

Frequently Asked Questions

Direct Edge Next Generation Technology Re-platform & Exchange Launch

On March 12, 2010, Direct Edge received formal approval from the U.S. Securities and Exchange Commission so that the EDGA and EDGX ECN platforms can operate as facilities to two newly created national securities exchanges. As part of this transition we plan to launch our Next Generation trading platforms in a new state-of-the-art data center. This document addresses many of the questions that are important to customers of both Direct Edge and the ISE Stock Exchange during this transitional period. For additional information about this migration, please contact DEMigration@DirectEdge.com or your sales account manager.

I. Overview

1. Q: Why is Direct Edge filing for exchange status?

A: Direct Edge's transition to exchange status is the pinnacle of our evolution as a market center. Our dual exchange licenses will put us on a level playing field with our competitors and give us direct representation in the national market system. Further, our exchange licenses provide us with economic and product flexibility that we can share with our customers downstream.

2. Q: Why is Direct Edge migrating to a new platform?

A: Direct Edge and the ISE Stock Exchange are combining platforms to offer the best-of-breed Next Generation platform to accommodate our rapid current and future growth. The new platform will improve the speed, throughput, and scalability needed for Direct Edge to continue its ascent as a major U.S. market center.

3. Q: What will happen to the current Direct Edge ECN platforms (EDGX & EDGA) as well as the ISE Stock Exchange system?

A: Once all securities are actively trading on the Next Generation platforms, the EDGA & EDGX ECN platforms as well as the ISE Stock Exchange platform will be shut down. Direct Edge will then operate two exchange platforms, EDGX & EDGA.

4. Q: When will Direct Edge begin the migration and how long will the migration period last?

A: We anticipate that migration will begin on July 2, 2010. There will be an initial period of test symbols introduced on June 21, 2010, followed by a handful of production symbols to prove out functionality of the Next Generation exchange environment. Direct Edge will then migrate the remaining list of stock symbols, which will take approximately 2 to 3 weeks to complete. A migration schedule is posted to www.directedge.com/ExchangeLaunch.aspx.

5. Q: Will the legacy systems continue to run in a parallel period after the new systems go live?

A: Yes, during the migration period all five systems will operate simultaneously. As symbols are migrated, orders that are sent to the old systems will be automatically forwarded to the new systems. Please note that orders sent to the ISE Stock Exchange will be sent to the EDGX exchange platform. Once the migration is complete, we strongly encourage that all firms route their orders directly to the new platforms as quickly as possible.

II. Programming Interfaces

6. Q: What order entry protocols will be supported for the new systems?

A: Direct Edge will support FIX version 4.2 as well as a High Performance API. Specifications are now available and posted to the Direct Edge [website](#) .

7. Q: What other programming interfaces will be available?

A: Direct Edge will provide a depth-of-book feed. Again, all specifications are available on the Direct Edge [web site](#).

III. Connectivity

8. Q: Where will the data center for the new platforms be located?

A: The new EDGA and EDGX exchange platforms will be located at the new state-of-the-art data center at the Equinix "NY4" facility in Secaucus, New Jersey.

9. Q: How will my telecommunications connectivity to Direct Edge's existing datacenter be affected by the transition?

A: Once Direct Edge completes the migration to the two new platforms your current communications equipment will no longer be needed. Please note that your new connections to the Next Generation platforms at the NY4 Equinix facility must be certified prior to being put in production.

10. Q: Can I use the same logical ports to connect to the new platforms?

A: No, you will be provided new ports.

11. Q: Will I need to receive new IP addresses for each logical FIX and OUCH port?

A: Yes, you will receive new IP addresses within the 74.112.224.0/24(EDGA) and 74.112.225.0/24(EDGX) subnets

12. Q: How long can I continue to remotely connect to the old data centers with my current circuits?

A: If you are connecting to 545 Washington Blvd in Jersey City for the purpose of connecting to Direct Edge, you will be allowed to keep your connections for a brief period of time while the ECN's are decommissioned. Again, we encourage you to migrate to the new platforms as quickly as possible, as Direct Edge will sunset the old systems. This information also applies to your ISE Stock Exchange connectivity.

13. Q: What type of connectivity will be offered to the new exchange platforms?

A: Direct Edge will be offering metro-Ethernet, 1 gigabit (both gig-e & fiber) and 10 gigabit handoffs.

14. Q: Will there be any connectivity or port related fees?

A: At this time, Direct Edge does not plan to charge application ports fees but clients will incur a yearly recurring charge for each physical connection they request to connect to. The charges will vary based on the type of handoff with the choices being 1-gig, 1-gig Fiber and 10-gig Fiber interfaces.

15. Q: Will Direct Edge provide cabinet space for client communication equipment?

A: Equinix will be offering on a first come first serve basis co-location space for Direct Edge customers. Clients will work directly with Equinix on contracting for this dedicated co-location space. For additional information please refer to the [connectivity summary](#) document or contact your Direct Edge Account Manager.

IV. General & Functionality

16. Q: Will there be any new order types or changes to current functionality within the Next Gen EDGX and EDGA platforms?

A: Yes, Direct Edge will be offering new order types and functionality for the Next Gen systems. These changes are detailed in a Guide to Order Types document, which is currently posted on the Direct Edge [web site](#).

17. Q: Is there a default routing strategy if an order does not have one designated?

A: Yes, the default routing strategy will be ROUT.

18. Q: How should we code for OATS reporting?

A: During the transition period, firms may continue to identify orders routed to Direct Edge (either EDGA ECN / EDGX ECN or EDGA Exchange / EDGX Exchange) as orders routed to an ECN with a Destination Code of "E" on OATS Route and Combined Order/Route Reports, until the last security has been transitioned. *Firms may also choose* to follow the transition schedule and report routes of transitioned securities according to the following:

- For orders routed to EDGA Exchange – new Destination Code of "XJ"
- For orders routed to EDGX Exchange – new Destination Code of "XK"

Once the last security is transitioned, all orders routed to the EDGA Exchange must be coded with a Destination Code of "XJ" and all orders routed to the EDGX Exchange must be coded with a Destination Code of "XK." Please see FINRA guidance published on their website here:

<http://www.finra.org/Industry/Compliance/MarketTransparency/OATS/OATSReport/P121143>

19. Q: What are the new SIP identifiers for both Direct Edge platforms?

A: EDGA = J
EDGX = K

20. Q: Are there any differences to the way Direct Edge will clear trades?

A: Yes, all internally matched and routed trades will be delivered to NSCC directly for clearance and settlement. These trades will be locked in and submitted in a manner to preserve anonymity. Your contra executing broker will always be "ANON", and your contra clearing number will always be "8602."

21. Q: How will NSCC clear the Direct Edge Exchange trades?

A: Trades will clear on the RIO contract sheets.

22. Q: How will Direct Edge be identified on the RIO contact sheets?

A: EDGA will be identified as "XDEA" and EDGX will be identified as "XDEX"

23. Q: Will Direct Edge submit the Execution ID to NSCC so that it is reported on the RIO contract sheets?

A: Yes

24. Q: What are the Blue Sheet Exchange and Requestor codes?

A: Blue Sheet Exchange Codes: EDGA = P EDGX = V

Blue Sheet Requestor Code: Direct Edge = J

25. Q: Will Direct Edge Support Order Delivery?

A: No, although order delivery is supported on the ISE stock exchange today, the Next Generation platforms, EDGA and EDGX will not support Order Delivery.

26. Q: What will happen if my firm is not connected to Direct Edge's new data center when the migration period begins?

A: In order to make this process as seamless as possible, during the migration and for a period of time thereafter, you will be able to continue to send orders through your existing FIX connections to the ECN's and the ISE Stock Exchange. Direct Edge will employ an API Translator that will forward your orders to the new platforms as symbols are migrated over. However, after the migration is complete, we strongly encourage all firms to move to the new facility as soon as possible. Please refer to the following document for additional information about the API Translator.

<http://www.directedge.com/portals/0/docs/NextGenTranslator.pdf>.

27. Q: During the migration period, how will I know if a trade occurred on the legacy ECN systems or the new exchange platforms when using the API Translator?

A: Direct Edge ECN currently uses FIX tag 375 (Contra Broker) for this purpose. Therefore, if you send an order that gets executed on either ECN, we will populate tag 375 with "EDGA" or "EDGX." However, if a symbol has been migrated over to the exchange platforms and you are sending your orders through your existing ECN connectivity, we will populate tag 375 with "JJJJ" for the EDGA exchange and "KKKK" for the EDGX exchange. It is important to note that tag 375 will not be supported in the NextGen platform FIX API. Once you move off of the API Translators and connect directly to the new exchanges, you will no longer be able to use tag 375 as an exchange identifier. Rather, you will know which exchange you are receiving executions from based on the session you are logged into.

28. Q: During the migration period, how will I know if a trade occurred on the legacy ISE system or the new EDGX exchange platform when using the API Translator?

A: For users of the FIX translator, any order executed on the EDGX Exchange will receive Tag 375 = KKKK in the FIX Execution Report. Orders executed on ISE for non-migrated symbols will not receive Tag 375.

29. Q: Will an API Translator be offered for Direct Edge's market data feeds during the migration period?

A: No, in order to receive the Direct Edge depth of book feeds for symbols that have been migrated to the new platforms you will need connectivity and market data ports to the new data center facility. However, since Direct Edge will be submitting quote and trade information directly to both CTA and UTP, firms can view the new Direct Edge exchanges top of book data through the SIP feeds during the migration period and thereafter.

V. Data Feeds

30. Q: Will new data feeds be offered or will there be changes to the existing feeds?

A: Both exchange platforms will offer a full depth-of-book feed. While Direct Edge only offers its feeds through TCP/IP connections today, the new exchange platforms will offer both TCP/IP as well as multicast in an uncompressed format.

31. Q: What are the bandwidth requirements to support both EDGA & EDGX data feeds?

A: Below are the requirements for both TCP/IP & Multicast:

- Direct Edge TCP Market Data Feed = 50 Mb per Login Pair (One EDGA Login, One EDGX Login)
- Direct Edge Uncompressed Multicast Market Data Feed = 100 Mb per "Feed" Pair (One EDGA, One EDGX)
- Direct Edge Order Entry Basic Recommendation = 1.5 Mb per Login Pair (One EDGA Login, One EDGX Login)

VI. Testing & Action Steps

32. Q: Will there be any certification testing for the new systems?

A: Yes, all firms will be required to fully certify their order entry ports for both exchange platforms prior to trading on the new systems. Please contact the FIX Support at 201-942-8220 for additional information and to schedule your certification.

VII. Membership

33. Q: Do I need to become a member to trade on both EDGX & EDGA exchanges and if so what is the process?

A: Yes, in order to trade on both of Direct Edge's platforms, you will need to become a member of both exchanges. Please visit our [website](#) for additional membership information and appropriate applications.

34. Q: When will I know if my membership application has been approved?

A: Direct Edge will notify all applicants of their membership status in writing.

35. Q: Will Direct Edge charge any membership or registered representative fees?

A: No, Direct Edge does not plan to charge any membership or registration fees at this time.

VIII. Enhanced Liquidity Provider (ELP) Program

36. Q: As an ELP participant, do I need to be a member of the Direct Edge exchanges?

A: ELP1 participants (those that receive IOI information) will need to be Direct Edge members. However, ELP2 participants (those that receive IOC orders from the ECN) do not need to be Direct Edge exchange members.

37. Q: As an ELP participant, will I be required to maintain connectivity to both 545 Washington Blvd and Equinix's NY4?

A: Yes, for a period of time during the migration process you will need to maintain connectivity to both data centers. You will also need to follow DE's migration schedule. IOIs (Indication of Interest) for symbols trading on the old systems will be sent from the 545 Washington Blvd facility, while IOIs from the new systems will be sent from the Equinix NY4 facility. Therefore, in order to receive IOIs from all symbols during the migration period, you will need to be connected to both data centers simultaneously. Once the migration process is complete and all symbols are trading on the new platforms you can shut down your ECN connectivity at 545 Washington Blvd.

38. Q: Are there new API's available to connect to Direct Edge's Next Gen system as an ELP participant?

A: Yes, specifications are available and posted to the Direct Edge [website](#) at this time.

IX. Billing

39. Q: Are there any changes to the billing process?

A: Yes, Direct Edge will utilize the Direct Debit program offered by DTCC for the collection of Section 31 and transaction fees. Firms who do not wish to participate in this program for transaction fees must opt-out when filling out the membership paperwork. However, Section 31 fees will be collected through the program and is not optional.

40. Q: How will I be invoiced for Transaction Fees?

A: Invoices for all transaction fees and rebates will be generated at the beginning of the month for all trading activity executed in the prior month. Invoices will not change in format and will continue to be sent by email to the billing contacts.

41. Q: Will I be able to see the details that support the invoices?

A: Trade details supporting the invoices will continue to be available in the Members Area of our website.

42. Q: Will invoices be netted when there is a net credit on one and an amount due on another?

A: Invoices from one exchange cannot be netted against an invoice from another exchange.

43. Q: How does the DTCC direct debit program work?

A: Each month a file will be sent to the DTCC by the fifth business day for payment of the prior month's invoices. The DTCC will debit your clearing broker's account on your behalf. Firms wishing to opt out of the DTCC settlement process in order to remit payment directly to Direct Edge must send notification to memberservices@directedge.com prior to the 15th of the month for which they wish to opt out.

44. Q: How will rebates be paid?

A: Rebates will be paid whenever the net amount of the invoice results in a credit due to the member either by check or by wire on the 15th of the month. Firms who do not want to receive checks are to provide bank information to AP@directedge.com.

45. Q: What bank information should be used for wire/ACH payments?

A: Electronic payments should be sent to our JP Morgan account using ABA # 021000021, account # 780267910 for EDGA Exchange invoices or account # 780267928 for EDGX Exchange invoices.

46. Q: Will existing amounts due for Direct Edge ECN invoices be settled via the DTCC?

A: ECN invoices whether they are from prior to Exchange launch or issued during the transition period can not be settled via the DTCC.

47. Q: How will I be invoiced for Section 31 Fees?

A: At the beginning of each month, the net amount of SEC fees for trades settled in the prior month will be billed to your clearing broker and paid through the DTCC. Fees will be assessed for all covered sales executed via the Direct Edge exchange platforms.

48. Q: Will Section 31 Fees be assessed based on trade or settlement date?

A: Section 31 Fees are assessed at settlement date.

X. Additional Information

49. Q: Whom can I contact to order circuits and get co-location information for the new data center?

A: Please email all inquiries to ECNINFRA@directedge.com and copy DE-PM@labradortech.com. In addition, please refer to the [Connectivity Summary](#) document for additional connectivity information.

50. Q: Whom can I contact for any questions or to receive additional information during this migration?

A: You may contact your Account Manager or email DEMigration@DirectEdge.com