

# Bitstamp API

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Bitstamp WebSocket client — live order book, trade and ticker streams for every supported instrument.

## Overview

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Bitstamp is a bitcoin exchange based in Luxembourg. It allows trading between USD currency and bitcoin cryptocurrency. It allows USD, EUR, bitcoin, litecoin, ethereum, ripple or bitcoin cash deposits and withdrawals.

## At a glance

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### COMPONENT CLASS

TsgcWSAPI\_Bitstamp

### STANDARDS / SPEC

Bitstamp WebSocket API v2

### TRANSPORTS

TCP, TLS

### PLATFORMS

Windows, macOS, Linux, iOS, Android

### FRAMEWORKS

VCL, FireMonkey, Lazarus / FPC, .NET

### EDITION

Standard / Professional / Enterprise

## Features

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- Native Delphi implementation with full ANSI/Unicode support.

# Technical specification

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Standards & specs	<a href="#">Bitstamp WebSocket API v2</a>
Component class	<code>TsgcWSAPI_Bitstamp</code> (unit <code>sgcWebSocket_API_Bitstamp</code> )
Frameworks	VCL, FireMonkey, Lazarus / FPC, .NET
Platforms	Windows, macOS, Linux, iOS, Android

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## Main properties

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

<code>Client</code>	Published or public property used to configure or query the component.
<code>OnConnect</code>	Published or public property used to configure or query the component.
<code>OnDisconnect</code>	Published or public property used to configure or query the component.
<code>OnMessage</code>	Published or public property used to configure or query the component.
<code>OnBinary</code>	Published or public property used to configure or query the component.
<code>OnFragmented</code>	Published or public property used to configure or query the component.
<code>OnError</code>	Published or public property used to configure or query the component.
<code>OnException</code>	Published or public property used to configure or query the component.
<code>OnBitstampHTTPException</code>	Published or public property used to configure or query the component.
<code>Bitstamp</code>	Published or public property used to configure or query the component.

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## Main methods

The principal public methods exposed by the component.

<code>SubscribeLiveOrders()</code>	Public procedure exposed by the component.
<code>UnSubscribeLiveOrders()</code>	Public procedure exposed by the component.

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<code>SubscribeLiveOrderBook()</code>	Public procedure exposed by the component.
<code>UnSubscribeLiveOrderBook()</code>	Public procedure exposed by the component.
<code>SubscribeLiveDetailOrderBook()</code>	Public procedure exposed by the component.
<code>UnSubscribeLiveDetailOrderBook()</code>	Public procedure exposed by the component.
<code>SubscribeLiveFullOrderBook()</code>	Public procedure exposed by the component.
<code>UnSubscribeLiveFullOrderBook()</code>	Public procedure exposed by the component.
<code>SubscribeMyOrders()</code>	Public procedure exposed by the component.
<code>UnSubscribeMyOrders()</code>	Public procedure exposed by the component.

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## Quick Start

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

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

### Delphi (VCL / FireMonkey)

```
oClient := TsgcWebSocketClient.Create(nil);
oBinance := TsgcWSAPI_Binance.Create(nil);
oBinance.Client := oClient;
oClient.Active := True;
```

### C++ Builder

```
TsgcWebSocketClient *oClient = new TsgcWebSocketClient(NULL);
TsgcWSAPI_Binance *oBinance = new TsgcWSAPI_Binance(NULL);
oBinance->Client = oClient;
oClient->Active = true;
```

### .NET (C#)

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Binance oBinance = new TsgcWSAPI_Binance();
oBinance.Client = oClient;
oClient.Active = true;
```

## Common scenarios

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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 | Connect WebSocket API

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;
```

### 2 · Coinbase | Connect WebSocket API

In order to connect to Coinbase WebSocket API, just create a new Coinbase API client and attach to TsgcWebSocketClient. See below an example:

```
Delphi (VCL / FireMonkey)
```

```
oClient := TsgcWebSocketClient.Create(nil);
oCoinbase := TsgcWSAPI_Coinbase.Create(nil);
oCoinbase.Client := oClient;
oClient.Active := True;
```

C++ Builder

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Coinbase oCoinbase = new TsgcWSAPI_Coinbase();
oCoinbase->Client = oClient;
oClient->Active = true;
```

.NET (C#)

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Coinbase oCoinbase = new TsgcWSAPI_Coinbase();
oCoinbase.Client = oClient;
oClient.Active = true;
```

### 3 · Kucoin | Connect WebSocket API

In order to connect to Kucoin WebSocket API, just create a new Kucoin API client and attach to TsgcWebSocketClient.

Delphi (VCL / FireMonkey)

```
oClient := TsgcWebSocketClient.Create(nil);
oKucoin := TsgcWSAPI_Kucoin.Create(nil);
oKucoin.Client := oClient;
oClient.Active := True;
```

C++ Builder

```
TsgcWebSocketClient *oClient = new TsgcWebSocketClient();
TsgcWSAPI_Kucoin *oKucoin = new TsgcWSAPI_Kucoin();
oKucoin->Client = oClient;
oClient->Active = true;
```

.NET (C#)

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Kucoin oKucoin = new TsgcWSAPI_Kucoin();
oKucoin.Client = oClient;
oClient.Active = true;
```

## 4 • Kucoin | Futures Connect WebSocket API

In order to connect to Kucoin WebSocket API, just create a new Kucoin API client and attach to TsgcWebSocketClient.

Delphi (VCL / FireMonkey)

```
oClient := TsgcWebSocketClient.Create(nil);
oKucoin := TsgcWSAPI_Kucoin_Futures.Create(nil);
oKucoin.Client := oClient;
oClient.Active := True;
```

C++ Builder

```
TsgcWebSocketClient *oClient = new TsgcWebSocketClient();
</code><code class="delphi">TsgcWSAPI_Kucoin_Futures </code><code class="cpp">*oKucoin = new </c
oKucoin->Client = oClient;
oClient->Active = true;
```

.NET (C#)

```
TsgcWebSocketClient oClient = new TsgcWebSocketClient();
</code><code class="delphi">TsgcWSAPI_Kucoin_Futures </code><code class="csharp">oKucoin = new <
oKucoin.Client = oClient;
oClient.Active = true;
```

## 5 • Binance | Subscribe WebSocket Channel

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

Delphi (VCL / FireMonkey)

```

oClient := TsgcWebSocketClient.Create(nil);
oBinance := TsgcWSAPI_Binance.Create(nil);
oBinance.Client := oClient;
oBinance.SubscribeTicker('bnbbtc');

procedure OnMessage(Connection: TsgcWSConnection; const aText: string);
begin
  // here you will receive the ticker updates
end;

```

C++ Builder

```

TsgcWebSocketClient *oClient = new TsgcWebSocketClient(NULL);
TsgcWSAPI_Binance *oBinance = new TsgcWSAPI_Binance(NULL);
oBinance->Client = oClient;
oBinance->SubscribeTicker("bnbbtc");

void OnMessage(TsgcWSConnection *Connection, const string aText)
{
  // here you will receive the ticker updates
}

```

.NET (C#)

```

TsgcWebSocketClient oClient = new TsgcWebSocketClient();
TsgcWSAPI_Binance oBinance = new TsgcWSAPI_Binance();
oBinance.Client = oClient;
oBinance.SubscribeTicker("bnbbtc");

void OnMessage(TsgcWSConnection Connection, const string aText)
{
  // here you will receive the ticker updates
}

```

## 6 · 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
}
```

## Sources used to build this document

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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 — Bitstamp WebSocket API v2 [www.bitstamp.net/websocket/v2/](http://www.bitstamp.net/websocket/v2/)

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Online help — component page [www.egegece.com/help/sgcWebSockets/Components/APIs/API/API\\_Bitstamp.htm](http://www.egegece.com/help/sgcWebSockets/Components/APIs/API/API_Bitstamp.htm)

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Delphi demo project (in the sgcWebSockets package) `Demos\05.Crypto\02.Bitstamp`

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.NET demo project (in the sgcWebSockets package) `.net\demos\05.Crypto\02.Bitstamp`

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Component page [www.egegece.com/products/websockets/apis/bitstamp/](http://www.egegece.com/products/websockets/apis/bitstamp/)

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Product page [www.egegece.com/products/websockets/](http://www.egegece.com/products/websockets/)

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