



Ethernet Service

Intelligent Ethernet
Connectivity to
Enterprise Markets

Ethernet over MPLS network
Ethernet over SDH network



CTA provides quality and effective global networking solutions through Ethernet Service to ensure a wide range of networking options for customers and to meet global communication needs of enterprises.

Relying on terrestrial cable systems connecting neighbouring countries and a variety of submarine cables, CTA ensures network accessibility by offering high quality, highly redundant and diversified networking solutions.

Ethernet over MPLS network EoMPLS (EVPL/EVPLAN/EVPTREE)



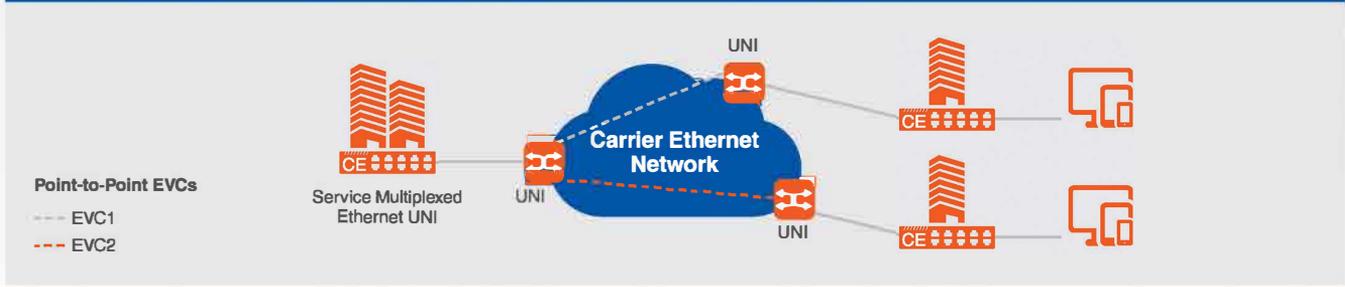
CTA's EoMPLS Service is engineered to provide private communication over public MPLS networks for enterprise customers. It allows geographically dispersed sites to share an Ethernet broadcast domain by connecting sites through MPLS tunnels and virtual circuits.



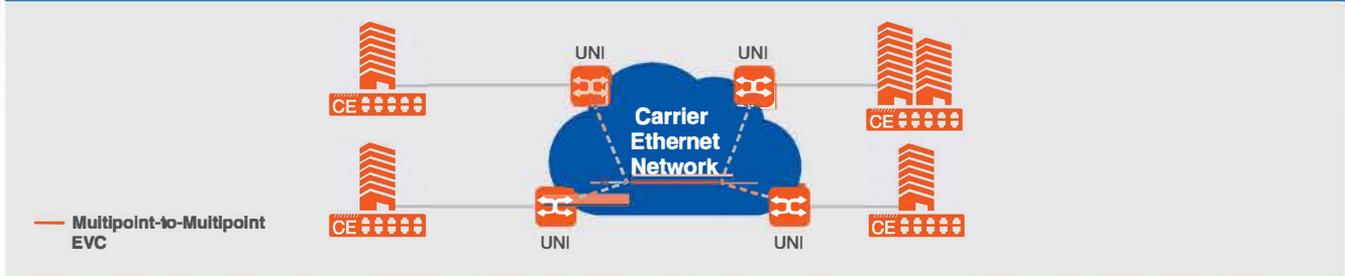
Services

With MEF standard 2.0 certification

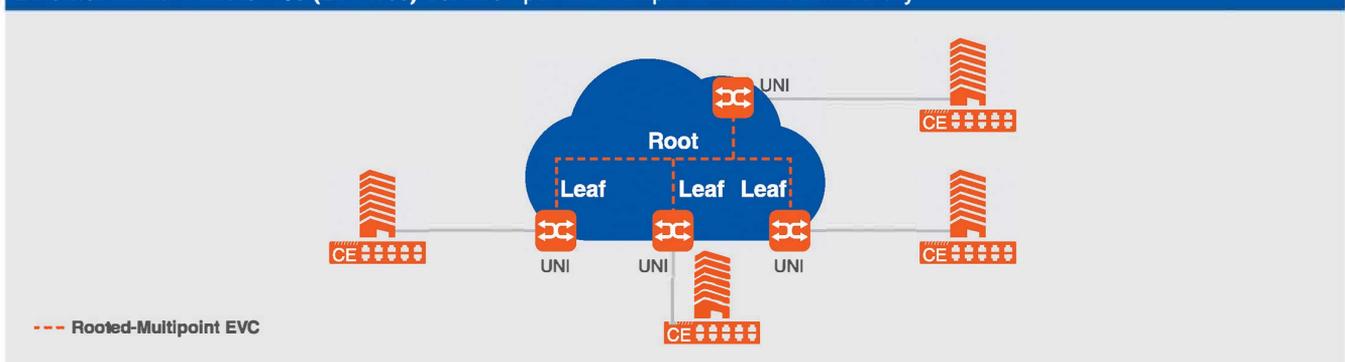
Ethernet Virtual Private Line (EVPL) Service - point-to-point Ethernet connectivity



Ethernet Virtual Private Lan (EVPLAN) Service - multipoint-to-multipoint Ethernet connectivity



Ethernet Virtual Private Tree (EVPTree) Service - point-to-multipoint Ethernet connectivity



Features



Simplified network architecture

transparent for upper layer protocol, such as IPv4, IPv6, etc. and self-managed IP environment and privacy WAN networks



Multiple QoS for various applications

up to five classes of service to prioritize traffic to strengthen efficiency and utilization



Flexible bandwidth from 1Mbps to 1Gbps



End-to-end service management from web portal

Service Level	Typical Applications
Diamond	Applications which are very sensitive to delay & jitter, such as high quality real time voice.
Platinum	Applications which are sensitive to delay & jitter, such as video conferencing, video streaming, etc.
Gold	Enterprise data applications which require low latency and low packet loss ratio, such as SAP, interactive messaging, data backup, archiving, etc.
Silver	Service applications, such as internal website access, file services, etc.
Bronze	Web/Internet browsing, Email, etc.

Technical Specification

Attribute	EVPL	EVPLAN	EVPTree
Class of Service (CoS)	√	√	√
CE VLAN Tag mode	Untagged, tagged, any tagged	Untagged, tagged, any tagged	Untagged, tagged, any tagged
VLAN Transparency	√	√	√
Topology	Point-to-point	Any-to-Any	Hub-spoke
MEF 2.0 Certified	√	√	√
Jumbo Frame Support	YES (Maximum 9000 Bytes)	YES (Maximum 9000 Bytes)	YES (Maximum 9000 Bytes)
SLA	Yes (POP-to-POP)	Yes (POP-to-POP)	Yes (POP-to-POP)
Mac address limitation	x	YES (1 Mac address for site)	YES (1 Mac address for site)
Install NID	x	√	√
Bandwidth	1 Mbps to 1 Gbps	1 Mbps to 1 Gbps	1 Mbps to 1 Gbps
END-to-END performance monitoring	x	√	√



Coverage



- 40+ nodes in major overseas cities
- Over 1000 service points globally
- Full coverage in Mainland China dual PoP/dual PE
- Full range of Managed Services
- Proactive Network Management

Real-time SLA Visualization

- Latency(FD)
- Jitter(FDV)
- Packet Loss Rate (FLR)
- Bandwidth utilization



Historical SLA Record

- PDF/Excel format
- Retrievable historical monthly reports



Customer-related Service Info

- Interactive Map
- NID info (Location, Circuit ID, MAC, IP,...)
- Service status overview



Network and Service Security

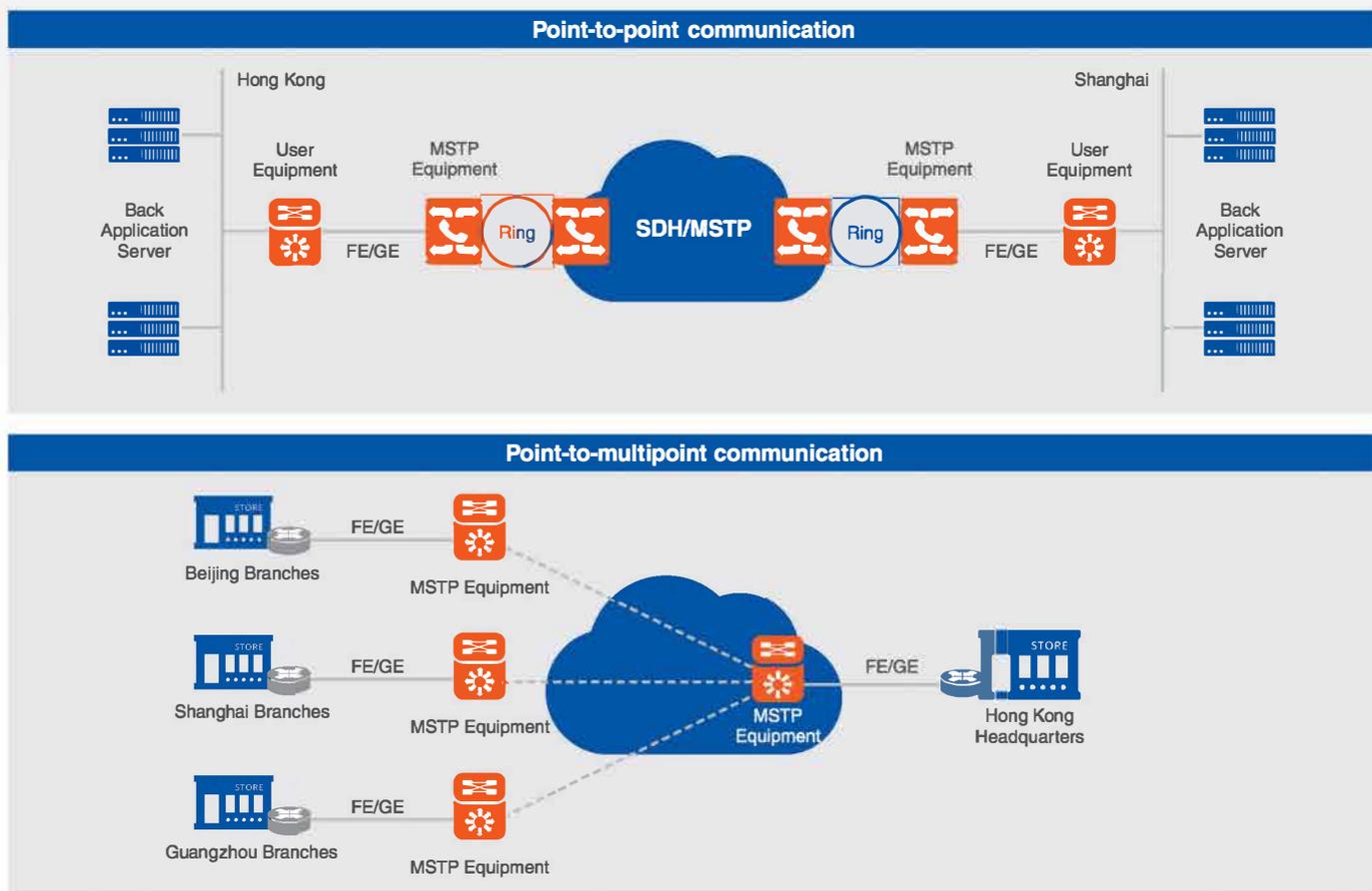
- HTTPS access
- Account & Password management
- Alarms (link or SLA threshold)





CTA IEPL adopts Ethernet over SDH technology to provide customers with long distance/ transnational Ethernet Private Line service with access rates between 2M and 10G and achieves point-to-point or point-to-multipoint communication. It also supports VLAN transparency, QinQ and Jumbo Frame (up to 9100 bytes).

System diagram illustration



Benefits



Dedicated bandwidth and high level of security

CTA's service is a perfect solution for companies that require dedicated bandwidth and data privacy. CTA provides physical isolation between customers, exclusive bandwidth of high security and superior network performance.



Flexibility in bandwidth choices, access options and optional service

You can choose from a wide range of bandwidth options ranging from 2M to 10G and a variety of access options including Fast-E, Gig-E and 10GE LAN interfaces. You may also choose to add multi-path routing with protection service for higher reliability.



Service changes with no downtime

As your business evolves, you may have new business needs. CTA is ready to help you scale your network without service interruption.



Easy deployment with cost benefits

CTA adopts standard and widely applicable Ethernet interface and does not require new equipment investment for simple network upgrading and short delivery time.



Global network

- Rich terrestrial and submarine cable transmission resources across the globe
- Global service stations connecting customers to any designated location
- Ongoing PoP expansion plan for convenient network access and network monitoring
- Global network disaster recovery services to guarantee uninterrupted network



Competitive Service Level Agreements (SLA)

CTA's SLA provides you with service levels for network availability of 99.9% or above in key customer demand areas, Mean Time To Repair (MTTR) within 4 hours, PoP to PoP latency guarantee and a packet loss ratio being less than 1×10^{-7}



MEF-certified Services

CTA's Ethernet service is with MEF9, MEF14 and MEF 2.0 certifications which recognize high performance and compatibility with MEF standards.

About China Telecom Americas

China Telecom Americas, a wholly-owned US-based subsidiary of China Telecom Corp. Ltd. (NYSE: CHA), is an international telecom provider for data, IP and voice wholesale services to multinational companies, organizations and international carriers requiring China domestic services and international access to China & throughout Asia-Pacific. Headquartered in Herndon, Virginia, China Telecom Americas is the largest international subsidiary of China Telecom Corporation Limited, as well as the only authorized re-seller of domestic Chinese telecom products to North American companies. China Telecom Americas has offices in 31 countries, providing access to Chinese telecom network assets for customers in the United States, Canada and Latin America. As the largest operating broadband operator in the world (127 million subscribers), as well as the world's largest CDMA mobile operator (227 million subscribers), China Telecom delivers a comprehensive global telecom service scope based on cutting edge technology, exceptional customer service, and a visionary approach to international telecommunications.

Awards

- **Best Telecommunications Company in Asia**
(2016) FinanceAsia
- **Best Managed Company in Asia Telecom Sector**
(2010-2016) FinanceAsia
- **Customer Relationship Excellence Award**
(2012-2016) Asia Pacific Customer Service Consortium
- **Best Managed Company in Asia**
(2010-2016) Euromoney
- **Most Honored Company**
(2011-2016) Institutional Investor
- **The Best of Asia**
(2010-2016) Corporate Governance

FinanceAsia

