

How to connect to MOEX ASTS Market Data test server

Connection instruction to MOEX ASTS Market Data test server.

1. Put license file to root folder packet.
2. Configuration files for MICEX_QuickStart sample in the following folders:
 - a. FIX Antenna .NET - <Package root folder>\samples\MICEX_QuickStart\x64-Release
 - b. FIX Antenna C/C++ - <Package root folder>\samples\MICEX_QuickStart\bin
3. It is recommended to check the following configuration files:
 - a. **config_test_internet.xml**. This file is used to specify the connection settings information. It is recommended to take an actual configuration file from MOEX FTP - <ftp://ftp.moex.com/pub/FAST/ASTS/config/>.

config_test_internet.xml

```
<configuration environment="TestFeed_Internet" updated="2016/12/19-16:00:00">
  <channel id="CURR" label="Currency Exchange Market"> <!-- ChannelID specify the market, e.g.
CURR - Currency Market, FOND - Stock Market -->
    <connections>
      <connection id="MSR"> <!-- ConnectionID specify feed identifier, e.g. Statistics Feed
Incremental - MSR, Statistics Feed Snapshot - MSS etc. -->
        <type feed-type="Statistics Incremental">I</type>
        <protocol>UDP/IP</protocol>
        <feed id="A"> <!-- Settings for feed A -->
          <src-ip>10.50.129.200</src-ip> <!-- Source IP address of the feed -->
          <ip>239.192.112.7</ip> <!-- Multicast group address -->
          <port>9027</port> <!-- Identifies the port to connect to -->
        </feed>
        <feed id="B"> <!-- Settings for feed B -->
          <src-ip>10.50.129.200</src-ip>
          <ip>239.192.112.135</ip>
          <port>9227</port>
        </feed>
      </connection>
      <connection id="MSS">
        <type feed-type="Statistics Snapshot">S</type>
        <protocol>UDP/IP</protocol>
        <feed id="A">
          <src-ip>10.50.129.200</src-ip>
          <ip>239.192.112.8</ip>
          <port>9028</port>
        </feed>
        <feed id="B">
          <src-ip>10.50.129.200</src-ip>
          <ip>239.192.112.136</ip>
          <port>9228</port>
        </feed>
      </connection>
    </connections>
  </channel>
</configuration>
```

- b. **nic_config.xml** - this file is used to configure the network interfaces. Can be used to determine on which network interface what feed should be listened.

nic_config.xml

```
<connection id="MSR">
  <feed id="A">
    <nic>0.0.0.0</nic>
  </feed>
  <feed id="B">
    <nic>0.0.0.0</nic>
  </feed>
</connection>
<connection id="MSS">
  <feed id="A">
    <nic>0.0.0.0</nic>
  </feed>
  <feed id="B">
    <nic>0.0.0.0</nic>
  </feed>
</connection>
```

- c. **FAST- template.** A template is communicated between MOEX and client systems in XML syntax using the FAST v1.1 Template Definition Schema maintained by FIX. A template is necessary for messages decoding.

It is recommended to take an actual template from MOEX FTP - <ftp://ftp.moex.com/pub/FAST/ASTS/template/>.

FIX50SP2-ALL.xml

```

<!-- Market Data - Incremental Refresh MSR CURR-->
<template name="X-MSR-CURR" id="3613" xmlns="http://www.fixprotocol.org/ns/fast/td/1.1">
  <string name="MessageType" id="35"><constant value="X" /></string>
  <string name="ApplVerID" id="1128"><constant value="9"/></string>
  <string name="BeginString" id="8"><constant value="FIXT.1.1"/></string>
  <string name="SenderCompID" id="49"><constant value="MOEX"/></string>
  <uint32 name="MsgSeqNum" id="34"></uint32>
  <uint64 name="SendingTime" id="52"></uint64>
  <uint64 name="LastUpdateTime" id="779" presence="optional"></uint64>
  <sequence name="GroupMDEntries">
    <length name="NoMDEntries" id="268"/>
    <uint32 name="MDUpdateAction" id="279" presence="optional"></uint32>
    <string name="MDEntryType" id="269" presence="optional"></string>
    <string name="MDEntryID" id="278" presence="optional"></string>
    <string name="Symbol" id="55" presence="optional"></string>
    <int32 name="RptSeq" id="83" presence="optional"></int32>
    <decimal name="MDEntryPx" id="270" presence="optional"></decimal>
    <decimal name="MDEntrySize" id="271" presence="optional"></decimal>
    <uint32 name="MDEntryDate" id="272" presence="optional"></uint32>
    <uint32 name="MDEntryTime" id="273" presence="optional"></uint32>
    <uint32 name="StartTime" id="9820" presence="optional"></uint32>
    <string name="QuoteCondition" id="276" presence="optional"></string>
    <string name="TradeCondition" id="277" presence="optional"></string>
    <string name="OpenCloseSettlFlag" id="286" presence="optional"></string>
    <decimal name="NetChgPrevDay" id="451" presence="optional"></decimal>
    <decimal name="ChgFromWAPrice" id="5510" presence="optional"></decimal>
    <decimal name="ChgOpenInterest" id="5511" presence="optional"></decimal>
    <decimal name="BidMarketSize" id="5292" presence="optional"></decimal>
    <decimal name="AskMarketSize" id="5293" presence="optional"></decimal>
    <int32 name="TotalNumOfTrades" id="6139" presence="optional"></int32>
    <decimal name="TradeValue" id="6143" presence="optional"></decimal>
    <int32 name="OfferNbOr" id="9168" presence="optional"></int32>
    <int32 name="BidNbOr" id="9169" presence="optional"></int32>
    <decimal name="ChgFromSettlmnt" id="9750" presence="optional"></decimal>
    <uint32 name="SettlDate" id="64" presence="optional"></uint32>
    <string name="SettleType" id="5459" presence="optional"></string>
    <string name="CXFlag" id="5154" presence="optional"></string>
    <string name="TradingSessionID" id="336" presence="optional"></string>
    <string name="TradingSessionSubID" id="625" presence="optional"></string>
  </sequence>
</template>

```

- d. **FIX dictionaries.** Since Micex FAST v.4.0 interface FIX Antenna C+/.NET uses custom FIX dictionary `fixdic50sp2_micex_asts.xml` instead of `fixdic50sp2.xml`.

It is recommended to check the dictionaries itself and properties for them:

FIX dictionary	fixdic50sp2_micex_asts.xml - custom FIX50SP2MICEX_ASTS protocol
	fixdict11.xml - standard FIXT11 protocol
	additional.xml - extends FIX50SP2MICEX_ASTS protocol
property in file engine.properties :	DictionariesFilesList = ../../dic/ fixdic50sp2_micex_asts.xml ; ../../dic/fixdict11.xml;additional.xml

- Establish VPN connection with MOEX. For more details please refer to chapter 5 in Market Data Multicast User Guide which is available on MOEX FTP - <ftp://ftp.moex.com/pub/FAST/ASTS/docs> (for example, ftp://ftp.moex.com/pub/FAST/ASTS/docs/ENG_Market_Data_Multicast_User_Guide_Ver_4_5.pdf.pdf).
- Launch MICEX_QuickStart sample.