Advanced Trade API Authentication

This guide explains how to authenticate requests to the Advanced Trade REST API endpoints and WebSocket server channels. It assumes that you have already created API keys on the Coinbase Developer Platform.

Making Requests

CDP API keys are used to generate a JSON Web Token (JWT) for an API. Once you've generated a JWT, set it as a Authorization Bearer header to make an authenticated request.

```
# Example request to get account
curl -H "Authorization: Bearer $JWT" 'https://api.coinbase.com/api/v3/brokerage/
accounts/f603f97c-37d7-4e58-b264-c27e9e393dd9'
```

Generating a JWT

Regardless of which code snippet you use, follow these steps:

- 1. Replace key name and key secret with your key name and private key. key secret is a multi-line key and newlines must be preserved to properly parse the key. Do this on one line with \n escaped newlines, or with a multi-line string.
- 2. Replace the request method and path you want to test. If the URI has a UUID in the path, include that UUID here, e.g., /api/v3/brokerage/accounts/f603f97c-37d7-4e58-b264-c27e9e393dd9.
- 3. Run the generation script that prints the command export JWT=...
- 4. Run the generated command to save your JWT.

▲ Caution

Your JWT expires after 2 minutes, after which all requests are unauthenticated.

▲ Caution

You must generate a different JWT for each unique API request.

Code Samples

The easiest way to generate a JWT is to use the built-in functions in our Python SDK as described below.

Otherwise, use the code samples below to generate/export a JWT and make an authenticated request.

Python SDK Python Go JavaScript PHP Java C++ TypeScript C >

1. Install the SDK.

```
pip3 install coinbase-advanced-py
```

- 2. In the console, run: python main.py (or whatever your file name is).
- 3. Set the JWT to that output, or export the JWT to the environment with export JWT=\$(python main.py).
- 4. Make your request, example curl -H "Authorization: Bearer \$JWT" 'https://api.coinbase.com/api/v3/brokerage/accounts'

```
from coinbase import jwt_generator

api_key = "organizations/{org_id}/apiKeys/{key_id}"

api_secret = "-----BEGIN EC PRIVATE KEY-----\nYOUR PRIVATE KEY\n----END EC PRIVATE
KEY----\n"

request_method = "GET"
request_path = "/api/v3/brokerage/accounts"

def main():
    jwt_uri = jwt_generator.format_jwt_uri(request_method, request_path)
    jwt_token = jwt_generator.build_rest_jwt(jwt_uri, api_key, api_secret)
    print(jwt_token)

if __name__ == "__main__":
    main()
```

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