

Disaster Recovery Scenarios

To optimally service customers and meet regulatory requirements for out-of-region recovery capabilities and timelines, CME Group utilizes a two-data center model comprised of a Production and a Disaster Recovery (DR) data center. DR for all CME Group applications including iLink, Market Data Platform, Clearing, and support applications are hosted at the New York Data Center (NYDC). This approach mitigates multiple [disaster recovery](#) instances.

This topic describes 2 different DR failover scenarios. None of these scenarios require customer configuration changes, as CME Group will re-route the network as required.

Contents

- [CME NYDR VPN Connectivity Option](#)
- [Customer Readiness](#)
- [Disaster Recovery Scenarios](#)
- [Network Description of Production Operations and Outlined Scenarios](#)
 - [Scenario 1 – Regional Chicago Metropolitan Disaster](#)
 - [Scenario 2 – Primary Data Center Production Room Failure, Co-location Services Available](#)
- [CME Group Services in Scope](#)
- [More Information on CME Globex DR](#)

CME NYDR VPN Connectivity Option

Customers who only connect to Chicago metropolitan area data centers from within the region have the option to connect to the DR data center via a secure internet connection called CME NYDR VPN. Completion of CME Group forms is required and a full description of this offering is available in our [Production Connectivity Guide](#).

Customer Readiness

In the event of a DR failover, customers must be aware of the following:

- Customers are not required to activate CME Group recovery IPs for failover.
- Customers who connect via the CME Group Network should continue to connect to the production IP addresses, URLs, and DNS names.
- CME Group recommends customers who are dependent on Chicago metropolitan connectivity consider alternative means of accessing the network.

Disaster Recovery Scenarios

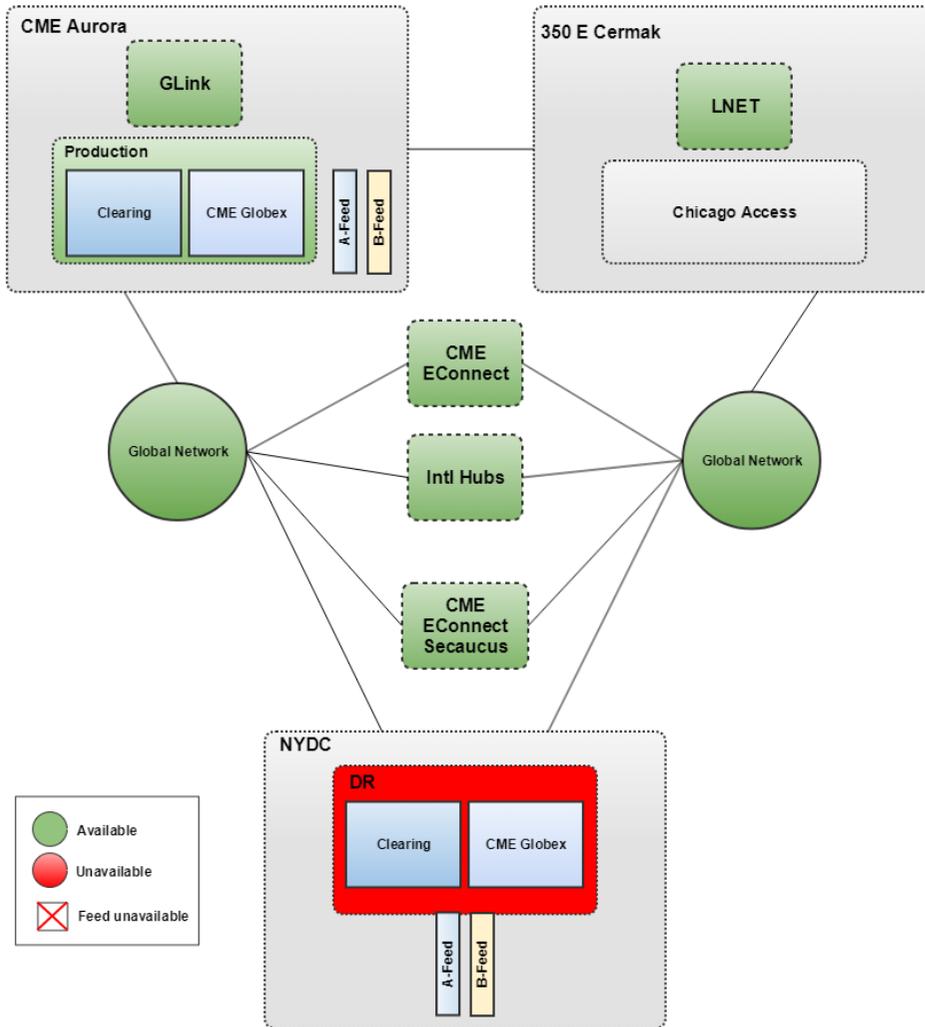
The primary Chicago data center houses all CME Group production applications, CME Globex, and Clearing as well as Co-location services. The out-of-region data center houses Disaster Recovery (DR) services and will be accessible via the network depending on the failure scenarios highlighted in the following 2 scenarios. **Customers connect to both production and DR applications via the same IP addresses, URLs, and DNS names.**

This topic highlights the potential scenarios that could impact customer connectivity during a disaster in Chicago. In these 2 scenarios both Clearing and Globex will be available via the disaster recovery facility.

- Scenario 1: Chicago Metropolitan Disaster: all CME Group Chicago area datacenters are down and customers will be re-directed to the disaster recovery facility.
- Scenario 2: Primary Data Center Production Room Failure: Co-location Services Available - only the applications and production environment are disabled in the CME Group primary data center. Customers are redirected to the disaster recovery facility. All method of customer connectivity will be maintained.

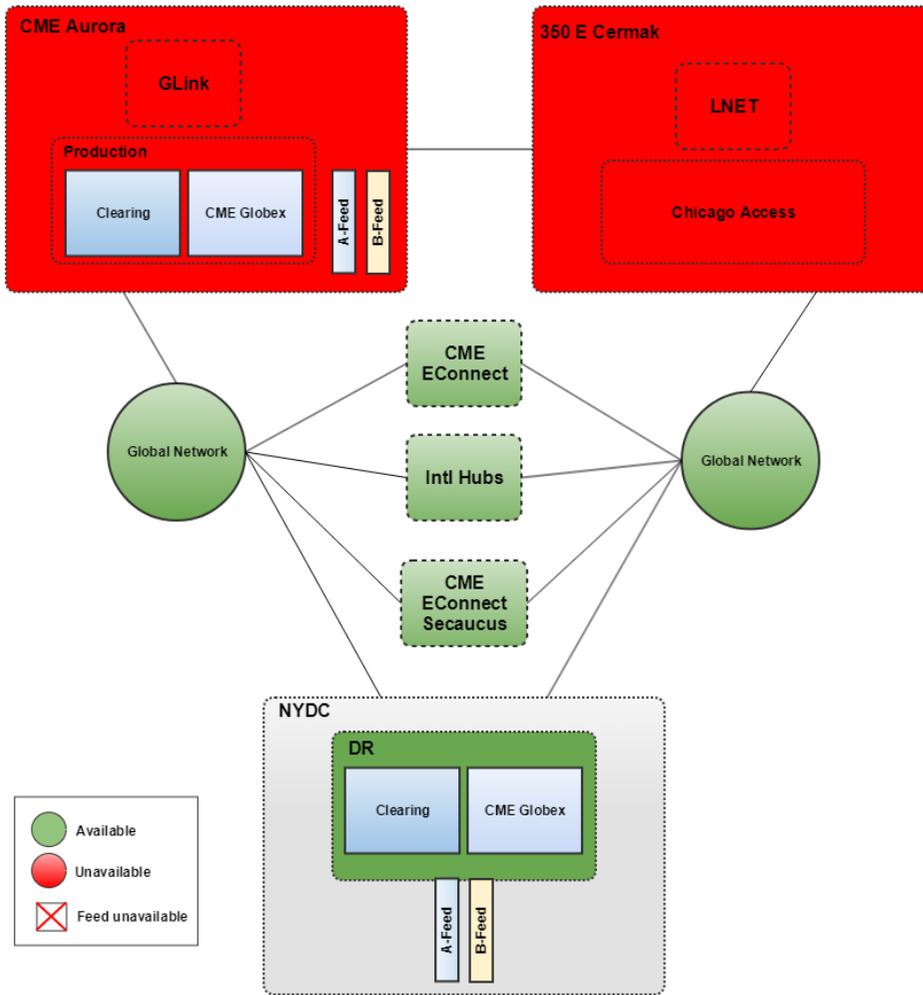
Network Description of Production Operations and Outlined Scenarios

During normal operations, all CME Globex and Clearing applications and environments run out of the primary data center (CME Aurora). This facility also houses CME Group Co-Location. All global customer connectivity is routed back to this facility via the CME Group network. The disaster recovery facility will be unavailable for any CME Group applications.



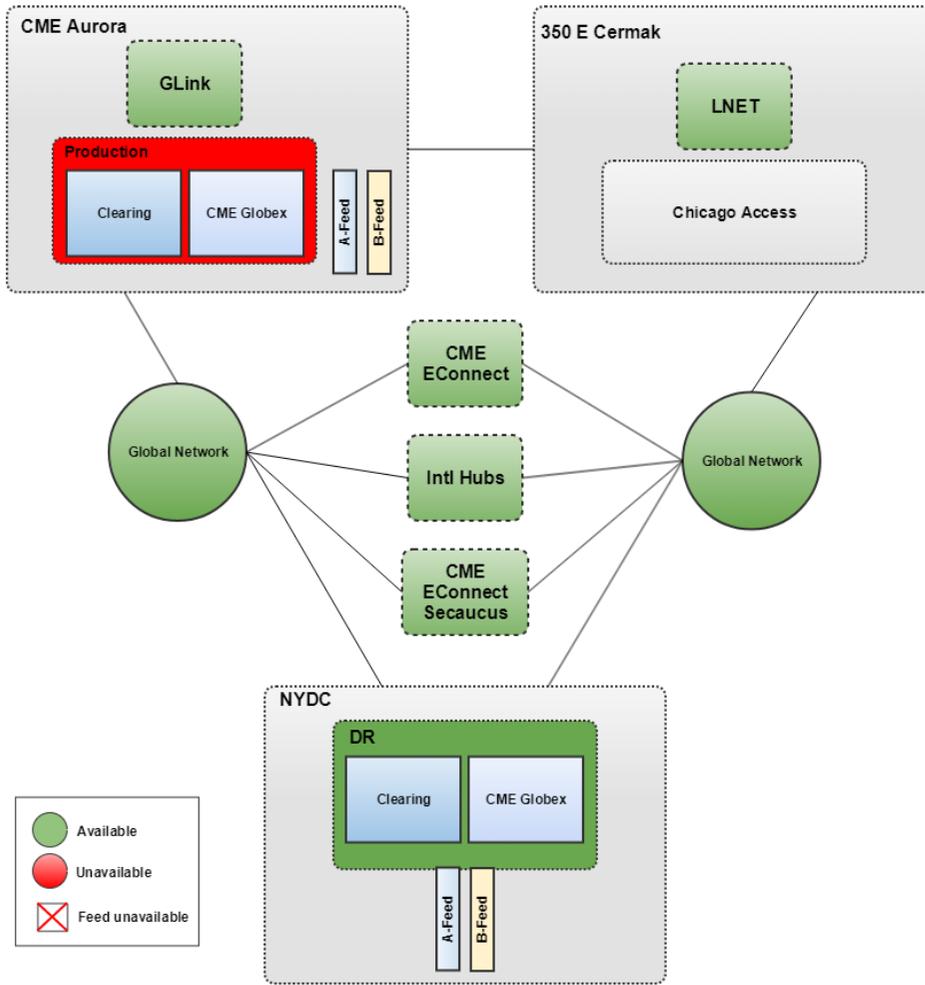
Scenario 1 – Regional Chicago Metropolitan Disaster

In scenario 1, the primary CME Group data center (CME Aurora) and redundant access node (350 E Cermak) have been forced to cease operations. All CME Group Chicago area datacenters are unavailable and customers will be re-directed to the disaster recovery facility. **Note: GLink and LNET are out of scope in this first scenario**, firms submitting test trades during this window would need to utilize their back-up order routing facilities. Customer connectivity that is not dependent on Chicago area data centers will be maintained; there will be no changes required by these customers. Customers will continue to connect to CME Globex and Clearing applications via production IP addresses. Network latency will be affected depending on the location of the customer infrastructure.



Scenario 2 – Primary Data Center Production Room Failure, Co-location Services Available

In scenario 2, only the applications and production environments are disabled in the primary data center (CME Aurora). All applications will be migrated to the CME Group out-of-region data center (NYDC). CME Group Co-Location facilities are not impacted. This scenario assumes that all carrier and network facilities at the CME Group redundant access node (350 E Cermak) are not impacted by the failure. **Note: GLink & LNET connectivity have been restored.** All methods of customer connectivity will be maintained and there will be no changes required by the customer. Customers will continue to connect to CME Globex and Clearing applications via production IP addresses, URL's and DNS names. Network latency will be affected depending on the location of the customer infrastructure.



CME Group Services in Scope

The list below outlines the services in scope during CME Group DR failover.

iLink
Market Data Platform
FirmSoft
Drop Copy
Cancel on Disconnect
CME Direct
Front-End Clearing

More Information on CME Globex DR

Complete information on the CME Group business continuity program is available at: <http://www.cmegroup.com/globexdr>. If you have further questions; please contact your Global Account Manager in the U.S. at 312 634 8700, in Europe at 44 203 379 3754, or in Asia at 65 6593 5505 or via [e mail](mailto:).