

Access Vendor Guide

MATCHNOW OVERVIEW

MATCHNowSM is a Canadian Alternative Trading System (ATS) operated by TriAct Canada Marketplace LP (TriAct) for all TSX-listed and TSX-venture securities, combining frequent call matches and continuous execution opportunities in a fully confidential trading book. MATCHNow is represented by three FIX-based destinations accessible through existing trading applications.

Third party networks and registered dealers that maintain their own proprietary market connections (collectively, Access Vendors) connect to MATCHNow for the purpose of transmitting orders submitted by Subscribers and Direct Access Clients. MATCHNow acts strictly as a broker-neutral matching facility; it does not participate on an agency or proprietary basis in any trade.

The MATCHNow system uses real-time quotes for all transparent Canadian markets (e.g. TSX, TSX Venture, Pure Trading, Chi-X, Alpha, Omega and TMX Select). All orders matched within MATCHNow are executed at a price inside the national best bid and offer (NBBO) at the time of the match, to a maximum of 4 decimal places. MATCHNow matches board lot and odd lot orders, for regular and short settlement, and is available from 8:00am daily, operating during normal market hours, 9:30am to 4:00pm.

THREE UNIQUE DESTINATIONS

From existing trading applications, users can choose one of three market destinations – MATCHNow Liquidity Providing (LP), Odd-lot Liquidity Providing (OLLP) or Market Flow (MF) destinations. When sending an order to the LP destination, the order routes directly to MATCHNow to trade in the confidential book. When sending an order to the Marketflow (smart routing) destination, the order checks MATCHNow for a potential match on its way to another Canadian marketplace.

MATCHNow Liquidity Destination

By choosing the MATCHNow Liquidity destination, market participants send orders directly to MATCHNow. These orders will remain in the MATCHNow book as day orders unless they are cancelled or expire. LP orders are matched with one another throughout the day, automatically executing in 5-second (randomized) intervals. These passive, confidential orders remain in the MATCHNow book as day orders unless they are filled, cancelled, or expire.

MATCHNow Marketflow Destination

Access Vendors should “smart-route” to the MATCHNow MF destination before sending those orders to the displayed markets. Each order “glances” into the MATCHNow Liquidity Pool. If a potential match exists within MATCHNow, the order will route to MATCHNow Marketflow, and will match immediately to the extent possible. Any unfilled balances of Marketflow orders will be returned to the initiating Access Vendor for on-routing to another (displayed) marketplace.

MATCHNow Odd Lot Liquidity Providing Destination

These passive, confidential orders remain in the MATCHNow Odd Lot book as day orders. An OLLP order will be rejected if it is less than the round lot size minus 1 (e.g. 98, 498, 998 shares). An order dropping below the round lot size shares minus 1 will be returned back as “Nothing Done.”

CONNECTIVITY

Access Vendors will have the option of internet connectivity or installing a direct link in order to access the MATCHNow network. The MATCHNow infrastructure is hosted by ITG Canada Corp. Access Vendors that already have connectivity to ITG Canada Corp. may be able to leverage existing lines.

TNS is one of TriAct's standard networking provider. The TNS network uses secure Points of Presence (POPs), complete with back-up. Security and privacy is assured by establishing Logical Virtual Connections (LVCs) to exchange transactions only when the parties have mutually agreed to do so. For FIX connectivity via TNS, LVC's will be provisioned between MATCHNow and the Access Vendor.

TriAct also supports connectivity from Atrium and will consider other network providers that are willing to connect to our data center. Please contact TCM_Network@triactcanada.com (416) 861-1010 for details and to see if a particular network provider is approved or can be added.

TriAct can also provide cross connections from local Toronto data centers for \$500/month/cross connect with a \$500 one time set-up fee. See Appendix A for a list of current data centers.

For FIX connectivity over the internet, the vendor must provide TriAct personnel with the public IP address of its server. The vendor must open its firewall to allow internal servers to connect to TriAct's internet proxy servers on a specified port.

Access Vendors are responsible for the costs associated with connecting to the MATCHNow system.

MESSAGING PROTOCOL

The MATCHNow system recommends FIX 4.2 protocol but can support FIX 4.0.. TriAct will test and certify all connections prior to production release.

The MATCHNow Liquidity destination will receive new orders via one of two FIX interfaces: one FIX single-order based, and the other FIX list-order based. If the MATCHNow Liquidity interface is dropped, order and report messages will be replayed.

MATCHNow Marketflow orders will be received over a separate FIX interface and should always be FIX single-order based. If the MATCHNow Marketflow interface is dropped, order and report messages will be replayed.

Market Flow Liquidity Filter

The MATCHNow liquidity filter is placed in front of the MATCHNow matching engine. This internal filter will allow MATCH Now to return any active orders that have a low probability of receiving a match. By canceling back orders before they reach the matching engine, two goals are accomplished:

- Reduced latency for active orders, allowing unfilled orders to be routed to the next destination on the smart order router table;
- Reduced IIROC message fees, since orders returned before the matching engine do not qualify as IIROC Messages.

The new liquidity filter provides both active and passive participants with a tool to help facilitate trades while reducing trading costs measured in market impact, execution latency, and regulatory fees.

ORDER ATTRIBUTES

The MATCHNow marketplace supports both market and limit orders. MATCHNow accepts board lot and mixed lot DAY orders for regular settlement, but will trade in board lots only. (When mixed lot orders are sent to the MATCHNow MF destination, the odd lot portion will be forwarded on to the primary market – via the Access Vendor – upon successful completion of the board lot portion. When

mixed lot orders are sent to the MATCHNow Liquidity destination, only the board lot portion will fill and it is the responsibility of the user to cancel the remaining odd lot portion.)

The following selected attributes are supported for all MF orders and LP (single and list) orders:

- **Short Sales:** LP short sales may trade below the last sale. MF will be allowed to trade within the quote down to their limit price.
- **Anonymous:** Trades for unattributed (anonymous) orders will be publicly reported with broker # 001. If the order is not marked “anonymous”, the trade will be attributed to the executing broker’s (TSX) broker number.
- **Jitney:** Jitney orders will be matched according to the executing broker.
- **Price Protection:** By specifying a limit price, users can establish a cap/floor above/below which their orders will not trade.
- **Minimum Fill Volume:** Users can set the minimum number of shares per fill to be executed in MATCHNow.
- **Expiration Time:** Specifies how long an LP order remains in the system. Open orders in the MATCHNow can also be cancelled at any time. (Marketflow orders with an expired time that has passed will be rejected.)

MATCHNow will check incoming order designations and reject to the Access Vendor any orders that are not supported. Where an order has been accepted by MATCHNow, designations that are not required for purposes of MATCHNow matching will be reported to the Investment Industry Regulatory Organization of Canada Inc. (IIROC) in accordance with the Universal Market Integrity Rules (UMIR).

Please see the MATCHNow FIX Specification & Developer’s Guide for comprehensive details on MATCHNow messaging, including accepted and rejected order tags.

PARAMETERS FOR LIQUIDITY PROVIDERS

In addition to standard FIX messaging, MATCHNow combines a number of unique features that enable users to control trade execution, minimize risk, and achieve overall trading goals.

LP lists can be sent with the following optional settings:

- **Buy/Sell Imbalance:** maximum dollar value by which portfolio buys can exceed sells / vice-versa.

Cancel Time & Minimum Shares can be set for the entire list and will apply to each order in the list. If comparable parameters are included for any single order in the list, these order-level parameters will take precedence over the list parameters.

These parameters can be configured by TriAct with specific user defaults. Additionally, from an Access Vendor trading application, users can override these defaults by establishing order- / list-specific parameters.

All attributes and parameters are applied in the following order of precedence: (1) orders; (2) lists; (3) user defaults; (4) system settings.

VENDOR APPLICATION CHANGES

The primary application change for Access Vendors is the addition of three new trading destinations.

MATCHNow Liquidity Destination

Vendors who wish to provide clients with MATCHNow-specific functionality may require changes to their front-end trading application to allow for the setting of parameters for LP orders.

MATCHNow Marketflow Destination

Aside from the routing changes referenced earlier in this document, no application-level changes are required for the Marketflow destination. Consistent with current practices for TSX-bound orders, MF orders submitted by Direct Access Clients should be visible and accessible to responsible dealers for purposes of canceling, changing or rejecting orders and trades.

MATCHNow Odd Lot Liquidity Destination

Vendors who wish to provide clients with MATCHNow-specific functionality may require changes to their front-end trading application to allow for the setting of parameters for OLLP orders.

USER CONFIGURATION

To configure users, TriAct requires each individual's TSX trading ID and executing broker number. Both the MATCHNow Liquidity and Marketflow destinations will validate users through the SenderSubId tag containing the user information.

ORDER AND TRADE REPORTING

The system will return a FIX Execution Report for each trade to the originating Access Vendor immediately following each match.

Public trade reports are disseminated in real time via TSX Datalinx in standard format (similar to TL1) and the TMX Information Processor. All matches are printed as having been completed in MATCHNow, with broker numbers, or with broker 001 for orders that were marked anonymous, in accordance with UMIR requirements.

Private (encrypted) and public order and trade information is also distributed in real time, in standard format (similar to TBF) via TSX Datalinx, and is accessible to Subscribers through decryption keys provided by TriAct personnel.

Data distributors that receive MATCHNow trade reports are encouraged to integrate MATCHNow trades with TSX and other markets' trades of the same security in their "time and sales" displays.

Daily MATCHNow trade reports are sent to CDS; it is the Subscribers' responsibility to clear and settle accordingly.

CO-LOCATION DISCLOSURE

TriAct Canada Marketplace LP does not offer co-location services. The MATCHNow production servers are located in the TSX data centre. Any enquiries regarding TSX data centre and co-location facilities should be directed to TMX Group.

LEGAL AGREEMENTS

Access Vendors must execute the TriAct Network Connectivity Agreement and the Client Connection Options (appendix A), and must provide MATCHNow with a satisfactory written description of how their systems and/or policies will ensure compliance with these provisions.

APPENDIX A – CLIENT CONNECTIO OPTIONS

Company: _____

Date: _____

**Triact Canada Marketplace LP (TCM)
Client Connection Options**

TCM clients have the following options to connect to TCM. Please return the completed form to Triact Canada Marketplace (TCM) via Fax: (416) 861-1010 or email: support@matchnow.ca

Please contact the TCM network team, if you have any questions related to connectivity options.

Email Contact: TCM_Network@triactcanada.com

Phone Support: (416) 861-1010

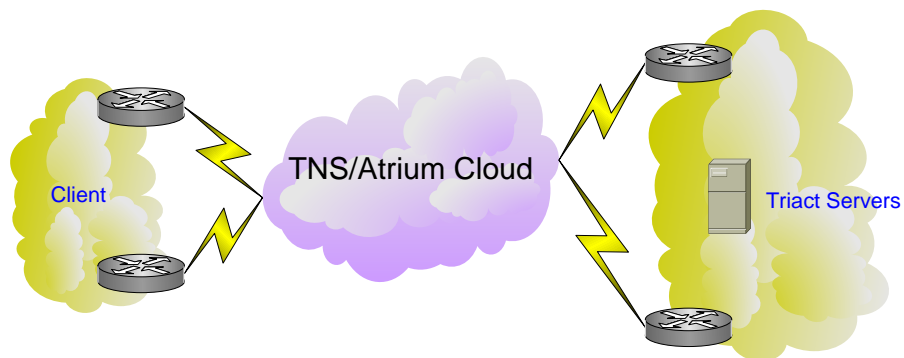
Option 1: Connection via Service Provider

Client Responsibilities:

- Routing up to TNS/Atrium router at client site.
- Obtain quotes, and bandwidth requirements must be coordinated with the Service Provider

TNS/Atrium Responsibilities:

- Coordinate primary and backup circuit installs with the carrier
- Provide, configure and manage router at client site
- Configure and manage the connectivity from Client site TNS/Atrium router to TCM router
- 24/7 support and monitoring
- Bandwidth management



Option 2: Direct Ethernet Connection – TCM Router

Client Responsibilities:

- Dedicated primary and backup circuit including cross connects (carrier coordination, maintenance and support). NOTE: Cross connects at the TCM’s datacenter/co-lo sites with 1G/100 Mb RJ45 handoff

TCM Datacenter/co-lo sites:

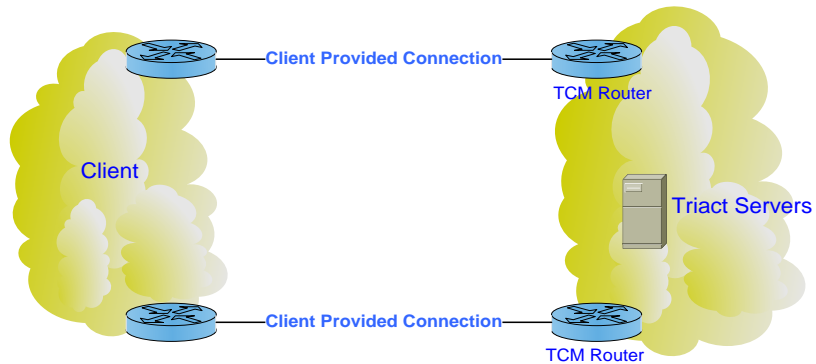
- Equinix - 151 Front street west
- Q9 – 100 Wellington
- TMX – 3500 Steeles
- Routing up to router at client site

TCM Responsibilities:

- Maintenance and support on TCM router
- Bandwidth monitoring and management
- TCM will NAT all traffic

Description	Non-Recurring Fee	Monthly Recurring Fee
Router Setup and maintenance	\$500	\$500

The non-recurring fee includes two (2) hours of support and configuration work. Any additional hours will be billed at the hourly rate as per **On-Site Support** below.



On-Site Support:

- Support will include configuration changes and troubleshooting

Description	Fee
Business Hours – Mon- Fri (8 am – 6 pm) EST	\$100/Hr
Off Business Hours (Incl. weekends and holidays)	\$200/Hr

Please choose one the options:

- For Option 1 please check which Service Provider
- For Option 2 please check which Datacenter/Co-lo Site

Option 1: ____

- Atrium ____ TNS ____

Option 2: ____

- Equinix (151 Front St.) ____ Q9 (100 Wellington) ____ TMX (3500 Steeles) ____

Signature: _____

Name: _____

Title: _____

Email: _____ Phone: _____