

RealTimeToDB

Version 2.5, November 25, 2014

User's Manual

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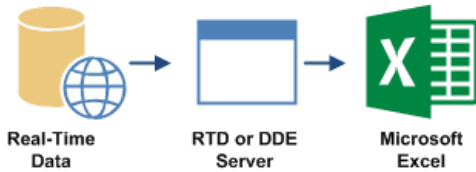
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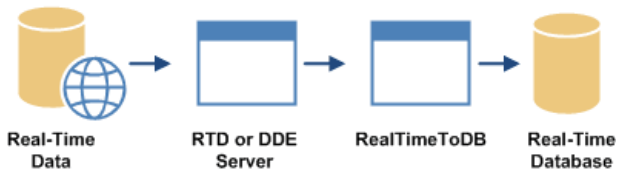
Getting Started

RealTimeToDB is a powerful tool for **updating databases with real-time data from RTD and DDE servers**.

The traditional usage of RTD and DDE servers is updating real-time data in Microsoft Excel like this:



RealTimeToDB allows getting real-time data from RTD or DDE servers and saving the data into databases like this:

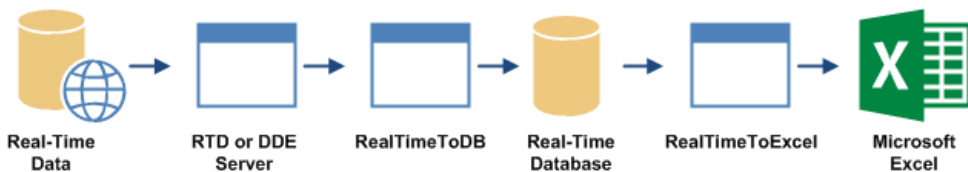


As a result, you may get **the required data for stocks, options, futures, and currency pairs in required time frames**.

RealTimeToDB includes **ready-to-use databases** for supported database platforms and several real-time data providers.

RealTimeToDB supports: Microsoft SQL Server, Microsoft SQL Server Compact, MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB.

RealTimeToExcel, an integrated companion product, allows **updating real-time data from databases in Microsoft Excel** like this:



This approach delivers additional benefits:

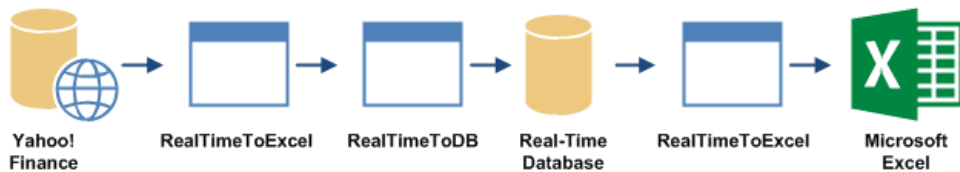
- You may use real-time and historical data in the same manner.
- You may combine and use data from different data sources in the same manner.
- You may replace complicated DDE formulas in Microsoft Excel to regular RTD formulas.

And the best news for private traders and investors!

You may get delayed **quotes and financial data from 60 world's exchanges from Yahoo! Finance for free**.

RealTimeToDB integrated into the SaveToDB add-in includes a preconfigured real-time local database.

And you may start using the following process in a couple of minutes:



You may start learning about RealTimeToDB in the following topics:

- [Using RealTimeToDB](#)
- [Edition Comparison](#)
- [User Interface](#)
- [Application Configuration](#)
- [Database Configuration](#)
- [RTD Database](#)

RealTimeToDB Edition Comparison

RealTimeToDB allows updating databases with real-time data from RTD and DDE servers.

This is a powerful feature as you may get the required data in required time frames for building and testing various models.

If you are a private trader or investor you might select the free Express or low cost Personal edition.

If you are a professional trader or institutional investor you might select the Standard or Enterprise edition.

Feature	Unregistered	Express	Personal	Standard	Enterprise
Number of RTD and DDE servers per instance	2	2	2	Unlimited	Unlimited
Number of updated databases per instance	2	2	2	5	Unlimited
Number of updated tables per instance	7	7	10	15	Unlimited
Number of updated rows per table	20	50	500	1000	Unlimited
Default x86 and x64 instances	✓	✓	✓	✓	✓
Custom name instances	✗	✗	✗	✗	✓
Last value, day, time, and tick history tables	✓	✓	✓	✓	✓
Multi-threading	✓	✓	✓	✓	✓
Low latency	✓	✓	✓	✓	✓
32-bit and 64-bit RTD servers	✓	✓	✓	✓	✓
Microsoft SQL Server	✓	✓	✓	✓	✓
Microsoft SQL Server Compact	✓	✓	✓	✓	✓
Oracle MySQL	✓	✓	✓	✓	✓
SkySQL MariaDB	✓	✓	✓	✓	✓
Oracle Database	✓	✓	✓	✓	✓
IBM DB2	✓	✓	✓	✓	✓
NuoDB	✓	✓	✓	✓	✓
Regular email support	✓	✓	✓	✓	✓
Priority email support, 1 year	✗	✗	✓	✓	✓
Private traders and investors	✓	✓	✓	✓	✓
Professional traders and institutional investors	✓	✓	✗	✓	✓
Commercial use	✓	✓	✗	✓	✓

Tested RTD servers:

- FutureSource, eSignal.
- RealTimeToExcel (former Gartle RTD Server), Gartle Technology Corporation.

Tested DDE servers:

- ThinkDesktop, Thinkorswim, division of TD Ameritrade.
- Trader Workstation, Interactive Brokers.
- VertexFX Trader, Hybrid Solutions.

Install and Uninstall

Installing RealTimeToDB with SaveToDB Setup

If possible, use the complete suite of the Gartle Technology Corporation products with the SaveToDB 4.1 or higher setup.

All products and examples are deeply integrated that allows starting work in a couple of minutes.

The setup package includes both 32-bit and 64-bit versions of the RealTimeToDB.

Installing RealTimeToDB with RealTimeToDB Setup

You may use the RealTimeToDB setup package if you plan to use RealTimeToDB on the server and manage databases from client computers.

Updating RealTimeToDB

The standard way to update the product is to run a new version setup without uninstalling the current product.

Uninstalling RealTimeToDB

To uninstall RealTimeToDB, open **Control Panel, Program and Features**, then select the installed product (SaveToDB or RealTimeToDB) and click the Uninstall button.

What's New

Legend:

- [+] Added Feature
- [-] Fixed Bug
- [*] Improved/changed feature

Version 2.5, November 25, 2014

- [!] Formulas for Thinkorswim thinkDesktop have been changed from DDE to tos.rtd.
See [Option Data from Thinkorswim thinkDesktop via TOS.RTD](#)
and [Quotes from Thinkorswim thinkDesktop via TOS.RTD](#).
You may update existing databases using the patch from the database folders.
Unlike DDE, data from tos.rtd may be updated under regular user privileges.
- [+] Large amount of tickers with RTD servers can be updated by cycling groups.
You may specify the <RTD Server Name>MaxUpdateRows and <RTD Server Name>MaxUpdateTime (in ms) application settings to control updating.
For example:
`<add key="tos.rtdMaxUpdateRows" value="100"/>`
`<add key="tos.rtdMaxUpdateTime" value="20000"/>`
- [*] Integrated RealTimeToExcel has been updated to version 2.5.
Loading options from Yahoo! Finance has been fixed.
- [-] Possible crash on the stop operation has been fixed.

Version 2.4, October 15, 2014

- [*] Limit in 10000 tickers for RealTimeToDB Enterprise has been removed.
- [+] Large amount of tickers with DDE servers can be updated by cycling groups.
You may specify the <DDE Server Name>MaxUpdateRows and <DDE Server Name>MaxUpdateTime (in ms) application settings to control updating.
For example:
`<add key="TosMaxUpdateRows" value="100"/>`
`<add key="TosMaxUpdateTime" value="20000"/>`
- [+] Thinkorswim thinkDesktop trading platform separators can be specified in application settings:
`<add key="TosDecimalSeparator" value=","/>`
`<add key="TosGroupSeparator" value=" " />`

Version 2.3, July 15, 2014

- [+] Support for NuoDB has been added.
NuoDB is an innovative database management system with advanced features:
the distributed cloud database, scale-out performance, geo-distribution, auto-administration, multi-tenancy.
NuoDB has also a free edition with 4GB database size limit.
Visit <http://www.nuodb.com>.
- [+] NuoDB ADO.NET Driver is installed with the setup package.
You do not need to install additional software to work with NuoDB.
- [+] The RTD database for NuoDB and example workbooks have been added.
- [+] Support for SkySQL MariaDB has been added.
MariaDB is an open source MySQL compatible DBMS. All application features for MySQL are suitable for MariaDB.
SkySQL's client base consists of global brands such as Google, Fusion-io, HP, Virgin Mobile, Craigslist, Harvard University.
Visit <http://mariadb.com>.
- [*] Support for Oracle Data Provider for .NET has been added.
Oracle Data Provider for .NET 12c Release 2 (12.1.0.1.2) is installed with the setup package.
To use the provider, you must accept license terms at <http://www.oracle.com/technetwork/licenses/distribution-license-152002.html>.
- [*] Support for IBM DB2 .NET Provider has been added.

Version 2.2, May 15, 2014

- [+] The data can be preprocessed before sending to a database using an external data processor, a RealTimeToDB add-in.
The add-in can modify data, broadcast data, etc. The add-in can disable saving all or selected rows to a database.

You may implement add-ins using C#, VB, C++, etc.
See [RealTimeToDB Add-Ins](#).

- [*] RealTimeToDB restarts a data source RTD server automatically if the server returns no data multiple times. Use the NoDataLimit application settings in the configuration file to specify the limit of empty replies. The default value is 20.
- [*] Event logging has been improved.

Version 2.1, March 28, 2014

- [*] The product can be registered in a silent mode using the RegisterProductCmd command line utility.
- [-] Empty once loaded values have been fixed.
- [+] New functions have been added: =Now(), =UtcNow(), and =TableNow().

Version 2.0, February 25, 2014

- [!] RealTimeToDB has new editions: **Personal**, **Express**, and **Standard**.
- [!] Due to new features, RealTimeToDB can be used at home by any person with minimal IT knowledge. The default local RTD database allows starting the work in a couple of minutes. Companion products allow managing the database and getting real-time data using Microsoft Excel.
- [!] RealTimeToDB has been integrated with companion products of Gartle Technology Corporation: RealTimeToExcel, SaveToDB, gConnectionManager, and gsqcmd.
Use the SaveToDB setup package as the most comprehensive setup suite.
- [+] RealTimeToDB works with **Microsoft SQL Server Compact, MySQL, Oracle Database, and IBM DB2**.
- [+] Extended support for InteractiveBrokers Trader Workstation has been added. You may specify TWS user name in the **TwsUserName** application property of the RealTimeToDB.exe.config.
- [+] The new **ServersAsAdmin** application property has been added. The property allows specifying DDE servers that require administrator privileges like Thinkorswim thinkDesktop (TOS) and Hybrid Solutions VertexFX Trader (VFX).
- [!] The preconfigured **RTD databases** for every supported platform and tested data provider have been added. The setup package includes source codes, installers, configuration and example workbooks.
- [+] The **table configuration** table includes two new fields: **TIME_ZONE** and **RTD_INSTANCE**.
- [+] RealTimeToDB instances have the default **x86 or x64 instance names** depend on executable bitness.
- [+] **Named RealTimeToDB instances** for Enterprise edition have been added.
- [+] The **field configuration** table has the new **IS_DISABLED** field.
- [+] **Built-in date, time, and timestamp function** have been added. Use this function to create history tables with different time frames.
- [+] The Connection Manager in the File menu allows configuring connection strings in visual mode.
- [*] The main application form restores its location and size, and column widths at startup.

Version 1.0, December 27, 2013

- [+] The first version has been released.

System Requirements

Tested RTD Servers

- FutureSource, eSignal
- RealTimeToExcel (former Gartle RTD Server), Gartle Technology Corporation

Tested DDE Servers

- ThinkDesktop, Thinkorswim, division of TD Ameritrade
- Trader Workstation, Interactive Brokers
- VertexFX Trader, Hybrid Solutions

Supported Architectures:

- x86
- x64

Supported Operating Systems:

- Windows XP SP3
- Windows Vista SP1
- Windows 7
- Windows 8 and 8.1
- Windows Server 2003 SP3
- Windows Server 2008
- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2

Supported Versions of Microsoft SQL Server:

- Microsoft SQL Server 2005
- Microsoft SQL Server 2008
- Microsoft SQL Server 2008 R2
- Microsoft SQL Server 2012 including Express LocalDB
- Microsoft SQL Server 2014 including Express LocalDB
- Windows Azure SQL Database

Supported Versions of Microsoft SQL Server Compact:

- Microsoft SQL Server Compact 3.5
- Microsoft SQL Server Compact 4.0

Supported Versions of Oracle Database:

- Oracle Database 10g Release 1
- Oracle Database 10g Release 2
- Oracle Database 11g Release 1
- Oracle Database 11g Release 2
- Oracle Database 12c Release 1

Supported Versions of IBM DB2:

- IBM DB2 9.5
- IBM DB2 9.7
- IBM DB2 10.1

IBM DB2 .NET Provider, IBM DB2 OLE DB Provider or IBM DB2 ODBC driver installed is required.

Supported Versions of MySQL:

- MySQL 5.0
- MySQL 5.1
- MySQL 5.2
- MySQL 5.5

- MySQL 5.6

Supported Versions of SkySQL MariaDB:

- MariaDB 5.1
- MariaDB 5.2
- MariaDB 5.3
- MariaDB 5.5
- MariaDB 10.0

All application features for MySQL are completely compatible with MariaDB.

ADO.Net Driver for MySQL and MySQL ODBC drivers can be used to connect to MariaDB.

MariaDB ODBC Driver 1.0 is not supported.

Supported Versions of NuoDB:

- NuoDB 2.0.4

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Using RealTimeToDB

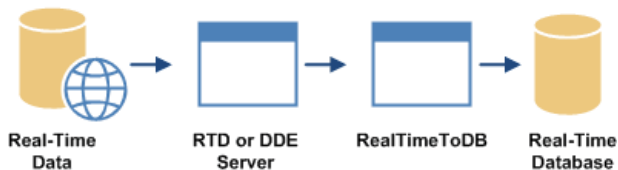
Installing Application

RealTimeToDB has two setup packages: RealTimeToDB and SaveToDB Suite.

SaveToDB Suite is the best choice for personal use. See details in the [Install and Uninstall](#) topic.

Configuring Application

RealTimeToDB allows getting real-time data from RTD or DDE servers and saving the data into databases like this:



As you can see, RealTimeToDB must know what data to get and where to save.

RealTimeToDB can have multiple running instances.

Connection strings in [application configuration files](#) define databases to update for each instance.

[Field configuration tables](#) in databases define source real-time servers, target database tables, and formulas to update table columns with real-time data.

[Table configuration tables](#) in database allow tuning loading ticker lists, tables per instances, and temporary disabling certain tables.

Configuration Steps

1. Create database tables for real-time data.
2. Create RealTimeToDB [configuration database tables](#).
3. Create configurations for real-time data tables.
4. Edit the [application configuration](#) file.

Ready-To-Use Databases

The RealTimeToDB setup package includes preconfigured [RTD databases](#) for supported database platforms.

Use it to quickly create databases and test working.

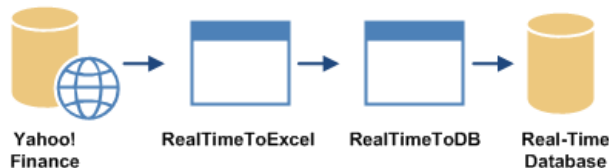
RealTimeToDB includes preconfigured and activated by default the Microsoft SQL Server Compact **rtd.sdf** database.

You may start getting real-time data for personal use immediately after install.

Real-Time Data Providers

You may use RTD and DDE servers from your trading applications or real-time data providers like eSignal.

RealTimeToDB includes a companion product, RealTimeToExcel, that can be used as an RTD server for getting Yahoo! Finance data.



The [RTD database](#) includes preconfigured tables for several real-time data providers including RealTimeToExcel.

Database Platforms

RealTimeToDB supports:

- Windows Azure SQL Database
- Microsoft SQL Server including Express LocalDB
- Microsoft SQL Server Compact
- SkySQL MariaDB

- Oracle MySQL
- Oracle Database
- IBM DB2
- NuoDB

Installed IBM DB2 .NET Provider, IBM DB2 OleDb Provider or IBM DB2 ODBC driver is required for working with IBM DB2 databases.

Other platforms are supported by default using the embedded providers.

Running Application

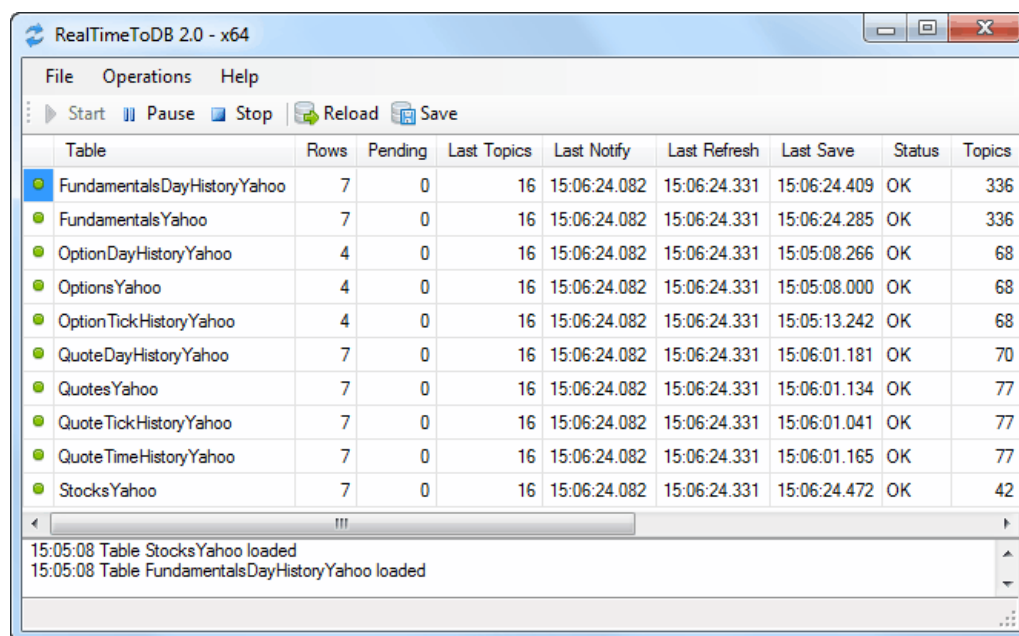
Starting Steps

1. Start required RTD or DDE servers.
2. Start the RealTimeToDB application.
3. [Start](#) updating data.

You may start multiple instances of RealTimeToDB. The default instance names are **x86** for 32-bit and **x64** for 64-bit executables.

Operating and Monitoring

The main application form allows performing service operations and monitoring services.



The application can be minimized to the System Tray.

Reloading Ticker Lists

RealTimeToDB loads database data on starting and updates the data in real-time.

If you have modified the database data that should be updated, click the [Reload](#) button.

Getting Real-Time Data from Databases into Microsoft Excel

RealTimeToExcel, a companion product, allows getting real-time data from database into Microsoft Excel.



Click the **Help**, **RealTimeToExcel**, **Help** menu item for details.

The [RTD Database](#) contains preconfigured [views with real-time formulas](#).

Registering Application

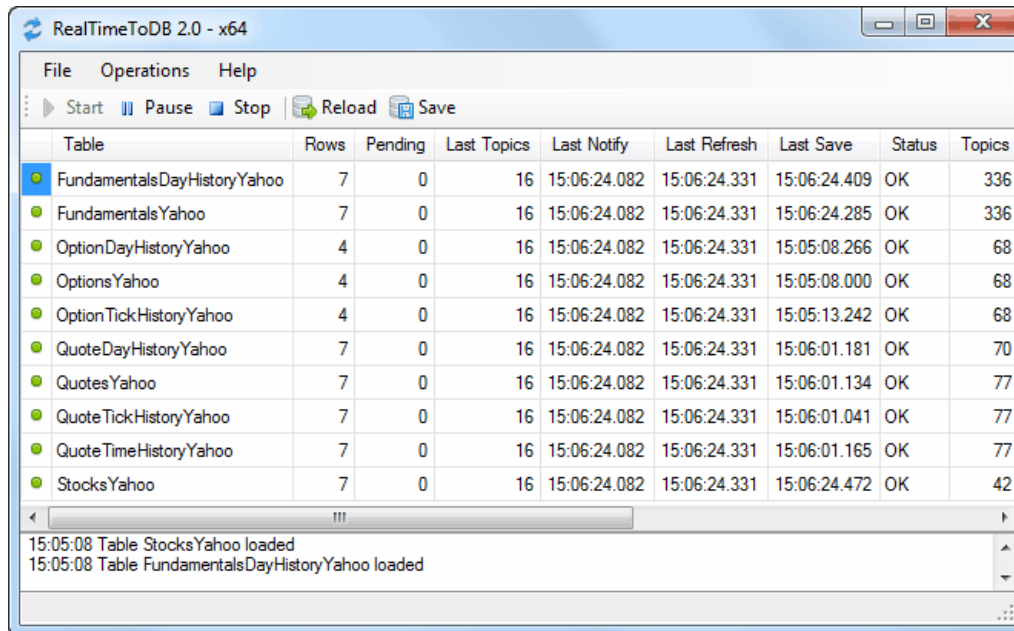
RealTimeToDB has several [editions](#) with different features.

Use the **Help, Register Product** menu item to [register the product](#).

User Interface

RealTimeToDB is a Windows application.

The main application form allows performing service operations and monitoring services.



See the following topics about user interface elements:

- [Menu File](#)
- [Menu Operations](#)
- [Menu Help](#)
- [Menu RealTimeToExcel Help](#)
- [Table Columns](#)

Menu File

Open Configuration File

Opens the **RealTimeToDB.exe.config** file. You may check or edit [application settings](#).

Open Connection Manager

Opens [Connection Manager](#) to edit connection strings in visual mode.

Exit

Stops all the running services and closes the application.

Menu Operations

Start Services

Starts updating databases with real-time data.

Pause Services

Stops the timer that starts updating databases.

Use this button to stop updating temporarily. To start updating, click the Start button.

Stop Services

Stops all the running services.

Reload Database Data

Saves current data to databases and reloads data from databases.
Use this button to reload data when you add new tickers to database tables.

Save Data To Database

Saves current data to databases immediately.
Use this button, if the services have been paused or you need to update the data before the next timer event.

Menu Help

Help

Displays the local help.

Online Help

Opens the online help webpage.

Technical Support

Opens the support webpage.

SaveToDB Website

Opens the product webpage at the official website.

Register Product

Displays the **Register Product** wizard.

Buy License

Opens the webpage to start purchasing.

Check Updates

Opens the webpage to download updates.

About RealTimeToDB

Displays the **About RealTimeToDB** dialog box.

Menu RealTimeToExcel Help

The menu contains links for integrated RealTimeToExcel.

Help

Displays the local RealTimeToExcel help.

Online Help

Opens the online RealTimeToExcel help webpage.

Register Product

Displays the **Register Product** wizard for registering RealTimeToExcel.

Table Columns

Status Image

The image indicates table status: green or red.

Table

The column displays database table name.

Rows

The column displays loaded row count.

Pending

The column displays amount of pending rows.

Last Topics

The column displays amount of topics that the real-time server returns on the last data refresh.

Last Notify

The column displays the time of the first data change notification from the real-time server after the last data refresh.

Last Refresh

The column displays the start time of the getting changed data from the real-time server.
The period between the notification and getting the changed data depends on the RefreshTimeInterval value.

Last Save

The column displays the time when the last data have been saved to a database.
The period between the notification and this time shows the maximum delay for real-time data in a database.

Status

The column displays the status of real-time server and database operations.

Topics

The column displays amount of topics connected to the real-time server.
Usually, this is the row count multiplied by real-time column count.

MSPR

The column displays average speed of saving data to a database in milliseconds per row (mspr).

ProgID

The column displays RTD server ProgIDs or DDE service names.

Server

The column displays database servers.

Database

The column displays database names.

Application Configuration

RealTimeToDB loads application settings from the **RealTimeToDB.exe.config** file at the application start.

You may edit this XML file using notepad.exe or another tool. Use the **File, Open Configuration File** menu item to open the file.

You may edit the connection strings using the Connection Manager. Use the **File, Open Connection Manager** menu item.

On the [Start](#) operation, RealTimeToDB opens all available connections, seeks [database configuration](#) tables, and starts updating configured tables.

Configuration File Format

The configuration file can contain the **appSettings** and **connectionStrings** sections.

Configuration file example:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
  <appSettings>
    <add key="AppCulture" value="en-US"/>
    <add key="AutoStart" value="true"/>
    <add key="ConnectionTimeout" value="5"/>
    <add key="CommandTimeout" value="5"/>
    <add key="InstanceName" value=""/>
    <add key="MinimizeToTray" value="true"/>
    <add key="RefreshTimerInterval" value="50"/>
    <add key="ServersAsAdmin" value="TOS VFX"/>
    <add key="TwsUserName" value=""/>
  </appSettings>
  <connectionStrings>
    <add name="rtd-mssql"
        connectionString="Data Source=.\SQLEXPRESS;Initial Catalog=RTD;Integrated Security=True"
        providerName="System.Data.SqlClient" />
  </connectionStrings>
</configuration>
```

Configuration file settings:

AppCulture

This string value defines the application culture used for user interface translation.

AutoStart

This boolean value defines immediate start of data updating after the program start.

Start the application with administrator privileges for updating data from DDE servers that require such privileges (TOS, VFX).

ConnectionTimeout

This integer value defines the server connection timeout in seconds.

CommandTimeout

This integer value defines the timeout of command execution in seconds.

InstanceName

This string value defines the instance name used to select [table configurations](#) using the RTD_INSTANCE_NAME field.

MinimizeToTray

This boolean value allow minimizing the application window in the system tray.

RefreshTimerInterval

This integer value defines the interval of data refreshing in milliseconds.

ServersAsAdmin

This string values defines RTD and DDE servers that require administrator privileges.

RealTimeToDB requests elevating for these servers.

TwsUserName

This string value defines a user name for InteractiveBrokers Trader Workstation (TWS).

This name is used in real-time formulas like =S<TwsUserName> by default, if the =S server is specified only.

Database Configuration

RealTimeToDB updates database table fields with real-time values from real-time servers.

The **field configuration table** is used to configure what fields must be updated and how.

The Microsoft Excel formula format is used to configure. It's easy.

You may copy formulas from Microsoft Excel workbooks.

In addition, you may change behavior for certain tables using the **table configuration table**.

RealTimeToDB loads the configurations on the [Start](#) operation.

You may check loading progress and possible errors in the message panel of the main form.

Field Configuration Table

RealTimeToDB reads the field configuration from the table that contains the following fields:

1. TABLE_SCHEMA
2. TABLE_NAME
3. COLUMN_NAME
4. RTD_FORMULA
5. IS_DISABLED

The table can contain an additional primary key first column.

Configuration data formats:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	IS_DISABLED
<Table schema>	<Table name>	<Column name>	<RTD or DDE formula>	1/0/NULL

The **TABLE_SCHEMA** and **TABLE_NAME** fields specify the database table.

The **COLUMN_NAME** field specifies the column of database tables.

The **RTD_FORMULA** column specifies RTD or DDE formula used to get real-time data.

The **IS_DISABLED** field allows disabling field updating. Use this if you do not want to delete the row.

Formula format is very similar to Microsoft Excel format.

But the formulas must contain parameter columns in square brackets instead of real tickers.

Below the example of the configuration table:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA
rtd	QuotesES	Code	
rtd	QuotesES	Symbol	=RTD("esrtd",,[Code],"Symbol")
rtd	QuotesES	Time	=RTD("esrtd",,[Code],"Time")
rtd	QuotesES	Last	=RTD("esrtd",,[Code],"Last")
rtd	QuotesES	Change	=RTD("esrtd",,[Code],"Change")
rtd	QuotesES	PercentChange	=RTD("esrtd",,[Code],"% Change")
rtd	QuotesES	Open	=RTD("esrtd",,[Code],"Open")
rtd	QuotesES	High	=RTD("esrtd",,[Code],"High")
rtd	QuotesES	Low	=RTD("esrtd",,[Code],"Low")
rtd	QuotesES	Volume	=RTD("esrtd",,[Code],"Volume")
rtd	QuotesTOS	Symbol	
rtd	QuotesTOS	Time	=Time()
rtd	QuotesTOS	Last	=TOS LAST! [Symbol]
rtd	QuotesTOS	Change	=TOS NET_CHANGE! [Symbol]
rtd	QuotesTOS	PercentChange	=TOS PERCENT_CHANGE! [Symbol]
rtd	QuotesTOS	Open	=TOS OPEN! [Symbol]
rtd	QuotesTOS	High	=TOS HIGH! [Symbol]
rtd	QuotesTOS	Low	=TOS LOW! [Symbol]
rtd	QuotesTOS	Close	=TOS CLOSE! [Symbol]
rtd	QuotesTOS	Volume	=TOS VOLUME! [Symbol]

The columns of the rtd.QuotesES table are updated from the eSignal **FutureSource** real-time RTD server ("esrtd").

The columns of the rtd.QuotesTOS table are updated from the Thinkorswim **thinkDesktop** real-time DDE server ("TOS").

rtd.QuotesES contains the Code column that is used as a parameter.

The Code column belongs to a task table (see below) and does not really exist in rtd.QuotesES.

But such parameter fields must be specified in the field configuration table to load parameter columns into the table column set.

rtd.QuotesTOS contains the Symbol column that is used as a parameter.

rtd.QuotesTOS contains the Time column calculated by RealTimeToDB as TOS have no time fields.

See the complete [list of built-in functions](#).

Table Configuration Table

RealTimeToDB reads the table configuration from the table that contains the following fields:

1. TABLE_SCHEMA
2. TABLE_NAME
3. LOAD_CODE
4. IS_HISTORY
5. IS_DISABLED
6. TIME_ZONE
7. RTD_INSTANCE_NAME

The table can contain an additional primary key first column.

Configuration data formats:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY	IS_DISABLED	TIME_ZONE	RTD_INSTANCE_NAME
<Table schema>	<Table name>	<SQL command>	1/0/NULL	1/0/NULL	<Time Zone>	<Instance Name>

The **TABLE_SCHEMA** and **TABLE_NAME** fields specify the database table.

The **LOAD_CODE** field allows changing the default code to load initial data from databases into RealTimeToDB.

The default code is

```
SELECT <COLUMNS> FROM <TABLE_SCHEMA>.<TABLE_NAME>
```

where <COLUMNS> are primary key columns, and real-time and formula parameter columns from the field configuration table.

You may change the default code to load the task data from other tables.

For example:

```
SELECT DISTINCT Symbols FROM dbo.WatchList UNION SELECT DISTINCT Symbols FROM dbo.Portfolio
```

The **IS_HISTORY** field allows switching on the history mode.

In this mode, RealTimeToDB uses insert commands to update data first. And only if the insert is failed, the update command is used.

The **IS_DISABLED** field allows turning off the table update.

The **TIME_ZONE** field defines the time zone of the table. This time zone is used to adjust the current PC time in built-in functions like =Time().

Specify 'Eastern Standard Time' for US exchanges.

See available time zones at [http://technet.microsoft.com/en-us/library/cc749073\(v=ws.10\).aspx](http://technet.microsoft.com/en-us/library/cc749073(v=ws.10).aspx).

The **RTD_INSTANCE_NAME** field specifies RealTimeToDB instances that must update this table. Other instances ignore such tables.

The default instance names are **x86** for 32-bit and **x64** for 64-bit RealTimeToDB executables.

User defined names are supported in the RealTimeToDB Enterprise edition and can be configured in the [application configuration files](#).

Creating Configuration Tables

The RealTimeToDB setup package contains the [RTD Database](#) source codes for supported databases platforms.

It is the fastest way to create database tables and ready-to-used configuration tables for several real-time data providers.

You may also use the SQL code below to create configuration tables in your databases.

- [Configuration Tables for Microsoft SQL Server](#)
- [Configuration Tables for Microsoft SQL Server Compact](#)
- [Configuration Tables for MySQL and MariaDB](#)
- [Configuration Tables for Oracle Database](#)
- [Configuration Tables for IBM DB2](#)
- [Configuration Tables for NuoDB](#)

Configuration Tables for Microsoft SQL Server

You may use the following SQL codes to create configuration tables in Microsoft SQL Server databases:

```
CREATE TABLE [rtd].[RealTimeFormulas](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [TABLE_SCHEMA] [nvarchar](128) NOT NULL,
    [TABLE_NAME] [nvarchar](128) NOT NULL,
    [COLUMN_NAME] [nvarchar](128) NOT NULL,
    [RTD_FORMULA] [nvarchar](255) NULL,
    [IS_DISABLED] [tinyint] NULL,
    CONSTRAINT [PK_RealTimeFormulas_rtd] PRIMARY KEY ([ID] ASC),
    CONSTRAINT [IX_RealTimeFormulas_Schema_Name_ColumnName_rtd] UNIQUE
    (
        [TABLE_SCHEMA] ASC,
        [TABLE_NAME] ASC,
        [COLUMN_NAME] ASC
    )
);
GO

CREATE TABLE [rtd].[RealTimeTables](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [TABLE_SCHEMA] [nvarchar](128) NOT NULL,
    [TABLE_NAME] [nvarchar](128) NOT NULL,
    [LOAD_CODE] [nvarchar](2000) NULL,
    [IS_HISTORY] [tinyint] NULL,
    [IS_DISABLED] [tinyint] NULL,
    [TIME_ZONE] [nvarchar](50) NULL,
    [RTD_INSTANCE_NAME] [nvarchar](50) NULL,
    CONSTRAINT [PK_RealTimeTables_rtd] PRIMARY KEY ([ID] ASC),
    CONSTRAINT [IX_RealTimeTables_Schema_Name_rtd] UNIQUE
    (
        [TABLE_SCHEMA] ASC,
        [TABLE_NAME] ASC
    )
);
GO
```

Configuration Tables for Microsoft SQL Server Compact

You may use the following SQL codes to create configuration tables in Microsoft SQL Server Compact databases:

```
CREATE TABLE [RealTimeFormulas](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [TABLE_SCHEMA] [nvarchar](128) NULL,
    [TABLE_NAME] [nvarchar](128) NOT NULL,
    [COLUMN_NAME] [nvarchar](128) NOT NULL,
    [RTD_FORMULA] [nvarchar](255) NULL,
    [IS_DISABLED] [tinyint] NULL,
    CONSTRAINT [PK_RealTimeFormulas] PRIMARY KEY ([ID]),
    CONSTRAINT [IX_RealTimeFormulas_Name_ColumnName] UNIQUE
    (
        [TABLE_NAME],
        [COLUMN_NAME]
    )
);
GO

CREATE TABLE [RealTimeTables](
    [ID] [int] IDENTITY(1,1) NOT NULL,
    [TABLE_SCHEMA] [nvarchar](128) NULL,
    [TABLE_NAME] [nvarchar](128) NOT NULL,
    [LOAD_CODE] [nvarchar](2000) NULL,
    [IS_HISTORY] [tinyint] NULL,
    [IS_DISABLED] [tinyint] NULL,
    [TIME_ZONE] [nvarchar](50) NULL,
    [RTD_INSTANCE_NAME] [nvarchar](50) NULL,
    CONSTRAINT [PK_RealTimeTables] PRIMARY KEY ([ID]),
    CONSTRAINT [IX_RealTimeTables_Schema_Name] UNIQUE
    (
        [TABLE_NAME]
    )
);
GO
```

Configuration Tables for MySQL and MariaDB

You may use the following SQL codes to create configuration tables in MySQL and MariaDB databases:

```
CREATE TABLE IF NOT EXISTS `rtd`.`real_time_formulas` (
  `ID` INTEGER NOT NULL AUTO_INCREMENT,
  `TABLE_SCHEMA` VARCHAR(128) NOT NULL,
  `TABLE_NAME` VARCHAR(128) NOT NULL,
  `COLUMN_NAME` VARCHAR(128) NOT NULL,
  `RTD_FORMULA` VARCHAR(255) NULL,
  `IS_DISABLED` TINYINT NULL,
  PRIMARY KEY (`ID`)
);

ALTER TABLE `rtd`.`real_time_formulas`
ADD UNIQUE INDEX `ix_real_time_formulas_schema_name_column_name`
USING BTREE (
  `TABLE_SCHEMA`,
  `TABLE_NAME`,
  `COLUMN_NAME`
);

CREATE TABLE IF NOT EXISTS `rtd`.`real_time_tables` (
  `ID` INTEGER NOT NULL AUTO_INCREMENT,
  `TABLE_SCHEMA` VARCHAR(128) NOT NULL,
  `TABLE_NAME` VARCHAR(128) NOT NULL,
  `LOAD_CODE` VARCHAR(2000) NULL,
  `IS_HISTORY` TINYINT NULL,
  `IS_DISABLED` TINYINT NULL,
  `TIME_ZONE` VARCHAR(50) NULL,
  `RTD_INSTANCE_NAME` VARCHAR(50) NULL,
  PRIMARY KEY (`ID`)
);

ALTER TABLE `rtd`.`real_time_tables`
ADD UNIQUE INDEX `ix_realtimetables_schema_name`
USING BTREE (
  `TABLE_SCHEMA`,
  `TABLE_NAME`
);
```

Configuration Tables for Oracle Database

You may use the following SQL codes to create configuration tables in Oracle Database databases:

```
CREATE TABLE "RTD"."REAL_TIME_FORMULAS" (
  "ID" NUMBER NOT NULL,
  "TABLE_SCHEMA" VARCHAR2(128) NOT NULL,
  "TABLE_NAME" VARCHAR2(128) NOT NULL,
  "COLUMN_NAME" VARCHAR2(128) NOT NULL,
  "RTD_FORMULA" VARCHAR2(255) NULL,
  "IS_DISABLED" NUMBER(1) NULL,
  CONSTRAINT "PK_REAL_TIME_FORMULAS"
  PRIMARY KEY ("ID"),
  CONSTRAINT "IX_REAL_TIME_FORMULAS_COLUMN"
  UNIQUE ("TABLE_SCHEMA", "TABLE_NAME", "COLUMN_NAME")
);

CREATE SEQUENCE "RTD"."SQ_REAL_TIME_FORMULAS_ID"
INCREMENT BY 1
START WITH 1
MAXVALUE 1E28
MINVALUE 1
NOCYCLE
CACHE 20
NOORDER;

CREATE TRIGGER "RTD"."TRG_REAL_TIME_FORMULAS_ID"
BEFORE INSERT OR UPDATE
ON "RTD"."REAL_TIME_FORMULAS"
REFERENCING NEW AS NEW OLD AS OLD FOR EACH ROW
BEGIN
  IF :new.ID IS NULL THEN
    SELECT SQ_REAL_TIME_FORMULAS_ID.NEXTVAL INTO :new.ID FROM dual;
  END IF;
END;
/

CREATE TABLE "RTD"."REAL_TIME_TABLES" (
  "ID" NUMBER NOT NULL,
  "TABLE_SCHEMA" VARCHAR2(128) NOT NULL,
```

```

"TABLE_NAME" VARCHAR2(128) NOT NULL,
"LOAD_CODE" VARCHAR2(2000) NULL,
"IS_HISTORY" NUMBER(1) NULL,
"IS_DISABLED" NUMBER(1) NULL,
"TIME_ZONE" VARCHAR2(50) NULL,
"RTD_INSTANCE_NAME" VARCHAR2(50) NULL,
CONSTRAINT "PK_REAL_TIME_TABLES"
PRIMARY KEY ("ID"),
CONSTRAINT "IX_REAL_TIME_TABLES_TABLE"
UNIQUE ("TABLE_SCHEMA", "TABLE_NAME")
);

CREATE SEQUENCE "RTD"."SQ_REAL_TIME_TABLES_ID"
INCREMENT BY 1
START WITH 1
MAXVALUE 1E28
MINVALUE 1
NOCYCLE
CACHE 20
NOORDER;

CREATE TRIGGER "RTD"."TRG_REAL_TIME_TABLES_ID"
BEFORE INSERT OR UPDATE
ON "RTD"."REAL_TIME_TABLES"
REFERENCING NEW AS NEW OLD AS OLD FOR EACH ROW
BEGIN
IF :new.ID IS NULL THEN
SELECT SQ_REAL_TIME_TABLES_ID.NEXTVAL INTO :new.ID FROM dual;
END IF;
END;
/

```

Configuration Tables for IBM DB2

You may use the following SQL codes to create configuration tables in IBM DB2 databases:

```

CREATE TABLE "RTD"."REAL_TIME_FORMULAS" (
"ID" INTEGER NOT NULL GENERATED BY DEFAULT AS IDENTITY,
"TABLE_SCHEMA" VARCHAR(128) NOT NULL,
"TABLE_NAME" VARCHAR(128) NOT NULL,
"COLUMN_NAME" VARCHAR(128) NOT NULL,
"RTD_FORMULA" VARCHAR(255) NULL,
"IS_DISABLED" SMALLINT NULL,
CONSTRAINT "PK_REAL_TIME_FORMULAS"
PRIMARY KEY ("ID"),
CONSTRAINT "IX_REAL_TIME_FORMULAS_COLUMN"
UNIQUE ("TABLE_SCHEMA", "TABLE_NAME", "COLUMN_NAME")
);

```

```

CREATE TABLE "RTD"."REAL_TIME_TABLES" (
"ID" INTEGER NOT NULL GENERATED BY DEFAULT AS IDENTITY,
"TABLE_SCHEMA" VARCHAR(128) NOT NULL,
"TABLE_NAME" VARCHAR(128) NOT NULL,
"LOAD_CODE" VARCHAR(2000) NULL,
"IS_HISTORY" SMALLINT NULL,
"IS_DISABLED" SMALLINT NULL,
"TIME_ZONE" VARCHAR(50) NULL,
"RTD_INSTANCE_NAME" VARCHAR(50) NULL,
CONSTRAINT "PK_REAL_TIME_TABLES"
PRIMARY KEY ("ID"),
CONSTRAINT "IX_REAL_TIME_TABLES_TABLE"
UNIQUE ("TABLE_SCHEMA", "TABLE_NAME")
);

```

Configuration Tables for NuoDB

You may use the following SQL codes to create configuration tables in NuoDB databases:

```

CREATE TABLE "RTD"."REAL_TIME_FORMULAS" (
"ID" INTEGER NOT NULL GENERATED BY DEFAULT AS IDENTITY,
"TABLE_SCHEMA" VARCHAR(128) NOT NULL,
"TABLE_NAME" VARCHAR(128) NOT NULL,
"COLUMN_NAME" VARCHAR(128) NOT NULL,
"RTD_FORMULA" VARCHAR(255) NULL,
"IS_DISABLED" SMALLINT NULL,
PRIMARY KEY ("ID")
);

CREATE UNIQUE INDEX "IX_REAL_TIME_FORMULAS_COLUMN"
ON "RTD"."REAL_TIME_FORMULAS" ("TABLE_SCHEMA", "TABLE_NAME", "COLUMN_NAME");

```

```

CREATE TABLE "RTD"."REAL TIME TABLES" (
  "ID" INTEGER NOT NULL GENERATED BY DEFAULT AS IDENTITY,
  "TABLE_SCHEMA" VARCHAR(128) NOT NULL,
  "TABLE_NAME" VARCHAR(128) NOT NULL,
  "LOAD_CODE" STRING NULL,
  "IS_HISTORY" SMALLINT NULL,
  "IS_DISABLED" SMALLINT NULL,
  "TIME_ZONE" VARCHAR(50) NULL,
  "RTD_INSTANCE_NAME" VARCHAR(50) NULL,
  PRIMARY KEY ("ID")
);

CREATE UNIQUE INDEX "IX_REAL_TIME_TABLES_TABLE"
ON "RTD"."REAL TIME TABLES" ("TABLE_SCHEMA", "TABLE_NAME");

```

RealTimeToDB Functions

The [real-time field configuration](#) table contains Excel-like formulas for getting data from real-time RTD and DDE servers.

Real-time servers can have no fields about date or time of the data.

In this case, you may use built-in RealTimeToDB formulas to update the database fields.

For example:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA
rtd	QuoteDayHistoryTOS	Symbol	
rtd	QuoteDayHistoryTOS	Date	=Date()
rtd	QuoteDayHistoryTOS	Time	=Time()
rtd	QuoteDayHistoryTOS	Last	=TOS LAST![(Symbol)]
rtd	QuoteDayHistoryTOS	Change	=TOS NET_CHANGE![(Symbol)]
rtd	QuoteDayHistoryTOS	Bid	=TOS BID![(Symbol)]
rtd	QuoteDayHistoryTOS	Ask	=TOS ASK![(Symbol)]

Thinkerswim thinkDesktop have no date and time fields.

So, to get the quote day history we need to use internal formulas =Date() and =Time().

Note, that the last data update fields are updated using the PC time adjusted to the table time zone, specified in the [table configuration](#).

You may use the 'Eastern Standard Time' time zone for US stock exchanges.

Function List

Function	Result
=TimeStamp()	Returns the current UTC datetime.
=UtcNow()	Returns the current UTC datetime.
=Now()	Returns the current datetime.
=TableNow()	Returns the current datetime adjusted to the table time zone.
=DateTime()	Returns the last data update datetime.
=DateTime0()	Returns the last data update datetime rounded to 1 second up.
=DateTime1()	Returns the last data update datetime rounded to 1 minute up.
=DateTime5()	Returns the last data update datetime rounded to 5 minutes up.
=DateTime10()	Returns the last data update datetime rounded to 10 minutes up.
=DateTime15()	Returns the last data update datetime rounded to 15 minutes up.
=DateTime20()	Returns the last data update datetime rounded to 20 minutes up.
=DateTime60()	Returns the last data update datetime rounded to 60 minutes up.
=Date()	Returns the last data update date.
=Time()	Returns the last data update time.
=Time0()	Returns the last data update time rounded to 1 second up.
=Time1()	Returns the last data update time rounded to 1 minute up.
=Time5()	Returns the last data update time rounded to 5 minutes up.
=Time10()	Returns the last data update time rounded to 10 minutes up.
=Time15()	Returns the last data update time rounded to 15 minutes up.
=Time20()	Returns the last data update time rounded to 20 minutes up.
=Time60()	Returns the last data update time rounded to 60 minutes up.

RealTimeToDB Add-Ins

The data can be processed before sending to a database using an external data processor, a RealTimeToDB add-in.

This feature can be used for broadcasting data, for example.

The data processor must implement the IRDDataProcessor interface defined in IDataProcessor.dll:

```
void IRDDataProcessor.AppStart()  
void IRDDataProcessor.AppStop()  
bool IRDDataProcessor.ProcessRow(IRDDataRow data)
```

The ProcessRow method is called before every saving data to a database.

The add-in can read the column data of the current row and change it using the Item property.

The data processor add-in must be attached using the configuration setting. For example:

```
<?xml version="1.0" encoding="utf-8" ?>  
<configuration>  
  <appSettings>  
    <add key="DataProcessor" value="RTDataBroadcastProcessor.dll"/>  
  </appSettings>  
</configuration>
```

You may find data processing add-in examples in C# and VB in the DataProcessor.zip file in the setup package.

Product Registration

RealTimeToDB has several editions. See [Edition comparison](#).

The registration process is required to register the desired edition.

To start the registration process, click **Help, Register Product**.

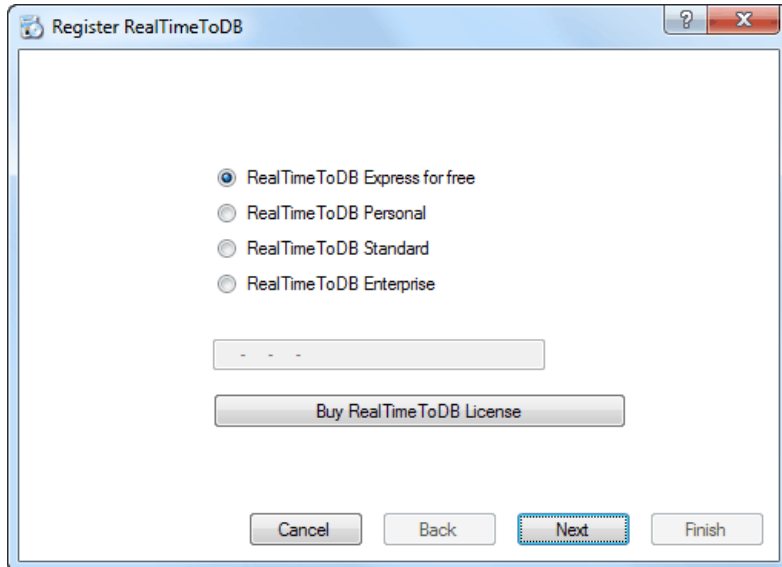
A product code is required to register the Personal, Standard, or Enterprise edition.

The product code is sent by email after purchasing.

You may register the RealTimeToDB Express edition for free.

Selecting Edition

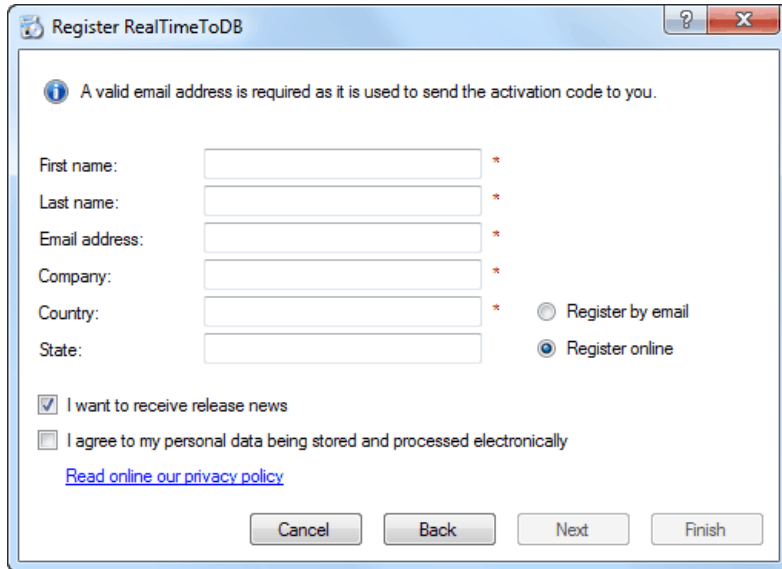
Select an edition and fill in the product code for the Personal, Standard, or Enterprise edition.



The screenshot shows a Windows-style dialog box titled "Register RealTimeToDB". Inside the dialog, there are four radio button options for selecting an edition: "RealTimeToDB Express for free" (which is selected), "RealTimeToDB Personal", "RealTimeToDB Standard", and "RealTimeToDB Enterprise". Below these options is a text input field containing three dashes ("---"). Underneath the input field is a button labeled "Buy RealTimeToDB License". At the bottom of the dialog, there are four buttons: "Cancel", "Back", "Next" (which is highlighted with a blue border), and "Finish".

Licensee Data

Please fill in the registration form carefully.



The screenshot shows a registration window titled "Register RealTimeToDB". It contains a message: "A valid email address is required as it is used to send the activation code to you." Below this are several input fields: "First name:", "Last name:", "Email address:", "Company:", "Country:", and "State:". Each field has a red asterisk indicating it is required. To the right of these fields are two radio buttons: "Register by email" and "Register online", with "Register online" being selected. Below the input fields are two checkboxes: "I want to receive release news" (checked) and "I agree to my personal data being stored and processed electronically" (unchecked). A link "Read online our privacy policy" is also present. At the bottom are four buttons: "Cancel", "Back", "Next", and "Finish".

The **Next** button is enabled when all the required fields are filled.

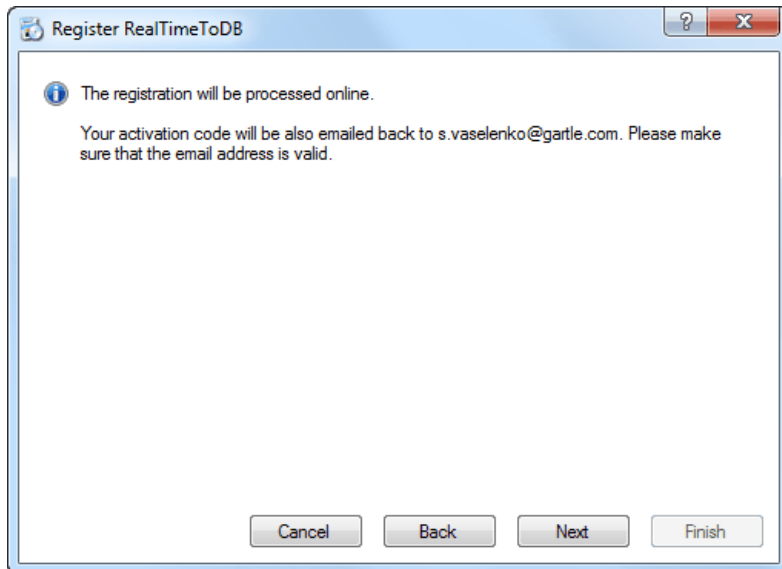
Don't forget to check the required field about the personal data use.

Online Registration

This step allows you to check your email address and to pause before the final step.

If the licensee data is valid, click **Next**.

You may return to the previous step using the **Back** button.

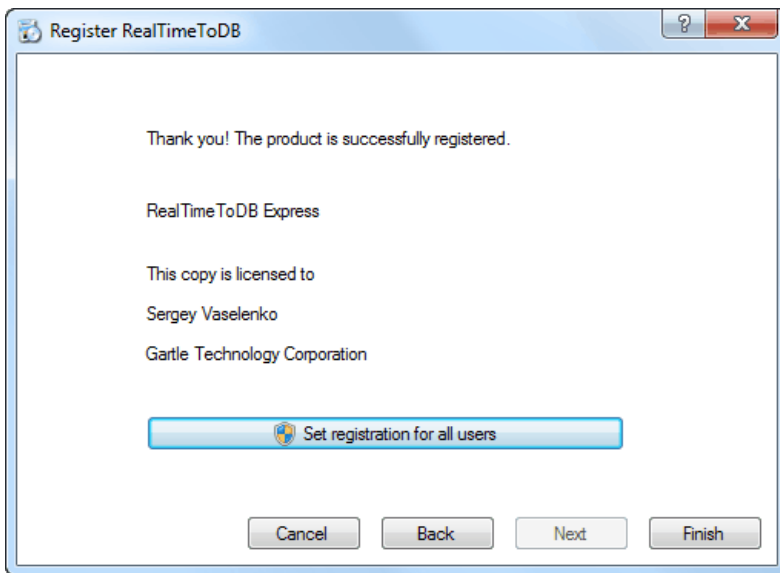


The screenshot shows a confirmation window titled "Register RealTimeToDB". It contains a message: "The registration will be processed online." Below this is a paragraph: "Your activation code will be also emailed back to s.vaselenko@gartle.com. Please make sure that the email address is valid." At the bottom are four buttons: "Cancel", "Back", "Next", and "Finish".

After clicking the **Next** button, the RealTimeToDB connects to the registration server.

If the connection is successful, the final step screen is shown.

If any error occurred during connection, you may try to register the product later or to register the product by email.

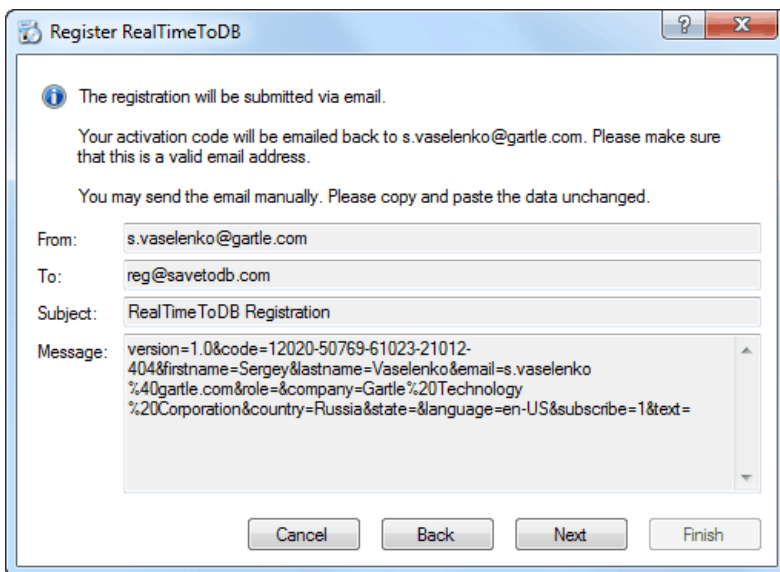


You may set the registration for all users of the computer. This action requires administrator privileges.

Click **Finish**.

Registration by Email

If you choose the **Register by email** option on the **Licensee Data** step, the following screen is displayed:

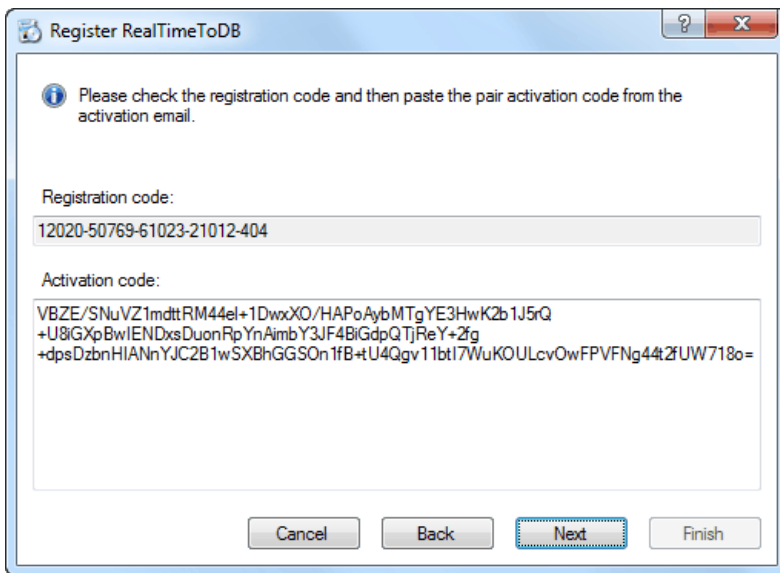


The **Next** button starts the default email program, creates a registration email, and activates the next step. Don't forget to send the email.

If starting of the email program has failed, you may create the registration email manually using the shown registration data. Please carefully copy the **To**, **Subject**, and the **Message** fields.

The registration server sends the reply in a couple of seconds; but you may close the dialog box and open it again, on the same step.

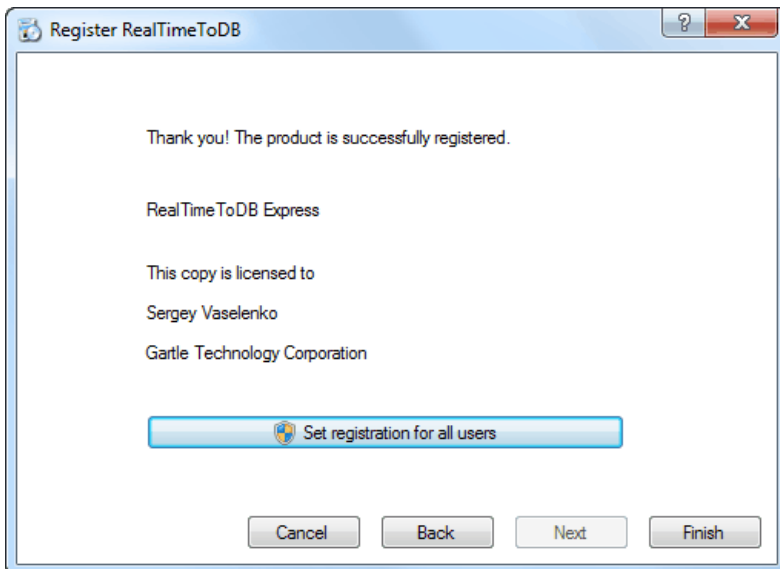
Please copy the activation code from the received registration email and paste it to the **Activation code** field.



The **Next** button is enabled when the pasted activation code is valid.

Click **Next** to continue.

The RealTimeToDB checks the registration data and confirms the registration.



You may set the registration for all users of the computer. This action requires administrator privileges.

Click **Finish**.

RTD Database

Overview

The RTD database is a ready-to-use solution for getting real-time data from preconfigured data providers using RealTimeToDB.

You may use the database as is, customize it, or use the source code to create required tables in your databases.

Preconfigured real-time data providers:

- [eSignal FutureSource \(ES\)](#)
- [Interactive Brokers Trader Workstation \(TWS\)](#)
- [Thinkorswim thinkDesktop \(TOS\)](#)
- [VertexFX Trader \(VFX\)](#)
- [Yahoo! Finance through RealTimeToExcel](#)

Supported database servers:

- Microsoft SQL Server.
- Microsoft SQL Server Compact.
- SkySQL MariaDB.
- Oracle MySQL.
- Oracle Database.
- IBM DB2.
- NuoDB.

You may find the installation code and instructions in the **RTD Database** folder of the setup package.

The RTD database also contains preconfigured views for getting real-time data from database tables into Microsoft Excel using companion products RealTimeToExcel and the SaveToDB add-in for Microsoft Excel.

The SaveToDB add-in can be used also for editing configuration tables in Microsoft Excel. So you do not need any installed database client to manage and use the database.

Preinstalled Local Database

The local RTD database for Microsoft SQL Server Compact is installed by default into the %LOCALAPPDATA%\Gartle\RealTimeToDB folder.

You may start loading real-time data into your database and using the real-time data in Microsoft Excel in a couple of minutes.

The source copy of the rtd.sdf database is also located in Resources subdirectory. You may use this copy to restore the database to the initial state.

Installing and Uninstalling

The RTD Database folder of the setup package contains the subfolders with the source code and instructions for every supported database server.

Generally, installation is an easy process: edit the connection properties and run the setup batch file.

The database must have two users:

- A user to update database tables using **RealTimeToDB**. The default name is **rtd**.
- A test user to get the data from the database into Microsoft Excel using **RealTimeToExcel**. The default name is **rtdxls**.

These names are used in preconfigured Excel workbooks and configuration files.

Configuration Tables

SQL Server and SQL Server Compact	MySQL and MariaDB	Oracle Database, IBM DB2, and NuoDB
RealTimeTables	real_time_tables	REAL_TIME_TABLES
RealTimeFormulas	real_time_formulas	REAL_TIME_FORMULAS

The RealTimeTables table contains [table configurations](#) in line with RealTimeToDB [requirements](#).

Change the IS_DISABLED field to manage updating data tables.

Change the LOAD_CODE field to manage tickers to update.

The RealTimeFormulas table configures Excel-like formulas used to get data from RTD and DDE servers.

See formulas in data table descriptions.

You may use the following Excel workbooks included into the setup package to manage tables:

- rtd-mssql.xlsx
- rtd-sqlce.xlsx
- rtd-mysql.xlsx
- rtd-ora.xlsx
- rtd-db2.xlsx
- rtd-nuodb.xlsx

Data Tables

SQL Server and SQL Server Compact	MySQL and MariaDB	Oracle Database, IBM DB2, and Nuodb
FundamentalsYahoo	fundamentals_day_history_yahoo	FUNDAMENTALS_DAY_HISTORY_YAHOO
FundamentalsDayHistoryYahoo	fundamentals_yahoo	FUNDAMENTALS_YAHOO
StocksYahoo	stocks_yahoo	STOCKS_YAHOO
QuotesYahoo	quotes_yahoo	QUOTES_YAHOO
QuoteDayHistoryYahoo	quote_day_history_yahoo	QUOTE_DAY_HISTORY_YAHOO
QuoteTimeHistoryYahoo	quote_time_history_yahoo	QUOTE_TIME_HISTORY_YAHOO
QuoteTickHistoryYahoo	quote_tick_history_yahoo	QUOTE_TICK_HISTORY_YAHOO
OptionsYahoo	options_yahoo	OPTIONS_YAHOO
OptionDayHistoryYahoo	option_day_history_yahoo	OPTION_DAY_HISTORY_YAHOO
OptionTickHistoryYahoo	option_tick_history_yahoo	OPTION_TICK_HISTORY_YAHOO
QuotesES	quotes_es	QUOTES_ES
QuoteDayHistoryES	quote_day_history_es	QUOTE_DAY_HISTORY_ES
QuoteTimeHistoryES	quote_time_history_es	QUOTE_TIME_HISTORY_ES
QuoteTickHistoryES	quote_tick_history_es	QUOTE_TICK_HISTORY_ES
QuotesTOS	quotes_tos	QUOTES_TOS
QuoteDayHistoryTOS	quote_day_history_tos	QUOTE_DAY_HISTORY_TOS
QuoteTickHistoryTOS	quote_tick_history_tos	QUOTE_TICK_HISTORY_TOS
OptionsTOS	options_tos	OPTIONS_TOS
OptionDayHistoryTOS	option_day_history_tos	OPTION_DAY_HISTORY_TOS
OptionTickHistoryTOS	option_tick_history_tos	OPTION_TICK_HISTORY_TOS
QuotesTWS	quotes_tws	QUOTES_TWS
QuoteDayHistoryTWS	quote_day_history_tws	QUOTE_DAY_HISTORY_TWS
QuoteTickHistoryTWS	quote_tick_history_tws	QUOTE_TICK_HISTORY_TWS
OptionsTWS	options_tws	OPTIONS_TWS
OptionDayHistoryTWS	option_day_history_tws	OPTION_DAY_HISTORY_TWS
OptionTickHistoryTWS	option_tick_history_tws	OPTION_TICK_HISTORY_TWS
QuotesVFX	quotes_vfx	QUOTES_VFX
QuoteDayHistoryVFX	quote_day_history_vfx	QUOTE_DAY_HISTORY_VFX
QuoteTimeHistoryVFX	quote_time_history_vfx	QUOTE_TIME_HISTORY_VFX
QuoteTickHistoryVFX	quote_tick_history_vfx	QUOTE_TICK_HISTORY_VFX

Data tables can be viewed from several perspectives.

Tables by data providers:

- [eSignal FutureSource \(ES\)](#)
- [Interactive Brokers Trader Workstation \(TWS\)](#)
- [Thinkorswim thinkDesktop \(TOS\)](#)
- [VertexFX Trader \(VFX\)](#)
- [Yahoo! Finance through RealTimeToExcel \(Yahoo\)](#)

Tables by stored data:

- Fundamentals (fundamental data from Yahoo! Finance).
- Stocks (static data from Yahoo! Finance).
- Quotes (stocks, futures, and currency pairs).
- Options.

Tables by time frame:

- Last values.
- Day history.
- Time history.
- Tick history.

Last value tables have one column primary keys, Symbol or Code.

Day history tables have two column primary keys, Symbol or Code and Date.

Time history tables have two column primary keys, Symbol or Code and DateTime.

You may change the time frame for such tables: 1 second (default), 1 minute, 5, 10, 15, 20, 30, and 60 minutes.

To change the time frame, modify used [functions](#) in the column formulas.

The time interval depends on real-time data provider also.

Tick history tables contain all records from real-time data provider. RealTimeToDB uses only INSERT statements for such tables.

The tick history tables must have an auto-increment primary key column.

You may click on any table above to go to the table description.

Task Tables

SQL Server and SQL Server Compact	MySQL and MariaDB	Oracle Database, IBM DB2, and NuoDB
QuoteListStocks	quote_list_stocks	QUOTE_LIST_STOCKS
QuoteListYahoo	option_list_yahoo	OPTION_LIST_YAHOO
QuoteListES	quote_list_es	QUOTE_LIST_ES
QuoteListTOS	quote_list_tos	QUOTE_LIST_TOS
QuoteListTWS	quote_list_tws	QUOTE_LIST_TWS
QuoteListVFX	quote_list_vfx	QUOTE_LIST_VFX
OptionListTOS	option_list_tos	OPTION_LIST_TOS
OptionListYahoo	quote_list_yahoo	QUOTE_LIST_YAHOO

Task tables contain tickers to update.

It is the simplest solution. You may delete all tickers and insert required ones. You may use Microsoft Excel workbooks like rtd-sqlce.xlsx or SQL statements to update task tables.

Another solution to specify tickers to update is to change the LOAD_CODE in the RealTimeTables table.

You may use SELECT UNION to combine tickers from several tables that require real-time data.

Don't forget to [reload the configuration](#) in RealTimeToDB after changes.

Views for Microsoft Excel

SQL Server and SQL Server Compact	MySQL and MariaDB	Oracle Database, IBM DB2, and NuoDB
FundamentalsDayHistoryYahoo	fundamentals_day_history_yahoo	FUNDAMENTALS_DAY_HISTORY_YAHOO
FundamentalsYahoo	fundamentals_yahoo	FUNDAMENTALS_YAHOO
OptionDayHistoryTOS	option_day_history_tos	OPTION_DAY_HISTORY_TOS
OptionDayHistoryTWS	option_day_history_tws	OPTION_DAY_HISTORY_TWS
OptionDayHistoryYahoo	option_day_history_yahoo	OPTION_DAY_HISTORY_YAHOO
OptionsTOS	options_tos	OPTIONS_TOS
OptionsTWS	options_tws	OPTIONS_TWS
OptionsYahoo	options_yahoo	OPTIONS_YAHOO
QuoteDayHistoryES	quote_day_history_es	QUOTE_DAY_HISTORY_ES
QuoteDayHistoryTOS	quote_day_history_tos	QUOTE_DAY_HISTORY_TOS
QuoteDayHistoryTWS	quote_day_history_tws	QUOTE_DAY_HISTORY_TWS
QuoteDayHistoryVFX	quote_day_history_vfx	QUOTE_DAY_HISTORY_VFX
QuoteDayHistoryYahoo	quote_day_history_yahoo	QUOTE_DAY_HISTORY_YAHOO
QuotesES	quotes_es	QUOTES_ES
QuotesTOS	quotes_tos	QUOTES_TOS
QuotesTWS	quotes_tws	QUOTES_TWS
QuotesVFX	quotes_vfx	QUOTES_VFX
QuotesYahoo	quotes_yahoo	QUOTES_YAHOO
StocksYahoo	stocks_yahoo	STOCKS_YAHOO

You may load database data into Microsoft Excel using native Excel features.

You may configure data auto-refresh to reload all table data.

But you have a better way. You may use RealTimeToExcel, a companion product, to refresh the data using the Excel RTD functions with the lowest overhead.

The views shown above contain ready Excel formulas to get data from database tables in real-time.

In addition, the SaveToDB add-in converts such text database formulas into real Excel ones. So, you easily connect to any table and get the real-time data immediately.

You may use preconfigured Excel workbooks from the setup package to get the data from views:

- rtdxls-mssql.xlsx
- rtdxls-sqlce.xlsx
- rtdxls-mysql.xlsx
- rtdxls-ora.xlsx
- rtdxls-db2.xlsx
- rtdxls-nuodb.xlsx

See [Real-Time Views for Microsoft Excel](#) for details.

Real-Time Data Providers

Overview

The RTD database contains tables and preconfigured formulas for the following real-time data providers:

- [eSignal FutureSource \(ES\)](#)
- [Interactive Brokers Trader Workstation \(TWS\)](#)
- [Thinkorswim thinkDesktop \(TOS\)](#)
- [VertexFX Trader \(VFX\)](#)
- [Yahoo! Finance through RealTimeToExcel](#)

If you have any of providers installed, you may activate data updating in the **RealTimeTables** table by clearing the **IS_DISABLED** flag.

RealTimeToExcel is integrated into RealTimeToDB and active by default.

eSignal FutureSource (ES)

“FutureSource is designed to be fast and reliable real-time market data and decision support software supplied to the commodities, financial futures and foreign exchange trading communities.”

Website: <http://www.interactivedata.com/index.php/Contents/show/content/FutureSource>

Interactive Brokers Trader Workstation (TWS)

“Our market maker-designed Trader Workstation (TWS) lets traders, investors and institutions trade stocks, options, futures, forex, bonds, and funds on over 100 markets worldwide from a single account.”

Website: <https://www.interactivebrokers.com/en/index.php?f=1537>

Thinkorswim thinkDesktop (TOS)

“thinkDesktop is our premiere, feature-rich, downloadable software platform. This is the one you've probably heard about. The one that made everyone thinkorswim.”

Website: <https://www.thinkorswim.com/tos/displayPage.tos?webpage=clientApplication&displayFormat=hide>

Hybrid Solutions VertexFX Trader (VFX)

“Our state-of-the-art Online Trading Platform, VertexFX Trader, is one of the most friendly, reliable and available online trading platforms in the world for all of STP and OTC business models.”

Website: <http://hybrid-solutions.com/>

Yahoo! Finance through RealTimeToExcel

“RealTimeToExcel is a powerful tool for getting real-time data from Yahoo! Finance into Microsoft Excel.”

Website: <http://www.savetodb.com/>

Configuration Tables

Overview

The RTD Database contains preconfigured tables in different time frames for several real-time providers.

You may check or restore configurations using the tables below.

Click on the required table to go to the table description.

Only Microsoft SQL Server Compact database tables are activated by default.

Change the IS_DISABLED field to activate the required tables.

You may modify the LOAD_CODE field to load tickers and option codes from desired tables.

- [RealTimeTables Table for Microsoft SQL Server and SQL Server Compact](#)
- [real_time_tables Table for MySQL and MariaDB](#)
- [REAL_TIME_TABLES Table for Oracle Database, IBM DB2, and NuoDB](#)

RealTimeTables Table for Microsoft SQL Server and SQL Server Compact

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY	IS_DISABLED
rtd	FundamentalsYahoo	SELECT Code AS Symbol FROM rtd.QuoteListStocks		
rtd	FundamentalsDayHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListStocks		
rtd	StocksYahoo	SELECT Code AS Symbol FROM rtd.QuoteListStocks		
rtd	QuotesYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo		
rtd	QuoteDayHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo		
rtd	QuoteTimeHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo		1
rtd	QuoteTickHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo	1	1
rtd	OptionsYahoo	SELECT Code FROM rtd.OptionListYahoo		
rtd	OptionDayHistoryYahoo	SELECT Code FROM rtd.OptionListYahoo		
rtd	OptionTickHistoryYahoo	SELECT Code FROM rtd.OptionListYahoo	1	1
rtd	QuotesES	SELECT Code FROM rtd.QuoteListES		1
rtd	QuoteDayHistoryES	SELECT Code FROM rtd.QuoteListES		1
rtd	QuoteTimeHistoryES	SELECT Code FROM rtd.QuoteListES		1
rtd	QuoteTickHistoryES	SELECT Code FROM rtd.QuoteListES	1	1
rtd	QuotesTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS		1
rtd	QuoteDayHistoryTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS		1
rtd	QuoteTickHistoryTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS	1	1
rtd	OptionsTOS	SELECT Code FROM rtd.OptionListTOS		1
rtd	OptionDayHistoryTOS	SELECT Code FROM rtd.OptionListTOS		1
rtd	OptionTickHistoryTOS	SELECT Code FROM rtd.OptionListTOS	1	1
rtd	QuotesTWS	SELECT TickId, Code AS Symbol FROM rtd.QuoteListTWS WHERE Code NOT LIKE '%_OPT_20%'		1
rtd	QuoteDayHistoryTWS	SELECT TickId, Code AS Symbol FROM rtd.QuoteListTWS WHERE Code NOT LIKE '%_OPT_20%'		1
rtd	QuoteTickHistoryTWS	SELECT TickId, Code AS Symbol FROM rtd.QuoteListTWS WHERE Code NOT LIKE '%_OPT_20%'	1	1
rtd	OptionsTWS	SELECT TickId, Code FROM rtd.QuoteListTWS WHERE Code LIKE '%_OPT_20%'		1
rtd	OptionDayHistoryTWS	SELECT TickId, Code FROM rtd.QuoteListTWS WHERE Code LIKE '%_OPT_20%'		1
rtd	OptionTickHistoryTWS	SELECT TickId, Code FROM rtd.QuoteListTWS WHERE Code LIKE '%_OPT_20%'	1	1
rtd	QuotesVFX	SELECT Code FROM rtd.QuoteListVFX		1
rtd	QuoteDayHistoryVFX	SELECT Code FROM rtd.QuoteListVFX		1
rtd	QuoteTimeHistoryVFX	SELECT Code FROM rtd.QuoteListVFX		1
rtd	QuoteTickHistoryVFX	SELECT Code FROM rtd.QuoteListVFX	1	1

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real_time_tables Table for MySQL and MariaDB

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY	IS_DISABLED
rtd	fundamentals_day_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_stocks		
rtd	fundamentals_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_stocks		
rtd	stocks_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_stocks		
rtd	quotes_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo		
rtd	quote_day_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo		
rtd	quote_time_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo		1
rtd	quote_tick_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo	1	1
rtd	options_yahoo	SELECT CODE FROM rtd.option_list_yahoo		
rtd	option_day_history_yahoo	SELECT CODE FROM rtd.option_list_yahoo		

rtd	option_tick_history_yahoo	SELECT CODE FROM rtd.option_list_yahoo	1	1
rtd	quotes_es	SELECT CODE FROM rtd.quote_list_es		1
rtd	quote_day_history_es	SELECT CODE FROM rtd.quote_list_es		1
rtd	quote_time_history_es	SELECT CODE FROM rtd.quote_list_es		1
rtd	quote_tick_history_es	SELECT CODE FROM rtd.quote_list_es	1	1
rtd	quotes_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos		1
rtd	quote_day_history_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos		1
rtd	quote_tick_history_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos	1	1
rtd	options_tos	SELECT CODE FROM rtd.option_list_tos		1
rtd	option_tick_history_tos	SELECT CODE FROM rtd.option_list_tos	1	1
rtd	quotes_tws	SELECT TICK_ID, CODE AS SYMBOL FROM rtd.quote_list_tws WHERE CODE NOT LIKE '%_OPT_20%'		1
rtd	quote_day_history_tws	SELECT TICK_ID, CODE AS SYMBOL FROM rtd.quote_list_tws WHERE CODE NOT LIKE '%_OPT_20%'		1
rtd	quote_tick_history_tws	SELECT TICK_ID, CODE AS SYMBOL FROM rtd.quote_list_tws WHERE CODE NOT LIKE '%_OPT_20%'	1	1
rtd	options_tws	SELECT TICK_ID, CODE FROM rtd.quote_list_tws WHERE CODE LIKE '%_OPT_20%'		1
rtd	option_day_history_tws	SELECT TICK_ID, CODE FROM rtd.quote_list_tws WHERE CODE LIKE '%_OPT_20%'		1
rtd	option_tick_history_tws	SELECT TICK_ID, CODE FROM rtd.quote_list_tws WHERE CODE LIKE '%_OPT_20%'	1	1
rtd	quotes_vfx	SELECT CODE FROM rtd.quote_list_vfx		1
rtd	quote_day_history_vfx	SELECT CODE FROM rtd.quote_list_vfx		1
rtd	quote_time_history_vfx	SELECT CODE FROM rtd.quote_list_vfx		1
rtd	quote_tick_history_vfx	SELECT CODE FROM rtd.quote_list_vfx	1	1

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REAL_TIME_TABLES Table for Oracle Database, IBM DB2, and NuoDB

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY	IS_DISABLED
RTD	FUNDAMENTALS_DAY_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_STOCKS		
RTD	FUNDAMENTALS_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_STOCKS		
RTD	STOCKS_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_STOCKS		
RTD	QUOTES_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO		
RTD	QUOTE_DAY_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO		
RTD	QUOTE_TIME_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO		1
RTD	QUOTE_TICK_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO	1	1
RTD	OPTIONS_YAHOO	SELECT CODE FROM RTD.OPTION_LIST_YAHOO		
RTD	OPTION_DAY_HISTORY_YAHOO	SELECT CODE FROM RTD.OPTION_LIST_YAHOO		
RTD	OPTION_TICK_HISTORY_YAHOO	SELECT CODE FROM RTD.OPTION_LIST_YAHOO	1	1
RTD	QUOTES_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES		1
RTD	QUOTE_DAY_HISTORY_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES		1
RTD	QUOTE_TIME_HISTORY_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES		1
RTD	QUOTE_TICK_HISTORY_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES	1	1
RTD	QUOTES_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS		1
RTD	QUOTE_DAY_HISTORY_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS		1
RTD	QUOTE_TICK_HISTORY_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS	1	1
RTD	OPTIONS_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS		1
RTD	OPTION_DAY_HISTORY_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS		1
RTD	OPTION_TICK_HISTORY_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS	1	1
RTD	QUOTES_TWS	SELECT TICK_ID, CODE AS SYMBOL FROM RTD.QUOTE_LIST_TWS WHERE CODE NOT LIKE '%_OPT_20%'		1
RTD	QUOTE_DAY_HISTORY_TWS	SELECT TICK_ID, CODE AS SYMBOL FROM RTD.QUOTE_LIST_TWS WHERE CODE NOT LIKE '%_OPT_20%'		1
RTD	QUOTE_TICK_HISTORY_TWS	SELECT TICK_ID, CODE AS SYMBOL FROM RTD.QUOTE_LIST_TWS WHERE CODE NOT LIKE '%_OPT_20%'	1	1
RTD	OPTIONS_TWS	SELECT TICK_ID, CODE FROM RTD.QUOTE_LIST_TWS WHERE CODE LIKE '%_OPT_20%'		1
RTD	OPTION_DAY_HISTORY_TWS	SELECT TICK_ID, CODE FROM RTD.QUOTE_LIST_TWS WHERE CODE LIKE '%_OPT_20%'		1
RTD	OPTION_TICK_HISTORY_TWS	SELECT TICK_ID, CODE FROM RTD.QUOTE_LIST_TWS WHERE CODE LIKE '%_OPT_20%'	1	1
RTD	QUOTES_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX		1
RTD	QUOTE_DAY_HISTORY_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX		1
RTD	QUOTE_TIME_HISTORY_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX		1
RTD	QUOTE_TICK_HISTORY_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX	1	1

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Fundamentals Data from Yahoo! Finance

Overview

The RTD database contains preconfigured tables for getting a lot of fundamentals data from Yahoo! Finance using [RealTimeToExcel](#).

These data are available and activated by default. Just edit required symbols in the QuoteListStocks table.

The data are loaded from Yahoo! Finance for one symbol at once. So you may use all columns without additional overhead.

Yahoo! Finance data are delayed.

Use <http://finance.yahoo.com/> to find tickers.

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	FundamentalsYahoo	SELECT Code AS Symbol FROM rtd.QuoteListStocks	
rtd	FundamentalsDayHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListStocks	

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	fundamentals_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_stocks	
rtd	fundamentals_day_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_stocks	

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	FUNDAMENTALS_DAY_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_STOCKS	
RTD	FUNDAMENTALS_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_STOCKS	

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListStocks for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
AAPL
GOOG

rtd.quote_list_stocks for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
AAPL
GOOG

Use <http://finance.yahoo.com/> to find tickers.

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	FundamentalsYahoo	Symbol		PK
rtd	FundamentalsDayHistoryYahoo	Symbol		PK
rtd	FundamentalsDayHistoryYahoo	LastTradeDate	=RTD("gartle.rtd","YahooFinanceQuotes",[Symbol],"LastTradeDate")	PK

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	fundamentals_yahoo	SYMBOL		PK
rtd	fundamentals_day_history_yahoo	SYMBOL		PK
rtd	fundamentals_day_history_yahoo	LAST_TRADE_DATE	=RTD("gartle.rtd","YahooFinanceQuotes",[SYMBOL],"LastTradeDate")	PK

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	FUNDAMENTALS_YAHOO	SYMBOL		PK
RTD	FUNDAMENTALS_DAY_HISTORY_YAHOO	SYMBOL		PK
RTD	FUNDAMENTALS_DAY_HISTORY_YAHOO	LAST_TRADE_DATE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"LastTradeDate")	PK

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.FundamentalsYahoo

The table contains the last values of fundamentals data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol		PK
LastTradeDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"LastTradeTime")	
Last	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Change")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeInPercent")	
Open	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Low")	
Volume	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Volume")	
DaysRange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DaysRange")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PreviousClose")	
ShortRatio	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ShortRatio")	
YearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"YearHigh")	
YearLow	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"YearLow")	
YearRange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"YearRange")	
ChangeFromYearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromYearHigh")	
ChangeFromYearLow	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromYearLow")	
PercentChangeFromYearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromYearHigh")	
PercentChangeFromYearLow	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromYearLow")	
MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"FiftydayMovingAverage")	
MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"TwoHundredDayMovingAverage")	
ChangeFromMA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromFiftyDayMovingAverage")	
ChangeFromMA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromTwoHundredDayMovingAverage")	
PercentChangeFromMA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromFiftyDayMovingAverage")	
PercentChangeFromMA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromTwoHundredDayMovingAverage")	
AverageDailyVolume	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"AverageDailyVolume")	
OneYearTargetPrice	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"OneYrTargetPrice")	
PE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PERatio")	
PEG	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PEGRatio")	
EPSEstCurrentYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EPSEstimateCurrentYear")	
EPSEstNextQuarter	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EPSEstimateNextQuarter")	
EPSEstNextYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EPSEstimateNextYear")	
EarningsShare	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EarningsShare")	
MarketCap	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"MarketCapitalization")	
DividendYield	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendYield")	
DividendShare	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendShare")	
ExDividendDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ExDividendDate")	
DividendPayDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendPayDate")	
BookValue	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"BookValue")	
PriceBook	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceBook")	
PriceSales	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceSales")	
PriceEPSEstCurrentYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceEPSEstimateCurrentYear")	
PriceEPSEstNextYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceEPSEstimateNextYear")	
EBITDA	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EBITDA")	
CompanyName	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Name")	
StockExchange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"StockExchange")	
Commission	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Commission")	
Notes	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Notes")	
LastUpdateTimeStamp		

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rtd.FundamentalsDayHistoryYahoo

The table contains day history of fundamentals data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol		PK
LastTradeDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"LastTradeDate")	PK
LastTradeTime	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"LastTradeTime")	
Last	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Change")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeInPercent")	
Open	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Low")	
Volume	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Volume")	
DaysRange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DaysRange")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PreviousClose")	
ShortRatio	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ShortRatio")	
YearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"YearHigh")	
YearLow	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"YearLow")	
YearRange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"YearRange")	
ChangeFromYearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromYearHigh")	
ChangeFromYearLow	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromYearLow")	
PercentChangeFromYearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromYearHigh")	
PercentChangeFromYearLow	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromYearLow")	
MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"FiftydayMovingAverage")	
MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"TwoHundredDayMovingAverage")	
ChangeFromMA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromFiftyDayMovingAverage")	
ChangeFromMA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeFromTwoHundredDayMovingAverage")	
PercentChangeFromMA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromFiftyDayMovingAverage")	
PercentChangeFromMA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentChangeFromTwoHundredDayMovingAverage")	
AverageDailyVolume	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"AverageDailyVolume")	
OneYearTargetPrice	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"OneYrTargetPrice")	
PE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PERatio")	
PEG	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PEGRatio")	
EPSEstCurrentYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EPSEstimateCurrentYear")	
EPSEstNextQuarter	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EPSEstimateNextQuarter")	
EPSEstNextYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EPSEstimateNextYear")	
EarningsShare	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EarningsShare")	
MarketCap	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"MarketCapitalization")	
DividendYield	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendYield")	
DividendShare	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendShare")	
ExDividendDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ExDividendDate")	
DividendPayDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendPayDate")	
BookValue	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"BookValue")	
PriceBook	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceBook")	
PriceSales	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceSales")	
PriceEPSEstCurrentYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceEPSEstimateCurrentYear")	
PriceEPSEstNextYear	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PriceEPSEstimateNextYear")	
EBITDA	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"EBITDA")	
CompanyName	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Name")	
StockExchange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"StockExchange")	
Commission	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Commission")	
Notes	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Notes")	
LastUpdateTimeStamp		

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

rtd.fundamentals_yahoo

The table contains the last values of fundamentals data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL		PK
LAST_TRADE_DATE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"LastTradeDate")	
LAST_TRADE_TIME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"LastTradeTime")	
LAST	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Last")	
CHANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeInPercent")	
OPEN	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Open")	
HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"High")	
LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Low")	
VOLUME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Volume")	
DAYS_RANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DaysRange")	
PREV_CLOSE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PreviousClose")	
SHORT_RATIO	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ShortRatio")	
YEAR_HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"YearHigh")	
YEAR_LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"YearLow")	
YEAR_RANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"YearRange")	
CHANGE_FROM_YEAR_HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromYearHigh")	
CHANGE_FROM_YEAR_LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromYearLow")	
PERCENT_CHANGE_FROM_YEAR_HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromYearHigh")	
PERCENT_CHANGE_FROM_YEAR_LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromYearLow")	
MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"FiftydayMovingAverage")	
MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"TwoHundredDayMovingAverage")	
CHANGE_FROM_MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromFiftyDayMovingAverage")	
CHANGE_FROM_MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromTwoHundredDayMovingAverage")	
PERCENT_CHANGE_FROM_MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromFiftyDayMovingAverage")	
PERCENT_CHANGE_FROM_MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromTwoHundredDayMovingAverage")	
AVERAGE_DAILY_VOLUME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"AverageDailyVolume")	
ONE_YEAR_TARGET_PRICE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"OneYrTargetPrice")	
PE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PERatio")	
PEG	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PEGRatio")	
EPS_EST_CURRENT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EPSEstimateCurrentYear")	
EPS_EST_NEXT_QUARTER	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EPSEstimateNextQuarter")	
EPS_EST_NEXT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EPSEstimateNextYear")	
EARNINGS_SHARE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EarningsShare")	
MARKET_CAP	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"MarketCapitalization")	
DIVIDEND_YIELD	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DividendYield")	
DIVIDEND_SHARE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DividendShare")	
EX_DIVIDEND_DATE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ExDividendDate")	
DIVIDEND_PAY_DATE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DividendPayDate")	
BOOK_VALUE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"BookValue")	
PRICE_BOOK	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceBook")	
PRICE_SALES	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceSales")	
PRICE_EPS_EST_CURRENT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceEPSEstimateCurrentYear")	
PRICE_EPS_EST_NEXT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceEPSEstimateNextYear")	
EBITDA	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EBITDA")	
COMPANY_NAME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Name")	
STOCK_EXCHANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"StockExchange")	
COMMISSION	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Commission")	
NOTES	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Notes")	
LAST_UPDATE_TIMESTAMP		

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rtd.fundamentals_day_history_yahoo

The table contains day history of fundamentals data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL		PK
LAST_TRADE_DATE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"LastTradeDate")	PK
LAST_TRADE_TIME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"LastTradeTime")	
LAST	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Last")	
CHANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeInPercent")	
OPEN	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Open")	
HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"High")	
LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Low")	
VOLUME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Volume")	
DAYS_RANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DaysRange")	
PREV_CLOSE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PreviousClose")	
SHORT_RATIO	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ShortRatio")	
YEAR_HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"YearHigh")	
YEAR_LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"YearLow")	
YEAR_RANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"YearRange")	
CHANGE_FROM_YEAR_HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromYearHigh")	
CHANGE_FROM_YEAR_LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromYearLow")	
PERCENT_CHANGE_FROM_YEAR_HIGH	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromYearHigh")	
PERCENT_CHANGE_FROM_YEAR_LOW	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromYearLow")	
MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"FiftydayMovingAverage")	
MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"TwoHundredDayMovingAverage")	
CHANGE_FROM_MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromFiftyDayMovingAverage")	
CHANGE_FROM_MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ChangeFromTwoHundredDayMovingAverage")	
PERCENT_CHANGE_FROM_MA50	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromFiftyDayMovingAverage")	
PERCENT_CHANGE_FROM_MA200	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PercentChangeFromTwoHundredDayMovingAverage")	
AVERAGE_DAILY_VOLUME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"AverageDailyVolume")	
ONE_YEAR_TARGET_PRICE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"OneYrTargetPrice")	
PE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PERatio")	
PEG	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PEGRatio")	
EPS_EST_CURRENT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EPSEstimateCurrentYear")	
EPS_EST_NEXT_QUARTER	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EPSEstimateNextQuarter")	
EPS_EST_NEXT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EPSEstimateNextYear")	
EARNINGS_SHARE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EarningsShare")	
MARKET_CAP	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"MarketCapitalization")	
DIVIDEND_YIELD	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DividendYield")	
DIVIDEND_SHARE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DividendShare")	
EX_DIVIDEND_DATE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"ExDividendDate")	
DIVIDEND_PAY_DATE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"DividendPayDate")	
BOOK_VALUE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"BookValue")	
PRICE_BOOK	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceBook")	
PRICE_SALES	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceSales")	
PRICE_EPS_EST_CURRENT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceEPSEstimateCurrentYear")	
PRICE_EPS_EST_NEXT_YEAR	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"PriceEPSEstimateNextYear")	
EBITDA	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"EBITDA")	
COMPANY_NAME	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Name")	
STOCK_EXCHANGE	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"StockExchange")	
COMMISSION	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Commission")	
NOTES	=RTD("gartle.rtd",,"YahooFinanceQuotes",[SYMBOL],"Notes")	
LAST_UPDATE_TIMESTAMP		

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Quotes from eSignal FutureSource

Overview

The RTD database contains preconfigured tables for getting real-time data from [eSignal FutureSource](#).

Quote tables are designed for getting data for stocks and futures.

The data are updated from the FutureSource RTD server.

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	QuoteListES		
rtd	QuotesES	SELECT Code FROM rtd.QuoteListES	
rtd	QuoteDayHistoryES	SELECT Code FROM rtd.QuoteListES	
rtd	QuoteTimeHistoryES	SELECT Code FROM rtd.QuoteListES	
rtd	QuoteTickHistoryES	SELECT Code FROM rtd.QuoteListES	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	quote_list_es		
rtd	quotes_es	SELECT CODE FROM rtd.quote_list_es	
rtd	quote_day_history_es	SELECT CODE FROM rtd.quote_list_es	
rtd	quote_time_history_es	SELECT CODE FROM rtd.quote_list_es	
rtd	quote_tick_history_es	SELECT CODE FROM rtd.quote_list_es	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	QUOTE_LIST_ES		
RTD	QUOTES_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES	
RTD	QUOTE_DAY_HISTORY_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES	
RTD	QUOTE_TIME_HISTORY_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES	
RTD	QUOTE_TICK_HISTORY_ES	SELECT CODE FROM RTD.QUOTE_LIST_ES	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListES for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
AAPL
GOOG

rtd.quote_list_es for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
AAPL
GOOG

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	QuotesES	Code		Formula
rtd	QuotesES	Symbol	=RTD("esrtd",,[Code],"Symbol")	PK
rtd	QuoteDayHistoryES	Code		Formula
rtd	QuoteDayHistoryES	Symbol	=RTD("esrtd",,[Code],"Symbol")	PK
rtd	QuoteDayHistoryES	Date	=Date()	PK
rtd	QuoteTimeHistoryES	Code		Formula
rtd	QuoteTimeHistoryES	Symbol	=RTD("esrtd",,[Code],"Symbol")	PK
rtd	QuoteTimeHistoryES	Date	=Date()	PK
rtd	QuoteTimeHistoryES	Time	=RTD("esrtd",,[Code],"Time")	PK
rtd	QuoteTickHistoryES	Code		Formula
rtd	QuoteTickHistoryES	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	quotes_es	CODE		Formula
rtd	quotes_es	SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
rtd	quote_day_history_es	CODE		Formula
rtd	quote_day_history_es	SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
rtd	quote_day_history_es	DATE	=Date()	PK
rtd	quote_time_history_es	CODE		Formula
rtd	quote_time_history_es	SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
rtd	quote_time_history_es	DATE	=Date()	PK
rtd	quote_time_history_es	TIME	=RTD("esrtd",,[CODE],"Time")	PK
rtd	quote_tick_history_es	CODE		Formula
rtd	quote_tick_history_es	ID		PK, IDENTITY

Oracle Database, IBM DB2, and Nuodb:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	QUOTES_ES	CODE		Formula
RTD	QUOTES_ES	SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
RTD	QUOTE_DAY_HISTORY_ES	CODE		Formula
RTD	QUOTE_DAY_HISTORY_ES	SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
RTD	QUOTE_DAY_HISTORY_ES	DATE	=Date()	PK
RTD	QUOTE_TICK_HISTORY_ES	CODE		Formula
RTD	QUOTE_TICK_HISTORY_ES	ID		PK, IDENTITY
RTD	QUOTE_TIME_HISTORY_ES	CODE		Formula
RTD	QUOTE_TIME_HISTORY_ES	SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
RTD	QUOTE_TIME_HISTORY_ES	DATE	=Date()	PK
RTD	QUOTE_TIME_HISTORY_ES	TIME	=RTD("esrtd",,[CODE],"Time")	PK

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.QuotesES

The table contains the last data values of stocks and futures from eSignal FutureSource.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
Symbol	=RTD("esrtd",,[Code],"Symbol")	PK
Date	=Date()	
Time	=RTD("esrtd",,[Code],"Time")	
Last	=RTD("esrtd",,[Code],"Last")	
Change	=RTD("esrtd",,[Code],"Change")	
PercentChange	=RTD("esrtd",,[Code],"% Change")	
Bid	=RTD("esrtd",,[Code],"Bid")	
Ask	=RTD("esrtd",,[Code],"Ask")	
BidSize	=RTD("esrtd",,[Code],"Bid Size")	
AskSize	=RTD("esrtd",,[Code],"Ask Size")	
Open	=RTD("esrtd",,[Code],"Open")	
High	=RTD("esrtd",,[Code],"High")	
Low	=RTD("esrtd",,[Code],"Low")	
Volume	=RTD("esrtd",,[Code],"Volume")	
OpenInt	=RTD("esrtd",,[Code],"OpenInt")	
TradePrice	=RTD("esrtd",,[Code],"TradePrice")	
LastUpdateTimeStamp		

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rtd.QuoteDayHistoryES

The table contains day data history of stocks and futures from eSignal FutureSource.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
Symbol	=RTD("esrtd",,[Code],"Symbol")	PK
Date	=Date()	PK
Time	=RTD("esrtd",,[Code],"Time")	
Last	=RTD("esrtd",,[Code],"Last")	
Change	=RTD("esrtd",,[Code],"Change")	
PercentChange	=RTD("esrtd",,[Code],"% Change")	
Bid	=RTD("esrtd",,[Code],"Bid")	
Ask	=RTD("esrtd",,[Code],"Ask")	
BidSize	=RTD("esrtd",,[Code],"Bid Size")	
AskSize	=RTD("esrtd",,[Code],"Ask Size")	
Open	=RTD("esrtd",,[Code],"Open")	
High	=RTD("esrtd",,[Code],"High")	
Low	=RTD("esrtd",,[Code],"Low")	
Volume	=RTD("esrtd",,[Code],"Volume")	
OpenInt	=RTD("esrtd",,[Code],"OpenInt")	
TradePrice	=RTD("esrtd",,[Code],"TradePrice")	
LastUpdateTimeStamp		

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rtd.QuoteTimeHistoryES

The table contains time data history of stocks and futures from eSignal FutureSource.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
Symbol	=RTD("esrtd",,[Code],"Symbol")	PK
Date	=Date()	PK
Time	=RTD("esrtd",,[Code],"Time")	PK
Last	=RTD("esrtd",,[Code],"Last")	
Change	=RTD("esrtd",,[Code],"Change")	
PercentChange	=RTD("esrtd",,[Code],"% Change")	
Bid	=RTD("esrtd",,[Code],"Bid")	
Ask	=RTD("esrtd",,[Code],"Ask")	
BidSize	=RTD("esrtd",,[Code],"Bid Size")	
AskSize	=RTD("esrtd",,[Code],"Ask Size")	
Open	=RTD("esrtd",,[Code],"Open")	
High	=RTD("esrtd",,[Code],"High")	
Low	=RTD("esrtd",,[Code],"Low")	
Volume	=RTD("esrtd",,[Code],"Volume")	
OpenInt	=RTD("esrtd",,[Code],"OpenInt")	
TradePrice	=RTD("esrtd",,[Code],"TradePrice")	
LastUpdateTimeStamp		

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rtd.QuoteTickHistoryES

The table contains tick data history of stocks and futures from eSignal FutureSource.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
ID		PK, IDENTITY
Symbol	=RTD("esrtd",,[Code],"Symbol")	
Date	=Date()	
Time	=RTD("esrtd",,[Code],"Time")	
Last	=RTD("esrtd",,[Code],"Last")	
Change	=RTD("esrtd",,[Code],"Change")	
PercentChange	=RTD("esrtd",,[Code],"% Change")	
Bid	=RTD("esrtd",,[Code],"Bid")	
Ask	=RTD("esrtd",,[Code],"Ask")	
BidSize	=RTD("esrtd",,[Code],"Bid Size")	
AskSize	=RTD("esrtd",,[Code],"Ask Size")	
Open	=RTD("esrtd",,[Code],"Open")	

High	=RTD("esrtd",,[Code],"High")	
Low	=RTD("esrtd",,[Code],"Low")	
Volume	=RTD("esrtd",,[Code],"Volume")	
OpenInt	=RTD("esrtd",,[Code],"OpenInt")	
TradePrice	=RTD("esrtd",,[Code],"TradePrice")	

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

The table contains the last data values of stocks and futures from eSignal FutureSource.

rtd.quotes_es

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
DATE	=Date()	
TIME	=RTD("esrtd",,[CODE],"Time")	
LAST	=RTD("esrtd",,[CODE],"Last")	
CHANGE	=RTD("esrtd",,[CODE],"Change")	
PERCENT_CHANGE	=RTD("esrtd",,[CODE],"% Change")	
BID	=RTD("esrtd",,[CODE],"Bid")	
ASK	=RTD("esrtd",,[CODE],"Ask")	
BID_SIZE	=RTD("esrtd",,[CODE],"Bid Size")	
ASK_SIZE	=RTD("esrtd",,[CODE],"Ask Size")	
OPEN	=RTD("esrtd",,[CODE],"Open")	
HIGH	=RTD("esrtd",,[CODE],"High")	
LOW	=RTD("esrtd",,[CODE],"Low")	
VOLUME	=RTD("esrtd",,[CODE],"Volume")	
OPEN_INT	=RTD("esrtd",,[CODE],"OpenInt")	
TRADE_PRICE	=RTD("esrtd",,[CODE],"TradePrice")	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_day_history_es

The table contains day data history of stocks and futures from eSignal FutureSource.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
DATE	=Date()	PK
TIME	=RTD("esrtd",,[CODE],"Time")	
LAST	=RTD("esrtd",,[CODE],"Last")	
CHANGE	=RTD("esrtd",,[CODE],"Change")	
PERCENT_CHANGE	=RTD("esrtd",,[CODE],"% Change")	
BID	=RTD("esrtd",,[CODE],"Bid")	
ASK	=RTD("esrtd",,[CODE],"Ask")	
BID_SIZE	=RTD("esrtd",,[CODE],"Bid Size")	
ASK_SIZE	=RTD("esrtd",,[CODE],"Ask Size")	
OPEN	=RTD("esrtd",,[CODE],"Open")	
HIGH	=RTD("esrtd",,[CODE],"High")	
LOW	=RTD("esrtd",,[CODE],"Low")	
VOLUME	=RTD("esrtd",,[CODE],"Volume")	
OPEN_INT	=RTD("esrtd",,[CODE],"OpenInt")	
TRADE_PRICE	=RTD("esrtd",,[CODE],"TradePrice")	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_time_history_es

The table contains time data history of stocks and futures from eSignal FutureSource.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	PK
DATE	=Date()	PK
TIME	=RTD("esrtd",,[CODE],"Time")	PK
LAST	=RTD("esrtd",,[CODE],"Last")	
CHANGE	=RTD("esrtd",,[CODE],"Change")	
PERCENT_CHANGE	=RTD("esrtd",,[CODE],"% Change")	
BID	=RTD("esrtd",,[CODE],"Bid")	
ASK	=RTD("esrtd",,[CODE],"Ask")	
BID_SIZE	=RTD("esrtd",,[CODE],"Bid Size")	
ASK_SIZE	=RTD("esrtd",,[CODE],"Ask Size")	
OPEN	=RTD("esrtd",,[CODE],"Open")	
HIGH	=RTD("esrtd",,[CODE],"High")	
LOW	=RTD("esrtd",,[CODE],"Low")	
VOLUME	=RTD("esrtd",,[CODE],"Volume")	
OPEN_INT	=RTD("esrtd",,[CODE],"OpenInt")	
TRADE_PRICE	=RTD("esrtd",,[CODE],"TradePrice")	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_tick_history_es

The table contains tick data history of stocks and futures from eSignal FutureSource.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
ID		PK, IDENTITY
SYMBOL	=RTD("esrtd",,[CODE],"Symbol")	
DATE	=Date()	
TIME	=RTD("esrtd",,[CODE],"Time")	
LAST	=RTD("esrtd",,[CODE],"Last")	
CHANGE	=RTD("esrtd",,[CODE],"Change")	
PERCENT_CHANGE	=RTD("esrtd",,[CODE],"% Change")	
BID	=RTD("esrtd",,[CODE],"Bid")	
ASK	=RTD("esrtd",,[CODE],"Ask")	
BID_SIZE	=RTD("esrtd",,[CODE],"Bid Size")	
ASK_SIZE	=RTD("esrtd",,[CODE],"Ask Size")	
OPEN	=RTD("esrtd",,[CODE],"Open")	
HIGH	=RTD("esrtd",,[CODE],"High")	
LOW	=RTD("esrtd",,[CODE],"Low")	
VOLUME	=RTD("esrtd",,[CODE],"Volume")	
OPEN_INT	=RTD("esrtd",,[CODE],"OpenInt")	
TRADE_PRICE	=RTD("esrtd",,[CODE],"TradePrice")	

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Quotes from Thinkorswim thinkDesktop via TOS.RTD

Overview

The RTD database contains preconfigured tables for getting real-time data from [Thinkorswim thinkDesktop](#).

Quote tables are designed for getting data for stocks, futures, and currency pairs. Use option tables for options.

Since RealTimeToDB 2.5, RTD functions are used by default.

To update existing DDE formulas, you may use patches from the database folders.

You may disable unusable columns to reduce the server overhead.

Note that Thinkorswim thinkDesktop can crash if more than 200 000 topics are being requested.

The RTD server does not contain an actual data time field.

The DateTime, Date and Time fields are updated using the PC time adjusted to the table time zone (Eastern Standard Time).

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	QuoteListTOS		
rtd	QuotesTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS	
rtd	QuoteDayHistoryTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS	
rtd	QuoteTickHistoryTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	quote_list_tos		
rtd	quotes_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos	
rtd	quote_day_history_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos	
rtd	quote_tick_history_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	QUOTE_LIST_TOS		
RTD	QUOTES_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS	
RTD	QUOTE_DAY_HISTORY_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS	
RTD	QUOTE_TICK_HISTORY_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListTOS for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
AAPL
GOOG

rtd.quote_list_tos for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
AAPL
GOOG

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	QuotesTOS	Symbol		PK
rtd	QuoteDayHistoryTOS	Symbol		PK
rtd	QuoteDayHistoryTOS	Date	=Date()	PK
rtd	QuoteTickHistoryTOS	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	quotes_tos	SYMBOL		PK
rtd	quote_day_history_tos	SYMBOL		PK
rtd	quote_day_history_tos	DATE	=Date()	PK
rtd	quote_tick_history_tos	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	QUOTES_TOS	SYMBOL		PK
RTD	QUOTE_DAY_HISTORY_TOS	SYMBOL		PK
RTD	QUOTE_DAY_HISTORY_TOS	DATE	=Date()	PK
RTD	QUOTE_TICK_HISTORY_TOS	ID		PK, IDENTITY

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.QuotesTOS

The table contains the last data values of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol		PK
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=RTD("tos.rtd", "DESCRIPTION",[Symbol])	
Last	=RTD("tos.rtd", "LAST",[Symbol])	
Change	=RTD("tos.rtd", "NET_CHANGE",[Symbol])	
PercentChange	=RTD("tos.rtd", "PERCENT_CHANGE",[Symbol])	
LastSize	=RTD("tos.rtd", "LAST_SIZE",[Symbol])	
LastX	=RTD("tos.rtd", "LX",[Symbol])	
Mark	=RTD("tos.rtd", "MARK",[Symbol])	
MarkChange	=RTD("tos.rtd", "MARK_CHANGE",[Symbol])	
MarkPercentChange	=RTD("tos.rtd", "MARK_PERCENT_CHANGE",[Symbol])	
Bid	=RTD("tos.rtd", "BID",[Symbol])	
Ask	=RTD("tos.rtd", "ASK",[Symbol])	
BidSize	=RTD("tos.rtd", "BID_SIZE",[Symbol])	
AskSize	=RTD("tos.rtd", "ASK_SIZE",[Symbol])	
BidAskSize	=RTD("tos.rtd", "BA_SIZE",[Symbol])	
BidX	=RTD("tos.rtd", "BX",[Symbol])	
AskX	=RTD("tos.rtd", "AX",[Symbol])	
StrengthMeter	=RTD("tos.rtd", "STRENGTH_METER",[Symbol])	
Open	=RTD("tos.rtd", "OPEN",[Symbol])	
High	=RTD("tos.rtd", "HIGH",[Symbol])	
Low	=RTD("tos.rtd", "LOW",[Symbol])	
Close	=RTD("tos.rtd", "CLOSE",[Symbol])	
Volume	=RTD("tos.rtd", "VOLUME",[Symbol])	
OpenInt	=RTD("tos.rtd", "OPEN_INT",[Symbol])	
ImpliedVol	=RTD("tos.rtd", "IMPL_VOL",[Symbol])	
VolIndex	=RTD("tos.rtd", "VOL_INDEX",[Symbol])	
FrontVol	=RTD("tos.rtd", "FRONT_VOL",[Symbol])	
BackVol	=RTD("tos.rtd", "BACK_VOL",[Symbol])	
WeightedBackVol	=RTD("tos.rtd", "WEIGHTED_BACK_VOL",[Symbol])	
VolDiff	=RTD("tos.rtd", "VOL_DIFF",[Symbol])	
PutCallRatio	=RTD("tos.rtd", "PUT_CALL_RATIO",[Symbol])	
CallVolumeIndex	=RTD("tos.rtd", "CALL_VOLUME_INDEX",[Symbol])	
PutVolumeIndex	=RTD("tos.rtd", "PUT_VOLUME_INDEX",[Symbol])	
OptionVolumeIndex	=RTD("tos.rtd", "OPTION_VOLUME_INDEX",[Symbol])	
FrontExpectedMove	=RTD("tos.rtd", "FRONT_EX_MOVE",[Symbol])	
BackExpectedMove	=RTD("tos.rtd", "BACK_EX_MOVE",[Symbol])	
ExpectedMoveDiff	=RTD("tos.rtd", "EX_MOVE_DIFF",[Symbol])	
Beta	=RTD("tos.rtd", "BETA",[Symbol])	
High52	=RTD("tos.rtd", "52HIGH",[Symbol])	
Low52	=RTD("tos.rtd", "52LOW",[Symbol])	
PE	=RTD("tos.rtd", "PE",[Symbol])	
EPS	=RTD("tos.rtd", "EPS",[Symbol])	
MarketCap	=RTD("tos.rtd", "MARKET_CAP",[Symbol])	
Shares	=RTD("tos.rtd", "SHARES",[Symbol])	
DividendYield	=RTD("tos.rtd", "YIELD",[Symbol])	
DividendShare	=RTD("tos.rtd", "DIV",[Symbol])	
LastUpdateTimeStamp		

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rtd.QuoteDayHistoryTOS

The table contains day data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol		PK
Date	=Date()	PK
Time	=Time()	
Description	=RTD("tos.rtd",,"DESCRIPTION",[Symbol])	
Last	=RTD("tos.rtd",,"LAST",[Symbol])	
Change	=RTD("tos.rtd",,"NET_CHANGE",[Symbol])	
PercentChange	=RTD("tos.rtd",,"PERCENT_CHANGE",[Symbol])	
LastSize	=RTD("tos.rtd",,"LAST_SIZE",[Symbol])	
LastX	=RTD("tos.rtd",,"LX",[Symbol])	
Mark	=RTD("tos.rtd",,"MARK",[Symbol])	
MarkChange	=RTD("tos.rtd",,"MARK_CHANGE",[Symbol])	
MarkPercentChange	=RTD("tos.rtd",,"MARK_PERCENT_CHANGE",[Symbol])	
Bid	=RTD("tos.rtd",,"BID",[Symbol])	
Ask	=RTD("tos.rtd",,"ASK",[Symbol])	
BidSize	=RTD("tos.rtd",,"BID_SIZE",[Symbol])	
AskSize	=RTD("tos.rtd",,"ASK_SIZE",[Symbol])	
BidAskSize	=RTD("tos.rtd",,"BA_SIZE",[Symbol])	
BidX	=RTD("tos.rtd",,"BX",[Symbol])	
AskX	=RTD("tos.rtd",,"AX",[Symbol])	
StrengthMeter	=RTD("tos.rtd",,"STRENGTH_METER",[Symbol])	
Open	=RTD("tos.rtd",,"OPEN",[Symbol])	
High	=RTD("tos.rtd",,"HIGH",[Symbol])	
Low	=RTD("tos.rtd",,"LOW",[Symbol])	
Close	=RTD("tos.rtd",,"CLOSE",[Symbol])	
Volume	=RTD("tos.rtd",,"VOLUME",[Symbol])	
OpenInt	=RTD("tos.rtd",,"OPEN_INT",[Symbol])	
ImpliedVol	=RTD("tos.rtd",,"IMPL_VOL",[Symbol])	
VolIndex	=RTD("tos.rtd",,"VOL_INDEX",[Symbol])	
FrontVol	=RTD("tos.rtd",,"FRONT_VOL",[Symbol])	
BackVol	=RTD("tos.rtd",,"BACK_VOL",[Symbol])	
WeightedBackVol	=RTD("tos.rtd",,"WEIGHTED_BACK_VOL",[Symbol])	
VolDiff	=RTD("tos.rtd",,"VOL_DIFF",[Symbol])	
PutCallRatio	=RTD("tos.rtd",,"PUT_CALL_RATIO",[Symbol])	
CallVolumeIndex	=RTD("tos.rtd",,"CALL_VOLUME_INDEX",[Symbol])	
PutVolumeIndex	=RTD("tos.rtd",,"PUT_VOLUME_INDEX",[Symbol])	
OptionVolumeIndex	=RTD("tos.rtd",,"OPTION_VOLUME_INDEX",[Symbol])	
FrontExpectedMove	=RTD("tos.rtd",,"FRONT_EX_MOVE",[Symbol])	
BackExpectedMove	=RTD("tos.rtd",,"BACK_EX_MOVE",[Symbol])	
ExpectedMoveDiff	=RTD("tos.rtd",,"EX_MOVE_DIFF",[Symbol])	
Beta	=RTD("tos.rtd",,"BETA",[Symbol])	
High52	=RTD("tos.rtd",,"52HIGH",[Symbol])	
Low52	=RTD("tos.rtd",,"52LOW",[Symbol])	
PE	=RTD("tos.rtd",,"PE",[Symbol])	
EPS	=RTD("tos.rtd",,"EPS",[Symbol])	
MarketCap	=RTD("tos.rtd",,"MARKET_CAP",[Symbol])	
Shares	=RTD("tos.rtd",,"SHARES",[Symbol])	
DividendYield	=RTD("tos.rtd",,"YIELD",[Symbol])	
DividendShare	=RTD("tos.rtd",,"DIV",[Symbol])	
LastUpdateTimeStamp		

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rtd.QuoteTickHistoryTOS

The table contains tick data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
Symbol		
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=RTD("tos.rtd",,"DESCRIPTION",[Symbol])	
Last	=RTD("tos.rtd",,"LAST",[Symbol])	
Change	=RTD("tos.rtd",,"NET_CHANGE",[Symbol])	
PercentChange	=RTD("tos.rtd",,"PERCENT_CHANGE",[Symbol])	
LastSize	=RTD("tos.rtd",,"LAST_SIZE",[Symbol])	
LastX	=RTD("tos.rtd",,"LX",[Symbol])	
Mark	=RTD("tos.rtd",,"MARK",[Symbol])	
MarkChange	=RTD("tos.rtd",,"MARK_CHANGE",[Symbol])	
MarkPercentChange	=RTD("tos.rtd",,"MARK_PERCENT_CHANGE",[Symbol])	
Bid	=RTD("tos.rtd",,"BID",[Symbol])	
Ask	=RTD("tos.rtd",,"ASK",[Symbol])	
BidSize	=RTD("tos.rtd",,"BID_SIZE",[Symbol])	
AskSize	=RTD("tos.rtd",,"ASK_SIZE",[Symbol])	
BidAskSize	=RTD("tos.rtd",,"BA_SIZE",[Symbol])	
BidX	=RTD("tos.rtd",,"BX",[Symbol])	
AskX	=RTD("tos.rtd",,"AX",[Symbol])	
StrengthMeter	=RTD("tos.rtd",,"STRENGTH_METER",[Symbol])	
Open	=RTD("tos.rtd",,"OPEN",[Symbol])	
High	=RTD("tos.rtd",,"HIGH",[Symbol])	
Low	=RTD("tos.rtd",,"LOW",[Symbol])	
Close	=RTD("tos.rtd",,"CLOSE",[Symbol])	
Volume	=RTD("tos.rtd",,"VOLUME",[Symbol])	
OpenInt	=RTD("tos.rtd",,"OPEN_INT",[Symbol])	
ImpliedVol	=RTD("tos.rtd",,"IMPL_VOL",[Symbol])	
VolIndex	=RTD("tos.rtd",,"VOL_INDEX",[Symbol])	
FrontVol	=RTD("tos.rtd",,"FRONT_VOL",[Symbol])	
BackVol	=RTD("tos.rtd",,"BACK_VOL",[Symbol])	
WeightedBackVol	=RTD("tos.rtd",,"WEIGHTED_BACK_VOL",[Symbol])	
VolDiff	=RTD("tos.rtd",,"VOL_DIFF",[Symbol])	
PutCallRatio	=RTD("tos.rtd",,"PUT_CALL_RATIO",[Symbol])	
CallVolumeIndex	=RTD("tos.rtd",,"CALL_VOLUME_INDEX",[Symbol])	
PutVolumeIndex	=RTD("tos.rtd",,"PUT_VOLUME_INDEX",[Symbol])	
OptionVolumeIndex	=RTD("tos.rtd",,"OPTION_VOLUME_INDEX",[Symbol])	
FrontExpectedMove	=RTD("tos.rtd",,"FRONT_EX_MOVE",[Symbol])	
BackExpectedMove	=RTD("tos.rtd",,"BACK_EX_MOVE",[Symbol])	
ExpectedMoveDiff	=RTD("tos.rtd",,"EX_MOVE_DIFF",[Symbol])	
Beta	=RTD("tos.rtd",,"BETA",[Symbol])	
High52	=RTD("tos.rtd",,"52HIGH",[Symbol])	
Low52	=RTD("tos.rtd",,"52LOW",[Symbol])	
PE	=RTD("tos.rtd",,"PE",[Symbol])	
EPS	=RTD("tos.rtd",,"EPS",[Symbol])	
MarketCap	=RTD("tos.rtd",,"MARKET_CAP",[Symbol])	
Shares	=RTD("tos.rtd",,"SHARES",[Symbol])	
DividendYield	=RTD("tos.rtd",,"YIELD",[Symbol])	
DividendShare	=RTD("tos.rtd",,"DIV",[Symbol])	

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

[rtd.quotes_tos](#)

The table contains the last data values of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL		PK
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=RTD("tos.rtd", "DESCRIPTION",[SYMBOL])	
LAST	=RTD("tos.rtd", "LAST",[SYMBOL])	
CHANGE	=RTD("tos.rtd", "NET_CHANGE",[SYMBOL])	
PERCENT_CHANGE	=RTD("tos.rtd", "PERCENT_CHANGE",[SYMBOL])	
LAST_SIZE	=RTD("tos.rtd", "LAST_SIZE",[SYMBOL])	
LAST_X	=RTD("tos.rtd", "LX",[SYMBOL])	
MARK	=RTD("tos.rtd", "MARK",[SYMBOL])	
MARK_CHANGE	=RTD("tos.rtd", "MARK_CHANGE",[SYMBOL])	
MARK_PERCENT_CHANGE	=RTD("tos.rtd", "MARK_PERCENT_CHANGE",[SYMBOL])	
BID	=RTD("tos.rtd", "BID",[SYMBOL])	
ASK	=RTD("tos.rtd", "ASK",[SYMBOL])	
BID_SIZE	=RTD("tos.rtd", "BID_SIZE",[SYMBOL])	
ASK_SIZE	=RTD("tos.rtd", "ASK_SIZE",[SYMBOL])	
BID_ASK_SIZE	=RTD("tos.rtd", "BA_SIZE",[SYMBOL])	
BID_X	=RTD("tos.rtd", "BX",[SYMBOL])	
ASK_X	=RTD("tos.rtd", "AX",[SYMBOL])	
STRENGTH_METER	=RTD("tos.rtd", "STRENGTH_METER",[SYMBOL])	
OPEN	=RTD("tos.rtd", "OPEN",[SYMBOL])	
HIGH	=RTD("tos.rtd", "HIGH",[SYMBOL])	
LOW	=RTD("tos.rtd", "LOW",[SYMBOL])	
CLOSE	=RTD("tos.rtd", "CLOSE",[SYMBOL])	
VOLUME	=RTD("tos.rtd", "VOLUME",[SYMBOL])	
OPEN_INT	=RTD("tos.rtd", "OPEN_INT",[SYMBOL])	
IMPLIED_VOL	=RTD("tos.rtd", "IMPL_VOL",[SYMBOL])	
VOL_INDEX	=RTD("tos.rtd", "VOL_INDEX",[SYMBOL])	
FRONT_VOL	=RTD("tos.rtd", "FRONT_VOL",[SYMBOL])	
BACK_VOL	=RTD("tos.rtd", "BACK_VOL",[SYMBOL])	
WEIGHTED_BACK_VOL	=RTD("tos.rtd", "WEIGHTED_BACK_VOL",[SYMBOL])	
VOL_DIFF	=RTD("tos.rtd", "VOL_DIFF",[SYMBOL])	
PUT_CALL_RATIO	=RTD("tos.rtd", "PUT_CALL_RATIO",[SYMBOL])	
CALL_VOLUME_INDEX	=RTD("tos.rtd", "CALL_VOLUME_INDEX",[SYMBOL])	
PUT_VOLUME_INDEX	=RTD("tos.rtd", "PUT_VOLUME_INDEX",[SYMBOL])	
OPTION_VOLUME_INDEX	=RTD("tos.rtd", "OPTION_VOLUME_INDEX",[SYMBOL])	
FRONT_EXPECTED_MOVE	=RTD("tos.rtd", "FRONT_EX_MOVE",[SYMBOL])	
BACK_EXPECTED_MOVE	=RTD("tos.rtd", "BACK_EX_MOVE",[SYMBOL])	
EXPECTED_MOVE_DIFF	=RTD("tos.rtd", "EX_MOVE_DIFF",[SYMBOL])	
BETA	=RTD("tos.rtd", "BETA",[SYMBOL])	
HIGH52	=RTD("tos.rtd", "52HIGH",[SYMBOL])	
LOW52	=RTD("tos.rtd", "52LOW",[SYMBOL])	
PE	=RTD("tos.rtd", "PE",[SYMBOL])	
EPS	=RTD("tos.rtd", "EPS",[SYMBOL])	
MARKET_CAP	=RTD("tos.rtd", "MARKET_CAP",[SYMBOL])	
SHARES	=RTD("tos.rtd", "SHARES",[SYMBOL])	
DIVIDEND_YIELD	=RTD("tos.rtd", "YIELD",[SYMBOL])	
DIVIDEND_SHARE	=RTD("tos.rtd", "DIV",[SYMBOL])	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_day_history_tos

The table contains day data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL		PK
DATE	=Date()	PK
TIME	=Time()	
DESCRIPTION	=RTD("tos.rtd",,"DESCRIPTION",[SYMBOL])	
LAST	=RTD("tos.rtd",,"LAST",[SYMBOL])	
CHANGE	=RTD("tos.rtd",,"NET_CHANGE",[SYMBOL])	
PERCENT_CHANGE	=RTD("tos.rtd",,"PERCENT_CHANGE",[SYMBOL])	
LAST_SIZE	=RTD("tos.rtd",,"LAST_SIZE",[SYMBOL])	
LAST_X	=RTD("tos.rtd",,"LX",[SYMBOL])	
MARK	=RTD("tos.rtd",,"MARK",[SYMBOL])	
MARK_CHANGE	=RTD("tos.rtd",,"MARK_CHANGE",[SYMBOL])	
MARK_PERCENT_CHANGE	=RTD("tos.rtd",,"MARK_PERCENT_CHANGE",[SYMBOL])	
BID	=RTD("tos.rtd",,"BID",[SYMBOL])	
ASK	=RTD("tos.rtd",,"ASK",[SYMBOL])	
BID_SIZE	=RTD("tos.rtd",,"BID_SIZE",[SYMBOL])	
ASK_SIZE	=RTD("tos.rtd",,"ASK_SIZE",[SYMBOL])	
BID_ASK_SIZE	=RTD("tos.rtd",,"BA_SIZE",[SYMBOL])	
BID_X	=RTD("tos.rtd",,"BX",[SYMBOL])	
ASK_X	=RTD("tos.rtd",,"AX",[SYMBOL])	
STRENGTH_METER	=RTD("tos.rtd",,"STRENGTH_METER",[SYMBOL])	
OPEN	=RTD("tos.rtd",,"OPEN",[SYMBOL])	
HIGH	=RTD("tos.rtd",,"HIGH",[SYMBOL])	
LOW	=RTD("tos.rtd",,"LOW",[SYMBOL])	
CLOSE	=RTD("tos.rtd",,"CLOSE",[SYMBOL])	
VOLUME	=RTD("tos.rtd",,"VOLUME",[SYMBOL])	
OPEN_INT	=RTD("tos.rtd",,"OPEN_INT",[SYMBOL])	
IMPLIED_VOL	=RTD("tos.rtd",,"IMPL_VOL",[SYMBOL])	
VOL_INDEX	=RTD("tos.rtd",,"VOL_INDEX",[SYMBOL])	
FRONT_VOL	=RTD("tos.rtd",,"FRONT_VOL",[SYMBOL])	
BACK_VOL	=RTD("tos.rtd",,"BACK_VOL",[SYMBOL])	
WEIGHTED_BACK_VOL	=RTD("tos.rtd",,"WEIGHTED_BACK_VOL",[SYMBOL])	
VOL_DIFF	=RTD("tos.rtd",,"VOL_DIFF",[SYMBOL])	
PUT_CALL_RATIO	=RTD("tos.rtd",,"PUT_CALL_RATIO",[SYMBOL])	
CALL_VOLUME_INDEX	=RTD("tos.rtd",,"CALL_VOLUME_INDEX",[SYMBOL])	
PUT_VOLUME_INDEX	=RTD("tos.rtd",,"PUT_VOLUME_INDEX",[SYMBOL])	
OPTION_VOLUME_INDEX	=RTD("tos.rtd",,"OPTION_VOLUME_INDEX",[SYMBOL])	
FRONT_EXPECTED_MOVE	=RTD("tos.rtd",,"FRONT_EX_MOVE",[SYMBOL])	
BACK_EXPECTED_MOVE	=RTD("tos.rtd",,"BACK_EX_MOVE",[SYMBOL])	
EXPECTED_MOVE_DIFF	=RTD("tos.rtd",,"EX_MOVE_DIFF",[SYMBOL])	
BETA	=RTD("tos.rtd",,"BETA",[SYMBOL])	
HIGH52	=RTD("tos.rtd",,"52HIGH",[SYMBOL])	
LOW52	=RTD("tos.rtd",,"52LOW",[SYMBOL])	
PE	=RTD("tos.rtd",,"PE",[SYMBOL])	
EPS	=RTD("tos.rtd",,"EPS",[SYMBOL])	
MARKET_CAP	=RTD("tos.rtd",,"MARKET_CAP",[SYMBOL])	
SHARES	=RTD("tos.rtd",,"SHARES",[SYMBOL])	
DIVIDEND_YIELD	=RTD("tos.rtd",,"YIELD",[SYMBOL])	
DIVIDEND_SHARE	=RTD("tos.rtd",,"DIV",[SYMBOL])	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_tick_history_tos

The table contains tick data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
SYMBOL		
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=RTD("tos.rtd", "DESCRIPTION", [SYMBOL])	
LAST	=RTD("tos.rtd", "LAST", [SYMBOL])	
CHANGE	=RTD("tos.rtd", "NET_CHANGE", [SYMBOL])	
PERCENT_CHANGE	=RTD("tos.rtd", "PERCENT_CHANGE", [SYMBOL])	
LAST_SIZE	=RTD("tos.rtd", "LAST_SIZE", [SYMBOL])	
LAST_X	=RTD("tos.rtd", "LX", [SYMBOL])	
MARK	=RTD("tos.rtd", "MARK", [SYMBOL])	
MARK_CHANGE	=RTD("tos.rtd", "MARK_CHANGE", [SYMBOL])	
MARK_PERCENT_CHANGE	=RTD("tos.rtd", "MARK_PERCENT_CHANGE", [SYMBOL])	
BID	=RTD("tos.rtd", "BID", [SYMBOL])	
ASK	=RTD("tos.rtd", "ASK", [SYMBOL])	
BID_SIZE	=RTD("tos.rtd", "BID_SIZE", [SYMBOL])	
ASK_SIZE	=RTD("tos.rtd", "ASK_SIZE", [SYMBOL])	
BID_ASK_SIZE	=RTD("tos.rtd", "BA_SIZE", [SYMBOL])	
BID_X	=RTD("tos.rtd", "BX", [SYMBOL])	
ASK_X	=RTD("tos.rtd", "AX", [SYMBOL])	
STRENGTH_METER	=RTD("tos.rtd", "STRENGTH_METER", [SYMBOL])	
OPEN	=RTD("tos.rtd", "OPEN", [SYMBOL])	
HIGH	=RTD("tos.rtd", "HIGH", [SYMBOL])	
LOW	=RTD("tos.rtd", "LOW", [SYMBOL])	
CLOSE	=RTD("tos.rtd", "CLOSE", [SYMBOL])	
VOLUME	=RTD("tos.rtd", "VOLUME", [SYMBOL])	
OPEN_INT	=RTD("tos.rtd", "OPEN_INT", [SYMBOL])	
IMPLIED_VOL	=RTD("tos.rtd", "IMPL_VOL", [SYMBOL])	
VOL_INDEX	=RTD("tos.rtd", "VOL_INDEX", [SYMBOL])	
FRONT_VOL	=RTD("tos.rtd", "FRONT_VOL", [SYMBOL])	
BACK_VOL	=RTD("tos.rtd", "BACK_VOL", [SYMBOL])	
WEIGHTED_BACK_VOL	=RTD("tos.rtd", "WEIGHTED_BACK_VOL", [SYMBOL])	
VOL_DIFF	=RTD("tos.rtd", "VOL_DIFF", [SYMBOL])	
PUT_CALL_RATIO	=RTD("tos.rtd", "PUT_CALL_RATIO", [SYMBOL])	
CALL_VOLUME_INDEX	=RTD("tos.rtd", "CALL_VOLUME_INDEX", [SYMBOL])	
PUT_VOLUME_INDEX	=RTD("tos.rtd", "PUT_VOLUME_INDEX", [SYMBOL])	
OPTION_VOLUME_INDEX	=RTD("tos.rtd", "OPTION_VOLUME_INDEX", [SYMBOL])	
FRONT_EXPECTED_MOVE	=RTD("tos.rtd", "FRONT_EX_MOVE", [SYMBOL])	
BACK_EXPECTED_MOVE	=RTD("tos.rtd", "BACK_EX_MOVE", [SYMBOL])	
EXPECTED_MOVE_DIFF	=RTD("tos.rtd", "EX_MOVE_DIFF", [SYMBOL])	
BETA	=RTD("tos.rtd", "BETA", [SYMBOL])	
HIGH52	=RTD("tos.rtd", "52HIGH", [SYMBOL])	
LOW52	=RTD("tos.rtd", "52LOW", [SYMBOL])	
PE	=RTD("tos.rtd", "PE", [SYMBOL])	
EPS	=RTD("tos.rtd", "EPS", [SYMBOL])	
MARKET_CAP	=RTD("tos.rtd", "MARKET_CAP", [SYMBOL])	
SHARES	=RTD("tos.rtd", "SHARES", [SYMBOL])	
DIVIDEND_YIELD	=RTD("tos.rtd", "YIELD", [SYMBOL])	
DIVIDEND_SHARE	=RTD("tos.rtd", "DIV", [SYMBOL])	

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Quotes from Thinkorswim thinkDesktop via DDE

Overview

The RTD database contains preconfigured tables for getting real-time data from [Thinkorswim thinkDesktop](#).

Quote tables are designed for getting data for stocks, futures, and currency pairs. Use option tables for options.

Since RealTimeToDB 2.5, the default formulas use the tos.rtd server, not DDE.

You may change RTD formulas to DDE using the patches from the database folders.

The data are updated from the thinkDesktop DDE server that requires administrator privileges for running RealTimeToDB.

You may disable unusable columns to reduce the server overhead.

The DDE server does not contain an actual data time field.

The DateTime, Date and Time fields are updated using the PC time adjusted to the table time zone (Eastern Standard Time).

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	QuoteListTOS		
rtd	QuotesTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS	
rtd	QuoteDayHistoryTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS	
rtd	QuoteTickHistoryTOS	SELECT Code AS Symbol FROM rtd.QuoteListTOS	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	quote_list_tos		
rtd	quotes_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos	
rtd	quote_day_history_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos	
rtd	quote_tick_history_tos	SELECT CODE AS SYMBOL FROM rtd.quote_list_tos	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	QUOTE_LIST_TOS		
RTD	QUOTES_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS	
RTD	QUOTE_DAY_HISTORY_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS	
RTD	QUOTE_TICK_HISTORY_TOS	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_TOS	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListTOS for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
AAPL
GOOG

rtd.quote_list_tos for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
AAPL
GOOG

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	QuotesTOS	Symbol		PK
rtd	QuoteDayHistoryTOS	Symbol		PK
rtd	QuoteDayHistoryTOS	Date	=Date()	PK
rtd	QuoteTickHistoryTOS	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	quotes_tos	SYMBOL		PK
rtd	quote_day_history_tos	SYMBOL		PK
rtd	quote_day_history_tos	DATE	=Date()	PK
rtd	quote_tick_history_tos	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	QUOTES_TOS	SYMBOL		PK
RTD	QUOTE_DAY_HISTORY_TOS	SYMBOL		PK
RTD	QUOTE_DAY_HISTORY_TOS	DATE	=Date()	PK
RTD	QUOTE_TICK_HISTORY_TOS	ID		PK, IDENTITY

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

[rtd.QuotesTOS](#)

The table contains the last data values of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol		PK
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=TOS DESCRIPTION![Symbol]	
Last	=TOS LAST![Symbol]	
Change	=TOS NET_CHANGE![Symbol]	
PercentChange	=TOS PERCENT_CHANGE![Symbol]	
LastSize	=TOS LAST_SIZE![Symbol]	
LastX	=TOS LX![Symbol]	
Mark	=TOS MARK![Symbol]	
MarkChange	=TOS MARK_CHANGE![Symbol]	
MarkPercentChange	=TOS MARK_PERCENT_CHANGE![Symbol]	
Bid	=TOS BID![Symbol]	
Ask	=TOS ASK![Symbol]	
BidSize	=TOS BID_SIZE![Symbol]	
AskSize	=TOS ASK_SIZE![Symbol]	
BidAskSize	=TOS BA_SIZE![Symbol]	
BidX	=TOS BX![Symbol]	
AskX	=TOS AX![Symbol]	
StrengthMeter	=TOS STRENGTH_METER![Symbol]	
Open	=TOS OPEN![Symbol]	
High	=TOS HIGH![Symbol]	
Low	=TOS LOW![Symbol]	
Close	=TOS CLOSE![Symbol]	
Volume	=TOS VOLUME![Symbol]	
OpenInt	=TOS OPEN_INT![Symbol]	
ImpliedVol	=TOS IMPL_VOL![Symbol]	
VolIndex	=TOS VOL_INDEX![Symbol]	
FrontVol	=TOS FRONT_VOL![Symbol]	
BackVol	=TOS BACK_VOL![Symbol]	
WeightedBackVol	=TOS WEIGHTED_BACK_VOL![Symbol]	
VolDiff	=TOS VOL_DIFF![Symbol]	
PutCallRatio	=TOS PUT_CALL_RATIO![Symbol]	
CallVolumeIndex	=TOS CALL_VOLUME_INDEX![Symbol]	
PutVolumeIndex	=TOS PUT_VOLUME_INDEX![Symbol]	
OptionVolumeIndex	=TOS OPTION_VOLUME_INDEX![Symbol]	
FrontExpectedMove	=TOS FRONT_EX_MOVE![Symbol]	
BackExpectedMove	=TOS BACK_EX_MOVE![Symbol]	
ExpectedMoveDiff	=TOS EX_MOVE_DIFF![Symbol]	
Beta	=TOS BETA![Symbol]	
High52	=TOS '52HIGH'![Symbol]	
Low52	=TOS '52LOW'![Symbol]	
PE	=TOS PE![Symbol]	
EPS	=TOS EPS![Symbol]	
MarketCap	=TOS MARKET_CAP![Symbol]	
Shares	=TOS SHARES![Symbol]	
DividendYield	=TOS YIELD![Symbol]	
DividendShare	=TOS DIV![Symbol]	
LastUpdateTimeStamp		

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rtd.QuoteDayHistoryTOS

The table contains day data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol		PK
Date	=Date()	PK
Time	=Time()	
Description	=TOS DESCRIPTION![Symbol]	
Last	=TOS LAST![Symbol]	
Change	=TOS NET_CHANGE![Symbol]	
PercentChange	=TOS PERCENT_CHANGE![Symbol]	
LastSize	=TOS LAST_SIZE![Symbol]	
LastX	=TOS LX![Symbol]	
Mark	=TOS MARK![Symbol]	
MarkChange	=TOS MARK_CHANGE![Symbol]	
MarkPercentChange	=TOS MARK_PERCENT_CHANGE![Symbol]	
Bid	=TOS BID![Symbol]	
Ask	=TOS ASK![Symbol]	
BidSize	=TOS BID_SIZE![Symbol]	
AskSize	=TOS ASK_SIZE![Symbol]	
BidAskSize	=TOS BA_SIZE![Symbol]	
BidX	=TOS BX![Symbol]	
AskX	=TOS AX![Symbol]	
StrengthMeter	=TOS STRENGTH_METER![Symbol]	
Open	=TOS OPEN![Symbol]	
High	=TOS HIGH![Symbol]	
Low	=TOS LOW![Symbol]	
Close	=TOS CLOSE![Symbol]	
Volume	=TOS VOLUME![Symbol]	
OpenInt	=TOS OPEN_INT![Symbol]	
ImpliedVol	=TOS IMPL_VOL![Symbol]	
VolIndex	=TOS VOL_INDEX![Symbol]	
FrontVol	=TOS FRONT_VOL![Symbol]	
BackVol	=TOS BACK_VOL![Symbol]	
WeightedBackVol	=TOS WEIGHTED_BACK_VOL![Symbol]	
VolDiff	=TOS VOL_DIFF![Symbol]	
PutCallRatio	=TOS PUT_CALL_RATIO![Symbol]	
CallVolumeIndex	=TOS CALL_VOLUME_INDEX![Symbol]	
PutVolumeIndex	=TOS PUT_VOLUME_INDEX![Symbol]	
OptionVolumeIndex	=TOS OPTION_VOLUME_INDEX![Symbol]	
FrontExpectedMove	=TOS FRONT_EX_MOVE![Symbol]	
BackExpectedMove	=TOS BACK_EX_MOVE![Symbol]	
ExpectedMoveDiff	=TOS EX_MOVE_DIFF![Symbol]	
Beta	=TOS BETA![Symbol]	
High52	=TOS '52HIGH'![Symbol]	
Low52	=TOS '52LOW'![Symbol]	
PE	=TOS PE![Symbol]	
EPS	=TOS EPS![Symbol]	
MarketCap	=TOS MARKET_CAP![Symbol]	
Shares	=TOS SHARES![Symbol]	
DividendYield	=TOS YIELD![Symbol]	
DividendShare	=TOS DIV![Symbol]	
LastUpdateTimeStamp		

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rtd.QuoteTickHistoryTOS

The table contains tick data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
Symbol		
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=TOS DESCRIPTION! Symbol]	
Last	=TOS LAST! Symbol]	
Change	=TOS NET_CHANGE! Symbol]	
PercentChange	=TOS PERCENT_CHANGE! Symbol]	
LastSize	=TOS LAST_SIZE! Symbol]	
LastX	=TOS LX! Symbol]	
Mark	=TOS MARK! Symbol]	
MarkChange	=TOS MARK_CHANGE! Symbol]	
MarkPercentChange	=TOS MARK_PERCENT_CHANGE! Symbol]	
Bid	=TOS BID! Symbol]	
Ask	=TOS ASK! Symbol]	
BidSize	=TOS BID_SIZE! Symbol]	
AskSize	=TOS ASK_SIZE! Symbol]	
BidAskSize	=TOS BA_SIZE! Symbol]	
BidX	=TOS BX! Symbol]	
AskX	=TOS AX! Symbol]	
StrengthMeter	=TOS STRENGTH_METER! Symbol]	
Open	=TOS OPEN! Symbol]	
High	=TOS HIGH! Symbol]	
Low	=TOS LOW! Symbol]	
Close	=TOS CLOSE! Symbol]	
Volume	=TOS VOLUME! Symbol]	
OpenInt	=TOS OPEN_INT! Symbol]	
ImpliedVol	=TOS IMPL_VOL! Symbol]	
VolIndex	=TOS VOL_INDEX! Symbol]	
FrontVol	=TOS FRONT_VOL! Symbol]	
BackVol	=TOS BACK_VOL! Symbol]	
WeightedBackVol	=TOS WEIGHTED_BACK_VOL! Symbol]	
VolDiff	=TOS VOL_DIFF! Symbol]	
PutCallRatio	=TOS PUT_CALL_RATIO! Symbol]	
CallVolumeIndex	=TOS CALL_VOLUME_INDEX! Symbol]	
PutVolumeIndex	=TOS PUT_VOLUME_INDEX! Symbol]	
OptionVolumeIndex	=TOS OPTION_VOLUME_INDEX! Symbol]	
FrontExpectedMove	=TOS FRONT_EX_MOVE! Symbol]	
BackExpectedMove	=TOS BACK_EX_MOVE! Symbol]	
ExpectedMoveDiff	=TOS EX_MOVE_DIFF! Symbol]	
Beta	=TOS BETA! Symbol]	
High52	=TOS '52HIGH'! Symbol]	
Low52	=TOS '52LOW'! Symbol]	
PE	=TOS PE! Symbol]	
EPS	=TOS EPS! Symbol]	
MarketCap	=TOS MARKET_CAP! Symbol]	
Shares	=TOS SHARES! Symbol]	
DividendYield	=TOS YIELD! Symbol]	
DividendShare	=TOS DIV! Symbol]	

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

[rtd.quotes_tos](#)

The table contains the last data values of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL		PK
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=TOS DESCRIPTION!{SYMBOL}	
LAST	=TOS LAST!{SYMBOL}	
CHANGE	=TOS NET_CHANGE!{SYMBOL}	
PERCENT_CHANGE	=TOS PERCENT_CHANGE!{SYMBOL}	
LAST_SIZE	=TOS LAST_SIZE!{SYMBOL}	
LAST_X	=TOS LX!{SYMBOL}	
MARK	=TOS MARK!{SYMBOL}	
MARK_CHANGE	=TOS MARK_CHANGE!{SYMBOL}	
MARK_PERCENT_CHANGE	=TOS MARK_PERCENT_CHANGE!{SYMBOL}	
BID	=TOS BID!{SYMBOL}	
ASK	=TOS ASK!{SYMBOL}	
BID_SIZE	=TOS BID_SIZE!{SYMBOL}	
ASK_SIZE	=TOS ASK_SIZE!{SYMBOL}	
BID_ASK_SIZE	=TOS BA_SIZE!{SYMBOL}	
BID_X	=TOS BX!{SYMBOL}	
ASK_X	=TOS AX!{SYMBOL}	
STRENGTH_METER	=TOS STRENGTH_METER!{SYMBOL}	
OPEN	=TOS OPEN!{SYMBOL}	
HIGH	=TOS HIGH!{SYMBOL}	
LOW	=TOS LOW!{SYMBOL}	
CLOSE	=TOS CLOSE!{SYMBOL}	
VOLUME	=TOS VOLUME!{SYMBOL}	
OPEN_INT	=TOS OPEN_INT!{SYMBOL}	
IMPLIED_VOL	=TOS IMPL_VOL!{SYMBOL}	
VOL_INDEX	=TOS VOL_INDEX!{SYMBOL}	
FRONT_VOL	=TOS FRONT_VOL!{SYMBOL}	
BACK_VOL	=TOS BACK_VOL!{SYMBOL}	
WEIGHTED_BACK_VOL	=TOS WEIGHTED_BACK_VOL!{SYMBOL}	
VOL_DIFF	=TOS VOL_DIFF!{SYMBOL}	
PUT_CALL_RATIO	=TOS PUT_CALL_RATIO!{SYMBOL}	
CALL_VOLUME_INDEX	=TOS CALL_VOLUME_INDEX!{SYMBOL}	
PUT_VOLUME_INDEX	=TOS PUT_VOLUME_INDEX!{SYMBOL}	
OPTION_VOLUME_INDEX	=TOS OPTION_VOLUME_INDEX!{SYMBOL}	
FRONT_EXPECTED_MOVE	=TOS FRONT_EX_MOVE!{SYMBOL}	
BACK_EXPECTED_MOVE	=TOS BACK_EX_MOVE!{SYMBOL}	
EXPECTED_MOVE_DIFF	=TOS EX_MOVE_DIFF!{SYMBOL}	
BETA	=TOS BETA!{SYMBOL}	
HIGH52	=TOS '52HIGH'!{SYMBOL}	
LOW52	=TOS '52LOW'!{SYMBOL}	
PE	=TOS PE!{SYMBOL}	
EPS	=TOS EPS!{SYMBOL}	
MARKET_CAP	=TOS MARKET_CAP!{SYMBOL}	
SHARES	=TOS SHARES!{SYMBOL}	
DIVIDEND_YIELD	=TOS YIELD!{SYMBOL}	
DIVIDEND_SHARE	=TOS DIV!{SYMBOL}	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_day_history_tos

The table contains day data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL		PK
DATE	=Date()	PK
TIME	=Time()	
DESCRIPTION	=TOS DESCRIPTION![SYMBOL]	
LAST	=TOS LAST![SYMBOL]	
CHANGE	=TOS NET_CHANGE![SYMBOL]	
PERCENT_CHANGE	=TOS PERCENT_CHANGE![SYMBOL]	
LAST_SIZE	=TOS LAST_SIZE![SYMBOL]	
LAST_X	=TOS LX![SYMBOL]	
MARK	=TOS MARK![SYMBOL]	
MARK_CHANGE	=TOS MARK_CHANGE![SYMBOL]	
MARK_PERCENT_CHANGE	=TOS MARK_PERCENT_CHANGE![SYMBOL]	
BID	=TOS BID![SYMBOL]	
ASK	=TOS ASK![SYMBOL]	
BID_SIZE	=TOS BID_SIZE![SYMBOL]	
ASK_SIZE	=TOS ASK_SIZE![SYMBOL]	
BID_ASK_SIZE	=TOS BA_SIZE![SYMBOL]	
BID_X	=TOS BX![SYMBOL]	
ASK_X	=TOS AX![SYMBOL]	
STRENGTH_METER	=TOS STRENGTH_METER![SYMBOL]	
OPEN	=TOS OPEN![SYMBOL]	
HIGH	=TOS HIGH![SYMBOL]	
LOW	=TOS LOW![SYMBOL]	
CLOSE	=TOS CLOSE![SYMBOL]	
VOLUME	=TOS VOLUME![SYMBOL]	
OPEN_INT	=TOS OPEN_INT![SYMBOL]	
IMPLIED_VOL	=TOS IMPL_VOL![SYMBOL]	
VOL_INDEX	=TOS VOL_INDEX![SYMBOL]	
FRONT_VOL	=TOS FRONT_VOL![SYMBOL]	
BACK_VOL	=TOS BACK_VOL![SYMBOL]	
WEIGHTED_BACK_VOL	=TOS WEIGHTED_BACK_VOL![SYMBOL]	
VOL_DIFF	=TOS VOL_DIFF![SYMBOL]	
PUT_CALL_RATIO	=TOS PUT_CALL_RATIO![SYMBOL]	
CALL_VOLUME_INDEX	=TOS CALL_VOLUME_INDEX![SYMBOL]	
PUT_VOLUME_INDEX	=TOS PUT_VOLUME_INDEX![SYMBOL]	
OPTION_VOLUME_INDEX	=TOS OPTION_VOLUME_INDEX![SYMBOL]	
FRONT_EXPECTED_MOVE	=TOS FRONT_EX_MOVE![SYMBOL]	
BACK_EXPECTED_MOVE	=TOS BACK_EX_MOVE![SYMBOL]	
EXPECTED_MOVE_DIFF	=TOS EX_MOVE_DIFF![SYMBOL]	
BETA	=TOS BETA![SYMBOL]	
HIGH52	=TOS '52HIGH'![SYMBOL]	
LOW52	=TOS '52LOW'![SYMBOL]	
PE	=TOS PE![SYMBOL]	
EPS	=TOS EPS![SYMBOL]	
MARKET_CAP	=TOS MARKET_CAP![SYMBOL]	
SHARES	=TOS SHARES![SYMBOL]	
DIVIDEND_YIELD	=TOS YIELD![SYMBOL]	
DIVIDEND_SHARE	=TOS DIV![SYMBOL]	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_tick_history_tos

The table contains tick data history of stocks, futures, and currency pairs from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
SYMBOL		
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=TOS DESCRIPTION!{SYMBOL}	
LAST	=TOS LAST!{SYMBOL}	
CHANGE	=TOS NET_CHANGE!{SYMBOL}	
PERCENT_CHANGE	=TOS PERCENT_CHANGE!{SYMBOL}	
LAST_SIZE	=TOS LAST_SIZE!{SYMBOL}	
LAST_X	=TOS LX!{SYMBOL}	
MARK	=TOS MARK!{SYMBOL}	
MARK_CHANGE	=TOS MARK_CHANGE!{SYMBOL}	
MARK_PERCENT_CHANGE	=TOS MARK_PERCENT_CHANGE!{SYMBOL}	
BID	=TOS BID!{SYMBOL}	
ASK	=TOS ASK!{SYMBOL}	
BID_SIZE	=TOS BID_SIZE!{SYMBOL}	
ASK_SIZE	=TOS ASK_SIZE!{SYMBOL}	
BID_ASK_SIZE	=TOS BA_SIZE!{SYMBOL}	
BID_X	=TOS BX!{SYMBOL}	
ASK_X	=TOS AX!{SYMBOL}	
STRENGTH_METER	=TOS STRENGTH_METER!{SYMBOL}	
OPEN	=TOS OPEN!{SYMBOL}	
HIGH	=TOS HIGH!{SYMBOL}	
LOW	=TOS LOW!{SYMBOL}	
CLOSE	=TOS CLOSE!{SYMBOL}	
VOLUME	=TOS VOLUME!{SYMBOL}	
OPEN_INT	=TOS OPEN_INT!{SYMBOL}	
IMPLIED_VOL	=TOS IMPL_VOL!{SYMBOL}	
VOL_INDEX	=TOS VOL_INDEX!{SYMBOL}	
FRONT_VOL	=TOS FRONT_VOL!{SYMBOL}	
BACK_VOL	=TOS BACK_VOL!{SYMBOL}	
WEIGHTED_BACK_VOL	=TOS WEIGHTED_BACK_VOL!{SYMBOL}	
VOL_DIFF	=TOS VOL_DIFF!{SYMBOL}	
PUT_CALL_RATIO	=TOS PUT_CALL_RATIO!{SYMBOL}	
CALL_VOLUME_INDEX	=TOS CALL_VOLUME_INDEX!{SYMBOL}	
PUT_VOLUME_INDEX	=TOS PUT_VOLUME_INDEX!{SYMBOL}	
OPTION_VOLUME_INDEX	=TOS OPTION_VOLUME_INDEX!{SYMBOL}	
FRONT_EXPECTED_MOVE	=TOS FRONT_EX_MOVE!{SYMBOL}	
BACK_EXPECTED_MOVE	=TOS BACK_EX_MOVE!{SYMBOL}	
EXPECTED_MOVE_DIFF	=TOS EX_MOVE_DIFF!{SYMBOL}	
BETA	=TOS BETA!{SYMBOL}	
HIGH52	=TOS '52 HIGH'!{SYMBOL}	
LOW52	=TOS '52 LOW'!{SYMBOL}	
PE	=TOS PE!{SYMBOL}	
EPS	=TOS EPS!{SYMBOL}	
MARKET_CAP	=TOS MARKET_CAP!{SYMBOL}	
SHARES	=TOS SHARES!{SYMBOL}	
DIVIDEND_YIELD	=TOS YIELD!{SYMBOL}	
DIVIDEND_SHARE	=TOS DIV!{SYMBOL}	

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Quotes from InteractiveBrokers Trader Workstation (TWS)

Overview

The RTD database contains preconfigured tables for getting real-time data from [InteractiveBrokers Trader Workstation \(TWS\)](#).

Quote tables are designed for getting data for stocks, futures, and currency pairs. Use option tables for options.

The data are updated from the DDE server.

You may disable unusable columns to reduce the server overhead.

The DDE server does not contain an actual data time field.

The DateTime, Date and Time fields are updated using the PC time adjusted to the table time zone (Eastern Standard Time).

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	QuoteListTWS		
rtd	QuotesTWS	SELECT TickId, Code AS Symbol FROM rtd.QuoteListTWS WHERE Code NOT LIKE '%_OPT_20%'	
rtd	QuoteDayHistoryTWS	SELECT TickId, Code AS Symbol FROM rtd.QuoteListTWS WHERE Code NOT LIKE '%_OPT_20%'	
rtd	QuoteTickHistoryTWS	SELECT TickId, Code AS Symbol FROM rtd.QuoteListTWS WHERE Code NOT LIKE '%_OPT_20%'	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	quote_list_tws		
rtd	quotes_tws	SELECT TICK_ID, CODE AS SYMBOL FROM rtd.quote_list_tws WHERE CODE NOT LIKE '%_OPT_20%'	
rtd	quote_day_history_tws	SELECT TICK_ID, CODE AS SYMBOL FROM rtd.quote_list_tws WHERE CODE NOT LIKE '%_OPT_20%'	
rtd	quote_tick_history_tws	SELECT TICK_ID, CODE AS SYMBOL FROM rtd.quote_list_tws WHERE CODE NOT LIKE '%_OPT_20%'	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	QUOTE_LIST_TWS		
RTD	QUOTES_TWS	SELECT TICK_ID, CODE AS SYMBOL FROM RTD.QUOTE_LIST_TWS WHERE CODE NOT LIKE '%_OPT_20%'	
RTD	QUOTE_DAY_HISTORY_TWS	SELECT TICK_ID, CODE AS SYMBOL FROM RTD.QUOTE_LIST_TWS WHERE CODE NOT LIKE '%_OPT_20%'	
RTD	QUOTE_TICK_HISTORY_TWS	SELECT TICK_ID, CODE AS SYMBOL FROM RTD.QUOTE_LIST_TWS WHERE CODE NOT LIKE '%_OPT_20%'	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListTWS for Microsoft SQL Server and Microsoft SQL Server Compact:

TickId	Code
1	AAPL
2	GOOG
8	AAPL_OPT_20150116_500_C_100_SMART_USD_~
9	AAPL_OPT_20150116_600_C_100_SMART_USD_~

rtd.quote_list_tws for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

TICK_ID	CODE
1	AAPL
2	GOOG
8	AAPL_OPT_20150116_500_C_100_SMART_USD_~
9	AAPL_OPT_20150116_600_C_100_SMART_USD_~

The task table contains tickers for quote and option tables as the TWS DDE server requires ticker registration using the TickId field.

Accordingly, quote table tasks select not option tickers only.

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	QuotesTWS	Req	=S tik!'id[TickId]?req?[Symbol]_STK_SMART_USD_~'	Formula
rtd	QuotesTWS	TickId		Formula
rtd	QuotesTWS	Symbol		PK
rtd	QuoteDayHistoryTWS	ID		Formula
rtd	QuoteDayHistoryTWS	Req	=S tik!'id[TickId]?req?[Symbol]_STK_SMART_USD_~'	Formula
rtd	QuoteDayHistoryTWS	TickId		Formula
rtd	QuoteDayHistoryTWS	Symbol		PK
rtd	QuoteDayHistoryTWS	Date	=Date()	PK
rtd	QuoteTickHistoryTWS	Req	=S tik!'id[TickId]?req?[Symbol]_STK_SMART_USD_~'	Formula
rtd	QuoteTickHistoryTWS	TickId		Formula
rtd	QuoteTickHistoryTWS	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	quotes_tws	REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
rtd	quotes_tws	TICK_ID		Formula
rtd	quotes_tws	SYMBOL		PK
rtd	quote_day_history_tws	ID		Formula
rtd	quote_day_history_tws	REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
rtd	quote_day_history_tws	TICK_ID		Formula
rtd	quote_day_history_tws	SYMBOL		PK
rtd	quote_day_history_tws	DATE	=Date()	PK
rtd	quote_tick_history_tws	REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
rtd	quote_tick_history_tws	TICK_ID		Formula
rtd	quote_tick_history_tws	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	QUOTES_TWS	REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
RTD	QUOTES_TWS	TICK_ID		Formula
RTD	QUOTES_TWS	SYMBOL		PK
RTD	QUOTE_DAY_HISTORY_TWS	ID		Formula
RTD	QUOTE_DAY_HISTORY_TWS	REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
RTD	QUOTE_DAY_HISTORY_TWS	TICK_ID		Formula
RTD	QUOTE_DAY_HISTORY_TWS	SYMBOL		PK
RTD	QUOTE_DAY_HISTORY_TWS	DATE	=Date()	PK
RTD	QUOTE_TICK_HISTORY_TWS	REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
RTD	QUOTE_TICK_HISTORY_TWS	TICK_ID		Formula
RTD	QUOTE_TICK_HISTORY_TWS	ID		PK, IDENTITY

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.QuotesTWS

The table contains the last data values of stocks, futures, and currency pairs from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
Req	=S tik!'id[TickId]?req?[Symbol]_STK_SMART_USD_~'	Formula
TickId		Formula
Symbol		PK
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Last	=S tik!id[TickId]?last	
LastSize	=S tik!id[TickId]?lastSize	
Bid	=S tik!id[TickId]?bid	
Ask	=S tik!id[TickId]?ask	
BidSize	=S tik!id[TickId]?bidSize	
AskSize	=S tik!id[TickId]?askSize	
High	=S tik!id[TickId]?high	
Low	=S tik!id[TickId]?low	
Close	=S tik!id[TickId]?close	
Volume	=S tik!id[TickId]?volume	
LastUpdateTimeStamp		

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rtd.QuoteDayHistoryTWS

The table contains day data history of stocks, futures, and currency pairs from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		Formula
Req	=S tik!id[TickId]?req?[Symbol]_STK_SMART_USD_~'	Formula
TickId		Formula
Symbol		PK
Date	=Date()	PK
Time	=Time()	
Last	=S tik!id[TickId]?last	
LastSize	=S tik!id[TickId]?lastSize	
Bid	=S tik!id[TickId]?bid	
Ask	=S tik!id[TickId]?ask	
BidSize	=S tik!id[TickId]?bidSize	
AskSize	=S tik!id[TickId]?askSize	
High	=S tik!id[TickId]?high	
Low	=S tik!id[TickId]?low	
Close	=S tik!id[TickId]?close	
Volume	=S tik!id[TickId]?volume	
LastUpdateTimeStamp		

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rtd.QuoteTickHistoryTWS

The table contains tick data history of stocks, futures, and currency pairs from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
Req	=S tik!id[TickId]?req?[Symbol]_STK_SMART_USD_~'	Formula
TickId		Formula
ID		PK, IDENTITY
Symbol		
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Last	=S tik!id[TickId]?last	
LastSize	=S tik!id[TickId]?lastSize	
Bid	=S tik!id[TickId]?bid	
Ask	=S tik!id[TickId]?ask	
BidSize	=S tik!id[TickId]?bidSize	
AskSize	=S tik!id[TickId]?askSize	
High	=S tik!id[TickId]?high	
Low	=S tik!id[TickId]?low	
Close	=S tik!id[TickId]?close	
Volume	=S tik!id[TickId]?volume	

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

rtd.quotes_tws

The table contains the last data values of stocks, futures, and currency pairs from InteractiveBroker Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
REQ	=S tik!id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
TICK_ID		Formula
SYMBOL		PK
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
LAST	=S tik!id[TICK_ID]?last	
LAST_SIZE	=S tik!id[TICK_ID]?lastSize	
BID	=S tik!id[TICK_ID]?bid	
ASK	=S tik!id[TICK_ID]?ask	

BID_SIZE	=S tiklid[TICK_ID]?bidSize	
ASK_SIZE	=S tiklid[TICK_ID]?askSize	
HIGH	=S tiklid[TICK_ID]?high	
LOW	=S tiklid[TICK_ID]?low	
CLOSE	=S tiklid[TICK_ID]?close	
VOLUME	=S tiklid[TICK_ID]?volume	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_day_history_tws

The table contains day data history of stocks, futures, and currency pairs from InteractiveBroker TraderWorkStation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		Formula
REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
TICK_ID		Formula
SYMBOL		PK
DATE	=Date()	PK
TIME	=Time()	
LAST	=S tiklid[TICK_ID]?last	
LAST_SIZE	=S tiklid[TICK_ID]?lastSize	
BID	=S tiklid[TICK_ID]?bid	
ASK	=S tiklid[TICK_ID]?ask	
BID_SIZE	=S tiklid[TICK_ID]?bidSize	
ASK_SIZE	=S tiklid[TICK_ID]?askSize	
HIGH	=S tiklid[TICK_ID]?high	
LOW	=S tiklid[TICK_ID]?low	
CLOSE	=S tiklid[TICK_ID]?close	
VOLUME	=S tiklid[TICK_ID]?volume	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_tick_history_tws

The table contains tick data history of stocks, futures, and currency pairs from InteractiveBroker TraderWorkStation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
REQ	=S tik!'id[TICK_ID]?req?[SYMBOL]_STK_SMART_USD_~'	Formula
TICK_ID		Formula
ID		PK, IDENTITY
SYMBOL		
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
LAST	=S tiklid[TICK_ID]?last	
LAST_SIZE	=S tiklid[TICK_ID]?lastSize	
BID	=S tiklid[TICK_ID]?bid	
ASK	=S tiklid[TICK_ID]?ask	
BID_SIZE	=S tiklid[TICK_ID]?bidSize	
ASK_SIZE	=S tiklid[TICK_ID]?askSize	
HIGH	=S tiklid[TICK_ID]?high	
LOW	=S tiklid[TICK_ID]?low	
CLOSE	=S tiklid[TICK_ID]?close	
VOLUME	=S tiklid[TICK_ID]?volume	

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Quotes from Hybrid Solutions VertexFX Trader (VFX)

Overview

The RTD database contains preconfigured tables for getting real-time data from [VertexFX Trader](#).

The data are updated from the VertexFX DDE server that requires administrator privileges for running RealTimeToDB.

You may disable unusable columns to reduce the server overhead.

The DDE server does not contain an actual data date field.

The DateTime, Date and Time fields are updated using the PC time adjusted to the table time zone (Eastern Standard Time).

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	QuoteListVFX		
rtd	QuotesVFX	SELECT Code FROM rtd.QuoteListVFX	
rtd	QuoteDayHistoryVFX	SELECT Code FROM rtd.QuoteListVFX	
rtd	QuoteTimeHistoryVFX	SELECT Code FROM rtd.QuoteListVFX	
rtd	QuoteTickHistoryVFX	SELECT Code FROM rtd.QuoteListVFX	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	quote_list_vfx		
rtd	quotes_vfx	SELECT CODE FROM rtd.quote_list_vfx	
rtd	quote_day_history_vfx	SELECT CODE FROM rtd.quote_list_vfx	
rtd	quote_time_history_vfx	SELECT CODE FROM rtd.quote_list_vfx	
rtd	quote_tick_history_vfx	SELECT CODE FROM rtd.quote_list_vfx	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	QUOTE_LIST_VFX		
RTD	QUOTES_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX	
RTD	QUOTE_DAY_HISTORY_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX	
RTD	QUOTE_TIME_HISTORY_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX	
RTD	QUOTE_TICK_HISTORY_VFX	SELECT CODE FROM RTD.QUOTE_LIST_VFX	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListVFX for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
EUR_USD
GBP_USD
USD_CHF
USD_JPY

rtd.quote_list_vfx for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
EUR_USD
GBP_USD
USD_CHF
USD_JPY

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	QuotesVFX	Code		Formula
rtd	QuotesVFX	Symbol	=VFX Name! [Code]	PK
rtd	QuoteDayHistoryVFX	Code		Formula
rtd	QuoteDayHistoryVFX	Symbol	=VFX Name! [Code]	PK
rtd	QuoteDayHistoryVFX	Date	=Date()	PK
rtd	QuoteTimeHistoryVFX	Code		Formula
rtd	QuoteTimeHistoryVFX	Symbol	=VFX Name! [Code]	PK
rtd	QuoteTimeHistoryVFX	Date	=Date()	PK
rtd	QuoteTimeHistoryVFX	Time	=VFX Time! [Code]	PK
rtd	QuoteTickHistoryVFX	Code		Formula
rtd	QuoteTickHistoryVFX	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	quotes_vfx	CODE		Formula
rtd	quotes_vfx	SYMBOL	=VFX Name! [CODE]	PK
rtd	quote_day_history_vfx	CODE		Formula
rtd	quote_day_history_vfx	SYMBOL	=VFX Name! [CODE]	PK
rtd	quote_day_history_vfx	DATE	=Date()	PK
rtd	quote_time_history_vfx	CODE		Formula
rtd	quote_time_history_vfx	SYMBOL	=VFX Name! [CODE]	PK
rtd	quote_time_history_vfx	DATE	=Date()	PK
rtd	quote_time_history_vfx	TIME	=VFX Time! [CODE]	PK
rtd	quote_tick_history_vfx	CODE		Formula
rtd	quote_tick_history_vfx	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	QUOTES_VFX	CODE		Formula
RTD	QUOTES_VFX	SYMBOL	=VFX Name! [CODE]	PK
RTD	QUOTE_DAY_HISTORY_VFX	CODE		Formula
RTD	QUOTE_DAY_HISTORY_VFX	SYMBOL	=VFX Name! [CODE]	PK
RTD	QUOTE_DAY_HISTORY_VFX	DATE	=Date()	PK
RTD	QUOTE_TICK_HISTORY_VFX	CODE		Formula
RTD	QUOTE_TICK_HISTORY_VFX	ID		PK, IDENTITY
RTD	QUOTE_TIME_HISTORY_VFX	CODE		Formula
RTD	QUOTE_TIME_HISTORY_VFX	SYMBOL	=VFX Name! [CODE]	PK
RTD	QUOTE_TIME_HISTORY_VFX	DATE	=Date()	PK
RTD	QUOTE_TIME_HISTORY_VFX	TIME	=VFX Time! [CODE]	PK

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.QuotesVFX

The table contains the last data values of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
Symbol	=VFX Name! [Code]	PK
Date	=Date()	
Time	=VFX Time! [Code]	
Bid	=VFX Bid! [Code]	
Ask	=VFX Ask! [Code]	
Open	=VFX OpenPrice! [Code]	
High	=VFX High! [Code]	
Low	=VFX Low! [Code]	
Close	=VFX ClosePrice! [Code]	
Change	=VFX NetChange! [Code]	
PercentChange	=VFX PercentChange! [Code]	
LastUpdateTimeStamp		

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rtd.QuoteDayHistoryVFX

The table contains day data history of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
Symbol	=VFX Name! [Code]	PK
Date	=Date()	PK
Time	=VFX Time! [Code]	
Bid	=VFX Bid! [Code]	
Ask	=VFX Ask! [Code]	
Open	=VFX OpenPrice! [Code]	
High	=VFX High! [Code]	
Low	=VFX Low! [Code]	
Close	=VFX ClosePrice! [Code]	
Change	=VFX NetChange! [Code]	
PercentChange	=VFX PercentChange! [Code]	
LastUpdateTimeStamp		

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rtd.QuoteTimeHistoryVFX

The table contains time data history of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
Symbol	=VFX Name! [Code]	PK
Date	=Date()	PK
Time	=VFX Time! [Code]	PK
Bid	=VFX Bid! [Code]	
Ask	=VFX Ask! [Code]	
Open	=VFX OpenPrice! [Code]	
High	=VFX High! [Code]	
Low	=VFX Low! [Code]	
Close	=VFX ClosePrice! [Code]	
Change	=VFX NetChange! [Code]	
PercentChange	=VFX PercentChange! [Code]	
LastUpdateTimeStamp		

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rtd.QuoteTickHistoryVFX

The table contains tick data history of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		Formula
ID		PK, IDENTITY
Symbol	=VFX Name! [Code]	
Date	=Date()	
Time	=VFX Time! [Code]	
Bid	=VFX Bid! [Code]	
Ask	=VFX Ask! [Code]	
Open	=VFX OpenPrice! [Code]	
High	=VFX High! [Code]	
Low	=VFX Low! [Code]	
Close	=VFX ClosePrice! [Code]	
Change	=VFX NetChange! [Code]	
PercentChange	=VFX PercentChange! [Code]	

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rtd.quotes_vfx

The table contains the last data values of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
SYMBOL	=VFX Name! [CODE]	PK
DATE	=Date()	
TIME	=VFX Time! [CODE]	
BID	=VFX Bid! [CODE]	
ASK	=VFX Ask! [CODE]	
OPEN	=VFX OpenPrice! [CODE]	
HIGH	=VFX High! [CODE]	
LOW	=VFX Low! [CODE]	
CLOSE	=VFX ClosePrice! [CODE]	
CHANGE	=VFX NetChange! [CODE]	
PERCENT_CHANGE	=VFX PercentChange! [CODE]	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_day_history_vfx

The table contains day data history of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
SYMBOL	=VFX Name! [CODE]	PK
DATE	=Date()	PK
TIME	=VFX Time! [CODE]	
BID	=VFX Bid! [CODE]	
ASK	=VFX Ask! [CODE]	
OPEN	=VFX OpenPrice! [CODE]	
HIGH	=VFX High! [CODE]	
LOW	=VFX Low! [CODE]	
CLOSE	=VFX ClosePrice! [CODE]	
CHANGE	=VFX NetChange! [CODE]	
PERCENT_CHANGE	=VFX PercentChange! [CODE]	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_time_history_vfx

The table contains time data history of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
SYMBOL	=VFX Name! [CODE]	PK
DATE	=Date()	PK
TIME	=VFX Time! [CODE]	PK
BID	=VFX Bid! [CODE]	
ASK	=VFX Ask! [CODE]	
OPEN	=VFX OpenPrice! [CODE]	
HIGH	=VFX High! [CODE]	
LOW	=VFX Low! [CODE]	
CLOSE	=VFX ClosePrice! [CODE]	
CHANGE	=VFX NetChange! [CODE]	
PERCENT_CHANGE	=VFX PercentChange! [CODE]	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_tick_history_vfx

The table contains tick data history of currency pairs and futures from VertexFX Trader.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		Formula
ID		PK, IDENTITY
SYMBOL	=VFX Name!([CODE])	
DATE	=Date()	
TIME	=VFX Time!([CODE])	
BID	=VFX Bid!([CODE])	
ASK	=VFX Ask!([CODE])	
OPEN	=VFX OpenPrice!([CODE])	
HIGH	=VFX High!([CODE])	
LOW	=VFX Low!([CODE])	
CLOSE	=VFX ClosePrice!([CODE])	
CHANGE	=VFX NetChange!([CODE])	
PERCENT_CHANGE	=VFX PercentChange!([CODE])	

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Quotes from Yahoo! Finance

Overview

The RTD database contains preconfigured tables for getting stock quotes from Yahoo! Finance using [RealTimeToExcel](#).

These data are available and activated by default. Just edit required symbols in the QuoteListYahoo table.

Yahoo! Finance data are delayed.

Use <http://finance.yahoo.com/> to find tickers.

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	QuoteListYahoo		
rtd	QuotesYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo	
rtd	QuoteDayHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo	
rtd	QuoteTimeHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo	
rtd	QuoteTickHistoryYahoo	SELECT Code AS Symbol FROM rtd.QuoteListYahoo	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	quote_list_yahoo		
rtd	quotes_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo	
rtd	quote_day_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo	
rtd	quote_time_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo	
rtd	quote_tick_history_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_yahoo	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	QUOTE_LIST_YAHOO		
RTD	QUOTES_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO	
RTD	QUOTE_DAY_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO	
RTD	QUOTE_TIME_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO	
RTD	QUOTE_TICK_HISTORY_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_YAHOO	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListYahoo for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
AAPL
GOOG

rtd.quote_list_yahoo for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
AAPL
GOOG

Use <http://finance.yahoo.com/> to find tickers.

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	QuotesYahoo	Symbol	=RTD("gartle.rtd", "YahooFinanceWatchList", [Symbol], "Symbol")	PK
rtd	QuoteDayHistoryYahoo	Symbol	=RTD("gartle.rtd", "YahooFinanceWatchList", [Symbol], "Symbol")	PK
rtd	QuoteDayHistoryYahoo	LastTradeDate	=RTD("gartle.rtd", "YahooFinanceWatchList", [Symbol], "LastTradeDate")	PK
rtd	QuoteTimeHistoryYahoo	Symbol	=RTD("gartle.rtd", "YahooFinanceWatchList", [Symbol], "Symbol")	PK
rtd	QuoteTimeHistoryYahoo	LastTradeDateTime	=RTD("gartle.rtd", "YahooFinanceWatchList", [Symbol], "LastTradeDateTime")	PK
rtd	QuoteTickHistoryYahoo	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	quotes_yahoo	SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
rtd	quote_day_history_yahoo	SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
rtd	quote_day_history_yahoo	LAST_TRADE_DATE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDate")	PK
rtd	quote_time_history_yahoo	SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
rtd	quote_time_history_yahoo	LAST_TRADE_DATETIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDateTime")	PK
rtd	quote_tick_history_yahoo	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	QUOTES_YAHOO	SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
RTD	QUOTE_DAY_HISTORY_YAHOO	SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
RTD	QUOTE_DAY_HISTORY_YAHOO	LAST_TRADE_DATE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDate")	PK
RTD	QUOTE_TICK_HISTORY_YAHOO	ID		PK, IDENTITY
RTD	QUOTE_TIME_HISTORY_YAHOO	SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
RTD	QUOTE_TIME_HISTORY_YAHOO	LAST_TRADE_DATETIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDateTime")	PK

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.QuotesYahoo

The table contains the last data values of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Symbol")	PK
LastTradeDateTime	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeDateTime")	
LastTradeDate	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeTime")	
Last	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Last")	
Change	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Change")	
PercentChange	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"ChangeInPercent")	
Open	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Open")	
High	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"High")	
Low	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Low")	
Volume	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Volume")	
LastUpdateTimeStamp		

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rtd.QuoteDayHistoryYahoo

The table contains day history of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Symbol")	PK
LastTradeDate	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeDate")	PK
LastTradeTime	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeTime")	
Last	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Last")	
Change	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Change")	
PercentChange	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"ChangeInPercent")	
Open	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Open")	
High	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"High")	
Low	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Low")	
Volume	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Volume")	
LastUpdateTimeStamp		

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rtd.QuoteTimeHistoryYahoo

The table contains time history of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Symbol")	PK
LastTradeDateTime	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeDateTime")	PK
LastTradeDate	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeTime")	
Last	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Last")	
Change	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Change")	
PercentChange	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"ChangeInPercent")	
Open	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Open")	
High	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"High")	
Low	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Low")	
Volume	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Volume")	
LastUpdateTimeStamp		

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rtd.QuoteTickHistoryYahoo

The table contains tick history of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
Symbol	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Symbol")	
LastTradeDateTime	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeDateTime")	
LastTradeDate	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"LastTradeTime")	
Last	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Last")	
Change	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Change")	
PercentChange	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"ChangeInPercent")	
Open	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Open")	
High	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"High")	
Low	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Low")	
Volume	=RTD("gartle.rtd","YahooFinanceWatchList",[Symbol],"Volume")	

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

rtd.quotes_yahoo

The table contains the last data values of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
LAST_TRADE_DATETIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDateTime")	
LAST_TRADE_DATE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDate")	
LAST_TRADE_TIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeTime")	
LAST	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Last")	
CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"ChangeInPercent")	
OPEN	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Open")	
HIGH	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"High")	
LOW	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Low")	
VOLUME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Volume")	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_day_history_yahoo

The table contains day history of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
LAST_TRADE_DATE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDate")	PK
LAST_TRADE_TIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeTime")	
LAST	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Last")	
CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"ChangeInPercent")	
OPEN	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Open")	
HIGH	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"High")	
LOW	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Low")	
VOLUME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Volume")	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_time_history_yahoo

The table contains time history of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	PK
LAST_TRADE_DATETIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDateTime")	PK
LAST_TRADE_DATE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDate")	
LAST_TRADE_TIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeTime")	
LAST	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Last")	
CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"ChangeInPercent")	
OPEN	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Open")	
HIGH	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"High")	
LOW	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Low")	
VOLUME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Volume")	
LAST_UPDATE_TIMESTAMP		

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rtd.quote_tick_history_yahoo

The table contains tick history of stock quotes from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
SYMBOL	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Symbol")	
LAST_TRADE_DATETIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDateTime")	
LAST_TRADE_DATE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeDate")	
LAST_TRADE_TIME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"LastTradeTime")	
LAST	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Last")	
CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"ChangeInPercent")	
OPEN	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Open")	
HIGH	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"High")	
LOW	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Low")	
VOLUME	=RTD("gartle.rtd","YahooFinanceWatchList",[SYMBOL],"Volume")	

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Option Data from Thinkorswim thinkDesktop via TOS.RTD

Overview

The RTD database contains preconfigured tables for getting real-time data from [Thinkorswim thinkDesktop](#).

Option tables are designed for getting data for options. Use quote tables for stocks, futures, and currency pairs.

Since RealTimeToDB 2.5, RTD functions are used by default.

To update existing DDE formulas, you may use patches from the database folders.

You may disable unusable columns to reduce the server overhead.

Note that Thinkorswim thinkDesktop can crash if more than 200 000 topics are being requested.

The RTD server does not contain an actual data time field.

The DateTime, Date and Time fields are updated using the PC time adjusted to the table time zone (Eastern Standard Time).

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	OptionListTOS		
rtd	OptionsTOS	SELECT Code FROM rtd.OptionListTOS	
rtd	OptionDayHistoryTOS	SELECT Code FROM rtd.OptionListTOS	
rtd	OptionTickHistoryTOS	SELECT Code FROM rtd.OptionListTOS	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	option_list_tos		
rtd	options_tos	SELECT CODE FROM rtd.option_list_tos	
rtd	option_day_history_tos	SELECT CODE FROM rtd.option_list_tos	
rtd	option_tick_history_tos	SELECT CODE FROM rtd.option_list_tos	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	OPTION_LIST_TOS		
RTD	OPTIONS_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS	
RTD	OPTION_DAY_HISTORY_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS	
RTD	OPTION_TICK_HISTORY_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.OptionListTOS for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
.AAPL150117C500
.AAPL150117C600
.AAPL150117P500
.AAPL150117P600

rtd.option_list_tos for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
.AAPL150117C500
.AAPL150117C600
.AAPL150117P500
.AAPL150117P600

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	OptionsTOS	Code		PK
rtd	OptionDayHistoryTOS	Code		PK
rtd	OptionDayHistoryTOS	Date	=Date()	PK

rtd	OptionTickHistoryTOS	ID		PK, IDENTITY
-----	----------------------	----	--	--------------

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	options_tos	CODE		PK
rtd	option_day_history_tos	CODE		PK
rtd	option_day_history_tos	DATE	=Date()	PK
rtd	option_tick_history_tos	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	OPTIONS_TOS	CODE		PK
RTD	OPTION_DAY_HISTORY_TOS	CODE		PK
RTD	OPTION_DAY_HISTORY_TOS	DATE	=Date()	PK
RTD	OPTION_TICK_HISTORY_TOS	ID		PK, IDENTITY

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.OptionsTOS

The table contains the last values of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		PK
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=RTD("tos.rtd", "DESCRIPTION", [Code])	
Last	=RTD("tos.rtd", "LAST", [Code])	
Change	=RTD("tos.rtd", "NET_CHANGE", [Code])	
PercentChange	=RTD("tos.rtd", "PERCENT_CHANGE", [Code])	
LastSize	=RTD("tos.rtd", "LAST_SIZE", [Code])	
LastX	=RTD("tos.rtd", "LX", [Code])	
Mark	=RTD("tos.rtd", "MARK", [Code])	
MarkChange	=RTD("tos.rtd", "MARK_CHANGE", [Code])	
MarkPercentChange	=RTD("tos.rtd", "MARK_PERCENT_CHANGE", [Code])	
Bid	=RTD("tos.rtd", "BID", [Code])	
Ask	=RTD("tos.rtd", "ASK", [Code])	
BidSize	=RTD("tos.rtd", "BID_SIZE", [Code])	
AskSize	=RTD("tos.rtd", "ASK_SIZE", [Code])	
BidAskSize	=RTD("tos.rtd", "BA_SIZE", [Code])	
BidX	=RTD("tos.rtd", "BX", [Code])	
AskX	=RTD("tos.rtd", "AX", [Code])	
Open	=RTD("tos.rtd", "OPEN", [Code])	
High	=RTD("tos.rtd", "HIGH", [Code])	
Low	=RTD("tos.rtd", "LOW", [Code])	
Close	=RTD("tos.rtd", "CLOSE", [Code])	
Volume	=RTD("tos.rtd", "VOLUME", [Code])	
OpenInt	=RTD("tos.rtd", "OPEN_INT", [Code])	
ImpliedVol	=RTD("tos.rtd", "IMPL_VOL", [Code])	
Delta	=RTD("tos.rtd", "DELTA", [Code])	
Gamma	=RTD("tos.rtd", "GAMMA", [Code])	
Theta	=RTD("tos.rtd", "THETA", [Code])	
Vega	=RTD("tos.rtd", "VEGA", [Code])	
Rho	=RTD("tos.rtd", "RHO", [Code])	
Extrinsic	=RTD("tos.rtd", "EXTRINSIC", [Code])	
Intrinsic	=RTD("tos.rtd", "INTRINSIC", [Code])	
ProbabilityITM	=RTD("tos.rtd", "PROB_OF_EXPIRING", [Code])	
ProbabilityOTM	=RTD("tos.rtd", "PROB_OTM", [Code])	
ProbabilityTouch	=RTD("tos.rtd", "PROB_OF_TOUCHING", [Code])	
CoveredReturn	=RTD("tos.rtd", "COVERED_RETURN", [Code])	
MaxCoveredReturn	=RTD("tos.rtd", "MAX_COVERED_RETURN", [Code])	
LastUpdateTimeStamp		

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rtd.OptionDayHistoryTOS

The table contains day history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		PK
Date	=Date()	PK
Time	=Time()	
Description	=RTD("tos.rtd", "DESCRIPTION",[Code])	
Last	=RTD("tos.rtd", "LAST",[Code])	
Change	=RTD("tos.rtd", "NET_CHANGE",[Code])	
PercentChange	=RTD("tos.rtd", "PERCENT_CHANGE",[Code])	
LastSize	=RTD("tos.rtd", "LAST_SIZE",[Code])	
LastX	=RTD("tos.rtd", "LX",[Code])	
Mark	=RTD("tos.rtd", "MARK",[Code])	
MarkChange	=RTD("tos.rtd", "MARK_CHANGE",[Code])	
MarkPercentChange	=RTD("tos.rtd", "MARK_PERCENT_CHANGE",[Code])	
Bid	=RTD("tos.rtd", "BID",[Code])	
Ask	=RTD("tos.rtd", "ASK",[Code])	
BidSize	=RTD("tos.rtd", "BID_SIZE",[Code])	
AskSize	=RTD("tos.rtd", "ASK_SIZE",[Code])	
BidAskSize	=RTD("tos.rtd", "BA_SIZE",[Code])	
BidX	=RTD("tos.rtd", "BX",[Code])	
AskX	=RTD("tos.rtd", "AX",[Code])	
Open	=RTD("tos.rtd", "OPEN",[Code])	
High	=RTD("tos.rtd", "HIGH",[Code])	
Low	=RTD("tos.rtd", "LOW",[Code])	
Close	=RTD("tos.rtd", "CLOSE",[Code])	
Volume	=RTD("tos.rtd", "VOLUME",[Code])	
OpenInt	=RTD("tos.rtd", "OPEN_INT",[Code])	
ImpliedVol	=RTD("tos.rtd", "IMPL_VOL",[Code])	
Delta	=RTD("tos.rtd", "DELTA",[Code])	
Gamma	=RTD("tos.rtd", "GAMMA",[Code])	
Theta	=RTD("tos.rtd", "THETA",[Code])	
Vega	=RTD("tos.rtd", "VEGA",[Code])	
Rho	=RTD("tos.rtd", "RHO",[Code])	
Extrinsic	=RTD("tos.rtd", "EXTRINSIC",[Code])	
Intrinsic	=RTD("tos.rtd", "INTRINSIC",[Code])	
ProbabilityITM	=RTD("tos.rtd", "PROB_OF_EXPIRING",[Code])	
ProbabilityOTM	=RTD("tos.rtd", "PROB_OTM",[Code])	
ProbabilityTouch	=RTD("tos.rtd", "PROB_OF_TOUCHING",[Code])	
CoveredReturn	=RTD("tos.rtd", "COVERED_RETURN",[Code])	
MaxCoveredReturn	=RTD("tos.rtd", "MAX_COVERED_RETURN",[Code])	
LastUpdateTimeStamp		

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rtd.OptionTickHistoryTOS

The table contains tick history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
Code		
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=RTD("tos.rtd",,"DESCRIPTION",[Code])	
Last	=RTD("tos.rtd",,"LAST",[Code])	
Change	=RTD("tos.rtd",,"NET_CHANGE",[Code])	
PercentChange	=RTD("tos.rtd",,"PERCENT_CHANGE",[Code])	
LastSize	=RTD("tos.rtd",,"LAST_SIZE",[Code])	
LastX	=RTD("tos.rtd",,"LX",[Code])	
Mark	=RTD("tos.rtd",,"MARK",[Code])	
MarkChange	=RTD("tos.rtd",,"MARK_CHANGE",[Code])	
MarkPercentChange	=RTD("tos.rtd",,"MARK_PERCENT_CHANGE",[Code])	
Bid	=RTD("tos.rtd",,"BID",[Code])	
Ask	=RTD("tos.rtd",,"ASK",[Code])	
BidSize	=RTD("tos.rtd",,"BID_SIZE",[Code])	
AskSize	=RTD("tos.rtd",,"ASK_SIZE",[Code])	
BidAskSize	=RTD("tos.rtd",,"BA_SIZE",[Code])	
BidX	=RTD("tos.rtd",,"BX",[Code])	
AskX	=RTD("tos.rtd",,"AX",[Code])	
Open	=RTD("tos.rtd",,"OPEN",[Code])	
High	=RTD("tos.rtd",,"HIGH",[Code])	
Low	=RTD("tos.rtd",,"LOW",[Code])	
Close	=RTD("tos.rtd",,"CLOSE",[Code])	
Volume	=RTD("tos.rtd",,"VOLUME",[Code])	
OpenInt	=RTD("tos.rtd",,"OPEN_INT",[Code])	
ImpliedVol	=RTD("tos.rtd",,"IMPL_VOL",[Code])	
Delta	=RTD("tos.rtd",,"DELTA",[Code])	
Gamma	=RTD("tos.rtd",,"GAMMA",[Code])	
Theta	=RTD("tos.rtd",,"THETA",[Code])	
Vega	=RTD("tos.rtd",,"VEGA",[Code])	
Rho	=RTD("tos.rtd",,"RHO",[Code])	
Extrinsic	=RTD("tos.rtd",,"EXTRINSIC",[Code])	
Intrinsic	=RTD("tos.rtd",,"INTRINSIC",[Code])	
ProbabilityITM	=RTD("tos.rtd",,"PROB_OF_EXPIRING",[Code])	
ProbabilityOTM	=RTD("tos.rtd",,"PROB_OTM",[Code])	
ProbabilityTouch	=RTD("tos.rtd",,"PROB_OF_TOUCHING",[Code])	
CoveredReturn	=RTD("tos.rtd",,"COVERED_RETURN",[Code])	
MaxCoveredReturn	=RTD("tos.rtd",,"MAX_COVERED_RETURN",[Code])	

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[rtd.options_tos](#)

The table contains the last values of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		PK
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=RTD("tos.rtd", "DESCRIPTION",[CODE])	
LAST	=RTD("tos.rtd", "LAST",[CODE])	
CHANGE	=RTD("tos.rtd", "NET_CHANGE",[CODE])	
PERCENT_CHANGE	=RTD("tos.rtd", "PERCENT_CHANGE",[CODE])	
LAST_SIZE	=RTD("tos.rtd", "LAST_SIZE",[CODE])	
LAST_X	=RTD("tos.rtd", "LX",[CODE])	
MARK	=RTD("tos.rtd", "MARK",[CODE])	
MARK_CHANGE	=RTD("tos.rtd", "MARK_CHANGE",[CODE])	
MARK_PERCENT_CHANGE	=RTD("tos.rtd", "MARK_PERCENT_CHANGE",[CODE])	
BID	=RTD("tos.rtd", "BID",[CODE])	
ASK	=RTD("tos.rtd", "ASK",[CODE])	
BID_SIZE	=RTD("tos.rtd", "BID_SIZE",[CODE])	
ASK_SIZE	=RTD("tos.rtd", "ASK_SIZE",[CODE])	
BID_ASK_SIZE	=RTD("tos.rtd", "BA_SIZE",[CODE])	
BID_X	=RTD("tos.rtd", "BX",[CODE])	
ASK_X	=RTD("tos.rtd", "AX",[CODE])	
OPEN	=RTD("tos.rtd", "OPEN",[CODE])	
HIGH	=RTD("tos.rtd", "HIGH",[CODE])	
LOW	=RTD("tos.rtd", "LOW",[CODE])	
CLOSE	=RTD("tos.rtd", "CLOSE",[CODE])	
VOLUME	=RTD("tos.rtd", "VOLUME",[CODE])	
OPEN_INT	=RTD("tos.rtd", "OPEN_INT",[CODE])	
IMPLIED_VOL	=RTD("tos.rtd", "IMPL_VOL",[CODE])	
DELTA	=RTD("tos.rtd", "DELTA",[CODE])	
GAMMA	=RTD("tos.rtd", "GAMMA",[CODE])	
THETA	=RTD("tos.rtd", "THETA",[CODE])	
VEGA	=RTD("tos.rtd", "VEGA",[CODE])	
RHO	=RTD("tos.rtd", "RHO",[CODE])	
EXTRINSIC	=RTD("tos.rtd", "EXTRINSIC",[CODE])	
INTRINSIC	=RTD("tos.rtd", "INTRINSIC",[CODE])	
PROBABILITY_ITM	=RTD("tos.rtd", "PROB_OF_EXPIRING",[CODE])	
PROBABILITY_OTM	=RTD("tos.rtd", "PROB_OTM",[CODE])	
PROBABILITY_TOUCH	=RTD("tos.rtd", "PROB_OF_TOUCHING",[CODE])	
COVERED_RETURN	=RTD("tos.rtd", "COVERED_RETURN",[CODE])	
MAX_COVERED_RETURN	=RTD("tos.rtd", "MAX_COVERED_RETURN",[CODE])	
LAST_UPDATE_TIMESTAMP		

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rtd.option_day_history_tos

The table contains day history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		PK
DATE	=Date()	PK
TIME	=Time()	
DESCRIPTION	=RTD("tos.rtd",,"DESCRIPTION",[CODE])	
LAST	=RTD("tos.rtd",,"LAST",[CODE])	
CHANGE	=RTD("tos.rtd",,"NET_CHANGE",[CODE])	
PERCENT_CHANGE	=RTD("tos.rtd",,"PERCENT_CHANGE",[CODE])	
LAST_SIZE	=RTD("tos.rtd",,"LAST_SIZE",[CODE])	
LAST_X	=RTD("tos.rtd",,"LX",[CODE])	
MARK	=RTD("tos.rtd",,"MARK",[CODE])	
MARK_CHANGE	=RTD("tos.rtd",,"MARK_CHANGE",[CODE])	
MARK_PERCENT_CHANGE	=RTD("tos.rtd",,"MARK_PERCENT_CHANGE",[CODE])	
BID	=RTD("tos.rtd",,"BID",[CODE])	
ASK	=RTD("tos.rtd",,"ASK",[CODE])	
BID_SIZE	=RTD("tos.rtd",,"BID_SIZE",[CODE])	
ASK_SIZE	=RTD("tos.rtd",,"ASK_SIZE",[CODE])	
BID_ASK_SIZE	=RTD("tos.rtd",,"BA_SIZE",[CODE])	
BID_X	=RTD("tos.rtd",,"BX",[CODE])	
ASK_X	=RTD("tos.rtd",,"AX",[CODE])	
OPEN	=RTD("tos.rtd",,"OPEN",[CODE])	
HIGH	=RTD("tos.rtd",,"HIGH",[CODE])	
LOW	=RTD("tos.rtd",,"LOW",[CODE])	
CLOSE	=RTD("tos.rtd",,"CLOSE",[CODE])	
VOLUME	=RTD("tos.rtd",,"VOLUME",[CODE])	
OPEN_INT	=RTD("tos.rtd",,"OPEN_INT",[CODE])	
IMPLIED_VOL	=RTD("tos.rtd",,"IMPL_VOL",[CODE])	
DELTA	=RTD("tos.rtd",,"DELTA",[CODE])	
GAMMA	=RTD("tos.rtd",,"GAMMA",[CODE])	
THETA	=RTD("tos.rtd",,"THETA",[CODE])	
VEGA	=RTD("tos.rtd",,"VEGA",[CODE])	
RHO	=RTD("tos.rtd",,"RHO",[CODE])	
EXTRINSIC	=RTD("tos.rtd",,"EXTRINSIC",[CODE])	
INTRINSIC	=RTD("tos.rtd",,"INTRINSIC",[CODE])	
PROBABILITY_ITM	=RTD("tos.rtd",,"PROB_OF_EXPIRING",[CODE])	
PROBABILITY_OTM	=RTD("tos.rtd",,"PROB_OTM",[CODE])	
PROBABILITY_TOUCH	=RTD("tos.rtd",,"PROB_OF_TOUCHING",[CODE])	
COVERED_RETURN	=RTD("tos.rtd",,"COVERED_RETURN",[CODE])	
MAX_COVERED_RETURN	=RTD("tos.rtd",,"MAX_COVERED_RETURN",[CODE])	
LAST_UPDATE_TIMESTAMP		

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rtd.option_tick_history_tos

The table contains tick history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
CODE		
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=RTD("tos.rtd", "DESCRIPTION", [CODE])	
LAST	=RTD("tos.rtd", "LAST", [CODE])	
CHANGE	=RTD("tos.rtd", "NET_CHANGE", [CODE])	
PERCENT_CHANGE	=RTD("tos.rtd", "PERCENT_CHANGE", [CODE])	
LAST_SIZE	=RTD("tos.rtd", "LAST_SIZE", [CODE])	
LAST_X	=RTD("tos.rtd", "LX", [CODE])	
MARK	=RTD("tos.rtd", "MARK", [CODE])	
MARK_CHANGE	=RTD("tos.rtd", "MARK_CHANGE", [CODE])	
MARK_PERCENT_CHANGE	=RTD("tos.rtd", "MARK_PERCENT_CHANGE", [CODE])	
BID	=RTD("tos.rtd", "BID", [CODE])	
ASK	=RTD("tos.rtd", "ASK", [CODE])	
BID_SIZE	=RTD("tos.rtd", "BID_SIZE", [CODE])	
ASK_SIZE	=RTD("tos.rtd", "ASK_SIZE", [CODE])	
BID_ASK_SIZE	=RTD("tos.rtd", "BA_SIZE", [CODE])	
BID_X	=RTD("tos.rtd", "BX", [CODE])	
ASK_X	=RTD("tos.rtd", "AX", [CODE])	
OPEN	=RTD("tos.rtd", "OPEN", [CODE])	
HIGH	=RTD("tos.rtd", "HIGH", [CODE])	
LOW	=RTD("tos.rtd", "LOW", [CODE])	
CLOSE	=RTD("tos.rtd", "CLOSE", [CODE])	
VOLUME	=RTD("tos.rtd", "VOLUME", [CODE])	
OPEN_INT	=RTD("tos.rtd", "OPEN_INT", [CODE])	
IMPLIED_VOL	=RTD("tos.rtd", "IMPL_VOL", [CODE])	
DELTA	=RTD("tos.rtd", "DELTA", [CODE])	
GAMMA	=RTD("tos.rtd", "GAMMA", [CODE])	
THETA	=RTD("tos.rtd", "THETA", [CODE])	
VEGA	=RTD("tos.rtd", "VEGA", [CODE])	
RHO	=RTD("tos.rtd", "RHO", [CODE])	
EXTRINSIC	=RTD("tos.rtd", "EXTRINSIC", [CODE])	
INTRINSIC	=RTD("tos.rtd", "INTRINSIC", [CODE])	
PROBABILITY_ITM	=RTD("tos.rtd", "PROB_OF_EXPIRING", [CODE])	
PROBABILITY_OTM	=RTD("tos.rtd", "PROB_OTM", [CODE])	
PROBABILITY_TOUCH	=RTD("tos.rtd", "PROB_OF_TOUCHING", [CODE])	
COVERED_RETURN	=RTD("tos.rtd", "COVERED_RETURN", [CODE])	
MAX_COVERED_RETURN	=RTD("tos.rtd", "MAX_COVERED_RETURN", [CODE])	

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Option Data from Thinkorswim thinkDesktop via DDE

Overview

The RTD database contains preconfigured tables for getting real-time data from [Thinkorswim thinkDesktop](#).

Option tables are designed for getting data for options. Use quote tables for stocks, futures, and currency pairs.

Since RealTimeToDB 2.5, the default formulas use the tos.rtd server, not DDE.

You may change RTD formulas to DDE using the patches from the database folders.

The data are updated from the thinkDesktop DDE server that requires administrator privileges for running RealTimeToDB.

You may disable unusable columns to reduce the server overhead.

The DDE server does not contain an actual data time field.

The DateTime, Date and Time fields are updated using the PC time adjusted to the table time zone (Eastern Standard Time).

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	OptionListTOS		
rtd	OptionsTOS	SELECT Code FROM rtd.OptionListTOS	
rtd	OptionDayHistoryTOS	SELECT Code FROM rtd.OptionListTOS	
rtd	OptionTickHistoryTOS	SELECT Code FROM rtd.OptionListTOS	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	option_list_tos		
rtd	options_tos	SELECT CODE FROM rtd.option_list_tos	
rtd	option_day_history_tos	SELECT CODE FROM rtd.option_list_tos	
rtd	option_tick_history_tos	SELECT CODE FROM rtd.option_list_tos	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	OPTION_LIST_TOS		
RTD	OPTIONS_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS	
RTD	OPTION_DAY_HISTORY_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS	
RTD	OPTION_TICK_HISTORY_TOS	SELECT CODE FROM RTD.OPTION_LIST_TOS	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.OptionListTOS for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
.AAPL150117C500
.AAPL150117C600
.AAPL150117P500
.AAPL150117P600

rtd.option_list_tos for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
.AAPL150117C500
.AAPL150117C600
.AAPL150117P500
.AAPL150117P600

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	OptionsTOS	Code		PK
rtd	OptionDayHistoryTOS	Code		PK
rtd	OptionDayHistoryTOS	Date	=Date()	PK

rtd	OptionTickHistoryTOS	ID		PK, IDENTITY
-----	----------------------	----	--	--------------

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	options_tos	CODE		PK
rtd	option_day_history_tos	CODE		PK
rtd	option_day_history_tos	DATE	=Date()	PK
rtd	option_tick_history_tos	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	OPTIONS_TOS	CODE		PK
RTD	OPTION_DAY_HISTORY_TOS	CODE		PK
RTD	OPTION_DAY_HISTORY_TOS	DATE	=Date()	PK
RTD	OPTION_TICK_HISTORY_TOS	ID		PK, IDENTITY

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.OptionsTOS

The table contains the last values of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		PK
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=TOS DESCRIPTION!'[Code]'	
Last	=TOS LAST!'[Code]'	
Change	=TOS NET_CHANGE!'[Code]'	
PercentChange	=TOS PERCENT_CHANGE!'[Code]'	
LastSize	=TOS LAST_SIZE!'[Code]'	
LastX	=TOS LX!'[Code]'	
Mark	=TOS MARK!'[Code]'	
MarkChange	=TOS MARK_CHANGE!'[Code]'	
MarkPercentChange	=TOS MARK_PERCENT_CHANGE!'[Code]'	
Bid	=TOS BID!'[Code]'	
Ask	=TOS ASK!'[Code]'	
BidSize	=TOS BID_SIZE!'[Code]'	
AskSize	=TOS ASK_SIZE!'[Code]'	
BidAskSize	=TOS BA_SIZE!'[Code]'	
BidX	=TOS BX!'[Code]'	
AskX	=TOS AX!'[Code]'	
Open	=TOS OPEN!'[Code]'	
High	=TOS HIGH!'[Code]'	
Low	=TOS LOW!'[Code]'	
Close	=TOS Close!'[Code]'	
Volume	=TOS VOLUME!'[Code]'	
OpenInt	=TOS OPEN_INT!'[Code]'	
ImpliedVol	=TOS IMPL_VOL!'[Code]'	
Delta	=TOS DELTA!'[Code]'	
Gamma	=TOS GAMMA!'[Code]'	
Theta	=TOS THETA!'[Code]'	
Vega	=TOS VEGA!'[Code]'	
Rho	=TOS RHO!'[Code]'	
Extrinsic	=TOS EXTRINSIC!'[Code]'	
Intrinsic	=TOS INTRINSIC!'[Code]'	
ProbabilityITM	=TOS PROB_OF_EXPIRING!'[Code]'	
ProbabilityOTM	=TOS PROB_OTM!'[Code]'	
ProbabilityTouch	=TOS PROB_OF_TOUCHING!'[Code]'	
CoveredReturn	=TOS COVERED_RETURN!'[Code]'	
MaxCoveredReturn	=TOS MAX_COVERED_RETURN!'[Code]'	
LastUpdateTimeStamp		

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rtd.OptionDayHistoryTOS

The table contains day history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		PK
Date	=Date()	PK
Time	=Time()	
Description	=TOS DESCRIPTION!'[Code]'	
Last	=TOS LAST!'[Code]'	
Change	=TOS NET_CHANGE!'[Code]'	
PercentChange	=TOS PERCENT_CHANGE!'[Code]'	
LastSize	=TOS LAST_SIZE!'[Code]'	
LastX	=TOS LX!'[Code]'	
Mark	=TOS MARK!'[Code]'	
MarkChange	=TOS MARK_CHANGE!'[Code]'	
MarkPercentChange	=TOS MARK_PERCENT_CHANGE!'[Code]'	
Bid	=TOS BID!'[Code]'	
Ask	=TOS ASK!'[Code]'	
BidSize	=TOS BID_SIZE!'[Code]'	
AskSize	=TOS ASK_SIZE!'[Code]'	
BidAskSize	=TOS BA_SIZE!'[Code]'	
BidX	=TOS BX!'[Code]'	
AskX	=TOS AX!'[Code]'	
Open	=TOS OPEN!'[Code]'	
High	=TOS HIGH!'[Code]'	
Low	=TOS LOW!'[Code]'	
Close	=TOS Close!'[Code]'	
Volume	=TOS VOLUME!'[Code]'	
OpenInt	=TOS OPEN_INT!'[Code]'	
ImpliedVol	=TOS IMPL_VOL!'[Code]'	
Delta	=TOS DELTA!'[Code]'	
Gamma	=TOS GAMMA!'[Code]'	
Theta	=TOS THETA!'[Code]'	
Vega	=TOS VEGA!'[Code]'	
Rho	=TOS RHO!'[Code]'	
Extrinsic	=TOS EXTRINSIC!'[Code]'	
Intrinsic	=TOS INTRINSIC!'[Code]'	
ProbabilityITM	=TOS PROB_OF_EXPIRING!'[Code]'	
ProbabilityOTM	=TOS PROB_OTM!'[Code]'	
ProbabilityTouch	=TOS PROB_OF_TOUCHING!'[Code]'	
CoveredReturn	=TOS COVERED_RETURN!'[Code]'	
MaxCoveredReturn	=TOS MAX_COVERED_RETURN!'[Code]'	
LastUpdateTimeStamp		

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rtd.OptionTickHistoryTOS

The table contains tick history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
Code		
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Description	=TOS DESCRIPTION!'[Code]'	
Last	=TOS LAST!'[Code]'	
Change	=TOS NET_CHANGE!'[Code]'	
PercentChange	=TOS PERCENT_CHANGE!'[Code]'	
LastSize	=TOS LAST_SIZE!'[Code]'	
LastX	=TOS LX!'[Code]'	
Mark	=TOS MARK!'[Code]'	
MarkChange	=TOS MARK_CHANGE!'[Code]'	
MarkPercentChange	=TOS MARK_PERCENT_CHANGE!'[Code]'	
Bid	=TOS BID!'[Code]'	
Ask	=TOS ASK!'[Code]'	
BidSize	=TOS BID_SIZE!'[Code]'	
AskSize	=TOS ASK_SIZE!'[Code]'	
BidAskSize	=TOS BA_SIZE!'[Code]'	
BidX	=TOS BX!'[Code]'	
AskX	=TOS AX!'[Code]'	
Open	=TOS OPEN!'[Code]'	
High	=TOS HIGH!'[Code]'	
Low	=TOS LOW!'[Code]'	
Close	=TOS Close!'[Code]'	
Volume	=TOS VOLUME!'[Code]'	
OpenInt	=TOS OPEN_INT!'[Code]'	
ImpliedVol	=TOS IMPL_VOL!'[Code]'	
Delta	=TOS DELTA!'[Code]'	
Gamma	=TOS GAMMA!'[Code]'	
Theta	=TOS THETA!'[Code]'	
Vega	=TOS VEGA!'[Code]'	
Rho	=TOS RHO!'[Code]'	
Extrinsic	=TOS EXTRINSIC!'[Code]'	
Intrinsic	=TOS INTRINSIC!'[Code]'	
ProbabilityITM	=TOS PROB_OF_EXPIRING!'[Code]'	
ProbabilityOTM	=TOS PROB_OTM!'[Code]'	
ProbabilityTouch	=TOS PROB_OF_TOUCHING!'[Code]'	
CoveredReturn	=TOS COVERED_RETURN!'[Code]'	
MaxCoveredReturn	=TOS MAX_COVERED_RETURN!'[Code]'	

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[rtd.options_tos](#)

The table contains the last values of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		PK
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=TOS DESCRIPTION!'[CODE]'	
LAST	=TOS LAST!'[CODE]'	
CHANGE	=TOS NET_CHANGE!'[CODE]'	
PERCENT_CHANGE	=TOS PERCENT_CHANGE!'[CODE]'	
LAST_SIZE	=TOS LAST_SIZE!'[CODE]'	
LAST_X	=TOS LX!'[CODE]'	
MARK	=TOS MARK!'[CODE]'	
MARK_CHANGE	=TOS MARK_CHANGE!'[CODE]'	
MARK_PERCENT_CHANGE	=TOS MARK_PERCENT_CHANGE!'[CODE]'	
BID	=TOS BID!'[CODE]'	
ASK	=TOS ASK!'[CODE]'	
BID_SIZE	=TOS BID_SIZE!'[CODE]'	
ASK_SIZE	=TOS ASK_SIZE!'[CODE]'	
BID_ASK_SIZE	=TOS BA_SIZE!'[CODE]'	
BID_X	=TOS BX!'[CODE]'	
ASK_X	=TOS AX!'[CODE]'	
OPEN	=TOS OPEN!'[CODE]'	
HIGH	=TOS HIGH!'[CODE]'	
LOW	=TOS LOW!'[CODE]'	
CLOSE	=TOS Close!'[CODE]'	
VOLUME	=TOS VOLUME!'[CODE]'	
OPEN_INT	=TOS OPEN_INT!'[CODE]'	
IMPLIED_VOL	=TOS IMPL_VOL!'[CODE]'	
DELTA	=TOS DELTA!'[CODE]'	
GAMMA	=TOS GAMMA!'[CODE]'	
THETA	=TOS THETA!'[CODE]'	
VEGA	=TOS VEGA!'[CODE]'	
RHO	=TOS RHO!'[CODE]'	
EXTRINSIC	=TOS EXTRINSIC!'[CODE]'	
INTRINSIC	=TOS INTRINSIC!'[CODE]'	
PROBABILITY_ITM	=TOS PROB_OF_EXPIRING!'[CODE]'	
PROBABILITY_OTM	=TOS PROB_OTM!'[CODE]'	
PROBABILITY_TOUCH	=TOS PROB_OF_TOUCHING!'[CODE]'	
COVERED_RETURN	=TOS COVERED_RETURN!'[CODE]'	
MAX_COVERED_RETURN	=TOS MAX_COVERED_RETURN!'[CODE]'	
LAST_UPDATE_TIMESTAMP		

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rtd.option_day_history_tos

The table contains day history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		PK
DATE	=Date()	PK
TIME	=Time()	
DESCRIPTION	=TOS DESCRIPTION!'[CODE]'	
LAST	=TOS LAST!'[CODE]'	
CHANGE	=TOS NET_CHANGE!'[CODE]'	
PERCENT_CHANGE	=TOS PERCENT_CHANGE!'[CODE]'	
LAST_SIZE	=TOS LAST_SIZE!'[CODE]'	
LAST_X	=TOS LX!'[CODE]'	
MARK	=TOS MARK!'[CODE]'	
MARK_CHANGE	=TOS MARK_CHANGE!'[CODE]'	
MARK_PERCENT_CHANGE	=TOS MARK_PERCENT_CHANGE!'[CODE]'	
BID	=TOS BID!'[CODE]'	
ASK	=TOS ASK!'[CODE]'	
BID_SIZE	=TOS BID_SIZE!'[CODE]'	
ASK_SIZE	=TOS ASK_SIZE!'[CODE]'	
BID_ASK_SIZE	=TOS BA_SIZE!'[CODE]'	
BID_X	=TOS BX!'[CODE]'	
ASK_X	=TOS AX!'[CODE]'	
OPEN	=TOS OPEN!'[CODE]'	
HIGH	=TOS HIGH!'[CODE]'	
LOW	=TOS LOW!'[CODE]'	
CLOSE	=TOS Close!'[CODE]'	
VOLUME	=TOS VOLUME!'[CODE]'	
OPEN_INT	=TOS OPEN_INT!'[CODE]'	
IMPLIED_VOL	=TOS IMPL_VOL!'[CODE]'	
DELTA	=TOS DELTA!'[CODE]'	
GAMMA	=TOS GAMMA!'[CODE]'	
THETA	=TOS THETA!'[CODE]'	
VEGA	=TOS VEGA!'[CODE]'	
RHO	=TOS RHO!'[CODE]'	
EXTRINSIC	=TOS EXTRINSIC!'[CODE]'	
INTRINSIC	=TOS INTRINSIC!'[CODE]'	
PROBABILITY_ITM	=TOS PROB_OF_EXPIRING!'[CODE]'	
PROBABILITY_OTM	=TOS PROB_OTM!'[CODE]'	
PROBABILITY_TOUCH	=TOS PROB_OF_TOUCHING!'[CODE]'	
COVERED_RETURN	=TOS COVERED_RETURN!'[CODE]'	
MAX_COVERED_RETURN	=TOS MAX_COVERED_RETURN!'[CODE]'	
LAST_UPDATE_TIMESTAMP		

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rtd.option_tick_history_tos

The table contains tick history of option data from Thinkorswim thinkDesktop.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
CODE		
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
DESCRIPTION	=TOS DESCRIPTION! [CODE]'	
LAST	=TOS LAST! [CODE]'	
CHANGE	=TOS NET_CHANGE! [CODE]'	
PERCENT_CHANGE	=TOS PERCENT_CHANGE! [CODE]'	
LAST_SIZE	=TOS LAST_SIZE! [CODE]'	
LAST_X	=TOS LX! [CODE]'	
MARK	=TOS MARK! [CODE]'	
MARK_CHANGE	=TOS MARK_CHANGE! [CODE]'	
MARK_PERCENT_CHANGE	=TOS MARK_PERCENT_CHANGE! [CODE]'	
BID	=TOS BID! [CODE]'	
ASK	=TOS ASK! [CODE]'	
BID_SIZE	=TOS BID_SIZE! [CODE]'	
ASK_SIZE	=TOS ASK_SIZE! [CODE]'	
BID_ASK_SIZE	=TOS BA_SIZE! [CODE]'	
BID_X	=TOS BX! [CODE]'	
ASK_X	=TOS AX! [CODE]'	
OPEN	=TOS OPEN! [CODE]'	
HIGH	=TOS HIGH! [CODE]'	
LOW	=TOS LOW! [CODE]'	
CLOSE	=TOS Close! [CODE]'	
VOLUME	=TOS VOLUME! [CODE]'	
OPEN_INT	=TOS OPEN_INT! [CODE]'	
IMPLIED_VOL	=TOS IMPL_VOL! [CODE]'	
DELTA	=TOS DELTA! [CODE]'	
GAMMA	=TOS GAMMA! [CODE]'	
THETA	=TOS THETA! [CODE]'	
VEGA	=TOS VEGA! [CODE]'	
RHO	=TOS RHO! [CODE]'	
EXTRINSIC	=TOS EXTRINSIC! [CODE]'	
INTRINSIC	=TOS INTRINSIC! [CODE]'	
PROBABILITY_ITM	=TOS PROB_OF_EXPIRING! [CODE]'	
PROBABILITY_OTM	=TOS PROB_OTM! [CODE]'	
PROBABILITY_TOUCH	=TOS PROB_OF_TOUCHING! [CODE]'	
COVERED_RETURN	=TOS COVERED_RETURN! [CODE]'	
MAX_COVERED_RETURN	=TOS MAX_COVERED_RETURN! [CODE]'	

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Option Data from InteractiveBrokers Trader Workstation (TWS)

Overview

The RTD database contains preconfigured tables for getting real-time data from [InteractiveBrokers Trader Workstation \(TWS\)](#).

Option tables are designed for getting data for options. Use quote tables for stocks, futures, and currency pairs.

The data are updated from the DDE server.

You may disable unusable columns to reduce the server overhead.

The DDE server does not contain an actual data time field.

The DateTime, Date and Time fields are updated using the PC time adjusted to the table time zone (Eastern Standard Time).

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	OptionsTWS	SELECT TickId, Code FROM rtd.QuoteListTWS WHERE Code LIKE '%_OPT_20%'	
rtd	OptionDayHistoryTWS	SELECT TickId, Code FROM rtd.QuoteListTWS WHERE Code LIKE '%_OPT_20%'	
rtd	OptionTickHistoryTWS	SELECT TickId, Code FROM rtd.QuoteListTWS WHERE Code LIKE '%_OPT_20%'	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	options_tws	SELECT TICK_ID, CODE FROM rtd.quote_list_tws WHERE CODE LIKE '%_OPT_20%'	
rtd	option_day_history_tws	SELECT TICK_ID, CODE FROM rtd.quote_list_tws WHERE CODE LIKE '%_OPT_20%'	
rtd	option_tick_history_tws	SELECT TICK_ID, CODE FROM rtd.quote_list_tws WHERE CODE LIKE '%_OPT_20%'	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	OPTIONS_TWS	SELECT TICK_ID, CODE FROM RTD.QUOTE_LIST_TWS WHERE CODE LIKE '%_OPT_20%'	
RTD	OPTION_DAY_HISTORY_TWS	SELECT TICK_ID, CODE FROM RTD.QUOTE_LIST_TWS WHERE CODE LIKE '%_OPT_20%'	
RTD	OPTION_TICK_HISTORY_TWS	SELECT TICK_ID, CODE FROM RTD.QUOTE_LIST_TWS WHERE CODE LIKE '%_OPT_20%'	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListTWS for Microsoft SQL Server and Microsoft SQL Server Compact:

TickId	Code
1	AAPL
2	GOOG
8	AAPL_OPT_20150116_500_C_100_SMART_USD_~
9	AAPL_OPT_20150116_600_C_100_SMART_USD_~

rtd.quote_list_tws for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

TICK_ID	CODE
1	AAPL
2	GOOG
8	AAPL_OPT_20150116_500_C_100_SMART_USD_~
9	AAPL_OPT_20150116_600_C_100_SMART_USD_~

The task table contains tickers for quote and option tables as the TWS DDE server requires ticker registration using the TickId field.

Accordingly, option table tasks select option tickers only.

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	OptionsTWS	Req	=S tik!'id[TickId]?req?[Code]'	Formula
rtd	OptionsTWS	TickId		Formula
rtd	OptionsTWS	Code		PK
rtd	OptionDayHistoryTWS	Req	=S tik!'id[TickId]?req?[Code]'	Formula
rtd	OptionDayHistoryTWS	TickId		Formula
rtd	OptionDayHistoryTWS	Code		PK
rtd	OptionDayHistoryTWS	Date	=Date()	PK
rtd	OptionTickHistoryTWS	Req	=S tik!'id[TickId]?req?[Code]'	Formula
rtd	OptionTickHistoryTWS	TickId		Formula
rtd	OptionTickHistoryTWS	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	options_tws	REQ	=S tik!'id[TICK_ID]?req?[CODE]'	Formula
rtd	options_tws	TICK_ID		Formula
rtd	options_tws	CODE		PK
rtd	option_day_history_tws	REQ	=S tik!'id[TICK_ID]?req?[CODE]'	Formula
rtd	option_day_history_tws	TICK_ID		Formula
rtd	option_day_history_tws	CODE		PK
rtd	option_day_history_tws	DATE	=Date()	PK
rtd	option_tick_history_tws	REQ	=S tik!'id[TICK_ID]?req?[CODE]'	Formula
rtd	option_tick_history_tws	TICK_ID		Formula
rtd	option_tick_history_tws	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	OPTIONS_TWS	REQ	=S tik!'id[TICK_ID]?req?[CODE]'	Formula
RTD	OPTIONS_TWS	TICK_ID		Formula
RTD	OPTIONS_TWS	CODE		PK
RTD	OPTION_DAY_HISTORY_TWS	REQ	=S tik!'id[TICK_ID]?req?[CODE]'	Formula
RTD	OPTION_DAY_HISTORY_TWS	TICK_ID		Formula
RTD	OPTION_DAY_HISTORY_TWS	CODE		PK
RTD	OPTION_DAY_HISTORY_TWS	DATE	=Date()	PK
RTD	OPTION_TICK_HISTORY_TWS	REQ	=S tik!'id[TICK_ID]?req?[CODE]'	Formula
RTD	OPTION_TICK_HISTORY_TWS	TICK_ID		Formula
RTD	OPTION_TICK_HISTORY_TWS	ID		PK, IDENTITY

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.OptionsTWS

The table contains the last values of option data from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
Req	=S tiklid[TickId]?req?[Code]'	Formula
TickId		Formula
Code		PK
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Last	=S tiklid[TickId]?last	
LastSize	=S tiklid[TickId]?lastSize	
Bid	=S tiklid[TickId]?bid	
Ask	=S tiklid[TickId]?ask	
BidSize	=S tiklid[TickId]?bidSize	
AskSize	=S tiklid[TickId]?askSize	
High	=S tiklid[TickId]?high	
Low	=S tiklid[TickId]?low	
Close	=S tiklid[TickId]?close	
Volume	=S tiklid[TickId]?volume	
UnderlyingPrice	=S tiklid[TickId]?modelUndPrice	
ModelPrice	=S tiklid[TickId]?modelPrice	
ImpliedVol	=S tiklid[TickId]?modelVolatility	
BidImpliedVol	=S tiklid[TickId]?bidImpliedVol	
AskImpliedVol	=S tiklid[TickId]?askImpliedVol	
LastImpliedVol	=S tiklid[TickId]?lastImpliedVol	
BidDelta	=S tiklid[TickId]?bidDelta	
AskDelta	=S tiklid[TickId]?askDelta	
LastDelta	=S tiklid[TickId]?lastDelta	
Delta	=S tiklid[TickId]?modelDelta	
Gamma	=S tiklid[TickId]?modelGamma	
Theta	=S tiklid[TickId]?modelTheta	
Vega	=S tiklid[TickId]?modelVega	
pvDividend	=S tiklid[TickId]?pvDividend	
LastUpdateTimeStamp		

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rtd.OptionDayHistoryTWS

The table contains day history of option data from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
Req	=S tiklid[TickId]?req?[Code]'	Formula
TickId		Formula
Code		PK
Date	=Date()	PK
Time	=Time()	
Last	=S tiklid[TickId]?last	
LastSize	=S tiklid[TickId]?lastSize	
Bid	=S tiklid[TickId]?bid	
Ask	=S tiklid[TickId]?ask	
BidSize	=S tiklid[TickId]?bidSize	
AskSize	=S tiklid[TickId]?askSize	
High	=S tiklid[TickId]?high	
Low	=S tiklid[TickId]?low	
Close	=S tiklid[TickId]?close	
Volume	=S tiklid[TickId]?volume	
UnderlyingPrice	=S tiklid[TickId]?modelUndPrice	
ModelPrice	=S tiklid[TickId]?modelPrice	
ImpliedVol	=S tiklid[TickId]?modelVolatility	
BidImpliedVol	=S tiklid[TickId]?bidImpliedVol	
AskImpliedVol	=S tiklid[TickId]?askImpliedVol	
LastImpliedVol	=S tiklid[TickId]?lastImpliedVol	
BidDelta	=S tiklid[TickId]?bidDelta	
AskDelta	=S tiklid[TickId]?askDelta	
LastDelta	=S tiklid[TickId]?lastDelta	

Delta	=S tiklid[TickId]?modelDelta	
Gamma	=S tiklid[TickId]?modelGamma	
Theta	=S tiklid[TickId]?modelTheta	
Vega	=S tiklid[TickId]?modelVega	
pvDividend	=S tiklid[TickId]?pvDividend	
LastUpdateTimeStamp		

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rtd.OptionTickHistoryTWS

The table contains tick history of option data from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
Req	=S tik!'id[TickId]?req?[Code]'	Formula
TickId		Formula
ID		PK, IDENTITY
Code		
DateTime	=DateTime()	
Date	=Date()	
Time	=Time()	
Last	=S tiklid[TickId]?last	
LastSize	=S tiklid[TickId]?lastSize	
Bid	=S tiklid[TickId]?bid	
Ask	=S tiklid[TickId]?ask	
BidSize	=S tiklid[TickId]?bidSize	
AskSize	=S tiklid[TickId]?askSize	
High	=S tiklid[TickId]?high	
Low	=S tiklid[TickId]?low	
Close	=S tiklid[TickId]?close	
Volume	=S tiklid[TickId]?volume	
UnderlyingPrice	=S tiklid[TickId]?modelUndPrice	
ModelPrice	=S tiklid[TickId]?modelPrice	
ImpliedVol	=S tiklid[TickId]?modelVolatility	
BidImpliedVol	=S tiklid[TickId]?bidImpliedVol	
AskImpliedVol	=S tiklid[TickId]?askImpliedVol	
LastImpliedVol	=S tiklid[TickId]?lastImpliedVol	
BidDelta	=S tiklid[TickId]?bidDelta	
AskDelta	=S tiklid[TickId]?askDelta	
LastDelta	=S tiklid[TickId]?lastDelta	
Delta	=S tiklid[TickId]?modelDelta	
Gamma	=S tiklid[TickId]?modelGamma	
Theta	=S tiklid[TickId]?modelTheta	
Vega	=S tiklid[TickId]?modelVega	
pvDividend	=S tiklid[TickId]?pvDividend	

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[rtd.options_tws](#)

The table contains the last values of option data from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
REQ	=S tik!id[TICK_ID]?req?[CODE]'	Formula
TICK_ID		Formula
CODE		PK
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
LAST	=S tik!id[TICK_ID]?last	
LAST_SIZE	=S tik!id[TICK_ID]?lastSize	
BID	=S tik!id[TICK_ID]?bid	
ASK	=S tik!id[TICK_ID]?ask	
BID_SIZE	=S tik!id[TICK_ID]?bidSize	
ASK_SIZE	=S tik!id[TICK_ID]?askSize	
HIGH	=S tik!id[TICK_ID]?high	
LOW	=S tik!id[TICK_ID]?low	
CLOSE	=S tik!id[TICK_ID]?close	
VOLUME	=S tik!id[TICK_ID]?volume	
UNDERLYING_PRICE	=S tik!id[TICK_ID]?modelUndPrice	
MODEL_PRICE	=S tik!id[TICK_ID]?modelPrice	
IMPLIED_VOL	=S tik!id[TICK_ID]?modelVolatility	
BID_IMPLIED_VOL	=S tik!id[TICK_ID]?bidImpliedVol	
ASK_IMPLIED_VOL	=S tik!id[TICK_ID]?askImpliedVol	
LAST_IMPLIED_VOL	=S tik!id[TICK_ID]?lastImpliedVol	
BID_DELTA	=S tik!id[TICK_ID]?bidDelta	
ASK_DELTA	=S tik!id[TICK_ID]?askDelta	
LAST_DELTA	=S tik!id[TICK_ID]?lastDelta	
DELTA	=S tik!id[TICK_ID]?modelDelta	
GAMMA	=S tik!id[TICK_ID]?modelGamma	
THETA	=S tik!id[TICK_ID]?modelTheta	
VEGA	=S tik!id[TICK_ID]?modelVega	
PV_DIVIDEND	=S tik!id[TICK_ID]?pvDividend	
LAST_UPDATE_TIMESTAMP		

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[rtd.option_day_history_tws](#)

The table contains day history of option data from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
REQ	=S tik!id[TICK_ID]?req?[CODE]'	Formula
TICK_ID		Formula
CODE		PK
DATE	=Date()	PK
TIME	=Time()	
LAST	=S tik!id[TICK_ID]?last	
LAST_SIZE	=S tik!id[TICK_ID]?lastSize	
BID	=S tik!id[TICK_ID]?bid	
ASK	=S tik!id[TICK_ID]?ask	
BID_SIZE	=S tik!id[TICK_ID]?bidSize	
ASK_SIZE	=S tik!id[TICK_ID]?askSize	
HIGH	=S tik!id[TICK_ID]?high	
LOW	=S tik!id[TICK_ID]?low	
CLOSE	=S tik!id[TICK_ID]?close	
VOLUME	=S tik!id[TICK_ID]?volume	
UNDERLYING_PRICE	=S tik!id[TICK_ID]?modelUndPrice	
MODEL_PRICE	=S tik!id[TICK_ID]?modelPrice	
IMPLIED_VOL	=S tik!id[TICK_ID]?modelVolatility	
BID_IMPLIED_VOL	=S tik!id[TICK_ID]?bidImpliedVol	
ASK_IMPLIED_VOL	=S tik!id[TICK_ID]?askImpliedVol	
LAST_IMPLIED_VOL	=S tik!id[TICK_ID]?lastImpliedVol	
BID_DELTA	=S tik!id[TICK_ID]?bidDelta	
ASK_DELTA	=S tik!id[TICK_ID]?askDelta	
LAST_DELTA	=S tik!id[TICK_ID]?lastDelta	

DELTA	=S tik!id[TICK_ID]?modelDelta	
GAMMA	=S tik!id[TICK_ID]?modelGamma	
THETA	=S tik!id[TICK_ID]?modelTheta	
VEGA	=S tik!id[TICK_ID]?modelVega	
PV_DIVIDEND	=S tik!id[TICK_ID]?pvDividend	
LAST_UPDATE_TIMESTAMP		

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rtd.option_tick_history_tws

The table contains tick history of option data from InteractiveBrokers Trader Workstation (TWS).

COLUMN_NAME	RTD_FORMULA	COMMENT
REQ	=S tik!id[TICK_ID]?req?[CODE]'	Formula
TICK_ID		Formula
ID		PK, IDENTITY
CODE		
DATETIME	=DateTime()	
DATE	=Date()	
TIME	=Time()	
LAST	=S tik!id[TICK_ID]?last	
LAST_SIZE	=S tik!id[TICK_ID]?lastSize	
BID	=S tik!id[TICK_ID]?bid	
ASK	=S tik!id[TICK_ID]?ask	
BID_SIZE	=S tik!id[TICK_ID]?bidSize	
ASK_SIZE	=S tik!id[TICK_ID]?askSize	
HIGH	=S tik!id[TICK_ID]?high	
LOW	=S tik!id[TICK_ID]?low	
CLOSE	=S tik!id[TICK_ID]?close	
VOLUME	=S tik!id[TICK_ID]?volume	
UNDERLYING_PRICE	=S tik!id[TICK_ID]?modelUndPrice	
MODEL_PRICE	=S tik!id[TICK_ID]?modelPrice	
IMPLIED_VOL	=S tik!id[TICK_ID]?modelVolatility	
BID_IMPLIED_VOL	=S tik!id[TICK_ID]?bidImpliedVol	
ASK_IMPLIED_VOL	=S tik!id[TICK_ID]?askImpliedVol	
LAST_IMPLIED_VOL	=S tik!id[TICK_ID]?lastImpliedVol	
BID_DELTA	=S tik!id[TICK_ID]?bidDelta	
ASK_DELTA	=S tik!id[TICK_ID]?askDelta	
LAST_DELTA	=S tik!id[TICK_ID]?lastDelta	
DELTA	=S tik!id[TICK_ID]?modelDelta	
GAMMA	=S tik!id[TICK_ID]?modelGamma	
THETA	=S tik!id[TICK_ID]?modelTheta	
VEGA	=S tik!id[TICK_ID]?modelVega	
PV_DIVIDEND	=S tik!id[TICK_ID]?pvDividend	

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Option Data from Yahoo! Finance

Overview

The RTD database contains preconfigured tables for getting option data from Yahoo! Finance using [RealTimeToExcel](#).

These data are available and activated by default. Just edit required symbols in the OptionListYahoo table.

Yahoo! Finance data are delayed.

Use <http://finance.yahoo.com/> to find option tickers.

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	OptionListYahoo		
rtd	OptionsYahoo	SELECT Code FROM rtd.OptionListYahoo	
rtd	OptionDayHistoryYahoo	SELECT Code FROM rtd.OptionListYahoo	
rtd	OptionTickHistoryYahoo	SELECT Code FROM rtd.OptionListYahoo	1

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	options_yahoo	SELECT CODE FROM rtd.option_list_yahoo	
rtd	option_day_history_yahoo	SELECT CODE FROM rtd.option_list_yahoo	
rtd	option_list_yahoo		
rtd	option_tick_history_yahoo	SELECT CODE FROM rtd.option_list_yahoo	1

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	OPTION_LIST_YAHOO		
RTD	OPTIONS_YAHOO	SELECT CODE FROM RTD.OPTION_LIST_YAHOO	
RTD	OPTION_DAY_HISTORY_YAHOO	SELECT CODE FROM RTD.OPTION_LIST_YAHOO	
RTD	OPTION_TICK_HISTORY_YAHOO	SELECT CODE FROM RTD.OPTION_LIST_YAHOO	1

* Click on the table name to go to the table description.

Task Table Examples

rtd.OptionListYahoo for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
.AAPL150117C500
.AAPL150117C600
AAPL150117P00500000
AAPL150117P00600000

rtd.option_list_yahoo for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
.AAPL150117C500
.AAPL150117C600
AAPL150117P00500000
AAPL150117P00600000

Task tables can contain option codes in thinkDesktop and Yahoo! Finance formats as shown above.

The result OptionCode column in data tables contains option codes in Yahoo! Finance format.

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	OptionsYahoo	Code		PK
rtd	OptionDayHistoryYahoo	DateTime	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdate")	Formula
rtd	OptionDayHistoryYahoo	Code		PK
rtd	OptionDayHistoryYahoo	Date	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdateDate")	PK
rtd	OptionTickHistoryYahoo	ID		PK, IDENTITY

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	options_yahoo	CODE		PK
rtd	option_day_history_yahoo	DATETIME	=RTD("gartle.rtd","YahooFinanceOptions",[CODE],"rtd_LastUpdate")	Formula
rtd	option_day_history_yahoo	CODE		PK
rtd	option_day_history_yahoo	DATE	=RTD("gartle.rtd","YahooFinanceOptions",[CODE],"rtd_LastUpdateDate")	PK
rtd	option_tick_history_yahoo	ID		PK, IDENTITY

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	OPTIONS_YAHOO	CODE		PK
RTD	OPTION_DAY_HISTORY_YAHOO	DATETIME	=RTD("gartle.rtd","YahooFinanceOptions",[CODE],"rtd_LastUpdate")	Formula
RTD	OPTION_DAY_HISTORY_YAHOO	CODE		PK
RTD	OPTION_DAY_HISTORY_YAHOO	DATE	=RTD("gartle.rtd","YahooFinanceOptions",[CODE],"rtd_LastUpdateDate")	PK
RTD	OPTION_TICK_HISTORY_YAHOO	ID		PK, IDENTITY

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.OptionsYahoo

The table contains the last values of option data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
Code		PK
OptionCode	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"OptionCode")	
Symbol	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Symbol")	
DateTime	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdate")	
Date	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdateDate")	
Time	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdateTime")	
OptionSymbol	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"OptionSymbol")	
ExpDate	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Exp")	
Strike	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Strike")	
Type	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Type")	
Last	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Last")	
Change	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Change")	
PercentChange	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"ChangeInPercent")	
Mark	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Mark")	
Bid	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Bid")	
Ask	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Ask")	
Volume	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Volume")	
OpenInt	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"OpenInt")	
LastUpdateTimeStamp		

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rtd.OptionDayHistoryYahoo

The table contains day history of option data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
DateTime	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdate")	Formula
Code		PK
OptionCode	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"OptionCode")	
Symbol	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"Symbol")	
Date	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdateDate")	PK
Time	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"rtd_LastUpdateTime")	
OptionSymbol	=RTD("gartle.rtd","YahooFinanceOptions",[Code],"OptionSymbol")	

ExpDate	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Exp")	
Strike	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Strike")	
Type	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Type")	
Last	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Last")	
Change	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Change")	
PercentChange	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"ChangeInPercent")	
Mark	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Mark")	
Bid	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Bid")	
Ask	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Ask")	
Volume	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Volume")	
OpenInt	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"OpenInt")	
LastUpdateTimeStamp		

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rtd.OptionTickHistoryYahoo

The table contains tick history of option data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
Code		
OptionCode	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"OptionCode")	
Symbol	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Symbol")	
DateTime	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"rtd_LastUpdate")	
Date	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"rtd_LastUpdateDate")	
Time	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"rtd_LastUpdateTime")	
OptionSymbol	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"OptionSymbol")	
ExpDate	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Exp")	
Strike	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Strike")	
Type	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Type")	
Last	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Last")	
Change	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Change")	
PercentChange	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"ChangeInPercent")	
Mark	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Mark")	
Bid	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Bid")	
Ask	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Ask")	
Volume	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"Volume")	
OpenInt	=RTD("gartle.rtd", "YahooFinanceOptions",[Code],"OpenInt")	

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

rtd.options_yahoo

The table contains the last values of option data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
CODE		PK
OPTION_CODE	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"OptionCode")	
SYMBOL	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Symbol")	
DATETIME	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"rtd_LastUpdate")	
DATE	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"rtd_LastUpdateDate")	
TIME	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"rtd_LastUpdateTime")	
OPTION_SYMBOL	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"OptionSymbol")	
EXP_DATE	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Exp")	
STRIKE	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Strike")	
TYPE	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Type")	
LAST	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Last")	
CHANGE	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"ChangeInPercent")	
MARK	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Mark")	
BID	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Bid")	
ASK	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Ask")	
VOLUME	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"Volume")	
OPEN_INT	=RTD("gartle.rtd", "YahooFinanceOptions",[CODE],"OpenInt")	
LAST_UPDATE_TIMESTAMP		

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rtd.option_day_history_yahoo

The table contains day history of option data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
DATETIME	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"rtd_LastUpdate")	Formula
CODE		PK
OPTION_CODE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"OptionCode")	
SYMBOL	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Symbol")	
DATE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"rtd_LastUpdateDate")	PK
TIME	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"rtd_LastUpdateTime")	
OPTION_SYMBOL	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"OptionSymbol")	
EXP_DATE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Exp")	
STRIKE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Strike")	
TYPE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Type")	
LAST	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Last")	
CHANGE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"ChangeInPercent")	
MARK	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Mark")	
BID	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Bid")	
ASK	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Ask")	
VOLUME	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Volume")	
OPEN_INT	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"OpenInt")	
LAST_UPDATE_TIMESTAMP		

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rtd.option_tick_history_yahoo

The table contains tick history of option data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
ID		PK, IDENTITY
CODE		
OPTION_CODE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"OptionCode")	
SYMBOL	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Symbol")	
DATETIME	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"rtd_LastUpdate")	
DATE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"rtd_LastUpdateDate")	
TIME	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"rtd_LastUpdateTime")	
OPTION_SYMBOL	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"OptionSymbol")	
EXP_DATE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Exp")	
STRIKE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Strike")	
TYPE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Type")	
LAST	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Last")	
CHANGE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Change")	
PERCENT_CHANGE	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"ChangeInPercent")	
MARK	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Mark")	
BID	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Bid")	
ASK	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Ask")	
VOLUME	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"Volume")	
OPEN_INT	=RTD("gartle.rtd",,"YahooFinanceOptions",[CODE],"OpenInt")	

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Stock Data from Yahoo! Finance

Overview

The RTD database contains preconfigured tables for getting static stock data from Yahoo! Finance using [RealTimeToExcel](#).

These data are available and activated by default. Just edit required symbols in the QuoteListStocks table.

Use <http://finance.yahoo.com/> to find tickers.

Real-Time Data Tables

Table Configurations

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	StocksYahoo	SELECT Code AS Symbol FROM rtd.QuoteListStocks	

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
rtd	stocks_yahoo	SELECT CODE AS SYMBOL FROM rtd.quote_list_stocks	

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	LOAD_CODE	IS_HISTORY
RTD	STOCKS_YAHOO	SELECT CODE AS SYMBOL FROM RTD.QUOTE_LIST_STOCKS	

* Click on the table name to go to the table description.

Task Table Examples

rtd.QuoteListStocks for Microsoft SQL Server and Microsoft SQL Server Compact:

Code
AAPL
GOOG

quote_list_stocks for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB:

CODE
AAPL
GOOG

Use <http://finance.yahoo.com/> to find tickers.

Primary Key Columns

Microsoft SQL Server and Microsoft SQL Server Compact:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	StocksYahoo	Symbol		PK

MySQL and MariaDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
rtd	stocks_yahoo	SYMBOL		PK

Oracle Database, IBM DB2, and NuoDB:

TABLE_SCHEMA	TABLE_NAME	COLUMN_NAME	RTD_FORMULA	COMMENT
RTD	STOCKS_YAHOO	SYMBOL		PK

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Real-Time Formulas for Microsoft SQL Server and Microsoft SQL Server Compact

rtd.StocksYahoo

The table contains stock data from Yahoo! Finance.

COLUMN_NAME	RTD_FORMULA	COMMENT
Symbol		PK
CompanyName	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"CompanyName")	
Sector	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"Sector")	
Industry	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"Industry")	
FullTimeEmployees	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"FullTimeEmployees")	
TradeStart	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"Start")	
TradeEnd	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"End")	
LastUpdateTimeStamp		

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Real-Time Formulas for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

The table contains stock data from Yahoo! Finance.

rtd.stocks_yahoo

COLUMN_NAME	RTD_FORMULA	COMMENT
SYMBOL		PK
COMPANY_NAME	=RTD("gartle.rtd",,"YahooFinanceStocks",[SYMBOL],"CompanyName")	
SECTOR	=RTD("gartle.rtd",,"YahooFinanceStocks",[SYMBOL],"Sector")	
INDUSTRY	=RTD("gartle.rtd",,"YahooFinanceStocks",[SYMBOL],"Industry")	
FULLTIME_EMPLOYEES	=RTD("gartle.rtd",,"YahooFinanceStocks",[SYMBOL],"FullTimeEmployees")	
TRADE_START	=RTD("gartle.rtd",,"YahooFinanceStocks",[SYMBOL],"Start")	
TRADE_END	=RTD("gartle.rtd",,"YahooFinanceStocks",[SYMBOL],"End")	
LAST_UPDATE_TIMESTAMP		

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Real-Time Views for Microsoft Excel

Overview

RealTimeToDB allows updating databases with real-time data.

RealTimeToExcel, a companion product, allows getting real-time data from databases into Microsoft Excel.

The RTD database contains views with Excel formulas for every real-time data table of the RTD database.

Also you may copy formulas using **Copy** or (Copy) **Transposed** links and insert formulas into Microsoft Excel.

Comma is used as formula parameter separator. Change it to semicolon, if the semicolon is used as a separator in your version of Microsoft Excel.

Adapt the data provider name to your database connections.

For example, change rtd-mysql to rtd-ora if you use Oracle Database.

RealTimeToExcel has predefined data providers for every database server:

- **rtd-mssql** for Microsoft SQL Server.
- **rtd-sqlce** for Microsoft SQL Server Compact.
- **rtd-mysql** for Oracle MySQL or SkySQL MariaDB.
- **rtd-ora** for Oracle Database.
- **rtd-db2** for IBM DB2.
- **rtd-nuodb** for Nuodb.

Edit connection properties for your database in the data provider configuration file in the **DataProviders** directory.

In addition, **SaveToDB**, the second companion product, allows configuring Microsoft Excel formulas using database views.

If you have SaveToDB add-in installed, just open the required view, and SaveToDB converts text formulas from view to Excel ones.

Preconfigured real-time data views:

SQL Server and SQL Server Compact	MySQL and MariaDB	Oracle Database, IBM DB2, and Nuodb
FundamentalsDayHistoryYahoo	fundamentals_day_history_yahoo	FUNDAMENTALS_DAY_HISTORY_YAHOO
FundamentalsYahoo	fundamentals_yahoo	FUNDAMENTALS_YAHOO
OptionDayHistoryTOS	option_day_history_tos	OPTION_DAY_HISTORY_TOS
OptionDayHistoryTWS	option_day_history_tws	OPTION_DAY_HISTORY_TWS
OptionDayHistoryYahoo	option_day_history_yahoo	OPTION_DAY_HISTORY_YAHOO
OptionsTOS	options_tos	OPTIONS_TOS
OptionsTWS	options_tws	OPTIONS_TWS
OptionsYahoo	options_yahoo	OPTIONS_YAHOO
QuoteDayHistoryES	quote_day_history_es	QUOTE_DAY_HISTORY_ES
QuoteDayHistoryTOS	quote_day_history_tos	QUOTE_DAY_HISTORY_TOS
QuoteDayHistoryTWS	quote_day_history_tws	QUOTE_DAY_HISTORY_TWS
QuoteDayHistoryVFX	quote_day_history_vfx	QUOTE_DAY_HISTORY_VFX
QuoteDayHistoryYahoo	quote_day_history_yahoo	QUOTE_DAY_HISTORY_YAHOO
QuotesES	quotes_es	QUOTES_ES
QuotesTOS	quotes_tos	QUOTES_TOS
QuotesTWS	quotes_tws	QUOTES_TWS
QuotesVFX	quotes_vfx	QUOTES_VFX
QuotesYahoo	quotes_yahoo	QUOTES_YAHOO
StocksYahoo	stocks_yahoo	STOCKS_YAHOO

* Click on the view name to go to the view description.

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Real-Time Views for Microsoft SQL Server and Microsoft SQL Server Compact

FundamentalsDayHistoryYahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
LastTradeTime	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"LastTradeTime")
Last	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"Last")
Change	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PercentChange")
Open	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"Low")
Volume	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"Volume")
DaysRange	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"DaysRange")
PrevClose	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PrevClose")
ShortRatio	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"ShortRatio")
YearHigh	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"YearHigh")
YearLow	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"YearLow")
YearRange	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"YearRange")
ChangeFromYearHigh	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"ChangeFromYearHigh")
ChangeFromYearLow	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"ChangeFromYearLow")
PercentChangeFromYearHigh	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PercentChangeFromYearHigh")
PercentChangeFromYearLow	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PercentChangeFromYearLow")
MA50	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"MA50")
MA200	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"MA200")
ChangeFromMA50	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"ChangeFromMA50")
ChangeFromMA200	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"ChangeFromMA200")
PercentChangeFromMA50	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PercentChangeFromMA50")
PercentChangeFromMA200	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PercentChangeFromMA200")
AverageDailyVolume	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"AverageDailyVolume")
OneYearTargetPrice	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"OneYearTargetPrice")
PE	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PE")
PEG	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PEG")
EPSEstCurrentYear	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"EPSEstCurrentYear")
EPSEstNextQuarter	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"EPSEstNextQuarter")
EPSEstNextYear	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"EPSEstNextYear")
EarningsShare	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"EarningsShare")
MarketCap	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"MarketCap")
DividendYield	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"DividendYield")
DividendShare	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"DividendShare")
ExDividendDate	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"ExDividendDate")
DividendPayDate	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"DividendPayDate")
BookValue	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"BookValue")
PriceBook	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PriceBook")
PriceSales	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PriceSales")
PriceEPSEstCurrentYear	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PriceEPSEstCurrentYear")
PriceEPSEstNextYear	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"PriceEPSEstNextYear")
EBITDA	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"EBITDA")
CompanyName	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"CompanyName")
StockExchange	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"StockExchange")
Commission	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"Commission")
Notes	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"Notes")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mssql","FundamentalsDayHistoryYahoo",[Symbol],[Date],"RTD_LastMessage")

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FundamentalsYahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
LastTradeDate	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"LastTradeDate")
LastTradeTime	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"LastTradeTime")
Last	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"Last")
Change	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PercentChange")
Open	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"Open")
High	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"Low")
Volume	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"Volume")
DaysRange	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"DaysRange")
PrevClose	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PrevClose")
ShortRatio	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"ShortRatio")
YearHigh	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"YearHigh")
YearLow	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"YearLow")
YearRange	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"YearRange")
ChangeFromYearHigh	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"ChangeFromYearHigh")
ChangeFromYearLow	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"ChangeFromYearLow")
PercentChangeFromYearHigh	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PercentChangeFromYearHigh")
PercentChangeFromYearLow	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PercentChangeFromYearLow")
MA50	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"MA50")
MA200	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"MA200")
ChangeFromMA50	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"ChangeFromMA50")
ChangeFromMA200	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"ChangeFromMA200")
PercentChangeFromMA50	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PercentChangeFromMA50")
PercentChangeFromMA200	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PercentChangeFromMA200")
AverageDailyVolume	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"AverageDailyVolume")
OneYearTargetPrice	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"OneYearTargetPrice")
PE	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PE")
PEG	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PEG")
EPSEstCurrentYear	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"EPSEstCurrentYear")
EPSEstNextQuarter	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"EPSEstNextQuarter")
EPSEstNextYear	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"EPSEstNextYear")
EarningsShare	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"EarningsShare")
MarketCap	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"MarketCap")
DividendYield	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"DividendYield")
DividendShare	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"DividendShare")
ExDividendDate	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"ExDividendDate")
DividendPayDate	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"DividendPayDate")
BookValue	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"BookValue")
PriceBook	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PriceBook")
PriceSales	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PriceSales")
PriceEPSEstCurrentYear	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PriceEPSEstCurrentYear")
PriceEPSEstNextYear	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"PriceEPSEstNextYear")
EBITDA	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"EBITDA")
CompanyName	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"CompanyName")
StockExchange	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"StockExchange")
Commission	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"Commission")
Notes	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"Notes")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","FundamentalsYahoo",[Symbol],"RTD_LastMessage")

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OptionDayHistoryTOS

COLUMN_NAME	EXCEL FORMULA
Code	
Date	
Time	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Time")
Description	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Description")
Last	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Last")
Change	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Change")
PercentChange	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "PercentChange")
LastSize	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "LastSize")
LastX	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "LastX")
Mark	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Mark")
MarkChange	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "MarkChange")
MarkPercentChange	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "MarkPercentChange")
Bid	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Bid")
Ask	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Ask")
BidSize	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "BidSize")
AskSize	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "AskSize")
BidAskSize	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "BidAskSize")
BidX	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "BidX")
AskX	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "AskX")
Open	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Open")
High	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "High")
Low	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Low")
Close	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Close")
Volume	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Volume")
OpenInt	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "OpenInt")
ImpliedVol	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "ImpliedVol")
Delta	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Delta")
Gamma	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Gamma")
Theta	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Theta")
Vega	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Vega")
Rho	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Rho")
Extrinsic	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Extrinsic")
Intrinsic	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "Intrinsic")
ProbabilityITM	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "ProbabilityITM")
ProbabilityOTM	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "ProbabilityOTM")
ProbabilityTouch	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "ProbabilityTouch")
CoveredReturn	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "CoveredReturn")
MaxCoveredReturn	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "MaxCoveredReturn")
LastUpdateTimeStamp	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd", "rtd-mssql", "OptionDayHistoryTOS", [Code], [Date], "RTD_LastMessage")

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OptionDayHistoryTWS

COLUMN_NAME	EXCEL FORMULA
Code	
Date	
Time	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Time")
Last	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Last")
LastSize	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"LastSize")
Bid	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"AskSize")
High	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Low")
Close	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Volume")
UnderlyingPrice	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"UnderlyingPrice")
ModelPrice	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"ModelPrice")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"ImpliedVol")
BidImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"BidImpliedVol")
AskImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"AskImpliedVol")
LastImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"LastImpliedVol")
BidDelta	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"BidDelta")
AskDelta	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"AskDelta")
LastDelta	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"LastDelta")
Delta	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Delta")
Gamma	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Gamma")
Theta	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Theta")
Vega	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"Vega")
pvDividend	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"pvDividend")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryTWS",[Code],[Date],"RTD_LastMessage")

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OptionDayHistoryYahoo

COLUMN_NAME	EXCEL FORMULA
Code	
Date	
Time	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Time")
OptionCode	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"OptionCode")
Symbol	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Symbol")
OptionSymbol	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"OptionSymbol")
ExpDate	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"ExpDate")
Strike	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Strike")
Type	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Type")
Last	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Last")
Change	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"PercentChange")
Mark	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Mark")
Bid	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Ask")
Volume	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"OpenInt")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","OptionDayHistoryYahoo",[Code],[Date],"RTD_LastMessage")

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OptionsTOS

COLUMN_NAME	EXCEL FORMULA
Code	
Date	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Date")
Time	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Time")
Description	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Description")
Last	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Last")
Change	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"PercentChange")
LastSize	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"LastSize")
LastX	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"LastX")
Mark	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Mark")
MarkChange	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"MarkChange")
MarkPercentChange	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"MarkPercentChange")
Bid	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"AskSize")
BidAskSize	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"BidAskSize")
BidX	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"BidX")
AskX	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"AskX")
Open	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Open")
High	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Low")
Close	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"OpenInt")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"ImpliedVol")
Delta	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Delta")
Gamma	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Gamma")
Theta	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Theta")
Vega	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Vega")
Rho	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Rho")
Extrinsic	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Extrinsic")
Intrinsic	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"Intrinsic")
ProbabilityITM	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"ProbabilityITM")
ProbabilityOTM	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"ProbabilityOTM")
ProbabilityTouch	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"ProbabilityTouch")
CoveredReturn	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"CoveredReturn")
MaxCoveredReturn	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"MaxCoveredReturn")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","OptionsTOS",[Code],"RTD_LastMessage")

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OptionsTWS

COLUMN_NAME	EXCEL FORMULA
Code	
Date	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Date")
Time	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Time")
Last	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Last")
LastSize	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"LastSize")
Bid	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"AskSize")
High	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Low")
Close	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Volume")
UnderlyingPrice	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"UnderlyingPrice")
ModelPrice	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"ModelPrice")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"ImpliedVol")
BidImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"BidImpliedVol")
AskImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"AskImpliedVol")
LastImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"LastImpliedVol")
BidDelta	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"BidDelta")
AskDelta	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"AskDelta")
LastDelta	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"LastDelta")
Delta	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Delta")
Gamma	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Gamma")
Theta	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Theta")
Vega	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"Vega")
pVDividend	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"pVDividend")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","OptionsTWS",[Code],"RTD_LastMessage")

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OptionsYahoo

COLUMN_NAME	EXCEL FORMULA
Code	
Date	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Date")
Time	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Time")
OptionCode	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"OptionCode")
Symbol	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Symbol")
OptionSymbol	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"OptionSymbol")
ExpDate	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"ExpDate")
Strike	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Strike")
Type	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Type")
Last	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Last")
Change	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"PercentChange")
Mark	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Mark")
Bid	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Ask")
Volume	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"OpenInt")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","OptionsYahoo",[Code],"RTD_LastMessage")

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QuoteDayHistoryES

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Time")
Last	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Last")
Change	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Change")
PercentChange	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "PercentChange")
Bid	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Bid")
Ask	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Ask")
BidSize	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "BidSize")
AskSize	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "AskSize")
Open	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Open")
High	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "High")
Low	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Low")
Volume	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "Volume")
OpenInt	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "OpenInt")
TradePrice	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "TradePrice")
LastUpdateTimeStamp	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd", "rtd-mssql", "QuoteDayHistoryES",[Symbol],[Date], "RTD_LastMessage")

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QuoteDayHistoryTOS

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Time")
Description	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Description")
Last	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Last")
Change	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"PercentChange")
LastSize	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"LastSize")
LastX	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"LastX")
Mark	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Mark")
MarkChange	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"MarkChange")
MarkPercentChange	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"MarkPercentChange")
Bid	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"AskSize")
BidAskSize	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"BidAskSize")
BidX	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"BidX")
AskX	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"AskX")
StrengthMeter	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"StrengthMeter")
Open	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Low")
Close	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"OpenInt")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"ImpliedVol")
VolIndex	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"VolIndex")
FrontVol	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"FrontVol")
BackVol	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"BackVol")
WeightedBackVol	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"WeightedBackVol")
VolDiff	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"VolDiff")
PutCallRatio	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"PutCallRatio")
CallVolumeIndex	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"CallVolumeIndex")
PutVolumeIndex	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"PutVolumeIndex")
OptionVolumeIndex	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"OptionVolumeIndex")
FrontExpectedMove	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"FrontExpectedMove")
BackExpectedMove	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"BackExpectedMove")
ExpectedMoveDiff	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"ExpectedMoveDiff")
Beta	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Beta")
High52	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"High52")
Low52	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Low52")
PE	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"PE")
EPS	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"EPS")
MarketCap	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"MarketCap")
Shares	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"Shares")
DividendYield	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"DividendYield")
DividendShare	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"DividendShare")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","QuoteDayHistoryTOS",[Symbol],[Date],"RTD_LastMessage")

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QuoteDayHistoryTWS

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"Time")
Last	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"Last")
LastSize	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"LastSize")
Bid	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"Bid")
Ask	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"Ask")
BidSize	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"BidSize")
AskSize	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"AskSize")
High	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"Low")
Close	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"Close")
Volume	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryTWS",[Symbol],[Date],"RTD_LastMessage")

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QuoteDayHistoryVFX

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"Time")
Bid	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"Bid")
Ask	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"Ask")
Open	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"Low")
Close	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"Close")
Change	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"PercentChange")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryVFX",[Symbol],[Date],"RTD_LastMessage")

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QuoteDayHistoryYahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
LastTradeTime	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"LastTradeTime")
Last	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"Last")
Change	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"PercentChange")
Open	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"Low")
Volume	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mssql","QuoteDayHistoryYahoo",[Symbol],[Date],"RTD_LastMessage")

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QuotesES

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Date")
Time	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Time")
Last	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Last")
Change	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Change")
PercentChange	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "PercentChange")
Bid	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Bid")
Ask	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Ask")
BidSize	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "BidSize")
AskSize	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "AskSize")
Open	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Open")
High	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "High")
Low	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Low")
Volume	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "Volume")
OpenInt	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "OpenInt")
TradePrice	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "TradePrice")
LastUpdateTimeStamp	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd", "rtd-mssql", "QuotesES", [Symbol], "RTD_LastMessage")

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QuotesTOS

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Date")
Time	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Time")
Description	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Description")
Last	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Last")
Change	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"PercentChange")
LastSize	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"LastSize")
LastX	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"LastX")
Mark	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Mark")
MarkChange	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"MarkChange")
MarkPercentChange	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"MarkPercentChange")
Bid	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"AskSize")
BidAskSize	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"BidAskSize")
BidX	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"BidX")
AskX	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"AskX")
StrengthMeter	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"StrengthMeter")
Open	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Open")
High	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Low")
Close	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"OpenInt")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"ImpliedVol")
VolIndex	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"VolIndex")
FrontVol	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"FrontVol")
BackVol	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"BackVol")
WeightedBackVol	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"WeightedBackVol")
VolDiff	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"VolDiff")
PutCallRatio	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"PutCallRatio")
CallVolumeIndex	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"CallVolumeIndex")
PutVolumeIndex	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"PutVolumeIndex")
OptionVolumeIndex	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"OptionVolumeIndex")
FrontExpectedMove	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"FrontExpectedMove")
BackExpectedMove	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"BackExpectedMove")
ExpectedMoveDiff	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"ExpectedMoveDiff")
Beta	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Beta")
High52	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"High52")
Low52	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Low52")
PE	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"PE")
EPS	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"EPS")
MarketCap	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"MarketCap")
Shares	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"Shares")
DividendYield	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"DividendYield")
DividendShare	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"DividendShare")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","QuotesTOS",[Symbol],"RTD_LastMessage")

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QuotesTWS

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Date")
Time	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Time")
Last	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Last")
LastSize	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"LastSize")
Bid	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"AskSize")
High	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Low")
Close	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","QuotesTWS",[Symbol],"RTD_LastMessage")

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QuotesVFX

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Date")
Time	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Time")
Bid	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Ask")
Open	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Open")
High	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Low")
Close	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Close")
Change	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"PercentChange")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","QuotesVFX",[Symbol],"RTD_LastMessage")

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QuotesYahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
LastTradeDate	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"LastTradeDate")
LastTradeTime	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"LastTradeTime")
Last	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"Last")
Change	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"PercentChange")
Open	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"Open")
High	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"High")
Low	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"Low")
Volume	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mssql","QuotesYahoo",[Symbol],"RTD_LastMessage")

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StocksYahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
CompanyName	=RTD("gartle.rtd",,"rtd-mssql","StocksYahoo",[Symbol],"CompanyName")
Sector	=RTD("gartle.rtd",,"rtd-mssql","StocksYahoo",[Symbol],"Sector")
Industry	=RTD("gartle.rtd",,"rtd-mssql","StocksYahoo",[Symbol],"Industry")
FullTimeEmployees	=RTD("gartle.rtd",,"rtd-mssql","StocksYahoo",[Symbol],"FullTimeEmployees")
TradeStart	=RTD("gartle.rtd",,"rtd-mssql","StocksYahoo",[Symbol],"TradeStart")
TradeEnd	=RTD("gartle.rtd",,"rtd-mssql","StocksYahoo",[Symbol],"TradeEnd")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mssql","StocksYahoo",[Symbol],"LastUpdateTimeStamp")

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Real-Time Views for MySQL, MariaDB, Oracle Database, IBM DB2, and NuoDB

fundamentals_day_history_yahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
LastTradeTime	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"LastTradeTime")
Last	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"Last")
Change	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PercentChange")
Open	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"Low")
Volume	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"Volume")
DaysRange	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"DaysRange")
PrevClose	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PrevClose")
ShortRatio	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"ShortRatio")
YearHigh	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"YearHigh")
YearLow	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"YearLow")
YearRange	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"YearRange")
ChangeFromYearHigh	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"ChangeFromYearHigh")
ChangeFromYearLow	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"ChangeFromYearLow")
PercentChangeFromYearHigh	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PercentChangeFromYearHigh")
PercentChangeFromYearLow	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PercentChangeFromYearLow")
MA50	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"MA50")
MA200	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"MA200")
ChangeFromMA50	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"ChangeFromMA50")
ChangeFromMA200	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"ChangeFromMA200")
PercentChangeFromMA50	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PercentChangeFromMA50")
PercentChangeFromMA200	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PercentChangeFromMA200")
AverageDailyVolume	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"AverageDailyVolume")
OneYearTargetPrice	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"OneYearTargetPrice")
PE	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PE")
PEG	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PEG")
EPSEstCurrentYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"EPSEstCurrentYear")
EPSEstNextQuarter	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"EPSEstNextQuarter")
EPSEstNextYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"EPSEstNextYear")
EarningsShare	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"EarningsShare")
MarketCap	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"MarketCap")
DividendYield	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"DividendYield")
DividendShare	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"DividendShare")
ExDividendDate	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"ExDividendDate")
DividendPayDate	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"DividendPayDate")
BookValue	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"BookValue")
PriceBook	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PriceBook")
PriceSales	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PriceSales")
PriceEPSEstCurrentYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PriceEPSEstCurrentYear")
PriceEPSEstNextYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"PriceEPSEstNextYear")
EBITDA	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"EBITDA")
CompanyName	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"CompanyName")
StockExchange	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"StockExchange")
Commission	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"Commission")
Notes	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"Notes")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","fundamentals_day_history_yahoo",[Symbol],[Date],"RTD_LastMessage")

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fundamentals_yahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
LastTradeDate	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"LastTradeDate")
LastTradeTime	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"LastTradeTime")
Last	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"Last")
Change	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PercentChange")
Open	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"Open")
High	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"High")
Low	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"Low")
Volume	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"Volume")
DaysRange	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"DaysRange")
PrevClose	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PrevClose")
ShortRatio	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"ShortRatio")
YearHigh	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"YearHigh")
YearLow	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"YearLow")
YearRange	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"YearRange")
ChangeFromYearHigh	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"ChangeFromYearHigh")
ChangeFromYearLow	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"ChangeFromYearLow")
PercentChangeFromYearHigh	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PercentChangeFromYearHigh")
PercentChangeFromYearLow	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PercentChangeFromYearLow")
MA50	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"MA50")
MA200	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"MA200")
ChangeFromMA50	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"ChangeFromMA50")
ChangeFromMA200	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"ChangeFromMA200")
PercentChangeFromMA50	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PercentChangeFromMA50")
PercentChangeFromMA200	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PercentChangeFromMA200")
AverageDailyVolume	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"AverageDailyVolume")
OneYearTargetPrice	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"OneYearTargetPrice")
PE	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PE")
PEG	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PEG")
EPSEstCurrentYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"EPSEstCurrentYear")
EPSEstNextQuarter	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"EPSEstNextQuarter")
EPSEstNextYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"EPSEstNextYear")
EarningsShare	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"EarningsShare")
MarketCap	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"MarketCap")
DividendYield	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"DividendYield")
DividendShare	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"DividendShare")
ExDividendDate	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"ExDividendDate")
DividendPayDate	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"DividendPayDate")
BookValue	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"BookValue")
PriceBook	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PriceBook")
PriceSales	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PriceSales")
PriceEPSEstCurrentYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PriceEPSEstCurrentYear")
PriceEPSEstNextYear	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"PriceEPSEstNextYear")
EBITDA	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"EBITDA")
CompanyName	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"CompanyName")
StockExchange	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"StockExchange")
Commission	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"Commission")
Notes	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"Notes")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","fundamentals_yahoo",[Symbol],"RTD_LastMessage")

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option_day_history_tos

COLUMN_NAME	EXCEL FORMULA
Code	
Date	
Time	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Time")
Description	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Description")
Last	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Last")
Change	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"PercentChange")
LastSize	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"LastSize")
LastX	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"LastX")
Mark	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Mark")
MarkChange	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"MarkChange")
MarkPercentChange	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"MarkPercentChange")
Bid	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"AskSize")
BidAskSize	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"BidAskSize")
BidX	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"BidX")
AskX	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"AskX")
Open	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Open")
High	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"High")
Low	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Low")
Close	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"OpenInt")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"ImpliedVol")
Delta	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Delta")
Gamma	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Gamma")
Theta	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Theta")
Vega	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Vega")
Rho	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Rho")
Extrinsic	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Extrinsic")
Intrinsic	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"Intrinsic")
ProbabilityITM	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"ProbabilityITM")
ProbabilityOTM	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"ProbabilityOTM")
ProbabilityTouch	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"ProbabilityTouch")
CoveredReturn	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"CoveredReturn")
MaxCoveredReturn	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"MaxCoveredReturn")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mysql","option_day_history_tos",[Code],[Date],"RTD_LastMessage")

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option_day_history_tws

COLUMN_NAME	EXCEL FORMULA
Code	
Date	
Time	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Time")
Last	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Last")
LastSize	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "LastSize")
Bid	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Bid")
Ask	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Ask")
BidSize	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "BidSize")
AskSize	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "AskSize")
High	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "High")
Low	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Low")
Close	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Close")
Volume	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Volume")
UnderlyingPrice	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "UnderlyingPrice")
ModelPrice	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "ModelPrice")
ImpliedVol	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "ImpliedVol")
BidImpliedVol	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "BidImpliedVol")
AskImpliedVol	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "AskImpliedVol")
LastImpliedVol	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "LastImpliedVol")
BidDelta	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "BidDelta")
AskDelta	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "AskDelta")
LastDelta	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "LastDelta")
Delta	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Delta")
Gamma	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Gamma")
Theta	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Theta")
Vega	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "Vega")
pVDividend	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "pVDividend")
LastUpdateTimeStamp	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_tws", [Code], [Date], "RTD_LastMessage")

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option_day_history_yahoo

COLUMN_NAME	EXCEL FORMULA
Code	
Date	
Time	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Time")
OptionCode	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "OptionCode")
Symbol	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Symbol")
OptionSymbol	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "OptionSymbol")
ExpDate	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "ExpDate")
Strike	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Strike")
Type	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Type")
Last	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Last")
Change	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Change")
PercentChange	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "PercentChange")
Mark	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Mark")
Bid	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Bid")
Ask	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Ask")
Volume	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "Volume")
OpenInt	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "OpenInt")
LastUpdateTimeStamp	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd", "rtd-mysql", "option_day_history_yahoo", [Code], [Date], "RTD_LastMessage")

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options_tos

COLUMN_NAME	EXCEL FORMULA
Code	
Date	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Date")
Time	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Time")
Description	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Description")
Last	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Last")
Change	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"PercentChange")
LastSize	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"LastSize")
LastX	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"LastX")
Mark	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Mark")
MarkChange	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"MarkChange")
MarkPercentChange	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"MarkPercentChange")
Bid	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"AskSize")
BidAskSize	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"BidAskSize")
BidX	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"BidX")
AskX	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"AskX")
Open	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Open")
High	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"High")
Low	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Low")
Close	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"OpenInt")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"ImpliedVol")
Delta	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Delta")
Gamma	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Gamma")
Theta	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Theta")
Vega	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Vega")
Rho	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Rho")
Extrinsic	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Extrinsic")
Intrinsic	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"Intrinsic")
ProbabilityITM	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"ProbabilityITM")
ProbabilityOTM	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"ProbabilityOTM")
ProbabilityTouch	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"ProbabilityTouch")
CoveredReturn	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"CoveredReturn")
MaxCoveredReturn	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"MaxCoveredReturn")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mysql","options_tos",[Code],"RTD_LastMessage")

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options_tws

COLUMN_NAME	EXCEL FORMULA
Code	
Date	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Date")
Time	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Time")
Last	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Last")
LastSize	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"LastSize")
Bid	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"AskSize")
High	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"High")
Low	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Low")
Close	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Volume")
UnderlyingPrice	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"UnderlyingPrice")
ModelPrice	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"ModelPrice")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"ImpliedVol")
BidImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"BidImpliedVol")
AskImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"AskImpliedVol")
LastImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"LastImpliedVol")
BidDelta	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"BidDelta")
AskDelta	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"AskDelta")
LastDelta	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"LastDelta")
Delta	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Delta")
Gamma	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Gamma")
Theta	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Theta")
Vega	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"Vega")
pvdDividend	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"pvdDividend")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mysql","options_tws",[Code],"RTD_LastMessage")

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options_yahoo

COLUMN_NAME	EXCEL FORMULA
Code	
Date	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Date")
Time	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Time")
OptionCode	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"OptionCode")
Symbol	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Symbol")
OptionSymbol	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"OptionSymbol")
ExpDate	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"ExpDate")
Strike	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Strike")
Type	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Type")
Last	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Last")
Change	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"PercentChange")
Mark	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Mark")
Bid	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Ask")
Volume	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"OpenInt")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mysql","options_yahoo",[Code],"RTD_LastMessage")

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quote_day_history_es

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Time")
Last	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Last")
Change	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Change")
PercentChange	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "PercentChange")
Bid	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Bid")
Ask	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Ask")
BidSize	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "BidSize")
AskSize	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "AskSize")
Open	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Open")
High	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "High")
Low	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Low")
Volume	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "Volume")
OpenInt	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "OpenInt")
TradePrice	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "TradePrice")
LastUpdateTimeStamp	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd", "rtd-mysql", "quote_day_history_es", [Symbol], [Date], "RTD_LastMessage")

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quote_day_history_tos

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Time")
Description	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Description")
Last	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Last")
Change	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"PercentChange")
LastSize	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"LastSize")
LastX	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"LastX")
Mark	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Mark")
MarkChange	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"MarkChange")
MarkPercentChange	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"MarkPercentChange")
Bid	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"AskSize")
BidAskSize	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"BidAskSize")
BidX	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"BidX")
AskX	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"AskX")
StrengthMeter	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"StrengthMeter")
Open	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Low")
Close	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"OpenInt")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"ImpliedVol")
VolIndex	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"VolIndex")
FrontVol	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"FrontVol")
BackVol	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"BackVol")
WeightedBackVol	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"WeightedBackVol")
VolDiff	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"VolDiff")
PutCallRatio	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"PutCallRatio")
CallVolumeIndex	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"CallVolumeIndex")
PutVolumeIndex	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"PutVolumeIndex")
OptionVolumeIndex	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"OptionVolumeIndex")
FrontExpectedMove	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"FrontExpectedMove")
BackExpectedMove	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"BackExpectedMove")
ExpectedMoveDiff	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"ExpectedMoveDiff")
Beta	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Beta")
High52	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"High52")
Low52	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Low52")
PE	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"PE")
EPS	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"EPS")
MarketCap	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"MarketCap")
Shares	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"Shares")
DividendYield	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"DividendYield")
DividendShare	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"DividendShare")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mysql","quote_day_history_tos",[Symbol],[Date],"RTD_LastMessage")

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quote_day_history_tws

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"Time")
Last	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"Last")
LastSize	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"LastSize")
Bid	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"Bid")
Ask	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"Ask")
BidSize	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"BidSize")
AskSize	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"AskSize")
High	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"Low")
Close	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"Close")
Volume	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","quote_day_history_tws",[Symbol],[Date],"RTD_LastMessage")

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quote_day_history_vfx

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
Time	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"Time")
Bid	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"Bid")
Ask	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"Ask")
Open	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"Low")
Close	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"Close")
Change	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"PercentChange")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","quote_day_history_vfx",[Symbol],[Date],"RTD_LastMessage")

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quote_day_history_yahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	
LastTradeTime	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"LastTradeTime")
Last	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"Last")
Change	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"PercentChange")
Open	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"Open")
High	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"High")
Low	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"Low")
Volume	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","quote_day_history_yahoo",[Symbol],[Date],"RTD_LastMessage")

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quotes_es

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Date")
Time	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Time")
Last	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Last")
Change	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"PercentChange")
Bid	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Bid")
Ask	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Ask")
BidSize	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"BidSize")
AskSize	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"AskSize")
Open	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Open")
High	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"High")
Low	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Low")
Volume	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"Volume")
OpenInt	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"OpenInt")
TradePrice	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"TradePrice")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","quotes_es",[Symbol],"RTD_LastMessage")

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quotes_tos

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Date")
Time	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Time")
Description	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Description")
Last	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Last")
Change	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"PercentChange")
LastSize	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"LastSize")
LastX	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"LastX")
Mark	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Mark")
MarkChange	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"MarkChange")
MarkPercentChange	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"MarkPercentChange")
Bid	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Bid")
Ask	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Ask")
BidSize	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"BidSize")
AskSize	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"AskSize")
BidAskSize	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"BidAskSize")
BidX	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"BidX")
AskX	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"AskX")
StrengthMeter	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"StrengthMeter")
Open	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Open")
High	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"High")
Low	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Low")
Close	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Close")
Volume	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Volume")
OpenInt	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"OpenInt")
ImpliedVol	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"ImpliedVol")
VolIndex	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"VolIndex")
FrontVol	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"FrontVol")
BackVol	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"BackVol")
WeightedBackVol	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"WeightedBackVol")
VolDiff	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"VolDiff")
PutCallRatio	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"PutCallRatio")
CallVolumeIndex	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"CallVolumeIndex")
PutVolumeIndex	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"PutVolumeIndex")
OptionVolumeIndex	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"OptionVolumeIndex")
FrontExpectedMove	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"FrontExpectedMove")
BackExpectedMove	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"BackExpectedMove")
ExpectedMoveDiff	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"ExpectedMoveDiff")
Beta	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Beta")
High52	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"High52")
Low52	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Low52")
PE	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"PE")
EPS	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"EPS")
MarketCap	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"MarketCap")
Shares	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"Shares")
DividendYield	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"DividendYield")
DividendShare	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"DividendShare")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd",,"rtd-mysql","quotes_tos",[Symbol],"RTD_LastMessage")

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quotes_tws

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Date")
Time	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Time")
Last	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Last")
LastSize	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"LastSize")
Bid	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Bid")
Ask	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Ask")
BidSize	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"BidSize")
AskSize	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"AskSize")
High	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"High")
Low	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Low")
Close	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Close")
Volume	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","quotes_tws",[Symbol],"RTD_LastMessage")

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quotes_vfx

COLUMN_NAME	EXCEL FORMULA
Symbol	
Date	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Date")
Time	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Time")
Bid	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Bid")
Ask	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Ask")
Open	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Open")
High	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"High")
Low	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Low")
Close	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Close")
Change	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"PercentChange")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","quotes_vfx",[Symbol],"RTD_LastMessage")

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quotes_yahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
LastTradeDate	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"LastTradeDate")
LastTradeTime	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"LastTradeTime")
Last	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"Last")
Change	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"Change")
PercentChange	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"PercentChange")
Open	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"Open")
High	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"High")
Low	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"Low")
Volume	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"Volume")
LastUpdateTimeStamp	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"LastUpdateTimeStamp")
RTD_LastMessage	=RTD("gartle.rtd","rtd-mysql","quotes_yahoo",[Symbol],"RTD_LastMessage")

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stocks_yahoo

COLUMN_NAME	EXCEL FORMULA
Symbol	
CompanyName	=RTD("gartle.rtd",,"rtd-mysql","stocks_yahoo",[Symbol],"CompanyName")
Sector	=RTD("gartle.rtd",,"rtd-mysql","stocks_yahoo",[Symbol],"Sector")
Industry	=RTD("gartle.rtd",,"rtd-mysql","stocks_yahoo",[Symbol],"Industry")
FullTimeEmployees	=RTD("gartle.rtd",,"rtd-mysql","stocks_yahoo",[Symbol],"FullTimeEmployees")
TradeStart	=RTD("gartle.rtd",,"rtd-mysql","stocks_yahoo",[Symbol],"TradeStart")
TradeEnd	=RTD("gartle.rtd",,"rtd-mysql","stocks_yahoo",[Symbol],"TradeEnd")
LastUpdateTimeStamp	=RTD("gartle.rtd",,"rtd-mysql","stocks_yahoo",[Symbol],"LastUpdateTimeStamp")

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Technical Support

You may download the latest releases at www.savetodb.com.

You may contact us via email support@savetodb.com.

See also [Frequently Asked Questions](#).

Frequently Asked Questions

RealTimeToDB can't connect to my RTD server.

Try to use the RealTimeToDB version of the same bitness as your RTD server.