# rest api

#### 请求错误枚举

HTTP Response Status Code	Reason	Response Model
400	Bad Request	{"code":"400",message":"parameter error"}
404	Not Found	{"code":"401","message":"parameter error"}

#### code表明业务错误,枚举code如下

Code	Description
400	参数错误
1xxxxx	xxxxxx

## 1. 请求历史分钟线数据

### URI:/api/v1/market/candle

#### **HTTP-METHOD:GET**

### a.请求参数

Name	Туре	Description	Notes
exchange	string	HUOBI	[required]
contract	string	BTC/USDT	[required]
begin	string	请求开始时间(时间戳)	[optional]
end	string	请求结束时间(时间戳)	[optional]
size	int	请求根数	[optional]
duration	string	请求周期类型(1m.5m.15m.30m.1h.4h.1d)	[required]

注意: 如果begin 和end都填写了,则size忽略,如果begin和size填写了,end没有填写,则表示从begin开始向后 请求多少根, 如果end和size填写了,begin没有填写,则表示向前请求多少根。 duration表示周期, 1m.5m.15m.30m表示1分钟线.5分钟线.15分钟线.30分钟线,1h.4h表示1小时线.4小时线,1d表示日线

### b.返回结果

注意: 数据里面time 如果duration是1m、5m、15m、30m,则时间到分钟、如果是1h、4h 则时间到小时,1d则时间到天

### 2. 请求成交数据

### URI:/api/v1/market/trade

#### **HTTP-METHOD:GET**

#### a.请求参数

name	type	description	Notes
exchange	string	HUOBI	[required]
contract	string	BTC/USDT	[required]
begin	string	请求开始时间(时间戳)	[optional]
end	string	请求结束时间(时间戳)	[optional]
size	int	请求根数	[optional]

注意: 如果begin 和end都填写了,则size忽略,如果begin和size填写了,end没有填写,则表示从begin开始向后 请求多少根, 如果end和size填写了,begin没有填写,则表示向前请求多少根。

#### b.返回结果

```
{
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "detail":[
    {
```

```
"time":"1354678432345",

"price":"4.35",

"volume":"4.35",

"side":"b"

}
]
```

注意: side表示买卖方向 b表示买, s表示卖

## 3. 请求depth10数据(Book)

### URI:/api/v1/market/depth10

#### HTTP-METHOD:GET

#### a.请求参数

Name	Туре	Description	Notes
exchange	string	HUOBI	[required]
contract	string	BTC/USDT	[required]

#### b.返回结果

## 4. 请求tick数据

### URI:/api/v1/market/tick

#### **HTTP-METHOD:GET**

### a.请求参数

Name	Туре	Description	Notes
exchange	string	HUOBI	[required]
contract	string	BTC/USDT	[required]

### b.返回结果

```
{
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "time":"1354678432345",
    "open":"4.35",
    "high":"4.35",
    "low":"4.35",
    "last":"4.35",
    "volume":"4.35",
    "change":"0.23"
}
```

# websocket api

注意: 如果code返回200表示成功,非200表示发生错误,message为简要描述,枚举映射如下:

Code	Reason
200	success
201	repeated subscribe
400	bad request
500	invalid subscribe common

## 1. 订阅tick数据

### a. 请求参数

..Websocket Client request

#### b. 返回数据

..Websocket Server response

```
"msg_type":"subscribed-tick",
   "exchange": "HUOBI",
   "contract":"BTC/USDT",
   "code": 200,
   "message":"invalid contract"
}]
```

..Websocket server push

```
"msg_type":"push-tick",
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "time":"1354678432345",
    "open":"4.35",
    "high":"4.35",
    "low":"4.35",
    "last":"4.35",
    "volume":"4.35",
    "change":"0.23",
    "change_rate":"0.012"
}
```

## 2. 订阅trade数据

### a. 请求参数

..Websocket Client request

#### b. 返回数据

..Websocket Server response

```
[{
    "msg_type":"subscribed-trade",
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "code": 200,
    "message":"invalid contract"
}]
```

..Websocket server push

```
{
    "msg_type":"push-trade",
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "time":"1354678432345",
    "price":"4.35",
    "volume":"4.35",
    "side":"b"
}
```

## 3. 订阅depth数据(book)

### a. 请求参数

..Websocket Client request

#### b. 返回数据

..Websocket Server response

```
[{
    "msg_type":"subscribed-depth10",
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "code": 200,
    "message":"invalid contract"
}]
```

..Websocket server push

## 4. 订阅k线数据

#### a. 请求参数

..Websocket Client request

### b. 返回数据

..Websocket Server response

```
[{
    "msg_type":"subscribed-candle",
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "duration":"1m",
    "code": 200,
    "message":"invalid contract"
}]
```

..Websocket server push

```
{
    "msg_type":"push-candle",
    "exchange": "HUOBI",
    "contract":"BTC/USDT",
    "duration":"1m",
    "time":"1549868040000",
    "open":"4.35",
    "high":"4.35",
    "low":"4.35",
    "close":"4.35",
    "volume":"4.35"
}
```

### 5. heartbeat

#### a. 请求参数

..Websocket Client request

```
{
    "msg_type":"ping"
}
```

#### b. 返回数据

..Websocket Server response

```
{
    "msg_type":"pong",
    "time":"1549868040000"
}
```

注意: 心跳包,客户端5秒中发一次ping包