



Network connectivity

Document version 1.12.3

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Revision history

Version 1.12.3 August 4, 2021

Changed addresses for multicast groups in binary protocol Instruments feed — Section [2.1](#).

Version 1.12.2 June 24, 2021

Changed addresses for multicast groups in transmitted feeds of the binary protocol.

Version 1.12.1 April 17, 2020

Information about restrictions applied to messages recovery is added to the "Market data feeds" section.

Version 1.12.0 22 November 2019

Address of the Discovery service for testing environment is changed

Version 1.11.0 30 November 2016

Addresses of binary protocol Instruments feeds are changed

Version 1.10.0 9 March 2016

1. Commons additional snapshot mode of binary protocol is not broadcast any more
2. Addresses of binary protocol Commons feeds are changed
3. Address of binary protocol recovery is changed

Version 1.9.0 14 January 2016

Changed addresses of the binary protocol Instruments feeds

Version 1.8.0 14 December 2015

1. Recovery of binary protocol Commons feed is enabled
2. CurrentPriceOfMarket feed starts broadcasting in FIX/FAST

Version 1.7.0 10 November 2015

CurrentPriceOfMarket feed starts broadcasting in binary protocol

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1. Trading system gateways

1.1. Binary protocol gateway



To connect to new channels in the Instruments feed of the binary protocol, it is necessary to transfer the logins to the new protocol version. To do this, client should send a request to the Technical support service at the email address np-help@rts.ru.

Connection to the trading system via one of the binary gateways starts with connection to Discovery service. Discovery service performs logon operation and provides user with the list of available gateways, their types and IP addresses. After that user can connect to the required gateway(s). This operation is also required when user wants to reconnect to the trading system.

Discovery service — 194.247.145.35:7001 .

1.2. FIX gateway

FIX gateways:

1. 194.247.145.35:7180 — FIX trading gateway
2. 194.247.145.35:7196 — Drop-copy gateway

1.3. Message resend

Maximum number of messages requested with a single `ResendRequest` message is 1000. Several consecutive `ResendRequest` messages are required if number of requested messages exceeds 1000.

There is no limit to the maximum number of messages recovered with a single `ApplicationMessageRequest [BW]` message.

2. Market data feeds

2.1. Binary market data feeds

Transmitted market data feeds with available ports and addresses for multicast groups are listed in the table below. For more details about market data feeds and message formats, see *Native Protocol Market Data Service*.

Recovery gateway — 194.247.145.35:7132 .



When a client requests messages from the recovery gateway, the gateway will return messages transmitted not earlier, than 30 s before the request.

Feed	Mode	Channel A	Channel B	The recovery topic identifier
OrderBook — order books updates for all accessible liquidity pools	Snapshot	239.16.0.5:6005	239.16.0.133:6133	
	Updates	239.16.0.6:6006	239.16.0.134:6134	BEX.DOM
Commons — market statistics for all accessible liquidity pools	Snapshot	239.16.0.13:6013	239.16.0.141:6141	
	Updates	239.16.0.14:6014	239.16.0.142:6142	BEX.Stats
BestPrices — top of book and trades for all accessible liquidity pools	Snapshot	239.16.0.16:6016	239.16.0.144:6144	
	Updates	239.16.0.17:6017	239.16.0.145:6145	BEX.TOB
Trades — trades matched on all accessible liquidity pools	Updates	239.16.0.26:6026	239.16.0.154:6154	BEX.Trades
CurrentPriceOfMarket — current price of market	Updates	239.16.0.92:6092	239.16.0.220:6220	IQ
Instruments — instruments status updates for all accessible liquidity pools	Snapshot	239.16.0.38:6038	239.16.0.166:6166	
	Updates	239.16.0.39:6039	239.16.0.167:6167	

2.2. FIX/FAST market data feeds

Transmitted market data feeds with available ports and addresses for multicast groups are listed in the table below. For more details about market data feeds and message formats, see *FIX/FAST Protocol Market Data Service*.

Recovery gateway — 194.247.145.35:7136 .



When a client requests messages from the recovery gateway, the gateway will return messages transmitted not earlier, than 30 s before the request.

Feed	Mode	Channel A	Channel B	The recovery topic identifier
OrderBook — order books updates for all accessible liquidity pools	Snapshot	239.16.0.3:6003	239.16.0.131:6131	
	Updates	239.16.0.4:6004	239.16.0.132:6132	BEX.DOM
Commons — market statistics for all accessible liquidity pools	Snapshot	239.16.0.10:6010	239.16.0.138:6138	
	Updates	239.16.0.11:6011	239.16.0.139:6139	BEX.Stats

Market data feeds

Feed	Mode	Channel A	Channel B	The recovery topic identifier
BestPrices — top of book and trades for all accessible liquidity pools	Snapshot	239.16.0.18:6018	239.16.0.146:6146	
	Updates	239.16.0.19:6019	239.16.0.147:6147	BEX.TOB
Trades — trades matched on all accessible liquidity pools	Updates	239.16.0.27:6027	239.16.0.155:6155	BEX.Trades
CurrentPriceOfMarket — current price of market	Updates	239.16.0.90:6090	239.16.0.218:6218	IQ