Polaris

NYSE FLOOR FAQ

FOR FLOOR BROKER USE ON FLOOR ONLY
DO NOT DISTRIBUTE OFF-FLOOR

VERSION: 1.0

DATE: 7/18/2022

pragma™

TIMELINE

When will Polaris be available?

Polaris Phase 1 is limited to One-touch closing dOrders only and is planned for go-live in November. Phase 2 will support High-touch, including intraday trading, additional order types, manually splitting orders, and external algo integration.

When can clients and service bureaus test their FIX connection to Polaris?

Pragma has already provided an environment for clients and service bureaus to test their FIX integration. Pragma will provide a Client Certification environment to establish and test client connectivity in October 2022.

When can Floor Broker Firms test Polaris?

Pragma will provide an environment accessible from 11 Wall Street in October 2022, for broker training.

Will BBSS run in parallel during the migration?

Yes. BBSS will run in parallel until after the delivery of Phase 2. After Phase 2 is live, NYSE will begin to decommission BBSS.

What Algos can Floor Brokers route to from Polaris? How will a broker be enabled for access to each Algo?

Polaris will provide access to the current Pragma Sponsored Algos as well as an optional service to use Pragma for additional algorithms and away markets in Phase 2. In addition, Pragma will work with other algo providers to integrate their algos into Polaris.

ONBOARDING

What do Floor Broker Firms need to do now?

Floor Broker Firms need to sign the Pragma Polaris Order Form and Agreement, which was distributed by Pragma in early May. Firms also need to ensure that their clients and internal desks can connect to Polaris, by signing the Client Connectivity contracts and testing against the Polaris Client Connectivity test environment. The majority of clients use service bureaus, and in these cases, the service bureau will sign the Polaris agreement and perform the connectivity testing.

Who will manage client communication around connecting to Polaris?

Floor Brokers Firms remain responsible for establishing and maintaining relationships with their clients. Pragma will support connectivity to the platform, including providing technical guidance to the Firm's clients.

What do clients and service bureaus need to do now?

Clients, including upstairs desks, and service bureaus need to onboard with Pragma for order entry. For more information, go to the Pragma website at https://www.pragmatrading.com/polaris.

How will the process of onboarding new brokers and the transfer of brokers occur? How will this be different than today?

Floor Broker Firms will work with Pragma to create new user accounts (broker or clerk) or to transfer a user account from one firm to another. There is no fee for onboarding brokers and clerks when the Firm goes live on Polaris. There is a one-time fee of $500 for creating or transferring a user account, after go-live, billable to the Firm.

Can buy- & sell-side clients connect to Polaris?

Both buy-side and sell-side clients can connect to Polaris.

How do fees for client connectivity to the Floor Broker Firm work?

Client connectivity to Polaris is an incremental monthly charge per session as detailed in the price list. The client or their service bureau will purchase the session directly from Polaris, although Firms may choose to sponsor these sessions on behalf of their clients. OMS Vendors that are acting as service bureaus may use a single session to support multiple clients and multiple brokers. This is similar to how NYSE fees work currently.

WORKFLOW

Can I continue to use my current Badge?

Badges will continue to be used to ensure that NYSE knows the trader responsible for the order.

Can I continue to use my current MPID and Sub-MPID (Mnemonic)?

MPIDs will continue to be used for risk and clearing at NYSE, and for order visibility within Polaris.

Can I continue to use my current Agency?

Agency will continue to be used for order visibility within Polaris.

How do I assign a Badge to an order?

In Phase 1, Polaris provides Order Assignment Rules to assign an order to a user within the Firm by Client, ClientGroup and ClientTrader. These rules also assign orders to Teams. Each user has an assigned badge.

How do I control visibility of an order?

Polaris supports grouping users into Teams. Users can see orders that are assigned to them or to their Teams. They cannot see orders that are neither assigned to them or to their Teams. A user may be in multiple Teams.

How will routing to away markets work with Polaris?

Polaris will offer optional services to route to non-NYSE venues, including exchanges, ATS, and dark pools. NYSE systems will also separately continue to route to away markets when required, including for routable orders sent to it via Polaris.

What alerts are generated around credit usage, rejects, etc.?

Pragma generates a warning alert if a Risk Budget (credit usage) crosses 70% usage, and a warning alert if a Risk Budget crosses 90% usage. Pragma generates an error alert if a Risk Budget breaches 100% usage. If an order is rejected due to a Risk Budget breach or other reasons, then an error alert is generated for that order as well.

Will credit breaches for credit limits be soft or hard?

One-touch orders always have hard rejects – these orders are always rejected back to the client if they breach a risk limit. High-touch orders are always soft – if these orders breach a risk limit, then they are paused in Polaris and the user may override the risk check or reject the order.

Are credit limits applied at the parent or child level?

Risk budgets (credit limits) are applied at the parent order level.

Can credit limits be managed at the customer, firm, or broker level?

Risk Budget (credit limits) are set at the Firm and Client. They may be extended to Client Group (Client Desk) and Client Trader.

Will Pragma support the Auto-Cancel feature? Will Auto-Cancel take effect for live orders?

Yes. If a client requests a cancellation of a live parent order, Pragma will always both alert the user and automatically cancel any related child orders, as well as the parent order.

Will routing rules be available?

Firms may create rules to assign orders to users by client. For high-touch orders, Firms will also be able to assign orders to users within their own Firm by symbol.

Will messaging be available for the following: *Broker to Booth*, *Booth to Booth*, *Broker to Customer*?

Pragma will support messaging between Polaris users from mobile and desktop, both inter-firm and intra-firm. It is still to be determined whether messaging to non-Polaris users (e.g., Clients) will be supported.

Can a Floor Broker manage 15c3-5 requirements from Polaris?

Polaris will support 15c3-5 Credit Risk and Erroneous Order Checks.

Will pre-market trading market data be available?

Polaris displays Best Bid/Offer as provided by the SIP feed, both pre- and post-open.

Are there limitations to trading NYSE-listed symbols in the pre-market in other venues?

The Sponsored Services provide access to the NYSE only, which will route to away markets when required. Optional services allowing access to other markets via the Pragma routing broker are targeted for phase 2 of the implementation.

Can Floor Broker Firms allocate to Buy-side flow post trade?

Polaris does not support post-trade allocation.

Will Polaris be accessible from a remote location? What are the limitations?

Yes. However, functionality that is available only to NYSE Floor Brokers, e.g., parity orders and dOrders and the 2 P.M. imbalance, will only be available when a Floor Broker has a verified point of presence on the NYSE Trading Floor at 11 Wall Street.

TECHNICAL

Will clients be able to use existing Pillar Gateways to send orders to Polaris?

No, Pillar Gateways cannot be used to route orders to Polaris. Your clients (or their OMS Vendor) will need to establish connectivity to the Polaris infrastructure, over which they will use the Polaris FIX Protocol Specification – NYSE Floor Brokers to send orders to your firm. The same Polaris FIX Session can be leveraged to route to multiple Floor Broker Firms within Polaris.

The connectivity is via NYSE IGN. Your client or OMS Vendor should contact their NYSE IGN representative for more information.

How will my Floor Broker Firm be identified in Polaris?

Your firm will be assigned a new identifier within Polaris to which clients will route orders.

Who will be the point of contact for information and/or issues Polaris?

Pragma is the first point of contact for matters related to Polaris. NYSE becomes a point of contact when NYSE systems are involved.

How will my clients be identified in Polaris?

Pragma requires the same client name reported to CAT to act as the primary identifier of each client.

Will an end-of-day activity report be sent to firm/broker?

Pragma will provide order, trade and audit trail end of day reports to each Firm.

How will CAT reporting be supported?

Pragma will continue engagement with S3 for ongoing CAT reporting support for orders handled through Polaris and the Pragma Algos, including an initial route to a third party OMS or Algo service. CAT reporting for subsequent activity is the responsibility of the third party. CAIS is not included as part of the service.

What limitations exist for Floor Brokers sending orders from the desktop vs. the mobile device?

Floor brokers can use the desktop to send orders to the NYSE or away markets. However, the mobile device can only be used to send orders to the NYSE and will not be enabled to send orders to any away market.

What levels of entitlement will be available?

User entitlements exist for:

- Market data
- Order visibility
- Order management functions
- Reference data administration (including Risk limits)

Will Pragma have on-floor support?

On-site support hours are 8:30AM to 4:30PM New York time on days that NYSE is scheduled to be open for full day trading. Support will end earlier on for days that are exchange-designated as half days.

Will Pragma offer its own hardware? What costs are associated with hardware? Who will support the hardware?

Pragma will provide and support mobile devices for each registered Broker as part of the Sponsored Services. Firms will provide their own desktop devices.

What is the PC hardware requirements for running Polaris?

The desktop has a minimum specification of:

- Intel Core i5 or higher, with 4+ cores and a base frequency of at least 2 GHz (or AMD equivalent)
- 16GB RAM or higher
- Display Resolution 1920x1080 or higher
- At least 10 GB free disk space
- Gigabit NIC
- Current version of Chrome or Edge installed

Note: Additional resources may be required to run the solution concurrently with other applications and services such as Bloomberg.

What redundancy is in place for Pragma?

Pragma will have both a primary and a geographically diverse secondary site. Firms are connected to both; and clients may choose to connect to both.

Will an export option be available for orders?

Yes. Selected intraday activity can be exported.

Will clients receive FIX acknowledgements only after orders are received at the matching engine?

Pragma will send a FIX order accept message to the client when the order is accepted by Polaris. A separate acknowledgement will not be sent when the order is subsequently accepted by an Exchange matching engine.

For more information, including contact information, go to www.pragmatrading.com/polaris