



# CME Globex<sup>®</sup> Platform

## Local Network (LNet) Connectivity Functionality

Version: 1.6  
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# Local Network (LNet) Connectivity

## 1.0 Technical Overview

LNet is a client-managed connectivity solution to the CME Globex platform via CME Group-approved colocation facilities. Customers utilizing LNet are required to house a CME Group-certified trading application at the colocation facility providing the connectivity.

### Circuit Specifications

- 1 Gbps hand-off, 40 Mbps port
- Single-mode fiber
- 1000BASE-LH long-wavelength/long haul; without DOM

The CME Globex production environment supports order entry, market data, and clearing transactions. Please contact [CME Globex Account Management](#) at 312.634.8700, or at + 44 (0) 20 7796 7100 in Europe; or at +852.3101.7696 in Asia.

LNet connectivity provides access to:

- CME Market Data Platform
- CME iLink<sup>®</sup>
- CME Clearing House Systems
- CME EOS Trader<sup>®</sup>

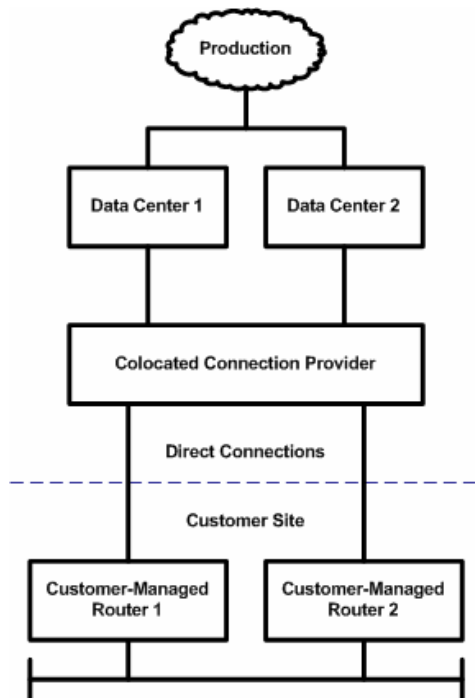


Figure 1. High-Level LNet Connectivity Diagram

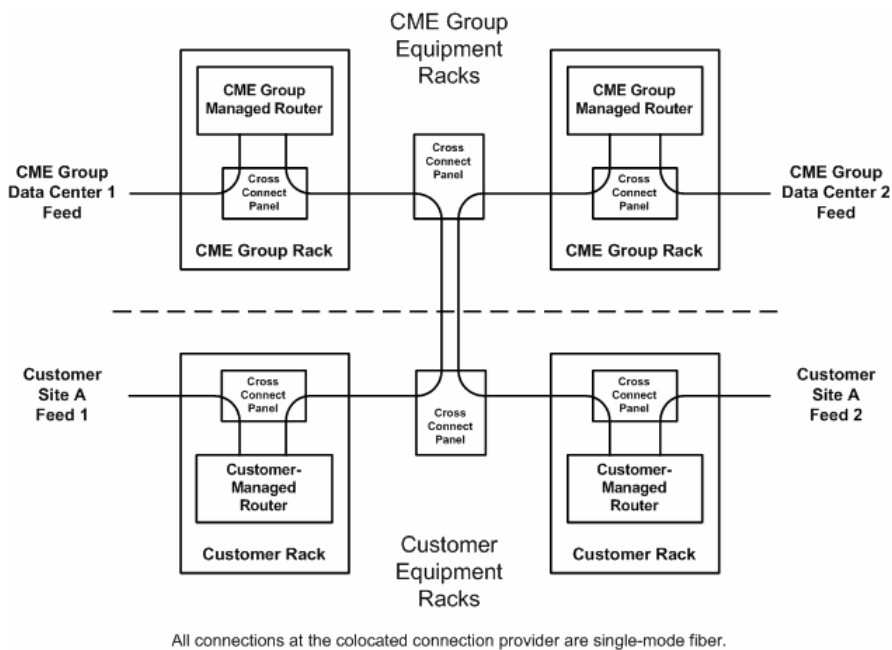


Figure 2. Detailed LNet Connectivity Diagram

## 2.0 Requirements

### 2.1 Customer Requirements

Customers must meet the following requirements:

- Have or establish a presence at a CME Group-approved colocated facility where the connection will be established.
  - Digital Realty Trust [www.digitalrealtytrust.com](http://www.digitalrealtytrust.com)  
John Kay at 312-604-1909  
[jkay@digitalrealtytrust.com](mailto:jkay@digitalrealtytrust.com)
  - Equinix [www.equinix.com](http://www.equinix.com)  
John Churchill, Regional Sales Manager at 312-279-1186 or  
[jchurchill@equinix.com](mailto:jchurchill@equinix.com)
- Customer production system must be located at the colocated facility.
- Although CME Group facilitates the cross connect requests within the colocation facility, it is the customer's responsibility to complete and/or approve any colocation agreements that may be applicable.
- Provide two routers or Layer 3 switches that will terminate each 1 Gbps, single-mode fiber cross-connect.
- The point-to-point IP address must be configured on the interface closest to CME Group device.
- CME Group recommends that the customer checks the Signal/Light levels at the time of turn up in order to attenuate levels to protect equipment.
- Verify connectivity requirements with the colocated facility.
- Avoid using media converters, if possible.
- The customer's SFP or GBIC must be compatible with long wavelength/long haul (1000BASE-LH) SFPs.

## **2.2 Routing Requirements**

Customer routers must be capable of using advanced TCP/IP Protocols including BGP and multicast, specifically PIM Sparse Mode.

- BGP routing must be used on the routers terminating CME Group connections.
- It is recommended that customers use a routing protocol between their routers to provide automatic failover.
- All IP packets destined for CME Group must be sourced from CME Group-assigned private address space.
- Multicast PIM Sparse Mode must be used.

## **2.3 Restrictions**

The following restrictions apply to LNet connectivity:

- No site-to-site connectivity.
- No direct server connectivity into CME Globex.
- Terminating the circuit on a Layer 2 device is not allowed.
- CME Group will not accept traffic sourced from any customer's public IP space.
- Only one Market Data Platform data feed per router is allowed.
- Customer hardware must be capable of supporting quote streams (e.g., PIM sparse mode).
- Customer equipment must be in CME approved space.

### **3.0 Establishing LNet Connectivity**

Use the following procedure to establish connectivity:

1. Customer leases space from one of the CME Group-specified colocation facilities (unless customer already has a presence at one of the colocation facilities).
2. Customer submits all required executed paperwork, including Schedule 2 Access Request Form with colocated cabinet and/or rack information, to their CME Globex Account Manager.
3. CME Group receives and processes the paperwork, then issues a Letter of Authorization (LOA) to the customer. The LOA contains the CME Group demarcation for the primary and secondary cross-connects.
4. Customer informs CME Globex Services when the cross-connects are completed and the 2x Layer 3 routers are installed in the rack.
5. CME Globex Services schedules a physical site survey with the customer.
6. CME Globex Services schedules a network connectivity test. CME Group requires that a knowledgeable contact from the firm on site to attend the site survey as well as the NSA (circuit turn up).

Testing will be scheduled for a weekday after 4:30 pm Central Time.

7. Upon successful test, CME Group notifies customer of completion and billing commences.

Please see [www.cmegroup.com/lnet](http://www.cmegroup.com/lnet) for LNet fee information.

### **Troubleshooting and Support**

If you experience issues with your LNet connection, please call the CME Globex Control Center (GCC) at 312-456-2391.

For general CME LNet questions, please contact [CME Globex Account Management](#) at 312.634.8700, or at + 44 (0) 20 7796 7100 in Europe; or at +852.3101.7696 in Asia.