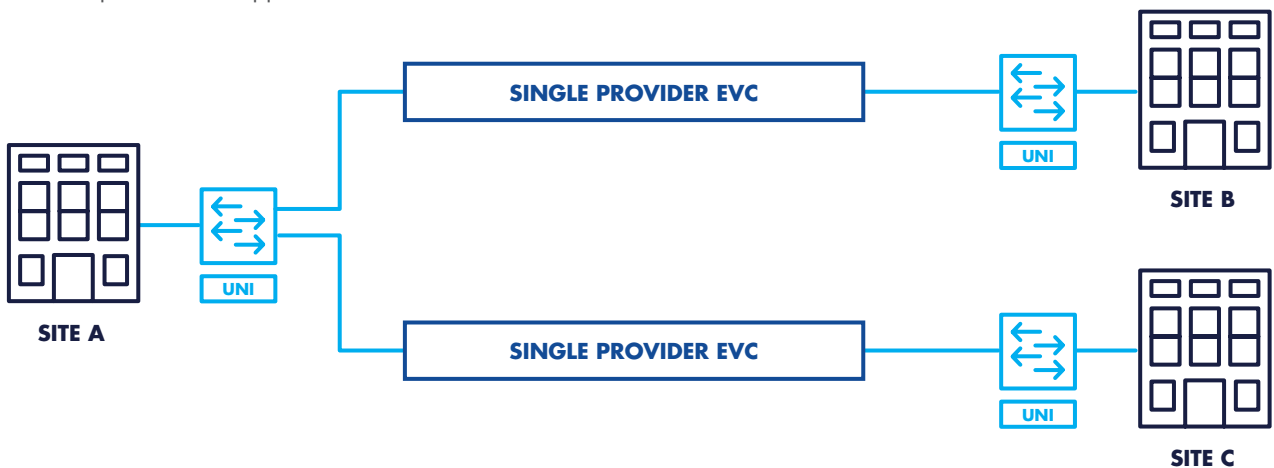


DIAGRAM KEY

 Network Termination Unit (NTU)

GLOSSARY

CoS - Class of Service
EVC - Ethernet Virtual Circuit

MEF - Metro Ethernet Forum
UNI - User Network Interface

Want to learn more about how we can help you? Contact your Vocus Account Manager or call us on 1300 88 99 88 or visit vocus.com.au