# **Junar API**

Current version of the API is 1.0

The API supports HTTP/REST protocols and it is organized in the following modules:

- 1. Methods for searching dashboards and data streams
- 2. Methods for accessing a particular dashboard or data stream object properties
- 3. Methods for consuming data streams

## **Error handling**

For all our methods these are the errors:

- 400 -> Bad Request
- 403 -> Forbidden
- 404 -> Not Found
- 405 -> Method Not Allowed
- 500 -> Internal Server Error

All the methods returns its results in JSON format.

## Methods for searching

#### Search Data Streams

Returns the data streams matching the query criteria in their titles, descriptions and tags. The result is provided as an array of data stream objects.

#### URL

http://apisandbox.junar.com/datastreams/search

### Supported request methods

**GET** 

#### **Params**

- query -> Required, Encoded query terms see below for options
- auth key -> Required, Authentication, use your auth\_key
- max results -> Optional, The number of data streams to return, up to a max of 100, default 100.
- callback -> Optional, If supplied, the response will use the JSONP format with a callback of the given name.

### **Example**

http://apisandbox.junar.com/datastreams/search?query=earthquakes%20world&max\_results=5& auth key=YOUR AUTH KEY

```
[
  {
   id: "LATES-7-AROUN-THE-WORLD",
   title: "Latest 7 EarthQuakes ",
   subtitle: "Around the World",
   description: "Returns a Table with the information regarding the last 7 signi
   user: "betogess",
   tags: [
      "Earthquakes",
      "Latest EarthQuakes"
    ],
   created at: 1273035231,
    source: "http://earthquake.usgs.gov/earthquakes/recenteqsww/Quakes/quakes all
   link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice
 },
 {
   id: "LARGE-EARTH-SINCE-1900",
   title: "Largest Earthquakes",
    subtitle: "Since 1900",
   description: "Returns a list of the largest earthquakes in the world since 19
   user: "marir1411",
    tags: [
      "biggest earthquakes",
      "Largest Earthquakes",
      "Earthquakes"
    ],
    created at: 1300850041,
    source: "http://earthquake.usgs.gov/earthquakes/world/10 largest world.php",
   link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice
 },
 {
```

```
id: "LATES-EARTH-MAGNI-5-AND",
   title: "Latest earthquakes",
    subtitle: "magnitude 5 and greater",
   description: "Returns a list of the latest earthquakes around the world in t∤
    user: "marir1411",
    tags: [
      "Latest EarthQuakes",
      "Earthquakes"
   created_at: 1299884834,
   source: "http://earthquake.usgs.gov/earthquakes/recentegsww/Quakes/quakes bic
   link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice
 },
 {
   id: "LATES-EARTH-QUAKE-FULL-TABLE",
   title: "Latest EarthQuakes in Chile",
    subtitle: "Full Table",
   description: "Date, magnitude and geographic reference of the latest measural
   user: "birdman",
   tags: [
      "Earthquakes",
      "Latest EarthQuakes",
      "Chile"
    ],
   created at: 1280713732,
    source: "http://ssn.dgf.uchile.cl/",
   link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice
 },
  {
   id: "COUNT-OF-ORDER-BY-POPUL",
   title: "Countries of the world",
    subtitle: "Ordered by Population Size",
   description: "List of the countries of the world ordered by population size",
   user: "betogess",
    tags: [
      "Population",
      "population size",
      "world"
    ],
   created_at: 1292545184,
   source: "http://www.listofcountriesoftheworld.com/population.html",
   link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice
 }
]
```

#### **Search Dashboards**

Returns the dashboards matching the query criteria in their titles, descriptions and tags. The result is provided as an array of data stream objects

#### **URL**

http://apisandbox.junar.com/dashboards/search

### Supported request methods

GET

#### **Params**

- query -> Required, Encoded query terms see below for options
- auth\_key -> Required, Authentication, use your auth\_key
- max results -> Optional, The number of dashboards to return, up to a max of 100, default 100.
- callback -> Optional, If supplied, the response will use the JSONP format with a callback of the given name.

## **Example**

http://apisandbox.junar.com/dashboards/search?query=deep%20impact&
auth key=YOUR AUTH KEY

```
[
 {
   id: "DEEP-IMPAC-DATA-ON-ASTER",
   title: "Deep impact",
   description: "Data on asteroids approaching to the earth and impact risks",
   user: "birdman",
   tags: [
      "NEO",
      "NASA",
      "Near Earth objects program",
      "Asteroid",
      "catastrophes"
    ],
   datastreams: [
      {
        id: "CLOSE-ASTER-WITHI-A-YEAR",
        title: "Closest Asteroids Approaches",
        subtitle: "Within a year",
        link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
      },
        id: "CURRE-ASTER-IMPAC-RECEN-OBSER",
        title: "Current Asteroid Impact Risks",
        subtitle: "Recently observed",
        link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
      },
        id: "EARTH-CLOSE-APPRO-RECEN",
        title: "Earth close approaches",
        subtitle: "Recent",
        link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
      },
      {
```

```
id: "EARTH-CLOSE-APPRO-UPCOM",
      title: "Earth close approaches",
      subtitle: "Upcoming",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
    },
      id: "NEAR-EARTH-LARGE-NE-AS",
      title: "Near Earth Object Program",
      subtitle: "Large NEAs Discovered by site",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
    },
    {
      id: "ODDS-OF-FROM-SELEC-CAUSE",
      title: "Odds of Dying in the US",
      subtitle: "From selected causes",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
    },
    {
      id: "CLOSE-ASTER-APPRO-DATE-FOR",
      title: "Closest Asteroids Approaches",
      subtitle: "Approach date for an object",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
    },
    {
      id: "CLOSE-ASTER-DATE-OF-NEXT",
      title: "Closest Asteroids Approaches",
      subtitle: "Date of next close approach",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataser
    }
  ],
  link: "http://www.junar.com/portal/DashboardsManager/actionView?dashboard id=
}
```

#### **Search Options**

In all of the cases, the guery argument should contain the search criteria expressed in one of the following formats:

- 1. term1 term2: Searches for one of the terms
- 2. term1+term2: Searches for both term
- 3. "term1": Searches for a phrase

The search is limited to a maximum of 100 results.

# **Methods for Accessing Objects**

#### **Data Stream Information**

Returns the data stream general information for a given ID

#### URL

http://apisandbox.junar.com/datastreams/{id}

### Supported request methods

GET

#### **Params**

- auth key -> Required, Authentication, use your auth\_key
- callback -> Optional, If supplied, the response will use the JSONP format with a callback of the given name.

### **Example**

http://apisandbox.junar.com/datastreams/LATES-7-AROUN-THE-WORLD?auth\_key=YOUR\_AUTH\_KEY

```
{
  id: "LATES-7-AROUN-THE-WORLD",
  title: "Latest 7 EarthQuakes ",
  subtitle: "Around the World",
  description: "Returns a Table with the information regarding the last 7 signifi
  user: "betogess",
  tags: [
    "Earthquakes",
    "Latest EarthQuakes"
  ],
  created_at: 1273035231,
  source: "http://earthquake.usgs.gov/earthquakes/recenteqsww/Quakes/quakes_all.g
  link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice_i
}
```

## Data Stream Information with parameters

### **Example**

http://apisandbox.junar.com/datastreams/COLOM-STOCK-MARKE-CURRE-PRICE?auth key=YOUR AUTH KEY

```
id: "COLOM-STOCK-MARKE-CURRE-PRICE",
  title: "Colombia Stock Market",
  subtitle: "Current Price",
  description: "Current price for a particular stock",
  user: "Startbull",
  tags: [
    ""
  ],
  created_at: 1307052130,
  source: "http://www.bvc.com.co/pps/tibco/portalbvc/Home/Mercados/enlinea/accior
  link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice_i
  parameters: [
    {
```

```
name: "day",
      position: 0,
      description: "day"
    },
    {
     name: "month",
      position: 1,
      description: "month"
    },
    {
     name: "year",
position: 2,
      description: "year"
    },
    {
      name: "nemo",
      position: 3,
      description: "nemo"
    }
 ]
}
```

#### **Dashboard Information**

Returns the dashboard general information for a given ID including a summary of its data streams

#### **URL**

http://apisandbox.junar.com/dashboards/{id}

# Supported request methods

GET

#### **Params**

- auth key -> Required, Authentication, use your auth key
- callback -> Optional, If supplied, the response will use the JSONP format with a callback of the given name.

### **Example**

http://apisandbox.junar.com/dashboards/DEEP-IMPAC-DATA-ON-ASTER?auth key=YOUR AUTH KEY

```
{
 id: "DEEP-IMPAC-DATA-ON-ASTER",
 title: "Deep impact",
 description: "Data on asteroids approaching to the earth and impact risks",
 user: "birdman",
 tags: [
    "NEO",
   "NASA",
   "Near Earth objects program",
   "Asteroid",
    "catastrophes"
 ],
 datastreams: [
   {
      id: "CLOSE-ASTER-WITHI-A-YEAR",
      title: "Closest Asteroids Approaches",
      subtitle: "Within a year",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservi
   },
      id: "CURRE-ASTER-IMPAC-RECEN-OBSER",
      title: "Current Asteroid Impact Risks",
      subtitle: "Recently observed",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservi
   },
    {
      id: "EARTH-CLOSE-APPRO-RECEN",
      title: "Earth close approaches",
      subtitle: "Recent",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservi
   },
    {
      id: "EARTH-CLOSE-APPRO-UPCOM",
      title: "Earth close approaches",
      subtitle: "Upcoming",
      link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservi
   },
```

```
id: "NEAR-EARTH-LARGE-NE-AS",
    title: "Near Earth Object Program",
    subtitle: "Large NEAs Discovered by site",
    link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservj
 },
    id: "ODDS-OF-FROM-SELEC-CAUSE",
    title: "Odds of Dying in the US",
    subtitle: "From selected causes",
    link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservi
  },
  {
    id: "CLOSE-ASTER-APPRO-DATE-FOR",
    title: "Closest Asteroids Approaches",
    subtitle: "Approach date for an object",
    link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservi
  },
  {
    id: "CLOSE-ASTER-DATE-OF-NEXT",
    title: "Closest Asteroids Approaches",
    subtitle: "Date of next close approach",
    link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservi
 }
],
link: "http://www.junar.com/portal/DashboardsManager/actionView?dashboard_id=6{
```

## **Methods for consuming Data Streams**

## Consuming a Data Stream

Executes a data stream and returns its result in JSON format

#### URL

http://apisandbox.junar.com/datastreams/invoke/{id}

## Supported request methods

GET

#### **Params**

- auth\_key -> Required, Authentication, use your auth\_key
- callback -> Optional, If supplied, the response will use the JSONP format with a callback of the given name.

### Example

http://apisandbox.junar.com/datastreams/invoke/TEPCO-STOCK-QUOTE?auth key=YOUR AUTH KEY

```
id: "TEPCO-STOCK-QUOTE",
title: "TEPCO Stock",
subtitle: "Quotes",
description: "TEPCO stock prices and volumes",
result: { \\ Explained below
  fNum: 0,
  fBool: false,
  fArray: [
      fNum: 0,
      fStr: "Recent Price(Trade Time)",
      fBool: false,
      fRows: 0,
      fCols: 0,
      fType: "TEXT"
    },
      fNum: 0,
      fStr: "380 (15:00)",
      fBool: false,
      fRows: 0,
      fCols: 0,
      fType: "TEXT"
    },
      fNum: 0,
      fStr: "Net Change (%)",
      fBool: false,
      fRows: 0,
      fCols: 0,
      fType: "TEXT"
    },
      fNum: 0,
```

```
fStr: "-40 (-9.52%)",
        fBool: false,
        fRows: 0,
        fCols: 0,
        fType: "TEXT"
      },
        fNum: 0,
        fStr: "Open",
        fBool: false,
        fRows: 0,
        fCols: 0,
        fType: "TEXT"
      },
      {
        fNum: 0,
        fStr: "404",
        fBool: false,
        fRows: 0,
        fCols: 0,
        fType: "TEXT"
      },
      {
        fNum: 0,
        fStr: "Previous Close",
        fBool: false,
        fRows: 0,
        fCols: 0,
        fType: "TEXT"
      },
        fNum: 0,
        fStr: "420",
        fBool: false,
        fRows: 0,
        fCols: 0,
        fType: "TEXT"
     },
    ... // Some values where removed for printing purposes
    ],
   fRows: 6,
   fCols: 4,
   fType: "ARRAY"
 },
 source: "http://quote.tse.or.jp/tse/quote.cgi?F=listing%2FEDetail1&MKTN=T&QCODE
 link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice j
}
```

## Consuming a Data Stream with parameters

#### **Example**

 $\label{lem:http://apisandbox.junar.com/datastreams/invoke/COLOM-STOCK-MARKE-CURRE-PRICE?pArgument0=09&pArgument1=6&pArgument2=2011&pArgument3=ECOPETROL\& \\ auth\_key=YOUR\_AUTH\_KEY$ 

```
id: "COLOM-STOCK-MARKE-CURRE-PRICE",
 title: "Colombia Stock Market",
 subtitle: "Current Price",
 description: "Current price for a particular stock",
  result: {
    fNum: 0.
    fBool: false,
    fArray: [
        fNum: 0,
        fStr: "Precio Cierre",
        fBool: false,
        fRows: 0,
        fCols: 0,
        fType: "TEXT"
      },
      {
        fNum: 0,
        fStr: "4,015.00",
        fBool: false,
        fRows: 0,
        fCols: 0,
        fType: "TEXT"
      }
    ],
    fRows: 2,
    fCols: 1,
    fType: "ARRAY"
  },
 source: "http://www.bvc.com.co/pps/tibco/portalbvc/Home/Mercados/enlinea/accior
 link: "http://www.junar.com/portal/DataServicesManager/actionView?dataservice i
}
```

### **JSON Structure**

The **result** is an Argument object, which is a recursive data structure containing the following properties:

*fType*: Indicates the data type of the Argument. Its values could be ARRAY | TEXT | NUMBER. The ARRAY data type indicates that the Argument contains a TABLE.

When the data type is ARRAY *fRows* and *fCols* indicate the number of rows and columns of the TABLE. In the same way, *fArray* contains the data of the TABLE as an array of Argument objects.

When the data type is TEXT the value is contained in *fStr*. For a NUMBER data type the value is contained in *fNum*. fBool is not used today.

An Argument may contain a LINK. In such case, *fType* contains LINK, the corresponding uri comes in *fUri* and the text to show is contained in *fStr*.

When data type is ERROR, it means that there was an error when executing the data stream, the error message will be contained in *fStr*.

When a error occurs, the result is replaced with the last result that was correctly executed. To recognize if a result is updated, an additional property called *fTimestamp* exists. It has the *POSIX time* when the last execution was successful. If *fTimestamp* has a value of 0, that means that the result is updated.