1. **What is a Nasdaq POP?**

   The POP service is a way for Nasdaq customers to connect directly to any of the Nasdaq market systems from specific financial data centers. Through a POP handoff, customers will be able to receive Nasdaq and third party market data as well as send orders directly to Nasdaq production systems.

2. **Where is a Nasdaq POP available?**

   A Nasdaq POP is available at both the Equinix NY4 facility (755 Secaucus Road, Secaucus NJ) as well as the Equinix CH4 facility* (350 East Cermak, 8th Fl, Chicago, IL).

   Additional locations will be added based on client requests, so please let us know of additional needs.

   *Nasdaq DR facilities are moving from Carteret to Chicago in 3Q 2015. More detail to follow.

3. **What services will be offered through a Nasdaq POP?**

   All available Nasdaq proprietary and many third party market data feeds along with order entry capabilities will be offered via POP handoffs. Customers will be able to choose from the following options depending on their business needs:

   - **Nasdaq Markets and Third Party Data*** – Provides access to the Nasdaq primary data center in Carteret for both sending orders and receiving market data, as well as the ability to receive select third party market data feeds via 1Gbps Ultra or 10Gbps handoffs (*note – third party data currently available in NY4 only).

   - **eSpeed and/or NFX Only** - Available in both POP locations. Provides limited access to the eSpeed and/or NFX markets for both order entry and market data. eSpeed Only is available via 1Gbps Ultra access only, and NFX Only is available via both 1Gbps Ultra or 10Gbps handoffs.
4. **What are the costs for each of the POP options?**

The table below show the cost breakdown per location and connection type:

<table>
<thead>
<tr>
<th>Bandwidth</th>
<th>Service</th>
<th>Install</th>
<th>Monthly**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Gbps</td>
<td>Nasdaq Markets &amp; Third Party Data (NY4/CH4*)</td>
<td>$1500</td>
<td>$2,500</td>
</tr>
<tr>
<td>10Gbps</td>
<td>Nasdaq Markets &amp; Third Party Data (NY4/CH4*)</td>
<td>$1,500</td>
<td>$7,500</td>
</tr>
<tr>
<td>1Gbps</td>
<td>eSpeed Primary Only (NY4)</td>
<td>$1,500</td>
<td>$1,500</td>
</tr>
<tr>
<td>1Gbps</td>
<td>eSpeed DR Only (CH4)</td>
<td>$500</td>
<td>$500</td>
</tr>
<tr>
<td>1Gbps/10Gbps</td>
<td>NFX Only*** (CH4/NY4)</td>
<td>Waived</td>
<td>Waived</td>
</tr>
</tbody>
</table>

*CH4 handoff fees for Nasdaq Markets will be waived until the order entry access is shut down in Ashburn on November 9, 2015.

**Additional fees will apply for the requested market data (applicable license, distribution and access fees) and order entry (applicable market ports/sessions and access fees).

*** NFX only fees (primary in CH4 & DR in NY4) are being waived through 2015. A notice will be sent to customers prior to the fee liability start date.

5. **How will I connect to a Nasdaq POP?**

Firms with presence at the Equinix NY4 or the Equinix CH4 data center can order the POP handoff through the [Nasdaq CoLo and Connectivity Console – our customer portal](#). Clients who place orders through the client portal will receive a Letter of Authorization (LOA) from Nasdaq. The LOA will allow clients to subsequently request a cross connect from Equinix. Contact [CoLo Admin](#) if you don’t have access to our client portal.

Customers who do not have a presence in NY4 or CH4, can connect through an Equinix approved telecommunications provider or an approved Extranet or ISV or connect to Nasdaq through other methods.

6. **Who is responsible for the cross-connects to the Nasdaq POP?**

Customers must order the cross-connect orders through their applicable vendor and/or Equinix directly. Nasdaq is not responsible for the ordering or maintenance of any cross-connects between customer cabinets or Telco demarcation point and a Nasdaq POP.
7. Will I be required to order new ports for order entry?

Depending you site, you may be required to opt-in for ports. If you connect via our POP in Secaucus, you will not require additional ports as you are connecting directly to Carteret. In Chicago however, there will be local order entry gateways and you will be required to opt-in for ports.

Contact Trading Services for more questions on ordering or updating ports in Carteret for the Secaucus POP.

8. What is the latency between the Nasdaq POPs and Carteret?

The one-way circuit latency between Carteret and the Secaucus POP is 150 microseconds.

The one-way circuit latency between Carteret and the Chicago POP is targeted at 7.25 milliseconds.

9. Is there redundancy between the Nasdaq POPs and Carteret?

Yes, Nasdaq has installed redundant circuits between both Carteret and Secaucus, and Carteret and Chicago. It’s important to note that the latency profile will be greater while in a failover scenario, as the primary and backup paths are fully redundant.

10. Will I be alerted if the primary circuit is failed over to the backup path?

Yes, you will receive a notification that there was a failure scenario on the path between Secaucus and Carteret, and that you are traversing the backup circuit. You will be notified again once the primary circuit has been restored, usually during the maintenance hours between 8:30 PM - 11:00 PM. Customer inquiries during a failover event should be directed to TradingServices@nasdaqomx.com.

11. What are the contract terms?

Similar to the terms of a handoff within Carteret, there is a monthly contract term. The monthly fee is prorated for the turn-up of service, but not for the cancellation of service. For example, if a customer requests a 10Gbps POP handoff in Secaucus and it is turned up by Nasdaq on the 10th of the month, the customer will be billed from the 10th through the rest of the month. If the customer cancels this service on the 20th of a subsequent month, they will be billed for the entire month.

12. Who do I contact for more information?

Please contact Andrea Moran, +1 212-231-5162 or Doug Aragones +1 212 231 5189 for more information.

MORE INFORMATION

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