

# Bovespa Market Data Adaptor: How to use TCP Replayer

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## Overview

The global TCP Replayer Connection (previously known as TCP Replay) functionality allows a client to request messages that were already sent through the incremental stream. These messages will be returned to the client over a TCP connection (a FIX 4.4 session). The same connection is used for both the request and the retransmission. TCP Replayer is enabled with Bovespa::BovespaApplicationParams. These chapters shows how to use parameters for setting up a TCP Replayer connection.

In order to access a TCP Replayer feed and obtain credentials, please contact to Bovespa.



See [https://corp-web.b2bits.com/b2bmd/bovespa/1.28.2/html/structBovespa\\_1\\_1TCPReplayParams.html](https://corp-web.b2bits.com/b2bmd/bovespa/1.28.2/html/structBovespa_1_1TCPReplayParams.html) for all connectivity parameters

The TCP connection (a FIX 4.4 session) uses customized FIX dictionary. So, FIX Antenna C++ requires that the property [AdditionalParsersList](#) in engine.properties file is equal to "id" from the dictionary (see BovespaClient sample):

### engine.properties

```
AdditionalParsersList = FIX44BVMF
```

## TCP Replayer Session properties

To establish a session the following parameters should be defined:

### BovespaClient.cpp

```
Bovespa::BovespaApplicationParams params;  
// ...  
params.tcpReplayParams_.senderCompId_ = "Sender";  
params.tcpReplayParams_.targetCompId_ = "BVMF";  
params.tcpReplayParams_.username_ = "username";  
params.tcpReplayParams_.password_ = "password";
```



The *senderCompId\_*, *targetCompId\_*, *username\_*, *password\_* parameter values should be given by Bovespa for Logon.

## Configuration network connections for TCP Replayer recovery

The 'UMDF channels definition' section contains the FIX/FAST [Market Data Channel Definitions](#). The feeds specified in the configuration XML files (see samples in /samples/BovespaClient/bin/ path). The desired channels for TCP Replayer Connections and network parameters should be specified in your C++ code.

### BovespaClient.cpp

```
params.tcpReplayParams_.channels_.push_back("151"); // use tcp replayer for channel 151 from configuration
params.tcpReplayParams_.channels_.push_back("141"); // use tcp replayer for channel 141 from configuration
params.tcpReplayParams_.channels_.push_back("121"); // use tcp replayer for channel 121 from configuration

params.tcpReplayParams_.reconnectAttemptCount_ = 5;
params.tcpReplayParams_.ip_ = "";
params.tcpReplayParams_.port_ = 0;
```



The *ip\_*, *port\_* parameter values should be given by Bovespa.

## Certified version of the client solution in Logon for TCP Replayer

According Bovespa [FIX Specification](#) in tag Text (58) in Logon (35=A) customers should provide the name and certified version of the client solution used to connect to the Exchange. Therefore the new parameter has been added for **FIX Antenna C++ 2.23**.

### BovespaClient.cpp

```
params.tcpReplayParams_.softwareId_ = "FIX Antenna C++ 2.23";
```



The *softwareId\_* parameter values should be given by Bovespa after certification.

## Pass Recovery option for Instrument subscription

### BovespaClient.cpp

```
Bovespa::BovespaSubscriptionItem instument;
instument.symbol_ = symbol;
instument.recovery_ = Bovespa::RO_USE_MARKET_TCP_AS_POSSIBLE_RECOVERY;
instument.recovery_ = recoveryOption_;
application_->subscribeToInstrument( instument, iterator.first->second.get() );
```



Recovery doesn't work with a subscription to feed ( *Bovespa::BovespaApplication::subscribeToFeed()* )

## Troubleshooting

### TCP Replayer session is not established.

Check AdditionalParsersList is set to "FIX44BVMF" in the engine.property file.