永豐金證券
PYTHON API

測試流程

API 測試前需知

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事前準備

- 完成 開戶及API下單簽署 (證券/期貨需分別簽署)
- 安裝 Python 及 Python API (Shioaji)

注意事項

- 欲開通正式環境API下單權限，客戶須於模擬環境完成**登入**及**下單**測試(證券/期貨需分別測試)。API測試紀錄當日審核完畢，最快約10分鐘。
- API下單簽署時間須早於API測試的時間，以利審核通過
- 證券/期貨下單測試，需間隔1秒以上，以利系統留存測試紀錄
- 所有API測試均須在模擬環境執行
- API模擬環境開放時間: 營業日 8am ~ 8pm
    - 8am ~ 6pm 不限制來源IP
    - 6pm ~ 8pm 限制須為台灣IP
- Python API請使用0.3.6.dev7以上版本

摘要

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登入測試

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登入測試

```
import shioaji as sj
api = sj.Shioaji(simulation=True)
api.login("身分證字號", "密碼")
```

- [API測試範例]
- 請修改成本人之**身分證字號**及**密碼**
- Event: Session up ->即表示與伺服器成功建立連線
- 登入成功後，api.login會回傳帳號列表，模擬環境(simulation=True)均回傳測試帳號，非開戶帳號

2. 登入

```
# 勿更動，確保API操作均在模擬環境執行
##################################

api = sj.Shioaji(simulation=True) # simulation=True 即表示使用模擬環境

##################################
```

```
# 請輸入證券(期貨)身分證字號及密碼
##################################

PERSON_ID = "身分證字號" #身分證字號
PASSWORD = "密碼" #密碼

##################################
```

```
api.login(PERSON_ID, PASSWORD) # 登入
```

```
Response Code: 0 | Event Code: 0 | Info: host '203.66.91.161:80', hostname '203.66.91.161:80' IP 203.66.91.161:80 (host 1 of 1) (host connection attempt 1 of 1) (total connection attempt 1 of 1) | Event: Session up
Response Code: 0 | Event Code: 0 | Info: host '218.32.76.102:80', hostname '218.32.76.102:80' IP 218.32.76.102:80 (host 1 of 1) (host connection attempt 1 of 1) (total connection attempt 1 of 1) | Event: Session up

[FutureAccount(person_id='QBCCAIGJBJ', broker_id='F002000', account_id='9100020', signed=True, username='PAPIUSER01'),
 StockAccount(person_id='QBCCAIGJBJ', broker_id='9A95', account_id='0504350', signed=True, username='PAPIUSER01')]
```

登入測試

常見問題

1. 身分證字號或密碼錯誤，請使用開戶身分證字號及密碼登入
2. 非模擬環境開放時間(營業日 8am ~ 8pm)登入
    - 8am ~ 6pm 不限制來源IP
    - 6pm ~ 8pm 限制須為台灣IP，**Colab為國外IP**
3. shioaji版本過舊，請確認shioaji版本 >= "0.3.6.dev7"

證券下單測試

PYTHON API

證券下單測試 (1)

- [API測試範例]

選擇商品檔

```
contract = api.Contracts.Stocks["2890"]
```

4. 證券下單

選擇商品檔

```
contract = api.Contracts.Stocks["2890"] # 請更改商品檔
contract
```

```
Stock(exchange=<Exchange.TSE: 'TSE'>, code='2890', symbol='TSE2890', name='永豐金', category='17', unit=1000, limit_up=18.95, li
mit_down=15.55, reference=17.25, update_date='2022/08/24', day_trade=<DayTrade.Yes: 'Yes'>)
```

■ 01_shioaji_test

證券下單測試 (2)

設定委託內容

```
order = api.Order(
    action=sj.constant.Action.Buy,
    price=18,
    quantity=1,
    price_type=sj.constant.TFTStockPriceType.LMT,
    order_type=sj.constant.TFTOrderType.ROD,
    order_lot=sj.constant.TFTStockOrderLot.Common,
    account=api.stock_account
)
```

- action (買賣別): Buy, Sell
- price (價格)
- quantity (數量)
- price_type (委託價格類別): LMT, MKT, MKP
- order_type(委託條件): IOC, ROD, FOK
- order_lot (倉別): Common(整股), Fixing(定盤), Odd(盤後零股), IntradayOdd(盤中零股)
- account (下單帳號)

證券下單測試 (3)

設定委託內容

```
order = api.Order(
    action=sj.constant.Action.Buy,                       # action (買賣別): Buy, Sell
    price=18,                                            # price (價格)
    quantity=1,                                          # quantity (委託數量)
    price_type=sj.constant.TFTStockPriceType.LMT,        # price_type (委託價格類別): LMT(限價), MKT(市價), MKP(範圍市價)
    order_type=sj.constant.TFTOrderType.ROD,             # order_type (委託條件): IOC, ROD, FOK
    order_lot=sj.constant.TFTStockOrderLot.Common,       # order_lot (盤別): Common(整股), Fixing(定盤), Odd(盤後零股),
                                                         #                  IntradayOdd (盤中零股)
    account=api.stock_account                            # account (下單帳號)
)
order
```

```
Order(action=<Action.Buy: 'Buy'>, price=18, quantity=1, account=StockAccount(person_id='QBCCAIGJBJ', broker_id='9A95', account_
id='0504350', signed=True, username='PAPIUSER01'), price_type=<StockPriceType.LMT: 'LMT'>, order_type=<FuturesOrderType.ROD: 'R
OD'>)
```

證券下單測試 (4)

下單

trade = api.place_order(contract, order, timeout=0)

```
trade = api.place_order(contract, order, timeout=0)
```

OrderState.TFTOrder {'operation': {'op_type': 'New', 'op_code': '88', 'op_msg': '價格超過漲跌幅範圍'}, 'order': {'id': '5ea073e3', 'seqno': '258924', 'ordno': 'W0000', 'account': {'account_type': 'S', 'person_id': '', 'broker_id': '9A95', 'account_id': '0504350', 'signed': True}, 'action': 'Buy', 'price': 18.0, 'quantity': 1, 'order_type': 'ROD', 'price_type': 'LMT', 'order_cond': 'Cash', 'order_lot': 'Common', 'custom_field': ''}, 'status': {'id': '5ea073e3', 'exchange_ts': 1661318105, 'modified_price': 0.0, 'cancel_quantity': 0, 'order_quantity': 0, 'web_id': '137'}, 'contract': {'security_type': 'STK', 'exchange': 'TSE', 'code': '2890', 'symbol': '', 'name': '', 'currency': 'TWD'}}

```
trade
```

Trade(contract=Stock(exchange=<Exchange.TSE: 'TSE'>, code='2890', symbol='TSE2890', name='永豐金', category='17', unit=1000, limit_up=18.95, limit_down=15.55, reference=17.25, update_date='2022/08/24', day_trade=<DayTrade.Yes: 'Yes'>), order=Order(action=<Action.Buy: 'Buy'>, price=18, quantity=1, account=StockAccount(person_id='QBCCAIGJBJ', broker_id='9A95', account_id='0504350', signed=True, username='PAPIUSER01'), price_type=<StockPriceType.LMT: 'LMT'>, order_type=<FuturesOrderType.ROD: 'ROD'>), status=OrderStatus(status=<Status.Inactive: 'Inactive'>))

證券下單測試 (5)

常見問題

1. 執行委託後，無委託回報。此為正常現象，模擬環境委託回報非開發團隊可控制因素。
2. 委託失敗。此為正常現象，模擬環境委託狀態非開發團隊可控制因素。
3. 只要trade物件不為None，下單測試即完成，**委託狀態不影響測試結果**。
4. timeout=0為非同步下單，**此設定為確保留存API測試紀錄**。一般情況，使用者可自由設定。

期貨下單測試

PYTHON API

期貨下單測試 (1)

- [API測試範例]()

選擇商品檔

```
contract = api.Contracts.Futures.TXF["TXF202306"]
```

5. 期貨下單

選擇商品檔

```
contract = api.Contracts.Futures.TXF["TXF202306"] # 請更改商品檔，合約若已到期，則商品檔為None
contract
```

```
Future(code='TXFF3', symbol='TXF202306', name='臺股期貨06', category='TXF', delivery_month='202306', delivery_date='2023/06/21',
underlying_kind='I', unit=1, limit_up=16242.0, limit_down=13290.0, reference=14766.0, update_date='2022/08/24')
```

■ 01_shioaji_test

期貨下單測試 (2)

設定委託內容

```
order = api.Order(
    action=sj.constant.Action.Buy,
    price=15000,
    quantity=1,
    price_type=sj.constant. FuturesPriceType.LMT,
    order_type=sj.constant.FuturesOrderType.ROD,
    octype=sj.constant.FuturesOCType.Auto,
    account=api.futopt_account,
)
```

- action (買賣別): Buy, Sell
- price (價格)
- quantity (數量)
- price_type (委託價格類別): LMT, MKT, MKP
- order_type(委託條件): IOC, ROD, FOK
- octype (倉別): Auto(自動), New(新倉), Cover(平倉), DayTrade(當沖)
- account (下單帳號)

期貨下單測試 (3)

設定委託內容

```
order = api.Order(
    action=sj.constant.Action.Buy,                          # action (買賣別): Buy, Sell
    price=15000,                                             # price (價格)
    quantity=1,                                              # quantity (委託數量)
    price_type=sj.constant.FuturesPriceType.LMT,             # price_type (委託價格類別): LMT(限價), MKT(市價), MKP(範圍市價)
    order_type=sj.constant.FuturesOrderType.ROD,             # order_type (委託條件): IOC, ROD, FOK
    octype=sj.constant.FuturesOCType.Auto,                   # octype (倉別 ): Auto(自動), New(新倉), Cover(平倉), DayTrade(當沖)
    account=api.futopt_account                               # account (下單帳號)
)
order
```

```
Order(action=<Action.Buy: 'Buy'>, price=15000, quantity=1, account=FutureAccount(person_id='QBCCAIGJBJ', broker_id='F002000', a
ccount_id='9100020', signed=True, username='PAPIUSER01'), price_type=<StockPriceType.LMT: 'LMT'>, order_type=<FuturesOrderType.
ROD: 'ROD'>)
```

期貨下單測試 (4)

下單

trade = api.place_order(contract, order, timeout=0)

```
trade = api.place_order(contract, order, timeout=0)
```

```
OrderState.FOrder {'operation': {'op_type': 'New', 'op_code': '00', 'op_msg': ''}, 'order': {'id': '7aed3d28', 'seqno': '25822
7', 'ordno': 'ky00m', 'account': {'account_type': 'F', 'person_id': '', 'broker_id': 'F002000', 'account_id': '9100020', 'signe
d': True}, 'action': 'Buy', 'price': 15000.0, 'quantity': 1, 'order_type': 'ROD', 'price_type': 'LMT', 'market_type': 'Day', 'o
c_type': 'New', 'subaccount': '', 'combo': False}, 'status': {'id': '7aed3d28', 'exchange_ts': 1661318120, 'modified_price': 0.
0, 'cancel_quantity': 0, 'order_quantity': 1, 'web_id': 'Z'}, 'contract': {'security_type': 'FUT', 'code': 'TXF', 'exchange':
'TIM', 'delivery_month': '202306', 'delivery_date': '', 'strike_price': 0.0, 'option_right': 'Future'}}
```

```
trade
```

```
Trade(contract=Future(code='TXFF3', symbol='TXF202306', name='臺股期貨06', category='TXF', delivery_month='202306', delivery_dat
e='2023/06/21', underlying_kind='I', unit=1, limit_up=16242.0, limit_down=13290.0, reference=14766.0, update_date='2022/08/2
4'), order=Order(action=<Action.Buy: 'Buy'>, price=15000, quantity=1, id='7aed3d28', seqno='258227', ordno='ky00m', account=Acc
ount(account_type=<AccountType.Future: 'F'>, person_id='QBCCAIGJBJ', broker_id='F002000', account_id='9100020', signed=True), p
rice_type=<StockPriceType.LMT: 'LMT'>, order_type=<FuturesOrderType.ROD: 'ROD'>), status=OrderStatus(id='7aed3d28', status=<Sta
tus.PendingSubmit: 'PendingSubmit'>, status_code='    ', order_datetime=datetime.datetime(2022, 8, 24, 13, 15, 20), deals=[]))
```

期貨下單測試 (5)

常見問題

1. 執行委託後，無委託回報。此為正常現象，模擬環境委託回報非開發團隊可控制因素。
2. 委託失敗。此為正常現象，模擬環境委託狀態非開發團隊可控制因素。
3. 只要trade物件不為None，下單測試即完成，**委託狀態不影響測試結果**。
4. timeout=0為非同步下單，**此設定為確保留存API測試紀錄**。一般情況，使用者可自由設定。

查詢測試審核結果

PYTHON API

查詢測試審核結果

- 查詢範例

```
import shioaji as sj
api = sj.Shioaji(simulation=False) #正式環境
api.login("身分證字號", "密碼")
```

2. 登入

```
# 請注意，API於正式環境執行
####################################

api = sj.Shioaji(simulation=False) # simulation=False 即表示使用正式環境

####################################
```

```
# 請輸入證券(期貨)身分證字號及密碼
####################################

PERSON_ID = "身分證字號" #身分證字號
PASSWORD = "密碼" #密碼

####################################
```

```
api.login(PERSON_ID, PASSWORD) # 登入
```

```
Response Code: 0 | Event Code: 0 | Info: host '203.66.91.161:80', hostname '203.66.91.161:80' IP 203.66.91.161:80 (host 1 of 1)
(host connection attempt 1 of 1) (total connection attempt 1 of 1) | Event: Session up
Response Code: 0 | Event Code: 0 | Info: host '218.32.76.102:80', hostname '218.32.76.102:80' IP 218.32.76.102:80 (host 1 of 1)
(host connection attempt 1 of 1) (total connection attempt 1 of 1) | Event: Session up

[FutureAccount(person_id='QBCCAIGJBJ', broker_id='F002000', account_id='9100020', signed=True, username='PAPIUSER01'),
 StockAccount(person_id='QBCCAIGJBJ', broker_id='9A95', account_id='0504350', signed=True, username='PAPIUSER01')]
```

- 請修改成本人之**身分證字號**及**密碼**
- 若需開通正事環境下單權限，需完成**API下單簽署** 及 **API測試 (證券/期貨需分別測試)**
- API測試紀錄當日審核完畢(最快約10分鐘)
- 若測試審核成功，可於帳號列表查詢到signed=True
- 若測試審核失敗，則不會顯示signed 或 signed=False

■ 02_shioaji_sign_status

感謝您

永豐金證券

SHIOAJI

線上開戶

線上簽署

使用說明

WWW.SINOTRADE.COM.TW