

# How to use multiple Security Definition feeds for instrument subscription in MOEX Spectra MD Adapter

- [Overview](#)
- [How to set up multiple Security Definition feeds using configuration file](#)
  - [Adding new connection](#)
  - [Adding multiple Security Definition sources](#)
- [How to set up multiple Security Definition feeds using the source code](#)

## Overview

Some configuration requires using of several sources of security definitions, e.g. ORDERS-LOG contains orders for both futures and options instruments. While working with ORDERS-LOG, MOEX Spectra Market Data Adapter should know security information for both security types. This article describes how to configure such options.

## How to set up multiple Security Definition feeds using configuration file

### Adding new connection

MOEX could provide separate configuration files for different feeds.

The configuration file - *configuration.xml* could be extended with new connections if it requires.

For example, **ORDERS-LOG** connection can be integrated into an original configuration just by adding a new **MarketDataGroup** to configuration section:

#### configuration.xml

```
<configuration type="Test" label="Test System" marketId="MOEX">
<!-- ... -->
  <MarketDataGroup feedType="FUT-INFO" marketID="F" label="Futures defintion">
    <connections>
      <!-- FUT-INFO feeds -->
    </connections>
  </MarketDataGroup>

  <!-- New section with ORDERS-LOG connections -->
  <MarketDataGroup feedType="ORDERS-LOG" marketID="D" label="Full orders log">
    <connections>
      <!-- ORDERS-LOG feeds -->
    </connections>
  </MarketDataGroup>

</configuration>
```

### Adding multiple Security Definition sources

**MarketDataGroup** may contain as many connections as it is required.

The following configuration block shows how to get two security definitions channels for ORDERS-LOG feed:

#### configuration.xml

```
  <MarketDataGroup feedType="ORDERS-LOG" marketID="D" label="Full orders log">
    <connections>
      <connection>
        <type>Incremental</type>
        <protocol>UDP/IP</protocol>
        <src-ip>10.50.129.90</src-ip>
        <ip>239.192.70.40</ip>
        <port>40040</port>
```

```
        <feed>A</feed>
</connection>
<connection>
  <type>Incremental</type>
  <protocol>UDP/IP</protocol>
  <src-ip>10.50.129.90</src-ip>
  <ip>239.192.175.40</ip>
  <port>41040</port>
  <feed>B</feed>
</connection>
<connection>
  <type>Snapshot</type>
  <protocol>UDP/IP</protocol>
  <src-ip>10.50.129.90</src-ip>
  <ip>239.192.70.41</ip>
  <port>40041</port>
  <feed>A</feed>
</connection>
<connection>
  <type>Snapshot</type>
  <protocol>UDP/IP</protocol>
  <src-ip>10.50.129.90</src-ip>
  <ip>239.192.175.41</ip>
  <port>41041</port>
  <feed>B</feed>
</connection>
<connection>
  <type>Historical Replay</type>
  <protocol>TCP/IP</protocol>
  <ip>1.1.7.202</ip>
  <port>7207</port>
</connection>

<!-- Futures security defintion -->
<connection>
  <type>Instrument Replay</type>
  <protocol>UDP/IP</protocol>
  <src-ip>10.50.129.90</src-ip>
  <ip>239.192.70.11</ip>
  <port>40011</port>
  <maxKbps>128</maxKbps>
  <feed>A</feed>
</connection>
<connection>
  <type>Instrument Replay</type>
  <protocol>UDP/IP</protocol>
  <src-ip>10.50.129.90</src-ip>
  <ip>239.192.175.11</ip>
  <port>41011</port>
  <maxKbps>128</maxKbps>
  <feed>B</feed>
</connection>

<!-- Options security defintion -->
<connection>
  <type>Instrument Replay</type>
  <protocol>UDP/IP</protocol>
  <src-ip>10.50.129.90</src-ip>
  <ip>239.192.70.27</ip>
  <port>40027</port>
  <maxKbps>128</maxKbps>
  <feed>A</feed>
</connection>
<connection>
  <type>Instrument Replay</type>
  <protocol>UDP/IP</protocol>
  <src-ip>10.50.129.90</src-ip>
  <ip>239.192.175.27</ip>
  <port>41027</port>
  <maxKbps>128</maxKbps>
  <feed>B</feed>
```

```

        </connection>

        <!-- OTC Issues feed -->
        <connection>
            <type>Instrument Replay</type>
            <protocol>UDP/IP</protocol>
            <src-ip>10.50.129.90</src-ip>
            <ip>239.192.70.31</ip>
            <port>40031</port>
            <maxKbps>16</maxKbps>
            <feed>A</feed>
        </connection>
        <connection>
            <type>Instrument Replay</type>
            <protocol>UDP/IP</protocol>
            <src-ip>10.50.129.90</src-ip>
            <ip>239.192.175.31</ip>
            <port>41031</port>
            <maxKbps>16</maxKbps>
            <feed>B</feed>
        </connection>
    </connections>
</MarketDataGroup>

```

## How to set up multiple Security Definition feeds using the source code

Extra security definition feeds could be configured with `Spectra::SpectraApplicationParams::customSecDefFeeds_` parameter:

### Application.cpp

```

Spectra::SpectraApplicationParams params;
params.customSecDefFeeds_[Spectra::SpectraDataChannel("D", "ORDERS-LOG")].push_back(Spectra::SpectraDataChannel("F", "FUT-INFO"));
params.customSecDefFeeds_[Spectra::SpectraDataChannel("D", "ORDERS-LOG")].push_back(Spectra::SpectraDataChannel("O", "OPT-INFO"));
params.customSecDefFeeds_[Spectra::SpectraDataChannel("D", "ORDERS-LOG")].push_back(Spectra::SpectraDataChannel("S", "SPOT-INFO"));

```



This approach may be used as an alternative of configuration file (configuration.xml) modification and allows keeping the original version of configuration files.