# Ethernet

VicTrack provides reliable, secure, and high-speed ethernet. Our services are configured to fit your needs, so you can enjoy a hassle-free connection.

VicTrack provides an extensive ethernet service that spans the rail corridors and key locations in Melbourne and Geelong, as well as in regional areas across the state.



#### Scalable and modular

Ethernet services provide modular bandwidths to support the needs of any organisation. VicTrack's solution is easily scalable to accommodate a large number of sites, bandwidths, and application requirements. With ethernet mesh services, new customer sites can be added without disruption.



#### Reliability

What sets VicTrack's ethernet apart is its exceptional reliability. VicTrack provides ethernet services using our own secure and dependable infrastructure. These services offer reliable and protected connections through the MPLS platform. Our network is highly reliable and we offer different options to help customers manage their important data.



#### **High performance**

Our ethernet offers high speed connectivity with options to meet your business needs. One of the standout features is its ability to quickly adapt to unexpected situations. It has builtin safeguards like fast reroute and link diversity to keep your network up and running when you need it most.



### Telecommunications

#### Product overview - Ethernet

VicTrack

Protect your mission-critical data and applications, and save on upfront costs, using our network infrastructure and experienced team of technical experts.

Not only do we offer ethernet services using VicTrack's own fibre access, we can also provide services to customers who have access through other third-party providers. Our solution gives customers the ability to adapt their network according to their needs. You can choose the bandwidth that suits your requirements and even add protection options whenever possible. As a VicTrack customer, you have the flexibility to build the network that works best for you. With VicTrack ethernet services, you get the support of a skilled team of experts available 24/7. They work from our Melbourne-based Network Management Centre (NMC) to ensure your network runs smoothly. We also provide industry leading service levels guaranteed by our service level agreements.

With VicTrack ethernet services you can also unlock peak performance with CoS (Class of Service): Empower your network for optimal efficiency and prioritised traffic!

Key features	Description	
Multi-purpose network with simple setup	Ethernet is a universal technology with a familiar look and feel making it easy to deploy and operate.	
	Supports today's demanding applications like VoIP multimedia, video, storage, cloud and similar applications with CoS.	
Scalable and modular	Ethernet services provide modular bandwidths to support the needs of the business. VicTrack's solution is easily scalable to accommodate a large number of sites, bandwidth increments and application requirements. Network changes, like adding new sites can be done without disrupting the overall network.	
Coverage	VicTrack's Victorian network coverage is among the largest and spans most of the rail corridors and key locations in Melbourne and Geelong as well as in regional areas such as Ballarat, Bendigo, Traralgon and others. Further state wide access (with last mile as required) is available via partners and VicTrack's own fibre network.	
Reliability	VicTrack ethernet services are delivered over our own secure and reliable infrastructure. They offer carrier grade reliability and service protection across the MPLS platform. The inherent reliability in our network, combined with a range of service level options, enables customers to manage and protect their mission- critical data/applications.	
High performance	VicTrack's ethernet supports high availability, meeting the demanding requirements of today's enterprise applications. The product is highly reliable with features such as fast reroute, link diversity and a range of CoS options.	

## For more information

<u>telcosales@victrack.com.au</u> 03 9619 8888 victrack.com.au/telco

## Technical specifications

## Product overview - Ethernet

Service attribute	Point-to-point Service - PORT	Point-to-point Service - VLAN	Mesh service - PORT	Mesh sevice - VLAN
General service attribute				
Туре	Point-to-point	Point-to-point	Mesh	Mesh
Maximum MTU	9100	9100	9100	9100
CE-VLan ID & CoS Preservation	Yes	Yes	Yes	Yes
Frame delivery of Unicast, Broadcast and Multicast Ethernet	Yes	Yes	Yes	Yes
Note: Multicast frame type only, this is not a Multicast VPN				
Service standards				
Ethernet standards	IEEE 802.3, 802.1q, 802.1AD	IEEE 802.3, 802.1q, 802.1AD	IEEE 802.3, 802.1q, 802.1AD	IEEE 802.3, 802.1q, 802.1AD
Service rates				
Supported speeds*	Mbps: 20, 50,100, 200, 500	Mbps: 20, 50,100, 200, 500	Mbps: 20, 50,100, 200, 500	Mbps: 20, 50,100, 200, 500
	Gbps: 1, 2, 5, 10	Gbps: 1, 2, 5, 10	Gbps: 1, 2, 5, 10	Gbps: 1, 2, 5, 10
UNI service attribute				
Physical medium	IEEE 802.3 2002 Physical Interface	IEEE 802.3 2002 Physical Interface	IEEE 802.3 2002 Physical Interface	IEEE 802.3 2002 Physical Interface
Interface speed	1Gbps if rate < 1Gps; or	1Gbps if rate < 1Gps; or	1Gbps if rate < 1Gps; or	1Gbps if rate < 1Gps; or
	10Gbps if >1Gbps	10Gbps if >1Gbps	10Gbps if >1Gbps	10Gbps if >1Gbps
	10/100Mbps (Transport Only)	10/100Mbps (Transport Only)	10/100Mbps (Transport Only)	10/100Mbps (Transport Only)
Mode	Full Duplex	Full Duplex	Full Duplex	Full Duplex
MAC layer	IEEE 802.3 2002	IEEE 802.3 2002	IEEE 802.3 2002	IEEE 802.3 2002
Service multiplexing	No	Yes	No	Yes
Bundling of traffic	No	No	Yes	Yes
Bundling means that all physical interfaces are included in the LAN topology i.e. any one interface can see all other interfaces.				
CE VIAN ID to service map	Service frames at the UNI map to the service	Untagged and priority service frames will be mapped to the CE VLAN ID	Service frames at the UNI map to the service	Untagged and priority service frames will be mapped to the CE VLAN ID
Maximum number of services per interface	1	4095	1	4095
Q-in-Q option	No	Yes	No	Yes
COS				
COS options	a) Dynamic and b) Static – 5 options available	a) Dynamic and b) Static – 5 options available	a) Dynamic and b) Static – 5 options available	a) Dynamic and b) Static – 5 options available

## Interface options

Interface speed	Supported Interfaces	Range/distance (maximum)
10/100/1000 Mbit/s	10/100/1000BaseT (100m)	100 m
1 Gbit/s	1000BASE-LX	10 km
	1000BASE-T	100 m
	1000BASE-T PoE+	100 m
10 Gbit/s	10GE-LR (10km)	10 km
	10GE-SR (70m)	70 m*
1 Gbit/s	Bbit/s 1000Base-EX	
10 Gbit/s	bit/s 10G-ER 40 km	

\*Option available for DC only

# CoS options

CoS Type	Option	Typical Applications / Details	Additional Information	
Static	Best Effort (default offering)	Non-critical applications with tolerance to latency, jitter and packet loss (e.g., internet services, mail, ftp data etc)	Default offering	
	Critical	Loss tolerance services using L2VPNs	Upgrade options available at additional price per	
	Streaming	Video broadcasting, steaming, multimedia (audio/video) and CCTV applications.	month	
	Premium	Low latency traffic types including signalling and circuit emulation traffic		
	Real time	Low latency traffic, jitter and loss tolerance such as voice and signalling services		
Dynamic	N/A	This option will dynamically allocate customer data into pre- defined CoS categories	Upgrade option available at additional price per month	

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