

# Historical Data

## OptionHistoricalDataClient

```
class alpaca.data.historical.option.OptionHistoricalDataClient(api_key:
    Optional[str] = None, secret_key: Optional[str] = None, oauth_token:
    Optional[str] = None, use_basic_auth: bool = False, raw_data: bool = False,
    url_override: Optional[str] = None, sandbox: bool = False)
```

The REST client for interacting with Alpaca Market Data API option data endpoints.

Learn more on <https://docs.alpaca.markets/docs/about-market-data-api>

```
__init__(api_key: Optional[str] = None, secret_key: Optional[str] = None,
    oauth_token: Optional[str] = None, use_basic_auth: bool = False,
    raw_data: bool = False, url_override: Optional[str] = None, sandbox: bool
    = False) → None
```

Instantiates a Historical Data Client.

### PARAMETERS:

- **api\_key** (*Optional[str], optional*) – Alpaca API key. Defaults to None.
- **secret\_key** (*Optional[str], optional*) – Alpaca API secret key. Defaults to None.
- **oauth\_token** (*Optional[str]*) – The oauth token if authenticating via OAuth. Defaults to None.
- **use\_basic\_auth** (*bool, optional*) – If true, API requests will use basic authorization headers. Set to true if using broker api sandbox credentials
- **raw\_data** (*bool, optional*) – If true, API responses will not be wrapped and raw responses will be returned from methods. Defaults to False. This has not been implemented yet.
- **url\_override** (*Optional[str], optional*) – If specified allows you to override the base url the client points to for proxy/testing.
- **sandbox** (*bool*) – True if using sandbox mode. Defaults to False.

# Get Option Bars

```
OptionHistoricalDataClient.get_option_bars(request_params: OptionBarsRequest) →  
    Union[BarSet, Dict[str, Any]]
```

Returns bar data for an option contract or list of option contracts over a given time period and timeframe.

**PARAMETERS:**

**request\_params** (*OptionBarsRequest*) – The request object for retrieving option bar data.

**RETURNS:**

The bar data either in raw or wrapped form

**RETURN TYPE:**

Union[BarSet, RawData]

# Get Option Trades

```
OptionHistoricalDataClient.get_option_trades(request_params: OptionTradesRequest)  
    → Union[TradeSet, Dict[str, Any]]
```

The historical option trades API provides trade data for a list of contract symbols between the specified dates up to 7 days ago.

**PARAMETERS:**

**request\_params** (*OptionTradesRequest*) – The request object for retrieving option trade data.

**RETURNS:**

The trade data either in raw or wrapped form

**RETURN TYPE:**

Union[TradeSet, RawData]

# Get Option Exchange Codes

`OptionHistoricalDataClient.get_option_exchange_codes() → Dict[str, Any]`

Returns the mapping between the option exchange codes and the corresponding exchanges names.

PARAMETERS:

**None** –

RETURNS:

The mapping between the option exchange codes and the corresponding exchanges names.

RETURN TYPE:

RawData

# Get Option Latest Quote

`OptionHistoricalDataClient.get_option_latest_quote(request_params: OptionLatestQuoteRequest) → Union[Dict[str, Quote], Dict[str, Any]]`

Retrieves the latest quote for an option symbol or list of option symbols.

PARAMETERS:

**request\_params** (*OptionLatestQuoteRequest*) – The request object for retrieving the latest quote data.

RETURNS:

The latest quote in raw or wrapped format

RETURN TYPE:

Union[Dict[str, Quote], RawData]

# Get Option Latest Trade

```
OptionHistoricalDataClient.get_option_latest_trade(request_params:  
    OptionLatestTradeRequest) → Union[Dict[str, Trade], Dict[str, Any]]
```

Retrieves the latest trade for an option symbol or list of option symbols.

## PARAMETERS:

**request\_params** (*OptionLatestTradeRequest*) – The request object for retrieving the latest trade data.

## RETURNS:

The latest trade in raw or wrapped format

## RETURN TYPE:

Union[Dict[str, Trade], RawData]

# Get Option Snapshot

```
OptionHistoricalDataClient.get_option_snapshot(request_params:  
    OptionSnapshotRequest) → Union[Dict[str, OptionsSnapshot], Dict[str, Any]]
```

Returns snapshots of queried symbols. OptionsSnapshot contain latest trade, latest quote, implied volatility, and greeks for the queried symbols.

## PARAMETERS:

**request\_params** (*OptionSnapshotRequest*) – The request object for retrieving snapshot data.

## RETURNS:

The snapshot data either in raw or wrapped form

## RETURN TYPE:

Union[Dict[str, OptionsSnapshot], RawData]

# Get Option Chain

```
OptionHistoricalDataClient.get_option_chain(request_params: OptionChainRequest) →  
    Union[Dict[str, OptionsSnapshot], Dict[str, Any]]
```

The option chain endpoint for underlying symbol provides the latest trade, latest quote, implied volatility, and greeks for each contract symbol of the underlying symbol.

## PARAMETERS:

**request\_params** (*OptionChainRequest*) – The request object for retrieving snapshot data.

## RETURNS:

The snapshot data either in raw or wrapped form

## RETURN TYPE:

Union[Dict[str, OptionsSnapshot], RawData]