Nasdaq Disaster Recovery
CONNECTIVITY GUIDELINES

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1 INTRODUCTION

This document includes the main procedures and information to prepare client infrastructure and connectivity to the Nasdaq Disaster Recovery (DR) facility in Chicago, IL.

If you have additional questions, please contact us via the details on page 7.
2 CONNECTIVITY

This section details the physical connectivity details and procedure for accessing the Nasdaq DR facility for the Equities and Options markets. The DR facility is located within the Equinix CH4 facility in 350 E. Cermak, Chicago, IL on the 8th floor.

2.1 CONNECTIVITY PROCEDURES

Nasdaq offers customers Point-of-Presence ("POP") capabilities to all Nasdaq markets and services at both 1Gbps and 10Gbps bandwidth speeds.

2.1.1 Point-of-Presence “POP”

For customers that are co-located within the Chicago facility, or have existing telecommunication (telco) circuits terminating in the building, orders can be placed via the Nasdaq Co-Lo & Connectivity Console. Nasdaq will subsequently provide a Letter of Authority (LOA) for customers to cross-connect from their location within the building to Nasdaq in CH4.

In the Nasdaq Co-Lo & Connectivity Console, customers will select:
- Connectivity→POP, then
- Qty #, CH4, 1G or 10G, Nasdaq Markets, etc.

2.1.2 Vendor Connectivity

Customers who do not have a presence in CH4 can either connect through an extranet, ISV or an Equinix approved telco provider. Clients who wish to have new dedicated telco circuits installed can contact any of these connectivity providers (note this is not an exhaustive list).

2.2 MARKET DATA

Chicago is a “hot” Point of Presence (POP) for Nasdaq, in which data feeds are disseminating during regular market hours regardless of where the matching engine is live. Customers may subscribe to the local Chicago IPs in order to receive the data for the market(s) they require. (See UDP/IP Addresses, noted as “Chicago Metro Area A”)

Customers are required to obtain approval to receive data feeds in Chicago. Online data feeds request forms can be found here. For more information, please contact Nasdaq Global Data Sales.

2.3 PORTS

Firms must complete a Port Request Form to request Chicago IPs/Ports. Email requests will not be accepted. Customers will need to check the box to request “a Chicago Backup/DR port”.

For new ports, firms can elect to receive a Chicago IP/port with their current order or firms can request to modify existing ports and add Chicago IPs/ports. Please include the list of ports in the Notes section or attach the list separately.
2.4 IP ADDRESSING

Customers will need to work with Nasdaq or their third party vendor to provision for Nasdaq’s Chicago subnets:

<table>
<thead>
<tr>
<th>Markets</th>
<th>Unicast</th>
<th>A Feed</th>
<th>B Feed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasdaq, NOM, BX, BX Options, PSX, PHLX (Nasdaq ISE, Nasdaq GEMX)</td>
<td>Source: 206.200.80.0/20</td>
<td>RP: 207.251.255.97</td>
<td>RP: 207.251.255.98</td>
</tr>
<tr>
<td>Nasdaq Fixed Income</td>
<td>Source: 206.200.196.0/24</td>
<td>RP: 207.251.255.97</td>
<td>RP: 207.251.255.98</td>
</tr>
<tr>
<td>Nasdaq MRX</td>
<td>Source: 206.200.80.0/20</td>
<td>RP: 207.251.255.104</td>
<td>RP: 207.251.255.114</td>
</tr>
<tr>
<td>UTP</td>
<td>Source: 69.10.252.0/22</td>
<td>RP: 207.251.255.112</td>
<td>RP: 207.251.255.122</td>
</tr>
</tbody>
</table>

Multicast market data will be configured in PIM Sparse mode in Chicago. The full list of market data multicast addresses can be found on our [UDP/IP Addresses page](#).

Order entry, quoting and DROP ports will be provided as needed, based on customer requests. Customers will be required to “opt-in” to receive Chicago IPs/ports.
3 CONTACTS

General queries on Nasdaq DR can be sent to coloadmin@nasdaq.com at +1 212-231-5180, or customers may contact Mickael Avedissian +1 212-231-5189.

3.1 CONNECTIVITY AND PORTS

For assistance with connectivity orders, please contact coloadmin@nasdaq.com.
For assistance with port request forms, please contact subscriber@nasdaq.com.

3.2 MARKET DATA

For assistance with data feed request forms – Nasdaq Global Data Products at +1 301 978 5307 or contact your Nasdaq Data Account Manager.