# 7. Entry Orders

This section covers entry orders.

```
In [1]:
```

```
import fxcmpy
import pandas as pd
import datetime as dt
con = fxcmpy.fxcmpy(config_file='fxcm.cfg')
```

### 7.1. Existing Orders

After connecting the FXCM Server, fxcmpy collects all existing orders. list or DataFrame object of the existing orders is returned by the con.get\_orders() method.

#### In [2]:

```
con.get_orders().T # returns DataFrame by default
```

Out[2]:

```
1
accountId
                 2815291
                                2815291
accountName
                 02815291
                                02815291
                                30
amountK
                 300
buy
                 110
                                0
currency
                 USD/JPY
                                EUR/USD
currencyPoint
                 26.7011
expireDate
                 12012018110000 10112018000000
isBuy
                 True
                                False
isELSOrder
                 False
                                False
isEntryOrder
                 True
                                True
isLimitOrder
                 True
                                False
\verb"isNetQuantity"
                                False
                 False
isStopOrder
                 False
                                True
limit
                                1.12
limitPegBaseType -1
                                -1
                                1.12
limitRate
                 112
                                423235902
ocoBulkId
                 0
                 422719537
                                423235903
orderId
range
                                5
ratePrecision
                 3
                                1.13
sell
                 0
status
                 1
                                1
stop
                                1.15
stopMove
stopPegBaseType
                                -1
                -1
stopRate
                                1.15
t
                 3
                                3
time
                 07122018091708 07122018143856
timeInForce
                 GTD
                                GTD
tradeId
                 186558353
                                186829211
type
                 LE
                                SE
```

#### In [3]:

```
con.get_orders(kind='list') # returns a list
Out[3]:
[{'accountId': '2815291',
```

'accountName': '02815291',
'amountK': 300,
'buy': 110,
'currency': 'USD/JPY',

```
'expireDate': '12012018110000',
   'isBuy': True,
   'isELSOrder': False,
   'isEntryOrder': True,
   'isLimitOrder': True,
   'isNetQuantity': False,
   'isStopOrder': False,
   'limit': 112,
   'limitPegBaseType': -1,
   'limitRate': 112,
   'ocoBulkId': 0,
   'orderId': '422719537',
   'range': 0,
   'ratePrecision': 3,
   'sell': 0,
   'status': 1,
   'stop': 0,
   'stopMove': 0,
   'stopPegBaseType': -1,
   'stopRate': 0,
   't': 3,
   'time': '07122018091708',
   'timeInForce': 'GTD',
   'tradeId': '186558353',
 'type': 'LE'},
{'accountId': '2815291',
   'accountName': '02815291',
   'amountK': 30,
   'buy': 0,
   'currency': 'EUR/USD',
   'currencyPoint': 3,
   'expireDate': '10112018000000',
   'isBuy': False,
   'isELSOrder': False,
   'isEntryOrder': True,
   'isLimitOrder': False,
'isNetQuantity': False,
   'isStopOrder': True,
   'limit': 1.12,
   'limitPegBaseType': -1,
   'limitRate': 1.12,
   'ocoBulkId': 423235902,
   'orderId': '423235903',
   'range': 0,
   'ratePrecision': 5,
   'sell': 1.13,
   'status': 1,
   'stop': 1.15,
   'stopMove': 0,
   'stopPegBaseType': -1,
   'stopRate': 1.15,
   't': 3,
   'time': '07122018143856',
   'timeInForce': 'GTD',
   'tradeId': '186829211',
   'type': 'SE'}]
Each order has a unique order id, these ids are returned by con.get order ids().
In [4]:
con.get_order_ids()
Out[4]:
[422719537, 423235903]
```

### 7.2. Placing Entry Orders

'currencyPoint': 26.70156,

Entry orders are placed via the con.create\_entry\_order() method. For a detailed description of the parameters refer to the FXCM API documentation.

```
In [5]:
```

#### In [6]:

con.get\_orders().T

Out[6]:

accountId         281529181         2815291         2815291		0	1		2
amountK         300         300         100           buy         110         0         110           currency         USD/JPY         EUR/USD         USD/JPY           currencyPoint         26.7016         3         26.7016           expireDate         12012018110000         10112018000000         10012108000000           isBuy         True         False         True           isELSOrder         False         False         True           isEntryOrder         True         True         True           isLimitOrder         True         False         True           isNetQuantity         False         False         False           isStopOrder         False         False         False           isstopOrder         False         True         122           limit         112         1.12         112           limitPegBaseType         -1         -1         112           cooBulkId         0         422719537         423235902         0           ratePrecision         3         3         424767349           rate         1         1.13         0           status         1         1	accountId	2815291	2815291	2815291	
buy         110         0         110	accountName	02815291	02815291	02815291	
currency         USD/JPY         EUR/USD         USD/JPY           currencyPoint         26.7016         3         26.7016           expireDate         12012018110000         10012018000000         10012108000000           isBuy         True         False         True           isELSOrder         False         False         False           isEntryOrder         True         True         True           isLimitOrder         True         False         True           isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         -1           limitRate         112         1.12         112           ocoBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratus         1         1         1           stop         0         0         1           stop         0         0         0	amountK	300	30	300	
currencyPoint         26.7016         3         26.7016           expireDate         12012018110000         10012108000000           isBuy         True         False         True           isELSOrder         False         False         False           isEntryOrder         True         True         True           isLimitOrder         True         False         True           isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         1           cooBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopPegBaseType         -1         -1         -1           stopPegBaseType <t< td=""><td>buy</td><td>110</td><td>0</td><td>110</td><td></td></t<>	buy	110	0	110	
expireDate         12012018110000         10112018000000         10012108000000           isBuy         True         False         True           isELSOrder         False         False         False           isEntryOrder         True         True         True           isLimitOrder         True         False         True           isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         112           limitRate         112         1.12         112           orderId         422719537         423235902         0           orderId         422719537         423235903         424767349           range         0         0         3           sell         0         0         3           status         1         1.13         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0 <t< td=""><td>currency</td><td>USD/JPY</td><td>EUR/USD</td><td>USD/JPY</td><td></td></t<>	currency	USD/JPY	EUR/USD	USD/JPY	
is Buy         True         False         True           isELSOrder         False         False         False           isEntryOrder         True         True         True           isLimitOrder         True         False         True           isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         -1           limitRate         112         1.12         112           ocoBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         424767349           range         0         0         0           ratePrecision         3         3         4           status         1         1.13         0           status         1         1.15         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopPegBaseType	currencyPoint	26.7016	3	26.7016	
isELSOrder         False         False         False           isEntryOrder         True         True         True           isLimitOrder         True         False         True           isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         -1           limitRate         112         1.12         112           ocoBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           time         0         07162018145	expireDate	12012018110000	10112018000000	10012108000000	
isEntryOrder         True         True         True         True           isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         112           cooBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         4           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stopMove         0         0         0           stopMove         0         0         0           stopRate         0         0         0           stopRate         0         0         0           time         0         0         0           stopRate         0         0         0           stopRate         0         0         0           time         0         0         0	isBuy	True	False	True	
islimitorder         True         False         True           isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         -1           limitRate         112         1.12         112           cooBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0         0           time         0         0         0         0           stopPegBaseType         -1         -1         -1         -1           time	isELSOrder	False	False	False	
isNetQuantity         False         False         False           isStopOrder         False         True         False           limit         112         1.12         112           limitPegBaseType         -1         -1         -1           limitRate         112         1.12         112           cooBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         3         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0         0           time         0         3         3         0           time         0         0         0         0         0	isEntryOrder	True	True	True	
isStopOrder False True False limit 112 1.12 1.12 112 limitPegBaseType -1 -1 -1 112 ocoBulkId 0 423235902 0 orderId 422719537 423235903 424767349 range 0 0 0 ratePrecision 3 5 3 sell 0 1.13 0 status 1 1 1.15 0 stop 0 0 1.15 0 stopMove 0 0 0 stopPegBaseType -1 -1 -1 stopRate 0 1.15 0 time 07122018091708 07122018143850 07162018145702255 timeInForce 0 GTD GTD	isLimitOrder	True	False	True	
limit         112         1.12 <th< td=""><td>isNetQuantity</td><td>False</td><td>False</td><td>False</td><td></td></th<>	isNetQuantity	False	False	False	
limitPegBaseType         -1         -1         -1           limitRate         112         1.12         112           ocoBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	isStopOrder	False	True	False	
limitRate         112         1.12         112           ocoBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	limit	112	1.12	112	
ocoBulkId         0         423235902         0           orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         1.15         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	limitPegBaseType	-1	-1	-1	
orderId         422719537         423235903         424767349           range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	limitRate	112	1.12	112	
range         0         0         0           ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         0         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	ocoBulkId	0	423235902	0	
ratePrecision         3         5         3           sell         0         1.13         0           status         1         1         1           stop         0         1.15         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	orderId	422719537	423235903	424767349	
sell         0         1.13         0           status         1         1         1           stop         0         1.15         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	range	0	0	0	
status         1         1         1           stop         0         1.15         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	ratePrecision	3	5	3	
stop         0         1.15         0           stopMove         0         0         0           stopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	sell	0	1.13	0	
stopMove         9         6           stopPegBaseType         -1         -1           stopRate         9         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	status	1	1	1	
restopPegBaseType         -1         -1         -1           stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	stop	0	1.15	0	
stopRate         0         1.15         0           t         3         3         3           time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	stopMove	0	0	0	
time 3 3 3 3 3 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1	stopPegBaseType	-1	-1	-1	
time         07122018091708         07122018143856         07162018145702255           timeInForce         GTD         GTD         GTD	stopRate	0	1.15	0	
timeInForce GTD GTD GTD	t	3	3	3	
	time	07122018091708	07122018143856	071620181457022	55
tradeId 186558353 186829211 187584382	timeInForce	GTD	GTD	GTD	
	tradeId	186558353	186829211	187584382	
type LE SE LE	type	LE	SE	LE	

# 7.3. Changing Orders

There are two methods to change entry orders:

- $\bullet$   $\ change\_order\_stop\_limit()$  to change an order's stop or limit rate.
- change\_order() to change an order's amount, rate, order range and/or trailing step.

```
In [7]:
```

```
order_id = con.get_order_ids()[-1]
```

In [8]:

```
order_id
```

Out[8]:

424767349

In [9]:

#### In [10]:

```
con.change_order(order_id=order_id, amount=500, rate=112)
```

The order is changed accordingly.

#### In [11]:

con.get_orders().T
contigee_or det 3().1

#### Out[11]:

	0	1		2
accountId	2815291	2815291	2815291	
accountName	02815291	02815291	02815291	
amountK	300	30	500	
buy	110	0	112	
currency	USD/JPY	EUR/USD	USD/JPY	
currencyPoint	26.6999	3	44.4998	
expireDate	12012018110000	10112018000000	10012108000000	
isBuy	True	False	True	
isELSOrder	False	False	False	
isEntryOrder	True	True	True	
isLimitOrder	True	False	True	
isNetQuantity	False	False	False	
isStopOrder	False	True	False	
limit	112	1.12	110	
limitPegBaseType	-1	-1	0	
limitRate	112	1.12	113.1	
ocoBulkId	0	423235902	0	
orderId	422719537	423235903	424767349	
range	0	0	0	
ratePrecision	3	5	3	
sell	0	1.13	0	
status	1	1	1	
stop	0	1.15	-1	
stopMove	0	0	0	
stopPegBaseType	-1	-1	1	
stopRate	0	1.15	111.968	
t	3	3	3	
time	07122018091708	07122018143856	071620181457077	83
timeInForce	GTD	GTD	GTD	
tradeId	186558353	186829211	187584382	
type	LE	SE	LE	

# 7.4. Deleting Orders

Orders can be deleted through the method con.delete\_orders().

```
In [12]:
```

```
order_id = con.get_order_ids()[0]
order_id
```

Out[12]:

422719537

In [13]:

```
con.delete_order(order_id)
```

In [14]:

```
con.get_orders().T
```

#### Out[14]:

	0		1
accountId	2815291	2815291	
accountName	02815291	02815291	
amountK	30	500	
buy	0	112	
currency	EUR/USD	USD/JPY	
currencyPoint	3	44.5	
expireDate	10112018000000	10012108000000	
isBuy	False	True	
isELSOrder	False	False	
isEntryOrder	True	True	
isLimitOrder	False	True	
isNetQuantity	False	False	
isStopOrder	True	False	
limit	1.12	110	
${\tt limitPegBaseType}$	-1	0	
limitRate	1.12	113.1	
ocoBulkId	423235902	0	
orderId	423235903	424767349	
range	0	0	
ratePrecision	5	3	
sell	1.13	0	
status	1	1	
stop	1.15	-1	
stopMove	0	0	
stopPegBaseType	-1	1	
stopRate	1.15	111.969	
t	3	3	
time	07122018143856	0716201814570778	33
timeInForce	GTD	GTD	
tradeId	186829211	187584382	
type	SE	LE	

Deleted or executed orders of the current session are stored in the attribute old\_orders as an fxcm\_order object.

#### In [15]:

```
con.old_orders

Out[15]:
{422719537: <fxcmpy_order.fxcmpy_order at 0x7eff1a3a1ba8>}

In [16]:
con.close()
```