



## POINT OF PRESENCE (POP) FAQs

### 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 are able to receive Nasdaq and select third party market data as well as send orders directly to Nasdaq production systems.

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

Nasdaq POPs are available at the following locations:

- Equinix NY4 Facility: 755 Secaucus Rd, Secaucus NJ
- Equinix CH4 Facility\*: 350 East Cermak, 8th Fl, Chicago, IL
- Equinix TR2 Facility\*\*: 45 Parliament St., Toronto, ON, Canada
- TMX Facility (MKM): 3500 Steeles Ave E, Markham, ON, Canada

\*CH4 is the Disaster Recovery site for all Nasdaq North American markets.

\*\*TR2 is primary matching engine site for Nasdaq Canada.

### 3. What services are offered through a Nasdaq POP?

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

- **Nasdaq Markets and Third Party Data** – Available in NY4 and CH4 POP locations. 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.
- **Nasdaq Canada Markets** – Available in CH4, MKM, and TR2 POP locations. Provides access to the Nasdaq Canada primary matching engine in TR2 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.
- **NFI and/or NFX Only** - Available in CH4 and NY4 POP locations. Provides limited access to the NFI and/or NFX markets for both order entry and market data. NFI Only is available via 1Gbps Ultra access only.

#### 4. What are the costs for each of the POP options?

The table below shows the cost breakdown per location and connection type for production connectivity:

Bandwidth	Service	POP Fee	
		Install	Monthly*
1GB Ultra	Nasdaq Markets & Select Third Party Data (CH4/NY4)	\$1500	\$2,500
10GB	Nasdaq Markets & Select Third Party Data (CH4/NY4)	\$1,500	\$7,500
1GB Ultra	NFI Only (CH4/NY4)	\$1,500	\$1,500
1GB Ultra	NFX Only** (CH4/NY4)	Waived	Waived
10GB	NFX Only** (CH4/NY4)	Waived	Waived
1GB Ultra	Nasdaq Canada Markets (CH4, MKM, TR2)	\$1,500	\$1,500
10GB	Nasdaq Canada Markets (CH4, MKM, TR2)	\$1,500	\$2,500
1GB Ultra	Ocean (CH4/NY4)	Waived	Waived
10GB	Ocean (CH4/NY4)	Waived	Waived

\*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 currently waived. A notice will be sent to customers prior to fee liability.

The table below shows the cost breakdown per location and connection type for Nasdaq Test Facility (NTF) connectivity:

		POP Fee	
Bandwidth	Service	Install	Monthly
1GB Ultra	Nasdaq Markets (NY4/CH4)	\$1,000	\$1,000
10GB	Nasdaq Markets (NY4/CH4)	\$1,000	\$1,000
1GB Ultra	NFI/NFX/Ocean Only (NY4/CH4)	Waived	Waived
10GB	NFI/NFX/Ocean Only (NY4/CH4)	Waived	Waived
1GB Ultra	Nasdaq Canada Markets (TR2)	\$500	\$500
10GB	Nasdaq Canada Markets (TR2)	\$500	\$500

## 5. How may I connect to a Nasdaq POP?

Firms place POP handoff orders through the [Nasdaq CoLo & Connectivity Console](#), our customer portal. Customers who place orders through the portal will receive a Letter of Authorization (LOA) from Nasdaq. The LOA will allow clients to subsequently request a cross connect from Equinix and/or TMX. Contact [CoLo Admin](#) if you don't have access to our customer portal.

Customers who do not have a presence in CH4, NY4, or TR2, 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, Equinix and/or TMX (MKM connectivity) 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 on the site, you may be required to opt-in for ports. If you connect via our POP in Secaucus (NY4), 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 may be required to order local ports.

Contact [subscriber@nasdaq.com](mailto:subscriber@nasdaq.com) for more questions on ordering or updating ports.

## 8. What is the latency between the Nasdaq US 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 7.25 milliseconds.

## 9. What is the latency between the Nasdaq Canada POPs and Chicago?

The one-way circuit latency between TR2 and Chicago POPs is 5.66 milliseconds.

The one-way circuit latency between MKM and Chicago POPs is 37.43 milliseconds.

The one-way circuit latency between MKM and TR2 POPs is 490 microseconds.

## 10. Is there redundancy between the Nasdaq POPs and Carteret?

Yes, Nasdaq has installed redundant circuits between Carteret and Secaucus, and Carteret and Chicago, Toronto and Markham, Toronto and Chicago and Markham 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.

## 11. 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 primary path 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@nasdaq.com](mailto:TradingServices@nasdaq.com).

## 12. What are the contract terms?

POP connectivity has 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 10<sup>th</sup> of the month, the customer will be billed from the 10<sup>th</sup> through the rest of the month. If the customer cancels this service on the 20<sup>th</sup> of a subsequent month, they will be billed for the entire month.

## 13. Who do I contact for more information?

Please contact [Kate Scholes](mailto:Kate.Scholes@nasdaq.com) at +1 212 312 0339 or [Mickael Avedissian](mailto:Mickael.Avedissian@nasdaq.com) at +1 212 231 5189.

## MORE INFORMATION

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