# **API Documentation Version 1.20**

All API requests work via a **key/value** list passed to a python script. Values must be passed via the GET method (appended to the end of the URL). All query results are returned as JSON.

# **How to look up Basket Trade Signals:**

```
General Case:
```

http://empirasign.com/api/basket/?ticker=xyz&h=[1:3]&n=[1:25]&api key=ABC123

#### **Example URL:**

http://empirasign.com/api/basket/?ticker=CSCO&d=20100518&api key=ABC123

Given a valid api\_key, the above request will return JSON as shown below:

```
[
    {
        " y intercept": "4.9637",
        "calc time": "2010-05-18 16:00:00",
        "hedge1": "PPG",
        "hedge2": "None"
"hedge3": "None"
        "hr 1": "0.314867",
        "hr 2": "None",
        "hr 3": "None",
        "pid": "",
        "rich cheap": "-1.26843",
        "rsquared": "0.961075",
        "ticker": "CSCO",
        "zscore": "-2.68215"
    },
        " y intercept": "3.27905",
        "calc_time": "2010-05-18 16:00:00",
        "hedge1": "BRCM",
        "hedge2": "PPG",
        "hedge3": "None"
        "hr 1": "0.208931",
        "hr 2": "0.237238",
        "hr 3": "None",
        "pid": "",
        "rich cheap": "-1.18312",
        "rsquared": "0.973069",
        "ticker": "CSCO",
        "zscore": "-3.01378"
    }
1
```

#### **Key Definitions:**

ticker = [xyz] Search for basket trades with xyz as the lead ticker aticker = [xyz] Search for basket trades where xyz is either the lead ticker or a member of the hedge basket. Use when you want to see any trade involving ticker xyz.

n = [1:25] show most recent values based on live intra-day prices (subscription required)

api\_key = abcdef six letter code used to access live and historical data (contact us for complementary limited use api key)

**h** = [1:3] number of components to the hedge basket

**d** = **YYYYMMDD** search based on closing prices for a single date

d0=YYYYMMDD&d1=YYYYMMDD search based on closing prices for a date range. d0 = start date, d1 = end date

**csv=[TRUE/FALSE]** if set to **TRUE**, output will be in comma separated values format, if **FALSE** or omitted, output will be in JSON format

# **How to search for Eurodollar Combo Prices:**

#### The general case:

http://empirasign.com/api/combo/(combo\_type)/?ticker=[ED##]&combo=[xyz]&n=[1:25]&api\_key=abc

### **Example URL:**

http://www.empirasign.com/api/combo/condor/?ticker=edz1&d0=20110726&d1=20110729&api\_key=ABC123

The above request will return JSON as shown below:

```
[
    {
          "calc time": "2011-07-28 15:00:00",
          "kind": "condor",
          "last": "-0.025"
          "previous": "-0.035",
         "ticker": "EDZ1",
"z100": "2.4616",
"z200": "1.2167",
         "z50": "1.8852"
    },
          "calc time": "2011-07-27 15:00:00",
         "kind": "condor",
          "last": "-0.035",
          "previous": "-0.04",
         "ticker": "EDZ1",
"z100": "2.291",
         "z200": "1.0012",
         "z50": "1.7111"
    },
          "calc time": "2011-07-26 15:00:00",
          "kind": "condor",
          "last": "-0.04",
          "previous": "-0.055",
         "ticker": "EDZ1",
"z100": "2.2334",
         "z200": "0.8916".
         "z50": "1.654"
    }
1
```

#### **Key Definitions:**

**ticker** = **ED(H,M,U,Z)[0-9]** All quarterly expiry eurodollar contracts are available. The ticker selected signifies the nearest to expiry contract in a combination. e.g. **ticker=EHU0&combo=fly**, the search is run on the EDU0/EDZ0/EDH1 butteryfly.

combo = any one of the following: fly,condor,fly6m,fly12m,fly2,condor2,dd3m,dd6m
see further definitions below. If this term is left blank, or not entered, all combo's will be returned in
the search results.

n = [1:25] show most recent values based on live intra-day prices

api\_key = abcdef six letter code used to access live and historical data (contact us for complementary limited use api key)

**d = YYYYMMDD** search based on closing prices for a single date

 $d\theta$ =YYYYMMDD&d1=YYYYMMDD search based on closing prices for a date range.  $d\theta$  = start date,  $d\theta$  = end date

**csv=[TRUE/FALSE]** if set to **TRUE**, output will be in comma separated values format, if **FALSE** or omitted, output will be in JSON format

#### **Eurodollar Combinations:**

fly: standard butteryfly condor: standard condor fly6m: 6 month butterfly fly12m: 12 month butterfly condor2: double condor fly2: double butterfly

**dd3m:** 3 month double/double **dd6m:** 6 month double/double

## How to search the Twitter News Feed:

#### **General Case:**

http://empirasign.com/api/firehose.php?ticker=[xyz]&event=[xyz]&n=[1:25]&feed=[XX]

#### Example URL (no api key required):

http://empirasign.com/api/firehose/?ticker=goog&d=20110707

Output shown below in JSON format:

ticker = [xyz] Search for tweets about ticker xyz
n = [1:25] show n most recent tweets for specific search. If omitted, n defaults to 1
event = [bb, fib, hl3m, hl52, ma200, ma50, piv, or sr] Search for specific event type, definitions below
feed = [fx,eq,eu,ap] Search for tweets from one of four feeds (@empirasign\_fx,
@empirasign\_eq, @empirasign\_eu, and @empirasign\_ap)
d = YYYYMMDD search for tweets on a specific date
d0=YYYYMMDD&d1=YYYYMMDD search for tweets over a date range. d0 = start date, d1 = end date
csv=[TRUE/FALSE] if set to TRUE, output will be in comma separated values format, if FALSE or omitted, output will be in JSON format

#### **Twitter Event Types:**

**bb**: ticker is trading through a bollinger band

fib: ticker has breached a fibonnacci retracement level

**hl3m:** new 3 month hi or low **hl52:** new 52 week hi or low

ma50: ticker has crossed 50 or 200 day moving average ma200: ticker has crossed 50 or 200 day moving average sr: ticker has breached keys support or resistance line