








PipeEthernet™

the evolution of ethernet

PipeEthernet™ is our brand new Metro Ethernet Forum (MEF) certified ethernet product. PIPE Networks is Australia's first telecommunications carrier to be awarded MEF certification. With MEF certification, our customers can be assured PipeEthernet™ adheres to the highest industry standard as set by the leading world body for Carrier Ethernet.

Top Five Features

	MEF Certified	PipeEthernet™ services are certified to the MEF Carrier Ethernet standard, assuring service quality, reliability and interoperability.
	PipeEthernet™ Coverage Areas	As opposed to traditional building-based pricing, PIPE Networks offers flat rate pricing within our continuously expanding ethernet coverage areas.
	Customer Portal	The PipeEthernet™ portal provides access to coverage maps, pre-qualification tools, quoting, ordering, provisioning and upgrading.
	10Gbps Aggregation Ports	PipeEthernet™ is the first in Australia to offer MEF certified 10Gbps Aggregation Ports, giving businesses more bandwidth for solutions like Disaster Recovery, Software as a Service (SaaS) and convergence.
	Committed Bandwidth	PipeEthernet™ gives you full speed on all circuits, all the time to ensure your applications deliver on your end users' expectations. The bandwidth ordered is set as the Committed Information Rate (CIR).

Service Overview

PipeEthernet™ services connect end users to their service provider in a point-to-multipoint architecture that facilitates aggregation at the service provider's end.

The service is an Ethernet Virtual Private Line (EVPL) which consists of a single Provider Ethernet Virtual Circuit (EVC), traditionally referred to as a VLAN, between the service provider's aggregation port and the end user port at the customer premises (known in MEF terms as User Network Interfaces or UNI).

The bandwidth ordered is set as the Committed Information Rate (CIR) which provides your business with the ability to deliver Quality of Service (QoS) dependent applications like voice and video to your end users.

PipeEthernet™ preserves Customer Edge VLAN (CE-VLAN) and Customer Edge Class of Service (CE-VLAN CoS) IDs. This service will not support All to One Bundling but will allow multiplexing at the aggregation end, which is essential to manage multiple customers per port.

Services are available in a range of speeds from 10 Mbps up to 1 Gbps, to meet the ever-growing demand for bandwidth, supported by aggregation ports up to 10 Gbps.



Metro Ethernet Forum (MEF)

The MEF is a global industry alliance comprising more than 150 organisations committed to accelerating the worldwide adoption of carrier class ethernet networks and services.

The MEF develops technical specifications and implementation agreements to promote interoperability and deployment of Carrier Ethernet worldwide. This is a ubiquitous, standardised, carrier class service that distinguishes it from familiar LAN based ethernet.

PIPE Networks chose to seek certification for its ethernet services to provide a 'guarantee of quality' to our customers.

PipeEthernet™ services are certified to the MEF Carrier Ethernet standard. This standard provides the framework to deliver metro ethernet services that have been designed by the world's peak ethernet body.



PipeEthernet™ Coverage Areas

For simplicity of pricing, PipeEthernet™ is available in buildings within our well-defined coverage areas for a simple, flat rate price. PipeEthernet™ coverage includes the Brisbane, Sydney and Melbourne metropolitan areas and is actively expanding both locally and nationally.



Online Customer Portal

The PipeEthernet™ portal provides our customers with convenient online access to all the tools needed to manage their end user circuits from pre-qualification (including coverage maps), quoting, ordering, provisioning and upgrading.

More Information

PIPE Networks has a range of communications solutions. For further information on PipeEthernet™ or solutions that may suit your other communication needs, contact one of our Account Managers on **1800 GO PIPE** or sales@pipenetworks.com.

Technical Specifications

UNI Service Attribute	Service Attribute Parameters and Values	
Physical medium	IEEE 802.3-2002 physical interface	
Interface speed	10 Mbps, 100 Mbps, 1 Gbps	
Mode	Full duplex	
MAC layer	IEEE 802.3-2002	
UNI MTU size	2000	
Service multiplexing	Yes, supported at the aggregation port	
Bundling	No	
All to one bundling	No	
CE-VLAN ID for untagged and priority frames	MUST specify CE-VLAN ID for untagged and priority tagged service frames	
Maximum number of EVCs	1	
Layer 2 control protocol processing	Protocol	Action
	STP, RSTP, MSTP	Discard
	PAUSE (802.3x)	Discard
	LACP, LAMP	Discard
	Link OAM	Discard
	Port Authentication (802.1x)	Discard
	E-LMI	Discard
	LLDP	Discard
	GARP, MRP Block	Discard
EVC per UNI Service Attribute	Service Attribute Parameters and Values	
Ingress bandwidth profile per EVC	CIR: SPEED in Mbps PURCHASED CBS: 2001 bytes EIR: 0 EBS: 0 CM: 'False' (colour blind) CF: Not specified (colour mode is colour blind)	
EVC Service Attribute	Service Attribute Parameters and Values	
EVC type	Point-to-Point	
MAC address limit	None	
Maximum number of UNIs	2	
EVC MTU size	2000	
CoS Level	Standard	
CE-VLAN ID preservation	Yes	
CE-VLAN CoS preservation	Yes	
Unicast service frame delivery	Deliver unconditionally	
Multicast service frame delivery	Deliver unconditionally	
Broadcast service frame delivery	Deliver unconditionally	
Service Performance Parameter	Service Attribute Parameters and Values	
Target availability	99.95%	

This document contains general information on PipeEthernet™ and is current as at November 2008. This information has been prepared without taking into account your objectives, situation or needs. You should consider the terms and conditions which apply to PipeEthernet™ before making any decision about whether to acquire it. For further information please contact PIPE Networks.