SGCWEBSOCKETS · TECHNICAL DOCUMENT

Bitmex API

Bitmex WebSocket and REST client — public market data plus authenticated trading and position streams.

eSeGeCe

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Overview

Bitmex is a cryptocurrency exchange and derivative trading platform.

At a glance

COMPONENT CLASS `TsgcWSAPI_Bitmex`	STANDARDS / SPEC **Bitmex API explorer**
TRANSPORTS **TCP, TLS**	PLATFORMS **Windows, macOS, Linux, iOS, Android**
FRAMEWORKS **VCL, FireMonkey, Lazarus / FPC, .NET**	EDITION **Standard / Professional / Enterprise**

Features

- Native Delphi implementation with full ANSI/Unicode support.

Technical specification

Standards & specs	Bitmex API explorer
Component class	`TsgcWSAPI_Bitmex` (unit `sgcWebSocket_API_Bitmex`)
Frameworks	VCL, FireMonkey, Lazarus / FPC, .NET
Platforms	Windows, macOS, Linux, iOS, Android

Main properties

The principal published / public properties used to configure and drive the component. Consult the online help for the full list.

`Client`	Published or public property used to configure or query the component.
`OnBitmexSubscribed`	Published or public property used to configure or query the component.
`OnBitmexUnsubscribed`	Published or public property used to configure or query the component.
`OnBitmexAuthenticated`	Published or public property used to configure or query the component.
`OnConnect`	Published or public property used to configure or query the component.
`OnBitmexConnect`	Published or public property used to configure or query the component.
`OnBitmexMessage`	Published or public property used to configure or query the component.
`OnBitmexError`	Published or public property used to configure or query the component.
`OnDisconnect`	Published or public property used to configure or query the component.
`OnBitmexHTTPException`	Published or public property used to configure or query the component.

Main methods

The principal public methods exposed by the component.

`Subscribe()`	Public procedure exposed by the component.
`Unsubscribe()`	Public procedure exposed by the component.

`Authenticate()`	Public procedure exposed by the component.
`CancelAllAfter()`	Public procedure exposed by the component.

Quick Start

Drop the component on a form, configure the properties below and activate it. The snippet that follows shows the typical **Bitmex | Connect WebSocket API** configuration sourced from the online help.

> **About this scenario.** In order to connect to Bitmex WebSocket API, just create a new Bitmex API client and attach to TsgcWebSocketClient.

Delphi (VCL / FireMonkey)

```
oClient := TsgcWebSocketClient.Create(nil);
oBitmex := TsgcWSAPI_Bitmex.Create(nil);
oBitmex .Client := oClient;
oClient.Active := True;
```

C++ Builder

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Bitmex oBitmex = new TsgcWSAPI_Bitmex();
oBitmex→Client = oClient;
oClient→Active = true;
```

.NET (C#)

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Bitmex oBitmex = new TsgcWSAPI_Bitmex();
oBitmex.Client = oClient;
oClient.Active = true;
```

Common scenarios

The following scenarios are lifted verbatim from the online help. Each shows the configuration and method calls needed to drive the component through a specific real-world flow.

1 · Bitmex | Subscribe WebSocket Channel

Bitmex offers a variety of channels where you can subscribe to get real-time updates of market data, orders... Find below a sample of how subscribe to a Trade Channel:

Delphi (VCL / FireMonkey)

```
oClient := TsgcWebSocketClient.Create(nil);
oBitmex := TsgcWSAPI_Bitmex.Create(nil);
oBitmex.Client := oClient;
oBitmex.Subscribe(btmTrade, 'XBTUSD');
procedure OnBitmexMessage(Sender: TObject; const aTopic: TwsBitmexTopics; const aMessage: string
begin
// here you will receive the trade updates
end;
```

C++ Builder

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Bitmex oBitmex = new TsgcWSAPI_Bitmex();
oBitmex->Client = oClient;
oBitmex->Subscribe(btmTrade, "XBTUSD");
void OnBitmexMessage(Sender: TObject; const aTopic: TwsBitmexTopics; const aMessage: string)
{
// here you will receive the trade updates
}
```

.NET (C#)

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Bitmex oBitmex = new TsgcWSAPI_Bitmex();
oBitmex.Client = oClient;
oBitmex.Subscribe(btmTrade, "xbtusd");
void OnBitmexMessage(Sender: TObject; const aTopic: TwsBitmexTopics; const aMessage: string)
{
// here you will receive the tradeupdates
}
```

2 · Bitmex | How to Place Orders

The Bitmex REST API offer public and private endpoints. The Private endpoints require that messages are signed to increase the security of transactions.

Delphi (VCL / FireMonkey)

```
// buy market order
BITMEX.REST_API.PlaceMarketOrder(bmosBuy, 'XBTUSD', 100);
// sell limit order at 45000
BITMEX.REST_API.PlaceLimitOrder(bmosSell, 'XBTUSD', 100, 45000.00);
// stop order at 48000
BITMEX.REST_API.PlaceStopOrder(bmosSell, 'XBTUSD', 100, 48000.00);
```

C++ Builder

```
// buy market order
BITMEX->REST_API->PlaceMarketOrder(bmosBuy, "XBTUSD", 100);
// sell limit order at 45000
BITMEX->REST_API->PlaceLimitOrder(bmosSell, "XBTUSD", 100, 45000.00);
// stop order at 48000
BITMEX->REST_API->PlaceStopOrder(bmosSell, "XBTUSD", 100, 48000.00);
```

.NET (C#)

```
// buy market order
BITMEX.REST_API.PlaceMarketOrder(bmosBuy, "XBTUSD", 100);
// sell limit order at 45000
BITMEX.REST_API.PlaceLimitOrder(bmosSell, "XBTUSD", 100, 45000.00);
// stop order at 48000
BITMEX.REST_API.PlaceStopOrder(bmosSell, "XBTUSD", 100, 48000.00);
```

Sources used to build this document

Every external claim links back to a primary source. The online-help references decode the canonical deep-link the company maintains for this component.

Primary standard / spec — Bitmex API explorer	www.bitmex.com/api/explorer/
Online help — component page	www.esegece.com/help/sgcWebSockets/Components/APIs/API/API_Bitmex.htm
Delphi demo project (in the sgcWebSockets package)	`Demos\05.Crypto\06.Bitmex`
.NET demo project (in the sgcWebSockets package)	`.net\demos\05.Crypto\06.Bitmex`
Component page	www.esegece.com/products/websockets/apis/bitmex/
Product page	www.esegece.com/products/websockets/

> **Document scope.** This document covers the publicly-documented surface of the Bitmex API component shipped with sgcWebSockets. For full property, method and event reference consult the online help linked above.