

Ethernet Private Line (EPL)

“Seamless end to end connectivity with scalable options”

AJC Ethernet Private Line (EPL) is a point to point Ethernet service for a single user without bandwidth sharing. The EPL solution provided by AJC supports GigE (1000M) and 10GigE (10000M) interfaces.

Gigabit Ethernet, is a transmission technology based on the Ethernet frame format and protocol used in local area networks (LANs) providing a transmission rate of one Gbit/sec. Gigabit Ethernet is defined in the **IEEE 802.3** standard and is currently being used as the backbone in many enterprise networks.

AJC has implemented Ethernet over SDH with two key elements which customers expect to see in the AJC Ethernet product: Granularity of capacity, in units of VC-4's (150Mbit/s), and support for Ethernet frames up to 9,224 bytes (jumbo frames).

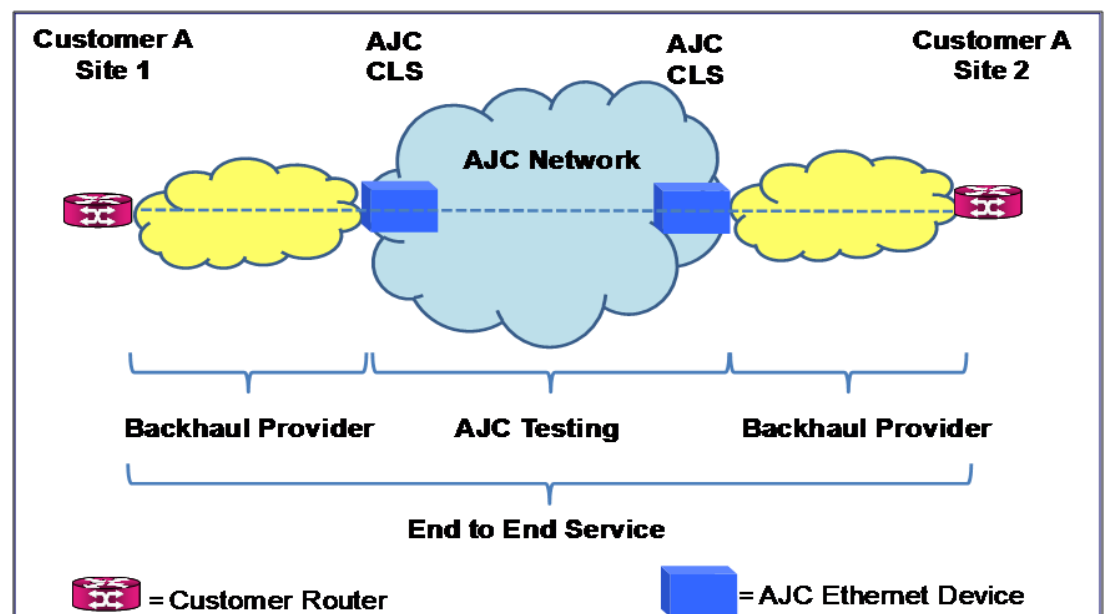
The Gigabit Ethernet unit supports the Link Pass Through mode in accordance with the ITU-T Rec. G.7041/Y.1303 (08/2005) and supports forwarding, encapsulation and mapping of Ethernet frames with lengths up to 9224 bytes (“jumbo frames”).

The AJC EPL provides unprotected, switchless, point-to-point, Ethernet over SDH transmission services. The Ethernet services are not protected but the wavelengths are protected on a 1:n basis..

The service is best described as a layer-1 transmission service with a Gigabit or 10 Gigabit per/sec Ethernet customer interface. The AJC EPL is offered on Gigabit and 10 Gigabit Ethernet interfaces in bandwidth granularity of VC-4 (STM-1 equivalent) increments, subject to commercial terms.

The following diagram illustrates the AJC EPL configuration:

Unprotected EPL on a Single Path





Key Parameters	ITU-T & IEEE	Performance Monitoring
TX Level = -3dbm	IEEE 802.3	Supports - CBR,CBS & PDE
Wavelength = 1300nm	ITU-T G707 VCAT	Doesn't provide - CIR or PIR
Interface Reach = 5km	ITU-T G7041 LCAS	

Benefits include:

- ▶ Ethernet is transparently passed to the AJC network
- ▶ 1000 Mbps economically more suitable than STM-1's for customers using Ethernet networks
- ▶ Easily scalable VC-4 increments within a 1GbE service or 10GbE service interface
- ▶ Easy to configure and scale up or down
- ▶ Layer 2 switching remains in the customer control
- ▶ Jumbo frames and LPT inherent to the AJC Ethernet services
- ▶ Ethernet onward backhaul connectivity options
- ▶ End to end capability to the USA utilising PC1
- ▶ End to end connectivity to HK, Singapore and other AAG landing points
- ▶ Short activation process - lead times within 10 days

Availability

The EPL is implemented using SDH VCAT of 7xVC-4 (1GbE) or 64xVC-4 (10GbE) and is placed on one of the Unprotected SDH rings of the AJC Upgrade. The long term availability is 99.993%. This excludes wet segment outages.

Contacts

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