

Package ‘RBloomberg’

November 22, 2010

Version 0.5-0

Date 2010-09-29

Title R/Bloomberg

Author Robert Sams <robert@sanctumfi.com>

Maintainer Ana Nelson <ana@ananelson.com>

Description Fetch data from Bloomberg using the Bloomberg Java APIv3.

License GPL

Depends rJava

Collate 'blpConnect.R' 'blpDisconnect.R' 'blpFieldInfo.R' 'blp.R'

R topics documented:

bar	2
bdh	2
bdp	4
bds	5
blp	6
blpConnect	6
blpDisconnect	7
blpFieldInfo	7
field.description	8
RBloomberg	8
tick	9

Index	10
--------------	-----------

bar	<i>Retrieve Bloomberg minute bars.</i>
-----	--

Description

Retrieve Bloomberg minute bars.

Usage

```
bar(conn, security, field, start_date_time, end_date_time, interval)
```

Arguments

conn	a Bloomberg connection object
security	bloomberg ticker
field	field mnemonic
start_date_time	date object
end_date_time	date object
interval	bar interval

Value

a data frame

Author(s)

Ana Nelson <ana@ananelson.com>

See Also

[tick](#)

bdh	<i>Retrieve Bloomberg historical data.</i>
-----	--

Description

Retrieve Bloomberg historical data.

Usage

```
bdh(conn, securities, fields, start_date, end_date, override_fields,  
     override_values, option_names, option_values,  
     always.display.tickers=FALSE,  
     dates.as.row.names=(length(securities) == 1),  
     include.non.trading.days)
```

Arguments

conn	a Bloomberg connection object
securities	A single ticker string or a vector of tickers.
fields	A single field string or a vector of field names.
start_date	date object, required
end_date	date object, optional
override_fields	vector of fields to override
override_values	values corresponding to override fields
option_names	vector of retrieval options
option_values	vector of option values
always.display.tickers	force tickers to be included even if only passing one security
dates.as.row.names	default TRUE if 1 ticker passed
include.non.trading.days	TRUE includes records for all calendar days

Details

Pass either a single security/field or a vector of securities and fields. Objects are converted with `.jarray` before being passed to the Java wrapper which accesses the Bloomberg API and returns the result.

Overrides which are dates must be passed in "YYYYMMDD" format as per Bloomberg Version 3 API.

Pass each security+field separately. Merge resulting data frames if the results are conformal, raise an error if they're not.

Value

a data frame

Author(s)

Ana Nelson <ana@ananelson.com>

`bdp`*Retrieve Bloomberg reference data.*

Description

Retrieve Bloomberg reference data.

Usage

```
bdp(conn, securities, fields, override_fields, override_values,  
     option_names, option_values)
```

Arguments

<code>conn</code>	a Bloomberg connection object
<code>securities</code>	A single ticker string or a vector of tickers.
<code>fields</code>	A single field string or a vector of field names.
<code>override_fields</code>	vector of fields to override
<code>override_values</code>	values corresponding to override fields
<code>option_names</code>	vector of retrieval options
<code>option_values</code>	vector of option values

Details

Pass either a single security/field or a vector of securities and fields. Objects are converted with `.jarray` before being passed to the Java wrapper which accesses the Bloomberg API and returns the result.

Overrides which are dates must be passed in "YYYYMMDD" format as per Bloomberg Version 3 API.

Value

a data frame

Author(s)

Ana Nelson <ana@ananelson.com>

`bds`*Retrieve Bloomberg bulk data fields.*

Description

Retrieve Bloomberg bulk data fields.

Usage

```
bds(conn, securities, fields, override_fields, override_values,  
     option_names, option_values)
```

Arguments

<code>conn</code>	a Bloomberg connection object
<code>securities</code>	A single ticker string or a vector of tickers.
<code>fields</code>	A single field string or a vector of field names.
<code>override_fields</code>	vector of fields to override
<code>override_values</code>	values corresponding to override fields
<code>option_names</code>	vector of retrieval options
<code>option_values</code>	vector of option values

Details

May pass either a single security/field or a vector of securities and fields.

If passed multiple securities or fields they are queried per security+field and merged into a single data frame. Raise an error if the results are not conformal.

Overrides which are dates must be passed in "YYYYMMDD" format as per Bloomberg Version 3 API.

Value

a data frame

Author(s)

Ana Nelson <ana@ananelson.com>

blp	<i>Deprecated.</i>
-----	--------------------

Description

Deprecated.

Details

blp and blpGetData are deprecated in favour of the functions [bdp](#), [bdh](#), [tick](#), [bar](#).

blpConnect	<i>Connect to the Bloomberg server.</i>
------------	---

Description

Connect to the Bloomberg server.

Usage

```
blpConnect(iface="Java", log.level="warning", blpapi.jar.file,  
           throw.ticker.errors=TRUE, jvm.params, host, port)
```

Arguments

iface	The API interface to use. Currently only "Java" supported
log.level	the log4j logging level from "finest", "fine", "info", "warning"
blpapi.jar.file	explicit path the the Bloomberg java API file. The code looks for the jar file in likely locations /opt/local/BLP/APIv3/JavaAPI/blpjavaapi.jar on unix and C:\blp\API\APIv3\JavaAPI\VERSION\blpapi3.jar on windows.
throw.ticker.errors	throw an error for invalid tickers (default TRUE)
jvm.params	parameters passed to the jvm as a vector of strings (eg jvm.params=c("-Xmx512m", "-Xloggc:jvmgc.log"))
host	host to connect to (for SAPI)
port	port to connect to (for SAPI, default 8194)

Details

Create a the connection to Bloomberg by default on the local machine or to a SAPI server. When the connection is created the jvm is also initialized.

See Also

[blpDisconnect](#)

blpDisconnect	<i>Close the bloomberg connection.</i>
---------------	--

Description

Close the bloomberg connection.

Usage

```
blpDisconnect(conn)
```

Arguments

conn	a Bloomberg connection object
------	-------------------------------

Details

Closes the connection and performs a round of garbage collection.

See Also

[blpConnect](#)

blpFieldInfo	<i>Get the field metadata from the bloomberg data dictionary...</i>
--------------	---

Description

Get the field metadata from the bloomberg data dictionary

Usage

```
blpFieldInfo(conn, fields)
```

Arguments

conn	a Bloomberg connection object
fields	a vector of field mnemonics

See Also

[field.description](#)

<code>field.description</code>	<i>Get the field descriptions from the bloomberg data dictionary...</i>
--------------------------------	---

Description

Get the field descriptions from the bloomberg data dictionary

Usage

```
field.description(conn, fields)
```

Arguments

<code>conn</code>	a Bloomberg connection object
<code>fields</code>	a vector of field mnemonics

See Also

[blpFieldInfo](#)

<code>RBloomberg</code>	<i>R interface to the Bloomberg API.</i>
-------------------------	--

Description

R interface to the Bloomberg API.

Details

RBloomberg provides R wrappers for the Bloomberg v3 API. The functions [bdp](#), [bds](#), [bdh](#), [bar](#), and [tick](#) are implemented. All return results as data frames.

Connections are created with [blpConnect](#) and use the Java API.

tick	<i>Retrieve Bloomberg tick history.</i>
------	---

Description

Retrieve Bloomberg tick history.

Usage

```
tick(conn, security, fields, start_date_time, end_date_time,  
      option_names, option_values)
```

Arguments

conn	a Bloomberg connection object
security	bloomberg ticker
fields	vector of field mnemonics
start_date_time	date object
end_date_time	date object
option_names	vector of retrieval options
option_values	vector of option values

Value

a data frame

Author(s)

Ana Nelson <ana@ananelson.com>

See Also

[bar](#)

Index

`bar`, [2](#), [6](#), [8](#), [9](#)

`bdh`, [2](#), [6](#), [8](#)

`bdp`, [4](#), [6](#), [8](#)

`bds`, [5](#), [8](#)

`blp`, [6](#)

`blpConnect`, [6](#), [7](#), [8](#)

`blpDisconnect`, [6](#), [7](#)

`blpFieldInfo`, [7](#), [8](#)

`blpGetData` (*blp*), [6](#)

`field.description`, [7](#), [8](#)

`package-RBloomberg` (*RBloomberg*), [8](#)

`RBloomberg`, [8](#)

`tick`, [2](#), [6](#), [8](#), [9](#)