


# How to configure FIX messages throttling in FIXEdge C++

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## Configure throttling of outgoing messages

 Throttling of outgoing messages is available since FIXEdge C++ 6.14.0 release

Throttling of outgoing messages allows limiting the amount of sent FIX messages within a time interval.

### Overview

If throttling of outgoing messages is configured for the session, FIXEdge sends to the counterparty the particular amount of messages ([MessagesLimit](#)) within the specified time interval ([IntervalMs](#)) using the mechanism defined in the [Type](#) property.

If the amount of sent FIX messages exceeds the specified [MessagesLimit](#) within the configured time interval then the outgoing message will be added to the queue.

### Configuration example

Throttling properties must be configured in the `FIXEdge.properties` file:

#### FIXEdge.properties

```
FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers = MyGeneralOutLimiter1, MyGeneralOutLimiter2

FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter1.Direction = Outgoing
FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter1.Type = SlidingWindowMessages
# throttler type dependent parameters
FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter1.MessagesLimit = 50
FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter1.IntervalMs = 2000

FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter2.Direction = Outgoing
FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter2.Type = SlidingWindowMessages
# throttler type dependent parameters
FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter2.MessagesLimit = 100
FixLayer.FixEngine.Session.TestFIXAcceptor.Throttlers.MyGeneralOutLimiter2.IntervalMs = 3000
```

Please refer to the [Throttling Settings](#) page for more information about throttling properties.

If at least one of these parameters is specified with an incorrect value then the FIX session will not be created.

### Log messages

If the [MessagesLimit](#) or [IntervalMs](#) property is specified with an incorrect value, the warning below will be logged:

```
WARN <Session_Name> session cannot be started now. Reason: <parameter>: max items in interval cannot be <value>
```

If the [Direction](#) or [Type](#) property is specified with an incorrect value, the error below will be logged:

```
ERROR <Session_Name> session can't be configured and won't be started because: invalid value of parameter
<parameter>
```

If at least one of [MessagesLimit](#), [IntervalMs](#), [Direction](#), and [Type](#) properties is absent, then the error below will be logged:

```
ERROR <Session_Name> session can't be configured and won't be started because: absent required value of
parameter <parameter>.
```