

## CME Globex Production Connectivity Options

	CME DIRECTLink		LNet	Jackson Direct	CME Globex Hub	Client INTERNETLink
	T1 access	Ethernet access				
<b>Definitions</b>	CME Group-managed option with high capacity access up to 100Mbps.		Client-managed solution via an approved 3rd Party vendor and CME Group-specified hosting facility. Customers are required to house the CME Group-certified trading applications at the vendor hosting facility.	Client-managed solution via CME Group-approved fiber provider(s) at the 141 W. Jackson facility. Customer works with fiber provider to extend service to fiber Meet Me Room. Customer owns the installation and on-going relationship with the fiber provider, and must have an established presence at the 141 W. Jackson facility.	Client-managed physical connection to the CME Group data centers in Europe and Asia: (Amsterdam, Dublin, London, Milan, Paris, Sao Paulo, Seoul and Singapore)	A secure, encrypted VPN tunnel through the Internet.
<b>Supported Interfaces</b>	All client interfaces: iLink, Market Data Platform and CME Clearing systems					
<b>Capacity &amp; Bandwidth</b>	T1 bandwidth	20, 40 & 100Mbps‡	40 & 100Mbps		Ethernet	Increments of 0.5Mbps up to 20Mbps
<b>Redundancy</b>	<b>T1</b> 2 T1 frame circuits and routers with carrier diversity	Carrier diversity with 2 circuits and 2 routers	CME Group recommends customers maintain a redundant site		Access from 2 different CME Group-authorized carriers to each data center	Dependent on client Internet connection
<b>CME Group- or Client-managed</b>	CME Group-managed		Client-managed		Client manages connection(s) to data center. CME Group manages the equipment on-site at the data center and connections back to Chicago.	Client and CME Group manage their respective connections to the Internet
<b>Cost</b>	Monthly charge based on bandwidth subscription	Monthly charge based on bandwidth subscription and Ethernet availability	40Mbps - \$6,000 monthly 100Mbps - \$8,000 monthly		\$6,000 annually for leased access to CME Group data center	\$500 monthly for 0.5Mbps, based on bandwidth subscription to CME Group
<b>Minimum Commitment Period</b>	12 months†		12 months		12 months	6 months
<b>Availability</b>			U.S. only		International only	U.S. & International
<b>Set-up</b>	Contact CME Group with request Complete paperwork Work with CME Group to coordinate circuit installation		Lease access from a CME-approved 3rd Party vendor's hosting facility. Manage implementation of circuits and equipment Contact CME Group with request and specific process requirements	Must be a tenant of record at the 141 W. Jackson facility Manage implementation of circuits and equipment to the fiber Meet Me Room Contact CME Group with request and specific process requirements	Lease access to both data centers in the respective city Manage implementation of connections from a CME Group-authorized carrier.	Have a secure Internet connection and Cisco router
<b>Best Suited for Clients Who:</b>	Customers who prefer CME to manage connectivity		Prefer to manage their own CME Globex connection Have in-house network expertise Have a relationship with a CME Group-authorized vendor		Prefer to manage their own CME Globex connection Have in-house network expertise Have a relationship with a CME Group-authorized vendor	Prefer to manage their own CME Globex connection Have in-house network expertise Use Cisco routers Feel comfortable using internet connectivity for production activity Need back-up production access
<b>CME Group-Authorized Carriers/Vendors</b>	AT&T & VZB	VZB, AT&T, & Reliance	Equinix, Telx, Savvis & DRT/Open	Cogent, FiberNet	Contact CME Globex Services for authorized carrier	Tier 1 Internet provider

† Upgrades from Frame to Ethernet are subject to a new 12-month commitment.

‡ As long as the client's facilities allow for Ethernet access it will be provided.