Petal + Coinbase real-time API

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Revision History

version	Date	CR No.	Section No.	Change description	Author
V1.0	02/20/2021				

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Background

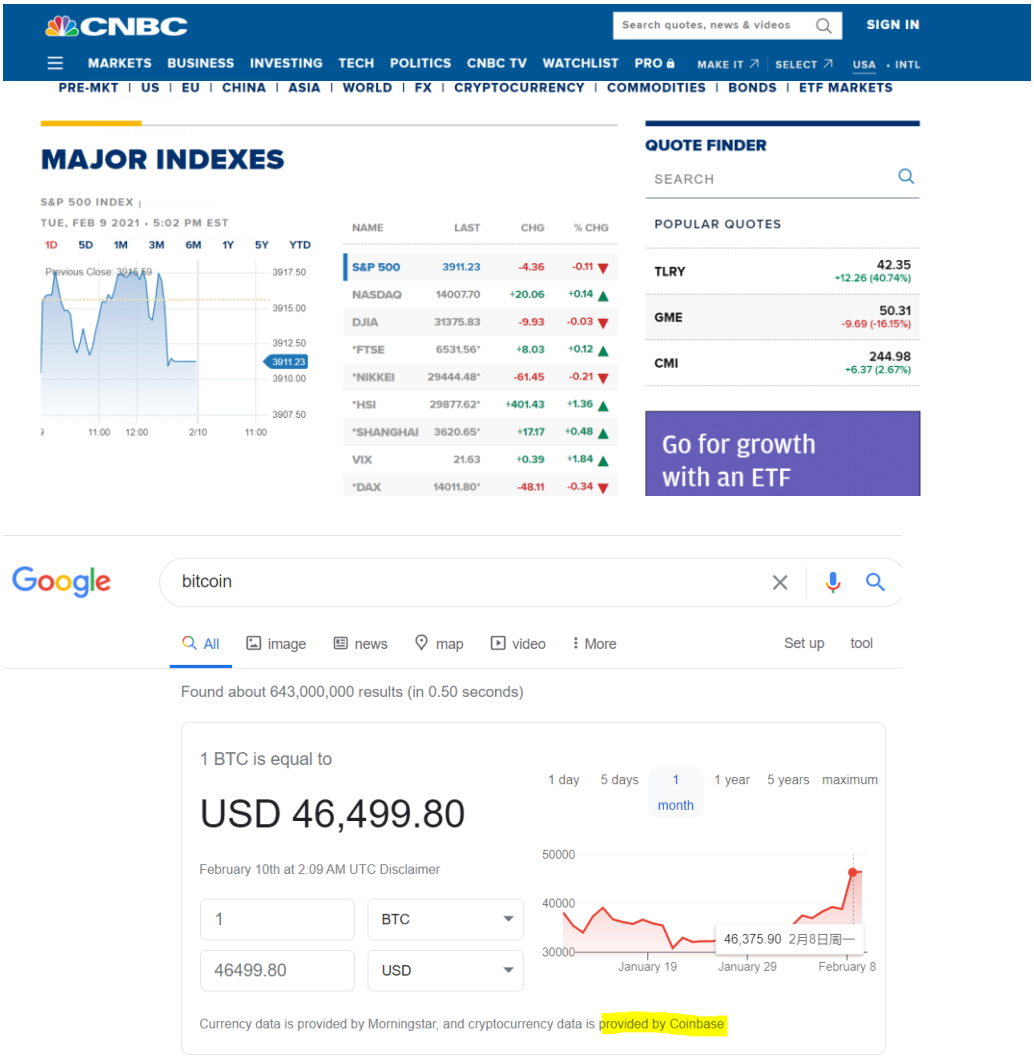
In today's global market, competitions from opponents are reaching record highs. Whether it is Samsung or Apple, all the technological competitors are outmaneuvering and outperforming each other to fight for the market share. To draw the most top tier Apps. and developers into our ecosystem, we need to extend our app. platforms in all dimensions to build up rich, flexible, customizable, and multi-channeled services to align with CPs' technical requirements and business needs. Even though Huawei's ecosystem is one of the best in the world, it still has missing pieces that are very much needed by our CPs.

A true partnership for technology must be a customer-specific one with the capabilities to bring your customers the most benefits that your competitors cannot offer. Herein this document, we would like to propose one missing piece of Huawei ecosystem - the integration of CP's APIs with Huawei's browsers (-1 Screen, Petal search, and Huawei default browser). With this integration, CP's product APIs will be used in Huawei Browsers and CP's brand name and products will be presented on browsers' UI for more product publicity. This is one of the highest demands from our CPs. To lay out all the technical details, we will use Coinbase's case as user scenario all through this proposal.

Coinbase is the largest cryptocurrency exchange companies in the world, with over 35 million users across 32 countries and bitcoin transactions and storage in 190 countries worldwide. Coinbase App. has over 10 million downloads in the Google Play Store. Coinbase's main function is for users to buy and sell cryptos such as bitcoin, bitcoin cash, Ethereum, Litecoin, and more. Coinbase.com is available in more than 100 countries. In Feb. 2021, Elon Musk, Tesla's CEO, brought $1.5 Billion in Bitcoin through Coinbase. Coinbase's IPO paperwork was submitted in late Nov. 2020 and got over $100 Billion Valuation from Nasdaq Private Market. Once it goes to public, it will draw a huge audience globally and the influence imposed on Huawei's image and reputation will be tremendously positive.

Currently, Coinbase has two Apps. in our Tier 1 App. list - Coinbase and Coinbase Wallet. NA BD and DTSE team are working diligently with CP so to bring them in Huawei App Gallery.

Since Huawei cannot provide Coinbase CP with any funds to purchase Huawei ads or promote their HMS version in AppGallery. Coinbase CP do not want to continue the business discussion with us and might walk away. Coinbase CP is asking the possibility of integrating Coinbase real-time pricing API with Huawei's browser for Bitcoin, Ethereum, Litecoin etc., this brand name exposure might convince them to do the HMS integration and send their Apps in HW AG. Coinbase real-time pricing APIs have already been integrated with US mainstream news platform CNBC (US Consumer News and Business Channel) and Google etc.



Proposed API integration

Current Huawei Browser Search UI:

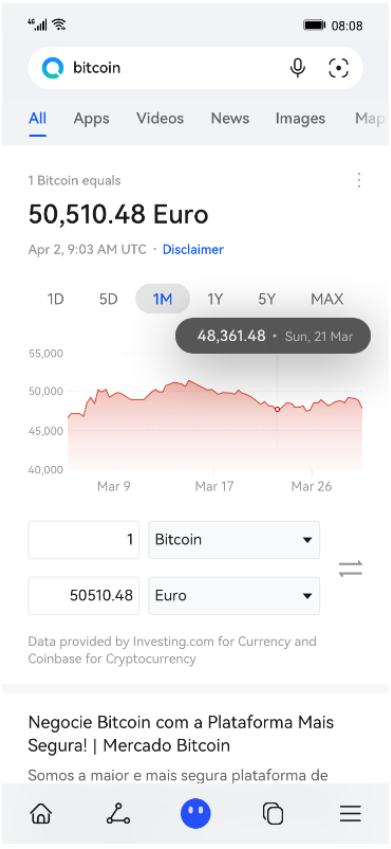
Huawei Petal search currently uses Microsoft Bing as default search engine. When device users type in, e.g. "Bitcoin" to do the search, the search result will return Bitcoin's real time price and show the data is provided by: Refinitiv API. This is the same situation in "-1 Screen".

Proposed Search Result UI for Coinbase:

Integrate Coinbase real-time pricing API with Huawei Petal Search: when device users type in, e.g., "Bitcoin" to do the search, use Coinbase real time API to retrieve Bitcoin price and present it on Petal search web UI. Also, we need to show that the data is powered by Coinbase.

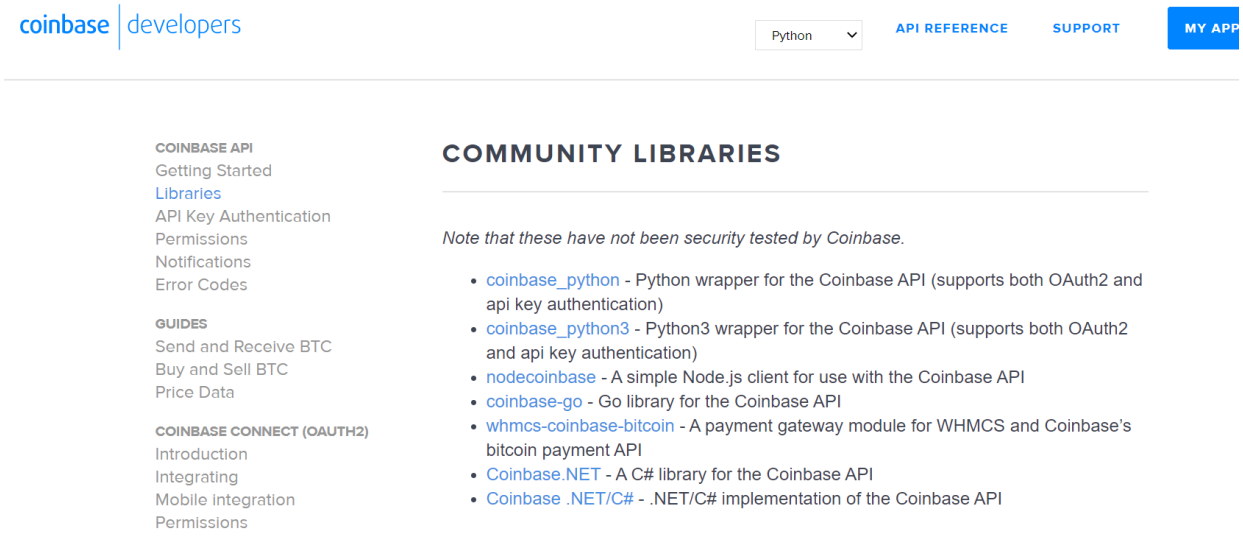
Current Search Result

Proposed Search Result

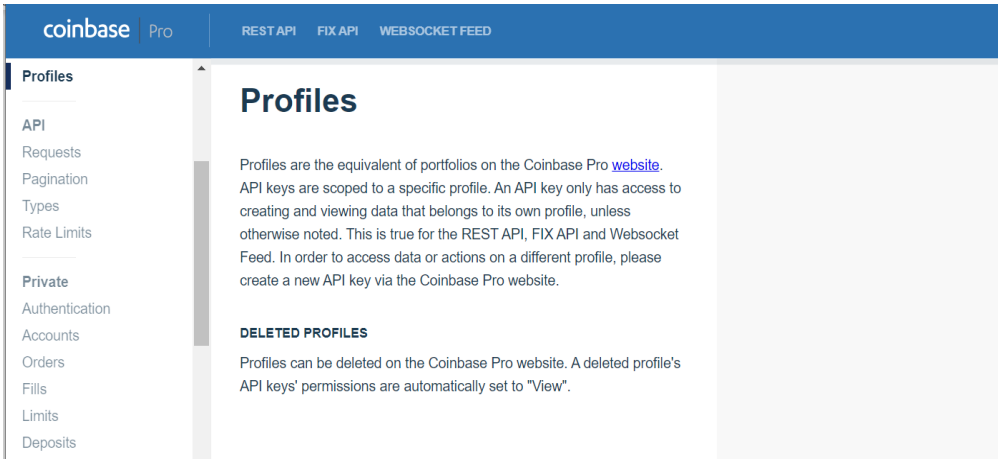


Coinbase Real Time Pricing APIs

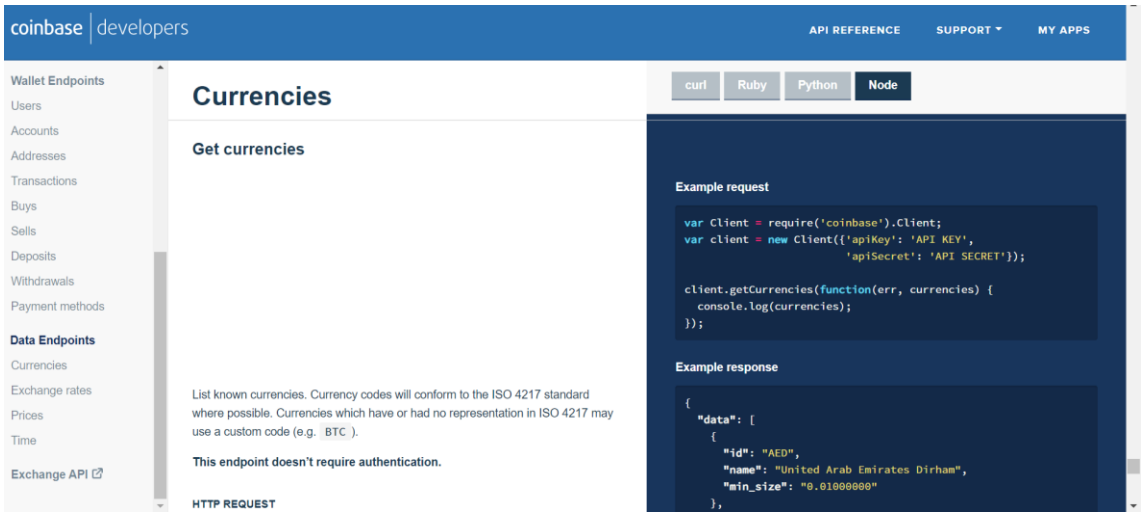
- Online Documentation on Coinbase API:

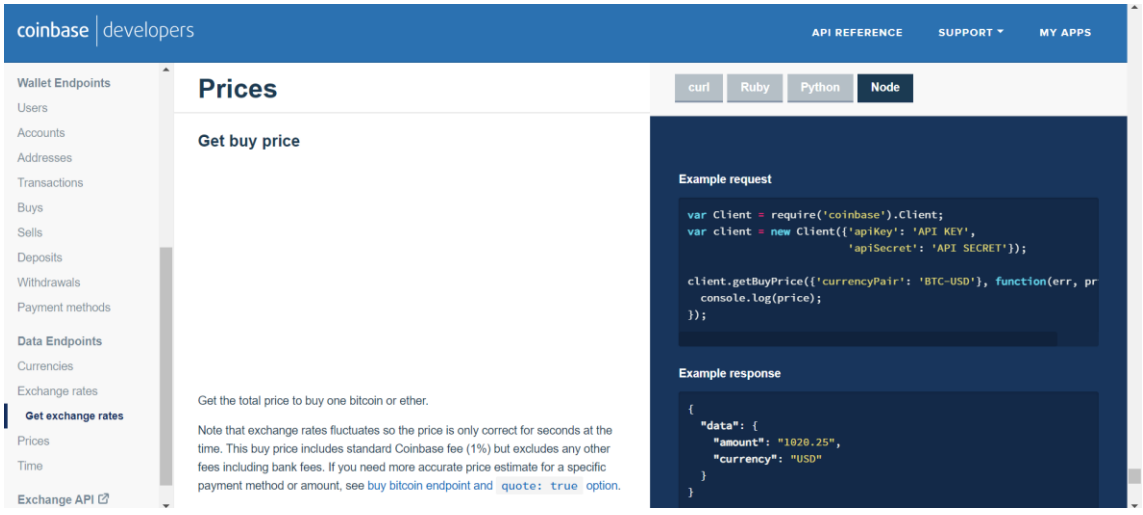


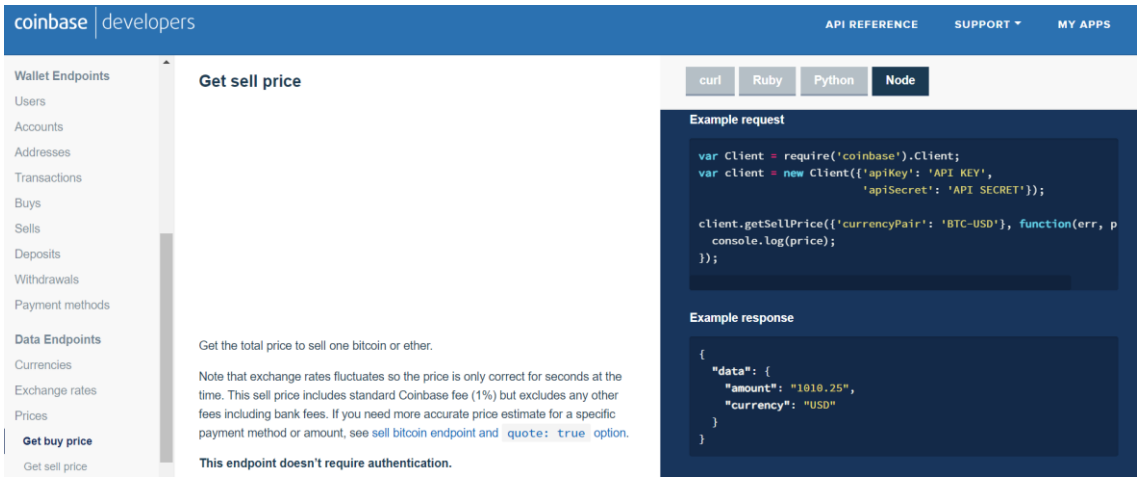
- Coinbase Pro. APIs:

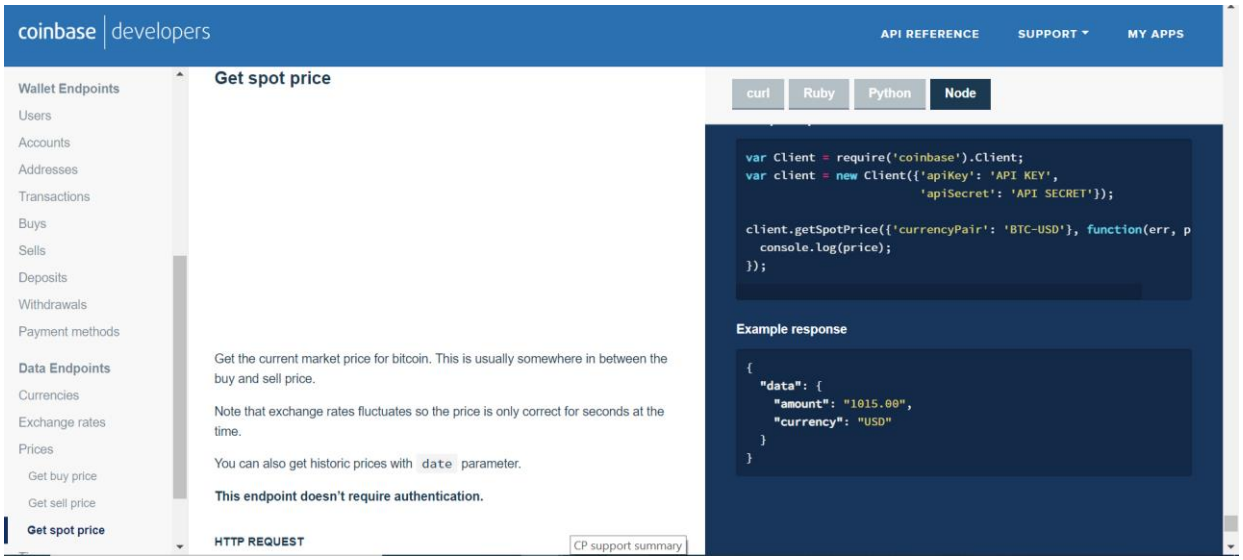


- Approaches to get Bitcoin real time price in Coinbase:
  - Coinbase Price APIs:

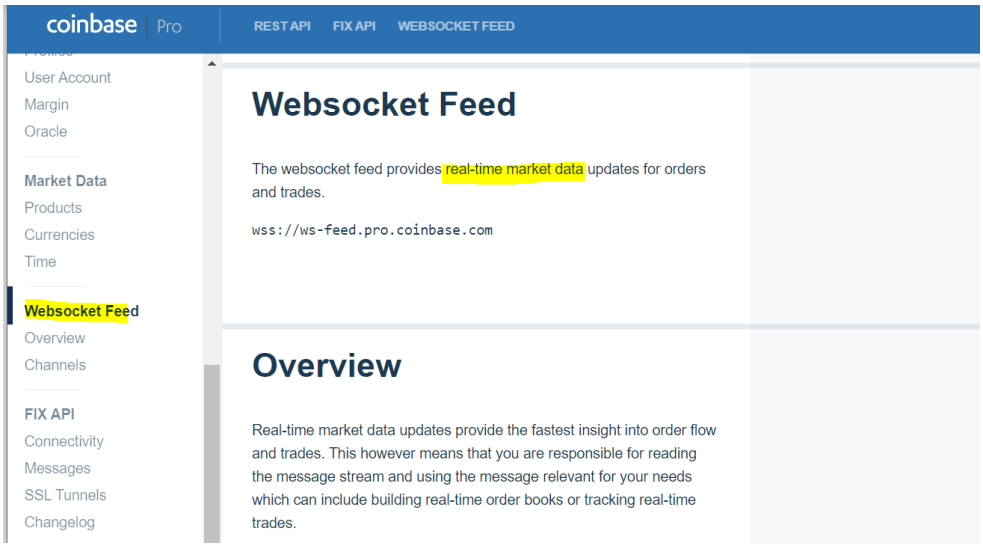








- Use Websocket Feed: Get Bitcoin price from Coinbase web socket feed using the ticker channel. The URL needs to be used is: wss://ws-feed.pro.coinbase.com with your API key.



Sample code:

```
const websocket = new CoinbasePro.WebsocketClient(
 ["BTC-EUR"],
 "wss://ws-feed.pro.coinbase.com",
 null, // <-- you need to put your API key in
 {
  channels: ['ticker']
 }
);
websocket.on('message',data=>data.type==='ticker'&&xPrice=data.price&&console.log(dat
a.price, data))
                    // (only want to see ticker messages)
                    // you will receive heartbeat (keep-alive) and ticker messages
                    // asynchronous callback will send data when it is available
                    // you must wait for data to be available and act on it
```

References:

- Coinbase Will Be First Major Cryptocurrency Company To Go Public
- Coinbase Valued Above $100 Billion, ahead of direct listing
- Coinbase plans to go public through a direct listing, following Spotify, Slack and Palantir
- Largest U.S. cryptocurrency exchange Coinbase files for IPO as bitcoin soars past $23,000
- CNBC (**Consumer News and Business Channel):** a joint venture between NBC and Cablevision
- **https://stackoverflow.com/questions/62302757/coinbase-pro-web-socket-get-the-current-price-for-a-currency**
- **https://stackoverflow.com/questions/48560144/get-live-exchange-rates-with-coinbase-api/48873524#48873524**

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