

RealTimeToExcel

Version 4.12, November 9, 2016

User's Manual

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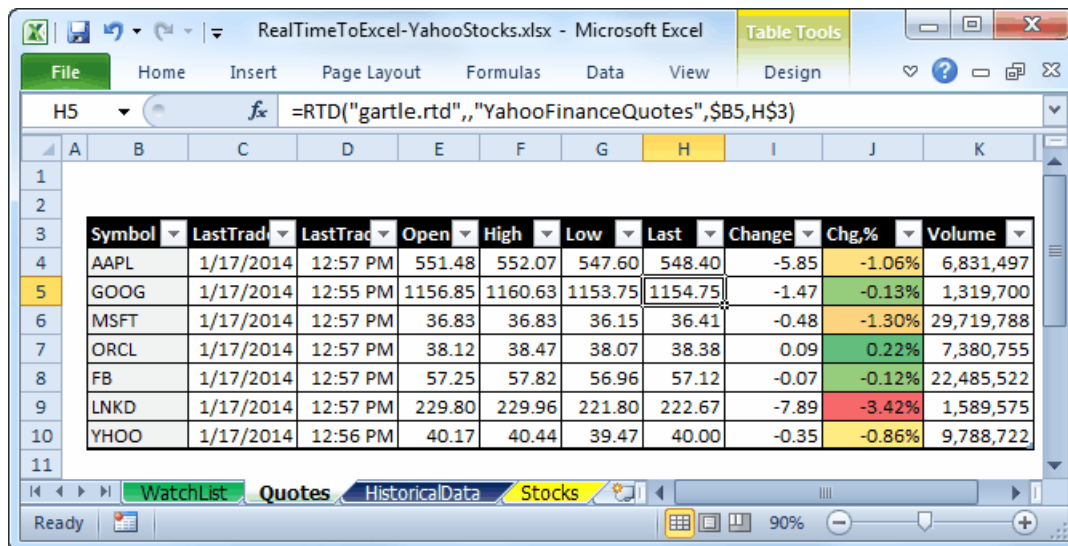
Getting Started

Microsoft Excel has the "magic" RTD function that allows refreshing values from real-time data servers in Excel spreadsheets.

The RTD function can be used in regular Microsoft Excel formulas.

So you may use cell values as formula arguments and build powerful refreshable data sheets and models in a couple of minutes.

For example:



Symbol	LastTrade	LastTrac	Open	High	Low	Last	Change	Chg.%	Volume
AAPL	1/17/2014	12:57 PM	551.48	552.07	547.60	548.40	-5.85	-1.06%	6,831,497
GOOG	1/17/2014	12:55 PM	1156.85	1160.63	1153.75	1154.75	-1.47	-0.13%	1,319,700
MSFT	1/17/2014	12:57 PM	36.83	36.83	36.15	36.41	-0.48	-1.30%	29,719,788
ORCL	1/17/2014	12:57 PM	38.12	38.47	38.07	38.38	0.09	0.22%	7,380,755
FB	1/17/2014	12:57 PM	57.25	57.82	56.96	57.12	-0.07	-0.12%	22,485,522
LNKD	1/17/2014	12:57 PM	229.80	229.96	221.80	222.67	-7.89	-3.42%	1,589,575
YHOO	1/17/2014	12:56 PM	40.17	40.44	39.47	40.00	-0.35	-0.86%	9,788,722

Used formulas look like:

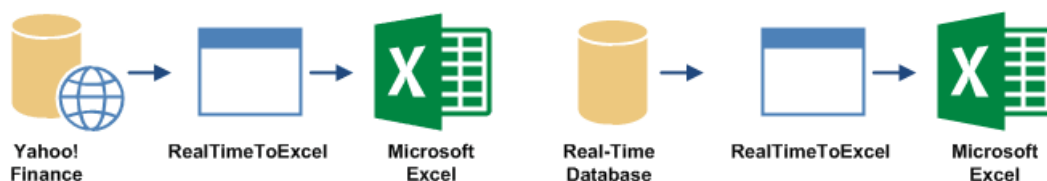
```
=RTD("gartle.rtd",,"YahooFinanceWatchList","AAPL","Open")
=RTD("gartle.rtd",,"YahooFinanceWatchList","AAPL","High")
=RTD("gartle.rtd",,"YahooFinanceWatchList","AAPL","Low")
=RTD("gartle.rtd",,"YahooFinanceWatchList","AAPL","Last")

=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","EPSEstimateCurrentYear")
=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","EPSEstimateNextYear")
```

YahooFinanceWatchList and YahooFinanceQuotes are data providers included in RealTimeToExcel.

RealTimeToExcel is an RTD server for Microsoft Excel that allows:

1. Getting real-time or delayed data from **Yahoo! Finance**, **Google Finance**, **MSN Money**, and other websites into Microsoft Excel.
2. Getting real-time or delayed data **from databases** into Microsoft Excel.



Yahoo! Finance, Google Finance, and MSN Money publish delayed quotes and financial data from 60 world's exchanges free of charge for non-commercial use.

RealTimeToExcel is an intermediary that loads data from Yahoo! Finance, Google Finance, MSN Money, or other websites and refreshes data in Microsoft Excel.

RealTimeToExcel also allows refreshing data from database tables in Excel in an easy way, without coding.

You may also save loaded data into databases using the companion product, [RealTimeToDB](#).

You may start learning about RealTimeToExcel on the following topics:

- [Using RealTimeToExcel](#)
- [Yahoo! Finance](#)
- [MSN Money](#)
- [Database Providers](#)
- [Edition Comparison](#)
- [Google Finance](#)
- [Universal Providers](#)

Edition Comparison

RealTimeToExcel allows updating data in Microsoft Excel from **Yahoo! Finance**, **Google Finance**, **MSN Money**, other financial websites, and **databases** in real-time.

Using RealTimeToExcel, you may build and update **models in Microsoft Excel in real time**.

See prices at www.stock-data-solutions.com.

Feature	Personal	Standard	Enterprise
Number of active data providers in all opened workbooks*	10	15	Unlimited
Number of updated rows per data provider**	500	1000	Unlimited
Yahoo! Finance Data Providers			
Yahoo! Finance Quotes, Watch List, Stocks	✓	✓	✓
Yahoo! Finance Financials, Key Statistics	✓	✓	✓
Yahoo! Finance Historical Prices	✓	✓	✓
Yahoo! Finance Currencies	✓	✓	✓
Yahoo! Finance Options	✓	✓	✓
Google Finance Data Providers			
Google Finance Financials	✓	✓	✓
Google Finance Historical Prices	✓	✓	✓
Google Finance Options	✓	✓	✓
MSN Money Data Providers			
MSN Money Quotes	✓	✓	✓
MSN Money Historical (days, weeks, 5 and 15 minutes)	✓	✓	✓
MSN Money Currencies	✓	✓	✓
MSN Money Options	✓	✓	✓
Universal Providers			
HTML Provider	✓	✓	✓
Database Data Providers			
Microsoft SQL Server, Microsoft Azure SQL Database, Microsoft SQL Server Compact Oracle Database, IBM DB2 Oracle MySQL, SkySQL MariaDB, NuoDB, PostgreSQL	✓	✓	✓
Other Features			
Microsoft Excel x86 and x64	✓	✓	✓
Private traders and investors	✓	✓	✓
Professional traders and institutional investors	✗	✓	✓
Commercial use	✗	✓	✓

* Number of Microsoft Excel workbooks and tables are not limited.

** Rows are stock or currency pair symbols, historical dates, or option codes depend on data providers.

Install and Uninstall

Installing RealTimeToExcel

You have two options to install RealTimeToExcel:

- Installing with the RealTimeToDB setup package.
- Installing with the RealTimeToExcel setup package.

All the packages work with 32-bit and 64-bit versions of Microsoft Excel.

Installing with RealTimeToDB Setup

You may use the RealTimeToDB setup package if you plan to use both RealTimeToDB and RealTimeToExcel.

RealTimeToDB allows getting data from Yahoo! Finance into databases using RealTimeToExcel, and getting the data in different time frames from the databases into Microsoft Excel.

Installing with RealTimeToExcel Setup

You may use the RealTimeToExcel setup package if you need only the RealTimeToExcel features.

Updating RealTimeToExcel

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

Upgrading from RealTimeToExcel 3.x to 4.0

Previous versions of the RealTimeToExcel Personal, Standard or Enterprise editions may be upgraded for free. Additional actions are not required.

Previous versions of the RealTimeToExcel Express edition are converted to a new trial version with a 30 day period.

After that period, you may purchase and register RealTimeToExcel Personal, Standard or Enterprise, or uninstall RealTimeToExcel 4.0 and install the previous version.

In the last case, if the previous version was registered, you may continue to use it without additional actions.

Uninstalling RealTimeToExcel

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

What's New

Version 4.12, November 9, 2016

Improvements:

- New fields of the YahooFinanceKeyStatistics provider:
Earnings Date1, Earnings Date2,
Target High Price, Target Low Price, Target Mean Price, Target Median Price,
Recommendation Mean, Recommendation Key, Number Of Analyst Opinions
- Number of rows in the trial period increased to 100 000.
- Improved HTML provider and updated FinanzenNet Financials.xlsx.

Bug Fixes:

- Fixed YahooFinanceSummary ChangeInPercent values.

Other changes:

- Barchart.com improved their website.
However, the HTML provider can't load data now.
Barchart.com examples have been removed.

Version 4.11, November 2, 2016

Improvements:

- You may get historical data from tables with auto-increment fields.
1. Get the MAX ID using formulas like this:

```
=RTD("gartle.rtd", "<Database provider>", "<Database table name>", "ID")
```

2. Get other IDs using formulas.

3. Get values for retrieved IDs:

```
=RTD("gartle.rtd", "<Database provider>", "<Database table name>", <ID cell reference>, "BID")
```

```
=RTD("gartle.rtd", "<Database provider>", "<Database table name>", <ID cell reference>, "ASK")
```

Version 4.10, September 9, 2016

New Data Providers

- [MsnMoneyHistoricalMonths](#)
- [YahooFinanceHistorical1min](#)
- [YahooFinanceHistorical5min](#)
- [YahooFinanceHistoricalDays](#)
- [YahooFinanceHistoricalMonths](#)
- [YahooFinanceHistoricalWeeks](#)

New Yahoo! Finance providers allow getting historical prices for currency pairs.

Improvements:

- Updated providers and RealTimeToExcel examples.

Bug Fixes:

- Updated YahooFinanceFinancials provider.

Version 4.9, July 27, 2016

Improvements:

- Updated providers and RealTimeToExcel examples.

Version 4.8, July 19, 2016

Improvements:

- Updated YahooFinanceKeyStatistics provider.
- Updated YahooFinanceSummary provider.
- Updated YahooFinanceIndustries provider.

Known Issues:

- YahooFinanceFinancials does not work due to Yahoo! Finance website changes on July 12, 2016. We are working on resolving the issue.

Version 4.7, July 13, 2016

Improvements:

- Updated YahooFinanceOptions provider.

Known Issues:

- YahooFinanceKeyStatistics, YahooFinanceSummary, YahooFinanceIndustries, and YahooFinanceFinancials do not work due to Yahoo! Finance website changes on July 12, 2016. We are working on resolving the issues. You may use alternative providers including Google Finance and MSN Money providers.

Version 4.6, June 21, 2016

RealTimeToExcel has a new product website, www.stock-data-solutions.com.

Improvements:

- The trial period is 30 days instead of 15 days before.
- The new Strike~0 data field that returns ATM strike in YahooFinanceOptions, GoogleFinanceOptions, and MsnMoneyOptions providers.
- MsnMoneyOptions can work with MSN Money stock codes like 126.1.AAPL.NAS.
- The following providers are marked as obsolete: YahooFinanceWatchList, YahooFinanceQuotes, YahooFinanceStocks, YahooFinanceHistoricalData, and MsnMoneyQuotes. Use [new providers](#) instead.

Version 4.5, April 20, 2016

Bug Fixes:

- Updated MSN Money providers.
- Incorrect values in the MsnMoneyQuotes2 provider for non-US regional settings.

Version 4.4, April 14, 2016

New Data Providers

- [MsnMoneyQuotes2](#)
Use this provider to get data for international markets from MSN.

Bug Fixes:

- Fixed getting MAX values from database tables if no one primary key is specified.

Version 4.3, March 15, 2016

New Data Providers

- [YahooFinanceQuotesCSV](#)
- [YahooFinanceSummary](#)

Improvements:

- Fields have multiple synonyms to switch easily between providers.
See new field names here [RealTimeToExcel Providers](#).
- New example "1 - Try Me First.xlsx" in the RealTimeToExcel Examples folder that shows all the fields across providers.

Bug Fixes:

- Fixed issues with installing on Windows XP.

Version 4.2, February 5, 2016

New Features

- New YahooFinanceIndustry data provider with two fields: Sector and Industry.
Data source example: <http://finance.yahoo.com/q/in?s=YHOO>

Improvements:

- New fields of YahooKeyStatistics with the suffix \$ that hold numbers from text fields.
For example, if the Revenue field contains text like 234.99B, the Revenue\$ field contains 234 990 000 000.
- New fields of YahooKeyStatistics: Shares Short (prior month) and Shares Short (prior month)\$.
- Updated RealTimeToExcel examples.
- Improved logging (via TraceDownload settings).

Bug Fixes:

- Fixed issues with refreshing data.
- Fixed issues with loading historical prices.
- Fixed issues with loading options for symbols like ^VIX.
- Fixed issues with periodic messages about errors of renaming and deleting files.

Version 4.1, November 11, 2015

New Features

- Support for Microsoft Excel 2016 has been added.

Version 4.0, October 20, 2015

Licensing Changes

RealTimeToExcel End User License Agreement has been changed:

- **The free RealTimeToExcel Express edition has been removed.**
- Starting RealTimeToExcel 4.0 you may purchase and register RealTimeToExcel Personal, Standard and Enterprise editions only.
- During a trial period of 15 days, you may test all the features of the RealTimeToExcel Enterprise edition.

We made this change to make the RealTimeToExcel product more profitable for our affiliate partners.

You are welcome to become our [affiliate partner](#).

You may continue to use previously registered versions of RealTimeToExcel Express for free forever.

Registering RealTimeToExcel Express of previous versions for new PC will be removed on December 1, 2015.

Please keep your registration email with the activation code to have a possibility to reinstall and activate RealTimeToExcel Express on a registered PC.

You may check your registration email and register once again before December 1, 2015. Do this using the previous versions.

Upgrade Notes

- Previous versions of the RealTimeToExcel Personal, Standard or Enterprise editions may be upgraded for free.
Additional actions are not required.
- Previous versions of the RealTimeToExcel Express edition are converted to a new trial version with a 15 day period.
After that period, you may purchase and register RealTimeToExcel Personal, Standard or Enterprise, or uninstall RealTimeToExcel 4.0 and install the previous version.
In the last case, if the previous version was registered, you may continue to use it without additional actions.

Download Package Changes

- You may install RealTimeToExcel using RealTimeToExcel and RealTimeToDB packages.
The SaveToDB Suite package is not available more.
You may continue to use SaveToDB Wizard Tools for working with RealTimeToExcel installed separately.

System Requirements

Supported Versions of Microsoft Excel:

- Microsoft Excel 2007
- Microsoft Excel 2010
- Microsoft Excel 2013
- Microsoft Excel 2016

Supported Architectures:

- x86
- x64

Supported Operating Systems:

- Windows XP SP3, Vista SP1, 7, 8, 8.1, 10
- Windows Server 2003 SP3, 2008, 2008 R2, 2012, 2012 R2

Supported Versions of Microsoft SQL Server:

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

Supported Versions of Microsoft SQL Server Compact:

- Microsoft SQL Server Compact 3.5, 4.0

Supported Versions of Oracle Database:

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

Supported Versions of IBM DB2:

- IBM DB2 9.5, 9.7, 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, 5.1, 5.2, 5.5, 5.6

Supported Versions of SkySQL MariaDB:

- MariaDB 5.1, 5.2, 5.3, 5.5, 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, 2.2

Supported Versions of PostgreSQL:

- PostgreSQL 9.0, 9.1, 9.2, 9.3, 9.4

End-User License Agreement

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5. **Upgrades:** To use Software identified as an upgrade, you must first be licensed for the software identified by Gartle Technology Corporation as eligible for the upgrade. After upgrading, you may no longer use the software that formed the basis for your upgrade eligibility.
6. **Applicable Law:** This EULA is governed by the laws of the Russian Federation. Any legal action or proceeding relating to this EULA shall be instituted in a court of arbitration in the Moscow City, Russian Federation. Gartle Technology Corporation and you agree to submit to the jurisdiction of, and agree that venue is proper in, these courts in any such action or proceeding. The prevailing party in any action to enforce this EULA will be entitled to recover its attorney fees and costs in connection with such action.
7. **Waiver:** The failure of either party to enforce any of the terms of this EULA shall not be construed as a waiver of future enforcement of that or any other term.
8. **Entire Agreement and Severability:** This EULA (including any addendum or amendment to this EULA which is included with the Software) is the entire agreement between you and Gartle Technology Corporation relating to the Software and the support services (if any) and it supersedes all prior or contemporaneous oral or written communications, proposals and representations with respect to the Software or any other subject matter covered by this EULA. To the extent the terms of any Gartle Technology Corporation policies or programs for support services conflict with the terms of this EULA, the terms of this EULA shall control. If any provision of this EULA is held to be void, invalid, unenforceable or illegal, the other provisions shall continue in full force and effect.
9. **Termination:** Without prejudice to any other rights, Gartle Technology Corporation may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the Software and all of its component parts and you will not be entitled to any refund of monies.

Using RealTimeToExcel

Getting Data From Yahoo! Finance, Google Finance, and MSN Money

To get **stock data**, use formulas in the following formats:

```
=RTD("gartle.rtd",,"YahooFinanceWatchList","<Ticker>","<Data Field>")
=RTD("gartle.rtd",,"YahooFinanceQuotes","<Ticker>","<Data Field>")
=RTD("gartle.rtd",,"YahooFinanceStocks","<Ticker>","<Data Field>")
=RTD("gartle.rtd",,"YahooFinanceKeyStatistics","<Ticker>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyQuotes","<Ticker>","<date>","<Data Field>")
```

To get **historical prices**, use formulas in the following formats:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV","<Ticker>","<date>","<Data Field>")
=RTD("gartle.rtd",,"YahooFinanceHistoricalData","<Ticker>","<date>","<Data Field>")
=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV","<Ticker>","<date>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyHistoricalDays","<Ticker>","<date>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks","<Ticker>","<date>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyHistorical15min","<Ticker>","<datetime>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyHistorical5","<Ticker>","<datetime>","<Data Field>")
```

To get **currency pair data**, use formulas in the following formats:

```
=RTD("gartle.rtd",,"YahooFinanceCurrencies","<Ticker>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyCurrencies","<Ticker>","<Data Field>")
```

To get **stock option data** using option codes, use formulas in the following formats:

```
=RTD("gartle.rtd",,"YahooFinanceOptions","<Option Code>","<Data Field>")
=RTD("gartle.rtd",,"GoogleFinanceOptions","<Option Code>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyOptions","<Option Code>","<Data Field>")
```

To get **stock option data** using option contract parts, use formulas in the following formats:

```
=RTD("gartle.rtd",,"YahooFinanceOptions","<Option Symbol>","<Expiration Date>","<Strike>","<Option Type>","<Data Field>")
=RTD("gartle.rtd",,"GoogleFinanceOptions","<Option Symbol>","<Expiration Date>","<Strike>","<Option Type>","<Data Field>")
=RTD("gartle.rtd",,"MsnMoneyOptions","<Option Symbol>","<Expiration Date>","<Strike>","<Option Type>","<Data Field>")
```

For example:

```
=RTD("gartle.rtd",,"YahooFinanceWatchList","YHOO","Last")
=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","Last")
=RTD("gartle.rtd",,"YahooFinanceStocks","YHOO","FullTimeEmployees")
=RTD("gartle.rtd",,"YahooFinanceHistoricalData","YHOO","2014-12-31","Close")
=RTD("gartle.rtd",,"YahooFinanceHistoricalData","YHOO",,"Close")
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO170120C00050000","OpenInt")
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO","170120",50,"CALL","OpenInt")
```

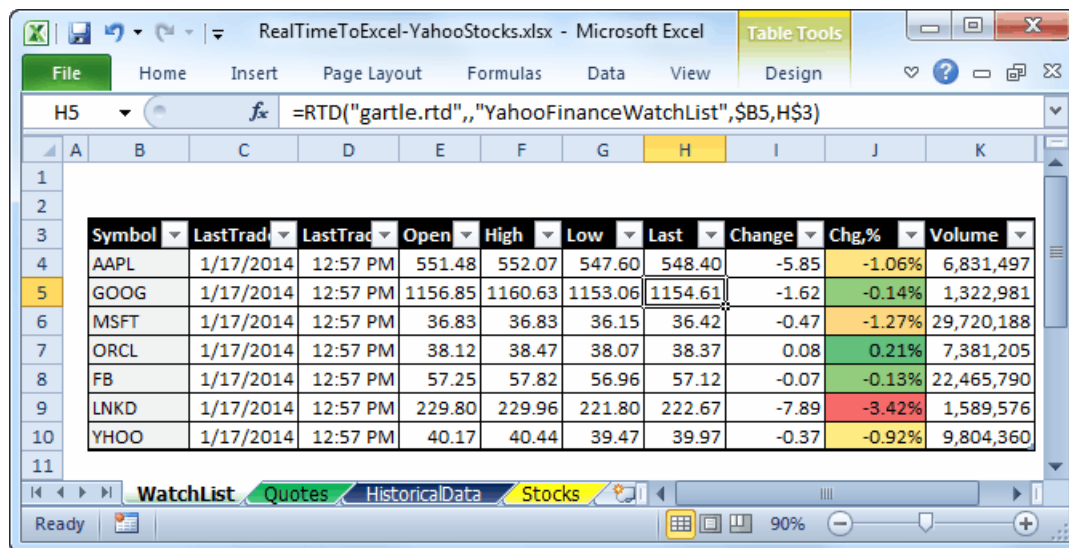
If a semicolon is used as a parameter separator in Microsoft Excel, use semicolons instead of commas in formulas.

For example:

```
=RTD("gartle.rtd";;"YahooFinanceWatchList";"YHOO";"Last")  
=RTD("gartle.rtd";;"YahooFinanceQuotes";"YHOO";"Last")
```

You may use cell values as formula arguments.

For example:



Symbol	LastTrade	LastTrac	Open	High	Low	Last	Change	Chg.%	Volume
AAPL	1/17/2014	12:57 PM	551.48	552.07	547.60	548.40	-5.85	-1.06%	6,831,497
GOOG	1/17/2014	12:57 PM	1156.85	1160.63	1153.06	1154.61	-1.62	-0.14%	1,322,981
MSFT	1/17/2014	12:57 PM	36.83	36.83	36.15	36.42	-0.47	-1.27%	29,720,188
ORCL	1/17/2014	12:57 PM	38.12	38.47	38.07	38.37	0.08	0.21%	7,381,205
FB	1/17/2014	12:57 PM	57.25	57.82	56.96	57.12	-0.07	-0.13%	22,465,790
LNKD	1/17/2014	12:57 PM	229.80	229.96	221.80	222.67	-7.89	-3.42%	1,589,576
YHOO	1/17/2014	12:57 PM	40.17	40.44	39.47	39.97	-0.37	-0.92%	9,804,360

In the example above, all the RTD formulas in the table are the same. The tickers are in column B, and the data field names are in the table headers in row 3.

Use Yahoo! Finance, Google Finance or MSN Money websites to find tickers:

- <http://finance.yahoo.com/>
- <https://www.google.com/finance>
- <http://www.msn.com/en-us/money>

You may find available fields and copy ready-to-use formulas in the topics:

- [Yahoo! Finance WatchList](#)
- [Yahoo! Finance Quotes](#)
- [Yahoo! Finance Quotes CSV](#)
- [Yahoo! Finance Stocks](#)
- [Yahoo! Finance Financials](#)
- [Yahoo! Finance Key Statistics](#)
- [Yahoo! Finance Summary](#)
- [Yahoo! Finance Historical Data](#)
- [Yahoo! Finance Historical CSV](#)
- [Yahoo! Finance Currencies](#)
- [Yahoo! Finance Options](#)
- [Google Finance Financials](#)
- [Google Finance Historical CSV](#)
- [Google Finance Options](#)
- [MSN Money Quotes](#)
- [MSN Money Historical Days](#)
- [MSN Money Historical Weeks](#)
- [MSN Money Historical 15 Minutes](#)
- [MSN Money Historical 5 Minutes](#)
- [MSN Money Currencies](#)
- [MSN Money Options](#)

Important Notes

RealTimeToExcel loads data directly from Yahoo! Finance, Google Finance and MSN Money websites and web services.

Any provider may change data formats or URLs, or even stop publishing data.

As a result of changes, RealTimeToExcel may not load data.

We at Gartle Technology Corporation try to modify RealTimeToExcel to address issues as soon as possible, but this requires some time.

You may notify us that any provider stops getting data.

RealTimeToExcel Examples

You may find multiple examples of different data providers in the **RealTimeToExcel Examples** folder of the downloaded package and the installation folder like %ProgramFiles%\Gartle\RealTimeToExcel.

Use these examples to test features quickly and troubleshoot formulas or loading data.

Getting Data from Databases

The common Excel formula format is

```
=RTD("gartle.rtd", "<Database provider>", "<Database table name>", "<First key column value>  
[,<Second key column value>[,...]], "<Data field>")
```

For example:

```
=RTD("gartle.rtd", "rtd-sqlce", "QuotesYahoo", "AAPL", "Last")
```

```
=RTD("gartle.rtd", "rtd-mysql", "fundamentals_yahoo", "AAPL", "OneYearTargetPrice")
```

```
=RTD("gartle.rtd", "rtd-mysql", "fundamentals_day_history_yahoo", "AAPL", "12/31/2013", "OneYearTargetPrice")
```

Database providers (like rtd-sqlce, rtd-mysql, etc.) must be configured for connecting to target databases.

Table names, key columns, and data fields depend on databases. Configuring databases is not required.

See details in [Database Providers](#).

Using Tick Fields

You may use special tick fields for number data fields. Add the **:tick** suffix to the data field name.

For example:

```
=RTD("gartle.rtd", "YahooFinanceWatchList", "YHOO", "Last")
```

```
=RTD("gartle.rtd", "YahooFinanceWatchList", "YHOO", "Last:tick")
```

Tick values:

Tick Value	Meaning
1	The value is changed up.
0	The value is unchanged.
-1	The value is changed down.

Tick fields can be used for conditional formatting of the underlying fields or as independent columns.

Monitoring RealTimeToExcel

You may use special data fields to monitor downloading and processing data.

For example:

```
=RTD("gartle.rtd", "YahooFinanceWatchList", "YHOO", "rtd_LastUpdate")
```

```
=RTD("gartle.rtd", "YahooFinanceWatchList", "YHOO", "rtd_LastError")
```

The formulas above show the last data update time and the last error code for the YHOO ticker.

See a complete list of the special data cells in [RealTimeToExcel Fields](#).

Complying with Yahoo! Terms of Services

Yahoo! Finance publishes delayed quotes and financial data free of charge for non-commercial use.

RealTimeToExcel default settings comply with Yahoo! Terms of Services.

See important documents about Yahoo! Finance data use:

- Yahoo! Terms of Service at <http://info.yahoo.com/legal/us/yahoo/utos/terms/>
- Yahoo! APIs Terms of Use at <http://info.yahoo.com/legal/us/yahoo/api/api-2140.html>
- Yahoo! Query Language at <http://developer.yahoo.com/yql/>

Complying with Google Finance Terms of Services

RealTimeToExcel loads data from the Google Finance website using undocumented features.

See important documents about Google Finance data use:

- Google Terms of Service at <http://www.google.com/intl/en/policies/terms/>

Complying with MSN Money Terms of Services

RealTimeToExcel loads data from the MSN Money website using undocumented features.

See important documents about MSN Money data use:

- Microsoft Services Agreement at <http://windows.microsoft.com/en-us/windows/microsoft-services-agreement>

Configuring RealTimeToExcel

You may change some of the application settings. See [RealTimeToExcel Settings](#).

The most useful setting is the Yahoo! API key that allows refreshing data more frequently.

You may configure the setting file using a Start Menu shortcut.

Configuring Data Providers

Every data provider has time periods of refreshing data and refresh intervals.

See a general description of [Data Provider Settings](#) and specific data provider settings in the provider topics.

You may change default settings using [Data Provider Manager](#) or directly in configuration files in the DataProviders folder.

RealTimeToExcel is configured by default for working 24 hours a day with different refresh intervals.

See topics for details:

- [Yahoo! Finance WatchList](#)
- [Yahoo! Finance Quotes](#)
- [Yahoo! Finance Stocks](#)
- [Yahoo! Finance Key Statistics](#)
- [Yahoo! Finance Historical Data](#)
- [Yahoo! Finance Historical CSV](#)
- [Yahoo! Finance Currencies](#)
- [Yahoo! Finance Options](#)
- [Google Finance Historical CSV](#)
- [Google Finance Options](#)
- [MSN Money Quotes](#)
- [MSN Money Historical Days](#)
- [MSN Money Historical Weeks](#)
- [MSN Money Historical 15 Minutes](#)
- [MSN Money Historical 5 Minutes](#)
- [MSN Money Currencies](#)
- [MSN Money Options](#)

RealTimeToExcel Providers

RealTimeToExcel includes providers for Yahoo! Finance, Google Finance and MSN Money.

The tables below show available fields and their synonyms.

You may switch from one provider to another. The field names remain the same.

Note that you may use field names without spaces, dashes or slashes.

For example, ExDividendDate instead of Ex-Dividend Date.

Fields with \$ suffixes contain values of the underlying fields converted to numbers including values like 1.23B or 1.23M.

RealTimeToExcel Providers for Stocks

- [Yahoo! Finance Key Statistics \(KS\)](#)
- [Yahoo! Finance Quotes \(Q\)](#)
- [Yahoo! Finance Quotes CSV \(QC\)](#)
- [Yahoo! Finance Summary \(S\)](#)
- [Yahoo! Finance WatchList \(W\)](#)
- [Yahoo! Finance Industry \(I\)](#)
- [MSN Money Quotes \(M\)](#)

Value	Synonyms	KS	Q	QC	S	W	M	I
Stock Information								
Symbol		✓	✓	✓	✓	✓	✓	✓
Company Name	Name	✓	✓	✓	✓			
Industry								✓
Sector								✓
Stock Exchange		✓	✓	✓	✓			
Earnings Date					✓			
Trading Information								
Last Trade Date		✓	✓	✓	✓	✓	✓	
Last Trade Time		✓	✓	✓	✓	✓	✓	
Last Trade DateTime		✓	✓	✓	✓	✓	✓	
Bid			✓	✓	✓		✓	
Ask			✓	✓	✓		✓	
Bid Size				✓	✓			
Ask Size				✓	✓			
BidX				✓	✓			
AskX				✓	✓			
Last	Price	✓	✓	✓	✓	✓	✓	
Change		✓	✓	✓	✓	✓	✓	
Change In Percent	Percent Change, % Change	✓	✓	✓	✓	✓	✓	
Open			✓	✓	✓	✓		
High			✓	✓	✓	✓	✓	
Low			✓	✓	✓	✓	✓	
Volume			✓	✓	✓	✓	✓	

Previous Close	Prev Close	✓	✓	✓	✓	✓	✓	
Days Range			✓	✓	✓	✓	✓	
Stock Price History								
Beta		✓			✓			
52-Week Change		✓						
S&P500 52-Week Change		✓						
52-Week High	Year High	✓	✓	✓	✓		✓	
52-Week Low	Year Low	✓	✓	✓	✓		✓	
52-Week High Date		✓						
52-Week Low Date		✓						
52-Week Range	Year Range	✓	✓	✓	✓		✓	
Change from 52-Week High	Change from Year High	✓	✓	✓	✓		✓	
Change from 52-Week Low	Change from Year Low	✓	✓	✓	✓		✓	
% Change from 52-Week High	Percent Change from Year High	✓	✓	✓	✓		✓	
% Change from 52-Week Low	Percent Change from Year Low	✓	✓	✓	✓		✓	
50-Day Moving Average	MA50	✓	✓	✓				
200-Day Moving Average	MA200	✓	✓	✓				
Change from 50-Day Moving Average	Change from MA50	✓	✓	✓				
Change from 200-Day Moving Average	Change from MA200	✓	✓	✓				
% Change from 50-Day Moving Average	Percent Change from MA50	✓	✓	✓				
% Change from 200-Day Moving Average	Percent Change from MA200	✓	✓	✓				
Avg Vol (3 Month)	Average Daily Volume	✓	✓	✓	✓			
Avg Vol (10 Day)		✓						
Valuation Measures								
Market Cap		✓	✓	✓	✓		✓	
Market Cap \$		✓	✓	✓	✓		✓	
Enterprise Value		✓						
Enterprise Value \$		✓						
Enterprise Value Date		✓						
P/E	Trailing P/E, PE, PE Ratio	✓	✓	✓	✓		✓	
Forward P/E		✓						
Forward P/E Date		✓						
PEG Ratio	PEG	✓	✓	✓	✓			
Price/Sales	P/S	✓	✓	✓	✓			
Price/Book		✓	✓	✓				
Enterprise Value/Revenue		✓						
Enterprise Value/EBITDA		✓						
Estimates								
One Year Target Price			✓	✓	✓			

Mean Recommendation					✓				
EPS Estimate Current Year	EPS Est Current Year		✓	✓	✓				
EPS Estimate Next Year	EPS Est Next Year		✓	✓					
EPS Estimate Next Quarter	EPS Est Next Quarter		✓	✓	✓				
P/E Estimate Current Year	Price/EPS Est Current Year		✓	✓					
P/E Estimate Next Year	Price/EPS Est Next Year		✓	✓					
Fiscal Year									
Fiscal Year Ends		✓							
Most Recent Quarter		✓							
Profitability									
Profit Margin		✓							
Operating Margin		✓							
Management Effectiveness									
Return on Assets		✓							
Return on Equity		✓							
Income Statement									
Revenue		✓							
Revenue \$		✓							
Revenue Per Share		✓							
Qtrly Revenue Growth		✓							
Gross Profit		✓							
Gross Profit \$		✓							
EBITDA		✓	✓	✓					
EBITDA \$		✓	✓	✓					
Net Income Avl to Common		✓							
Net Income Avl to Common \$		✓							
EPS	Diluted EPS, Earnings/Share	✓							
Qtrly Earnings Growth		✓							
Balance Sheet									
Total Cash		✓							
Total Cash \$		✓							
Total Cash Per Share		✓							
Total Debt		✓							
Total Debt \$		✓							
Total Debt/Equity		✓							
Current Ratio		✓							
Book Value Per Share	Book Value	✓	✓						
Cash Flow Statement									
Operating Cash Flow		✓							
Operating Cash Flow \$		✓							

Levered Free Cash Flow		✓							
Levered Free Cash Flow \$		✓							
Share Statistics									
Shares Outstanding		✓							
Shares Outstanding \$		✓							
Float		✓							
Float \$		✓							
% Held by Insiders	Percent Held by Insiders	✓							
% Held by Institutions	Percent Held by Institutions	✓							
Shares Short		✓							
Shares Short \$		✓							
Shares Short Date		✓							
Short Ratio		✓	✓	✓					
Short Ratio Date		✓							
Short % of Float	Short Percent of Float	✓							
Short % of Float Date	Short Percent of Float Date	✓							
Shares Short (prior month)		✓							
Shares Short (prior month) \$		✓							
Dividends & Splits									
Forward Annual Dividend Rate	Dividend/Share	✓		✓	✓				
Forward Annual Dividend Yield	Dividend Yield	✓		✓	✓				
Trailing Annual Dividend Rate		✓							
Trailing Annual Dividend Yield		✓							
5 Year Average Dividend Yield		✓							
Payout Ratio		✓							
Dividend Date	Dividend Pay Date	✓	✓	✓					
Ex-Dividend Date		✓	✓	✓	✓				
Last Split Factor		✓							
Last Split Date		✓							

See field descriptions at <https://help.yahoo.com/kb/finance/SLN2347.html>.

RealTimeToExcel Providers for Historical Prices

- [Yahoo! Finance Historical Data \(D\)](#)
- [Yahoo! Finance Historical CSV \(C\)](#)
- [Google Finance Historical CSV \(G\)](#)
- [MSN Money Historical Days \(D\)](#)
- [MSN Money Historical Weeks](#)
- [MSN Money Historical 15 Minutes](#)
- [MSN Money Historical 5 Minutes](#)

Value	Synonyms	D	C	G	M
Stock Information					
Symbol		✓	✓	✓	✓
Trading Information					
Date		✓	✓	✓	✓
Open		✓	✓	✓	✓
High		✓	✓	✓	✓
Low		✓	✓	✓	✓
Close		✓	✓	✓	✓
Change		✓	✓	✓	✓
Change in Percent	Percent Change, % Change	✓	✓	✓	✓
AdjClose		✓	✓	✓	✓
AdjChange		✓	✓	✓	✓
AdjChange in Percent		✓	✓	✓	✓
Volume		✓	✓	✓	✓
Prev Date	Previous Date	✓	✓	✓	✓
Prev Open	Previous Open	✓	✓	✓	✓
Prev High	Previous High	✓	✓	✓	✓
Prev Low	Previous Low	✓	✓	✓	✓
Prev Close	Previous Close	✓	✓	✓	✓
Prev AdjClose	Previous AdjClose	✓	✓	✓	✓
Prev Volume	Previous Volume	✓	✓	✓	✓

RealTimeToExcel Providers for Options

- [Yahoo! Finance Summary \(S\)](#)
- [Yahoo! Finance Options \(Y\)](#)
- [Google Finance Options \(G\)](#)
- [MSN Money Options \(M\)](#)

Value	Synonyms	S	Y	G	M
Stock Information					
Symbol		✓	✓	✓	✓
Stock Exchange		✓		✓	✓
Option Contract Information					
Option Code		✓	✓	✓	✓
Strike		✓	✓	✓	✓
Expire Date	Exp Date, Expiry	✓	✓	✓	✓
Type		✓	✓	✓	✓
Trading Information					
Last Trade Date		✓			
Last Trade Time		✓			
Last Trade DateTime		✓			
Bid		✓	✓	✓	✓
Ask		✓	✓	✓	✓
Last		✓	✓	✓	✓
Change		✓	✓	✓	✓
Change In Percent	Percent Change, % Change	✓	✓	✓	✓
Open		✓			
High		✓			
Low		✓			
Volume		✓	✓	✓	✓
Open Interest	Open Int	✓	✓	✓	✓
Implied Volatility	Imp Vol		✓		
Prev Close	Previous Close	✓	✓	✓	✓
Days Range		✓			

RealTimeToExcel Providers for Currencies

- [Yahoo! Finance Currencies \(C\)](#)
- [Yahoo! Finance Summary \(S\)](#)
- [MSN Money Currencies \(M\)](#)

Value	Synonyms	C	S	M
Stock Information				
Symbol		✓	✓	✓
Name	Name	✓	✓	✓
Trading Information				
Last Trade Date		✓	✓	
Last Trade Time		✓	✓	
Last Trade DateTime		✓	✓	
Bid		✓	✓	
Ask		✓	✓	
Last	Price	✓	✓	✓
Change		✓	✓	✓
Change In Percent	Percent Change, % Change	✓	✓	✓
Open		✓	✓	
High		✓	✓	
Low		✓	✓	
Previous Close	Prev Close	✓	✓	✓
Days Range		✓	✓	
Stock Price History				
52-Week High	Year High	✓	✓	✓
52-Week Low	Year Low	✓	✓	✓
52-Week Range	Year Range	✓	✓	✓
Change from 52-Week High	Change from Year High	✓	✓	✓
Change from 52-Week Low	Change from Year Low	✓	✓	✓
% Change from 52-Week High	Percent Change from Year High	✓	✓	✓
% Change from 52-Week Low	Percent Change from Year Low	✓	✓	✓

RealTimeToExcel Providers for Financial Reports

- [Yahoo! Finance Financials](#)
- [Google Finance Financials](#)
- [Universal HTML Provider](#)

RealTimeToExcel Fields

Server Fields

RealTimeToExcel allows getting server information and values of [RealTimeToExcel settings](#) into Microsoft Excel.

Formula format:

```
=RTD("gartle.rtd",,"<Data field>")
```

For example:

```
=RTD("gartle.rtd",,"rtd_server_Version")  
=RTD("gartle.rtd",,"rtd_server_DataCacheDirectory")
```

Complete list of fields:

Field	Meaning
rtd_server_Version	RealTimeToExcel version.
rtd_server_Registration	Information about the registered edition and trial period.
rtd_server_DataProviderDirectory	The directory of data provider configuration.
rtd_server_DataCacheDirectory	DataCacheDirectory value.
rtd_server_RefreshTimerInterval	RefreshTimerInterval value.
rtd_server_DateTime	Current date and time adjusted to the server time zone.
rtd_server_Date	Current date adjusted to the server time zone.
rtd_server_Time	Current time adjusted to the server time zone.
rtd_server_TimeZone	TimeZone configuration value.
rtd_server_TraceDownload	TraceDownload configuration value.
rtd_server_LogFileName	LogFileName configuration value.
rtd_server_YahooConsumerKey	YahooConsumerKey value.
rtd_server_LastClosedTradeDate	Calculated date of the last closed trade date.
rtd_server_PrevClosedTradeDate	Calculated date of the previous closed trade date.

Tick Fields

You may use special tick fields for number data fields. Add the **:tick** suffix to the data field name.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceWatchList","YHOO","Last")  
=RTD("gartle.rtd",,"YahooFinanceWatchList","YHOO","Last:tick")
```

Tick values:

Tick Value	Meaning
1	The value is changed up.
0	The value is unchanged.
-1	The value is changed down.

Tick fields can be used for conditional formatting of the underlying fields or as independent columns.

Data Provider Fields

In addition to data provider-specific fields, you may use predefined fields to monitor the current status of data refreshing:

Field	Meaning
rtd_LastUpdate	DateTime of the last update.
rtd_LastUpdateDate	Date of the last update.
rtd_LastUpdateTime	Time of the last update.
rtd_LastError	The last error code. See WebException Status and HTTP Status Codes below.
rtd_LastMessage	The last error message.
rtd_DataProvider	A data provider name. The value is the same as called in the formula.
rtd_RowID	A row identifier based on the formula.
rtd_TopicCount	Unique ticker's data field count in all opened workbooks.
rtd_InQueue	True if the row in the download queue.
rtd_RefreshInterval	Data provider refresh interval.

For example, if a data formula is

```
=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","LastTradePriceOnly")
```

you may add formulas to monitor data status:

```
=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","rtd_LastUpdate")
=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","rtd_LastError")
=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","rtd_LastMessage")
=RTD("gartle.rtd",,"YahooFinanceQuotes","YHOO","rtd_InQueue")
```

WebException Status Values

The rtd_LastError field can return WebException Status values.

See a complete description at

[http://msdn.microsoft.com/en-us/library/system.net.webexceptionstatus\(v=vs.100\).aspx](http://msdn.microsoft.com/en-us/library/system.net.webexceptionstatus(v=vs.100).aspx)

The most frequent statuses:

Value	Member name	Description
0	Success	No error was encountered.
7	ProtocolError	The response received from the server was complete but indicated a protocol-level error. The HTTP status code is shown instead. See below.
14	Timeout	No response was received during the time-out period for a request.
15	ProxyNameResolutionFailure	The name resolver service could not resolve the proxy host name.

HTTP StatusCode Values

The rtd_LastError field can return HTTP StatusCode values.

See complete descriptions at

[http://msdn.microsoft.com/en-us/library/system.net.httpstatuscode\(v=vs.100\).aspx](http://msdn.microsoft.com/en-us/library/system.net.httpstatuscode(v=vs.100).aspx)

<http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html>

The most frequent status codes:

Value	Member name	Description
200	OK	The request has succeeded.
400	BadRequest	The request could not be understood by the server due to malformed syntax.
401	Unauthorized	The request requires user authentication.
403	Forbidden	The server understood the request, but is refusing to fulfill it.
404	NotFound	The server has not found anything matching the Request-URI.
407	ProxyAuthenticationRequired	This code is similar to 401 (Unauthorized), but indicates that the client must first authenticate itself with the proxy.
408	RequestTimeout	The client did not produce a request within the time that the server was prepared to wait.
500	InternalServerError	The server encountered an unexpected condition which prevented it from fulfilling the request.
503	ServiceUnavailable	The server is currently unable to handle the request due to a temporary overloading or maintenance of the server.

RealTimeToExcel Settings

RealTimeToExcel Settings

You may change the RealTimeToExcel settings in the **RealTimeToExcel.dll.config** file in the installation folder.

The default installation folder depends on the installed product:

- %ProgramFiles%\Gartle\RealTimeToExcel
- %ProgramFiles%\Gartle\RealTimeToDB

Configuration parameters:

RefreshTimerInterval

This integer value defines the minimum interval of data refreshing in milliseconds.
The default value is 500 milliseconds.

DataCacheDirectory

This string value allows changing the cache directory of downloaded data.
The default value is %USERPROFILE%\AppData\Local\RealTimeToExcel\DataCache on Windows Vista and later,
and %USERPROFILE%\Local Settings\Application Data\RealTimeToExcel\DataCache on Windows XP.

TimeZone

The string value is used to adjust the PC time used in the rtd_LastUpdate, rtd_LastUpdateDate, and rtd_LastUpdateTime fields.
The default value is 'Eastern Standard Time'.
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).

TraceDownload

This boolean value controls download logging.
The default value is False.

LogFileName

This string value allows changing the log file name.
The default value is %USERPROFILE%\AppData\Local\RealTimeToExcel\RealTimeToExcel.log on Windows Vista and later,
and %USERPROFILE%\Local Settings\Application Data\RealTimeToExcel\RealTimeToExcel.log on Windows XP.

YahooConsumerKey

This string values used to specify Yahoo! API Consumer Key. See below.

YahooConsumerSecret

This string values used to specify Yahoo! API Consumer Secret. See below.

You may get values of server settings into Microsoft Excel. See [RealTimeToExcel fields](#).

Yahoo! API Key

Yahoo! specifies the following usage limits:

- 1000 calls per hour for IP authenticated users.
- 10000 calls per hour for applications identified by Access Key.

So, you may increase the usage limits. Do the following steps:

1. Get your Yahoo! API Key at <http://developer.yahoo.com/dashboard/createKey.html>.
2. Specify Consumer Key and Consumer Secret in the RealTimeToExcel configuration file. See above.
3. Change RefreshTimerInterval in the RealTimeToExcel configuration file if needed.
4. Change RefreshInterval and NextRequestDelay in the [Data provider settings](#) if needed.
5. Close and reopen opened workbooks that use RealTimeToExcel.

Data Provider Settings

Basics

Data provider settings define periods of refreshing data, refresh intervals, and auth providers.

You may use [Data Provider Manager](#) to configure provider settings.

Also, you may change data provider settings directly in the provider configuration files, like YahooFinanceQuotes.dll.config, in the **DataProviders** subdirectory.

The default installation folder is %ProgramFiles%\Gartle\RealTimeToExcel.

Yahoo! Finance Data Provider Settings

See Yahoo! Query Language at <http://developer.yahoo.com/yql/> and Yahoo! Query Language FAQ at <http://developer.yahoo.com/yql/faq/> to learn usage limits before the changes.

In short, this is 1000 calls per hour. Note that all Yahoo! Finance data providers connect to the single Yahoo! web service. So, if you use two data providers, you must divide 1000 calls by two to get the available watched stock number.

For example, you watch stocks using 2 data providers. You can watch $1000 / 2 = 500$ stocks with the one-hour refresh interval.

If you want to refresh the data twice an hour, divide the number by 2. In this example, your limit is 250 stocks.

The FAQ also contains the recommended limit as 0.2 calls per second. But, one call per second is quite good when the 1000 calls per hour limit are kept.

You may increase the usage limit to 10000 calls per hour. Just [get your Yahoo! API key](#) and configure it in the [RealTimeToExcel settings](#).

Data Provider Configuration Parameters

RefreshInterval

This time value defines the interval of row data refreshing.

The default value is 01:00:00, one hour.

NextRequestDelay

This integer value defines the interval between requests to a data source server, in milliseconds.

The default value is 1000, one second.

DataStartTime

This time value defines the time when the data source server starts publishing data.

For example, this is 09:50:00 -05:00 for free 20-minute delayed Yahoo! Finance data from US exchanges.

The default value is 00:00:00 -05:00.

DataEndTime

This time value defines the time when the data source server ends publishing data.

For example, this is 16:20:00 -05:00 for free 20-minute delayed Yahoo! Finance data from US exchanges.

The default value is 24:00:00 -05:00.

LoadEndTime

This time value defines the latest time when today's data can be loaded.

For example, this is 24:00:00 -05:00 for free 20-minute delayed Yahoo! Finance data from US exchanges.

This is the default value.

LoadOnSaturday

This integer value defines the behavior of data loading on Saturday:

0 - Load data as for other working days.

1 - Load Friday's data once.

2 - Do not load the data.

The default value is 1.

LoadOnSunday

This integer value defines the behavior of data loading on Sunday and has the same values as LoadOnSaturday.

AuthProvider

This string value defines a provider used to authenticate requests. "Yahoo" specifies the Yahoo! API Key.

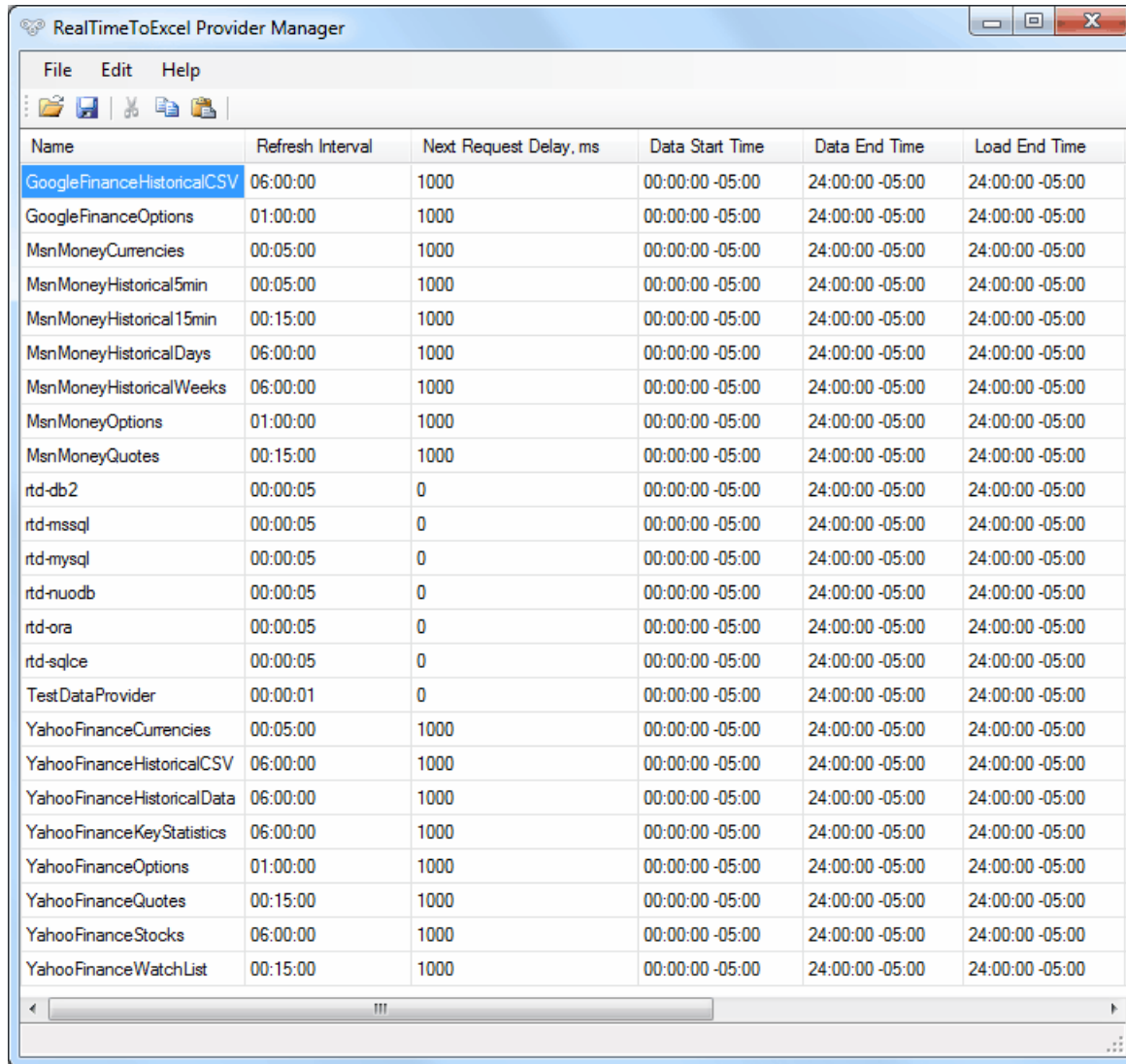
Data Provider Manager

You may edit [data provider settings](#) in a visual mode.

Use the Data Provider Manager link from the Start Menu in the All Applications\Gartle\RealTimeToExcel folder.

You may also run gProviderManager.exe from the installation folder and open configuration files from the **DataProviders** subfolder.

Here is a screenshot of the default providers:



Name	Refresh Interval	Next Request Delay, ms	Data Start Time	Data End Time	Load End Time
GoogleFinanceHistoricalCSV	06:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
GoogleFinanceOptions	01:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
MsnMoneyCurrencies	00:05:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
MsnMoneyHistorical5min	00:05:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
MsnMoneyHistorical15min	00:15:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
MsnMoneyHistoricalDays	06:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
MsnMoneyHistoricalWeeks	06:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
MsnMoneyOptions	01:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
MsnMoneyQuotes	00:15:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
rtd-db2	00:00:05	0	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
rtd-mssql	00:00:05	0	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
rtd-mysql	00:00:05	0	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
rtd-nuodb	00:00:05	0	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
rtd-ora	00:00:05	0	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
rtd-sqlce	00:00:05	0	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
TestDataProvider	00:00:01	0	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceCurrencies	00:05:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceHistoricalCSV	06:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceHistoricalData	06:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceKeyStatistics	06:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceOptions	01:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceQuotes	00:15:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceStocks	06:00:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00
YahooFinanceWatchList	00:15:00	1000	00:00:00 -05:00	24:00:00 -05:00	24:00:00 -05:00

Copying Excel Formulas

The documentation contains tables with Excel formulas like this:

Excel Column	Excel Formula	Copy Copy(,)
Symbol		
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")	

You may select the required formula and paste it into Excel spreadsheet.

You may also copy the entire table and quickly create a table in Excel.

Do the following:

1. Click the **Copy** or **Copy(,)** link in the upper right cell.
Use Copy(,) if the semicolon is used as a parameter separator in your version of Microsoft Excel.
2. Switch to Microsoft Excel, select the cell to insert the table, and click **Paste**.
The data will be inserted from the Clipboard, and the region will be selected.
3. Select the **Insert** tab of Microsoft Excel, click **Table**, check **My table has headers**, and click **OK**.
The regular Excel region will be converted to an Excel table.
4. Type the value in the first column empty cell. For example, YHOO for the Symbol column.
5. Press **F2** and then **Enter** on each formula in a row.
You will get updatable cells with working real-time formulas.

When you create the table as described, you may add next symbols in a second. Just type the ticker below the table.

For the documentation on the website use Internet Explorer to copy tables.

The setup package contains example workbooks. You may also copy example tables into your spreadsheets.

Product Registration

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

The registration process is required to register the desired edition.

To start the registration process, click the **Register Product** shortcut in the **RealTimeToExcel** group of the **Start** menu.

You may find the RealTimeToExcel group in one of the parent groups depend on the setup package:

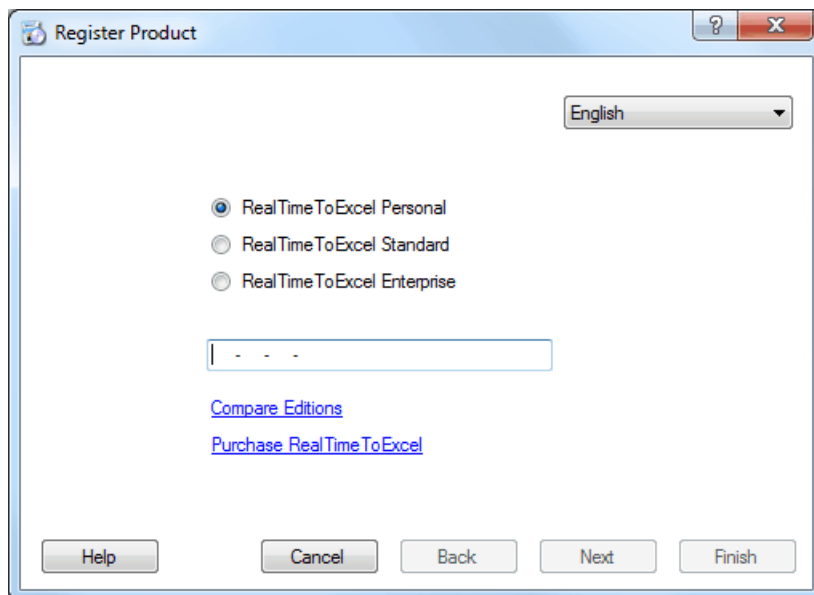
- Gartle\RealTimeToDB\RealTimeToExcel
- Gartle\RealTimeToExcel

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

The product code is sent by email after purchasing.

Selecting Edition

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



The image shows a Windows-style dialog box titled "Register Product". It has a standard Windows window frame with a question mark icon and a close button (X) in the top right corner. Inside the dialog, there is a language dropdown menu at the top right, currently set to "English". Below this, there are three radio button options for selecting an edition: "RealTimeToExcel Personal" (which is selected), "RealTimeToExcel Standard", and "RealTimeToExcel Enterprise". Under these options is a text input field containing three dashes " - - - ". Below the input field are two blue hyperlinks: "Compare Editions" and "Purchase RealTimeToExcel". At the bottom of the dialog, there are five buttons: "Help", "Cancel", "Back", "Next", and "Finish".

Licensee Data

Please fill in the registration form carefully.

Register RealTimeToExcel

A valid email address is required as it is used to send the activation code to you.

First name: *

Last name: *

Email address: *

Company: *

Country: *

State: *

☐ Register by email

☒ Register online

☒ I want to receive release news

☐ I agree to my personal data being stored and processed electronically

[Read online our privacy policy](#)

Cancel Back Next 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.

Register RealTimeToExcel

The registration will be processed online.

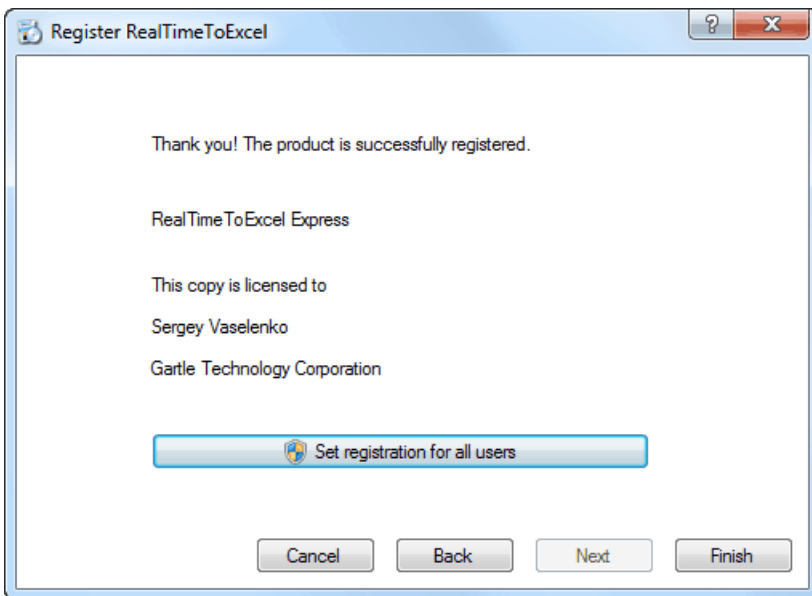
Your activation code will be also emailed back to s.vaselenko@gartle.com. Please make sure that the email address is valid.

Cancel Back Next Finish

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

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

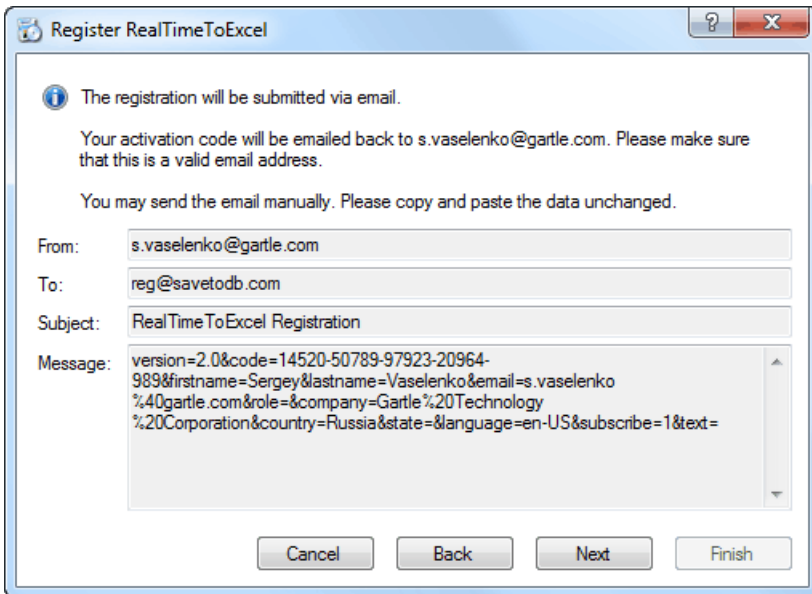
If any error occurred during connection, you might try to register the product later or try to register the product by email.



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:

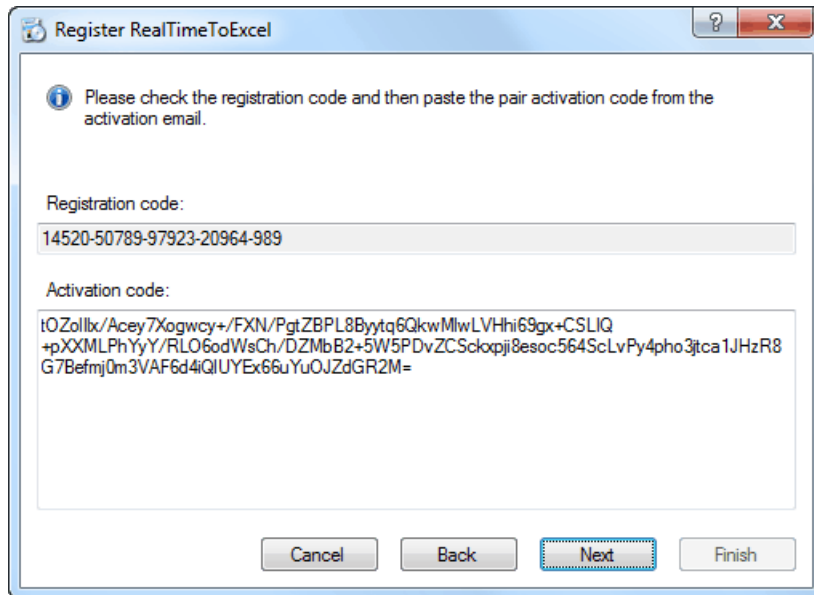


The **Next** button starts the default email program, creates a registration email, and activates the next step.
Don't forget to send the email.

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, in the same step.

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

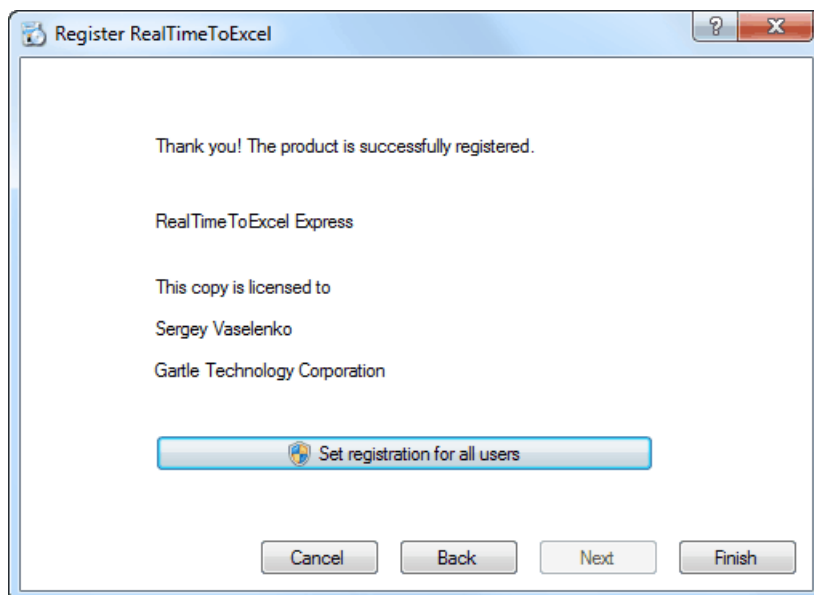


The dialog box titled "Register RealTimeToExcel" contains an information icon and the instruction: "Please check the registration code and then paste the pair activation code from the activation email." Below this, there are two text input fields. The first field, labeled "Registration code:", contains the text "14520-50789-97923-20964-989". The second field, labeled "Activation code:", contains a long alphanumeric string: "tOZollx/Acey7Xogwcy+/FXN/PgtZBPL8Byytq6QkwMlwLVHhi69gx+CSLIQ+pXXMLPhYyY/RLO6odWsCh/DZMbB2+5W5PDvZCScloxpji8esoc564ScLvPy4pho3jtca1JHzR8G7Befmj0m3VAF6d4QIUYEx66uYuOJZdGR2M=". At the bottom of the dialog, there are four buttons: "Cancel", "Back", "Next", and "Finish". The "Next" button is highlighted with a blue border, indicating it is the active button.

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

Click **Next** to continue.

The RealTimeToExcel checks the registration data and confirms the registration.



The dialog box titled "Register RealTimeToExcel" displays a success message: "Thank you! The product is successfully registered." Below this, it shows the product name "RealTimeToExcel Express" and the license information: "This copy is licensed to Sergey Vaselenko" and "Gartle Technology Corporation". A button labeled "Set registration for all users" with a shield icon is positioned below the license information. At the bottom of the dialog, there are four buttons: "Cancel", "Back", "Next", and "Finish". The "Next" button is highlighted with a blue border, indicating it is the active button.

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

Click **Finish**.

Yahoo! Finance

RealTimeToExcel allows loading data from the Yahoo! Finance website and web services.

You may load data for stocks, currencies, and options.

The most of the data are loaded from the officially supported YQL web service.

Key Statistics, Historical CSV, and Options are loaded from the Yahoo! Finance website directly using undocumented features.

Data Providers

- [Yahoo! Finance Quotes CSV](#)
- [Yahoo! Finance Financials](#)
- [Yahoo! Finance Key Statistics](#)
- [Yahoo! Finance Summary](#)
- [Yahoo! Finance Industry](#)
- [Yahoo! Finance Historical CSV](#)
- [Yahoo! Finance Currencies](#)
- [Yahoo! Finance Options](#)

Complying with Yahoo! Terms of Services

Yahoo! Finance publishes delayed quotes and financial data free of charge for non-commercial use.

RealTimeToExcel default settings comply with Yahoo! Terms of Services.

See important documents about Yahoo! Finance data use:

- Yahoo! Terms of Service at <http://info.yahoo.com/legal/us/yahoo/utos/terms/>
- Yahoo! APIs Terms of Use at <http://info.yahoo.com/legal/us/yahoo/api/api-2140.html>
- Yahoo! Query Language at <http://developer.yahoo.com/yql/>

Yahoo! Finance Quotes CSV

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceQuotesCSV", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"YahooFinanceQuotesCSV", "YHOO", "Last")
```

This provider has the same data as the YahooFinanceQuotes provider but loads data directly from Yahoo! Finance website. You may use this provider if the YahooFinanceQuotes provider has issues with updating data.

Use <http://finance.yahoo.com/> to find tickers. See also the complete list of [Yahoo! Finance exchanges](#).

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
LastTradeDate	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"LastTradeTime")	
Bid	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Bid")	
Ask	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Ask")	
Last	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"ChangeInPercent")	
Open	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Low")	
Volume	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Volume")	
DaysRange	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"DaysRange")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PreviousClose")	
ShortRatio	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"ShortRatio")	
YearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"YearHigh")	
YearLow	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"YearLow")	
YearRange	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"YearRange")	
ChangeFromYearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"ChangeFromYearHigh")	
ChangeFromYearLow	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"ChangeFromYearLow")	
PercentChangeFromYearHigh	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PercentChangeFromYearHigh")	
PercentChangeFromYearLow	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PercentChangeFromYearLow")	
MA50	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"FiftydayMovingAverage")	
MA200	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"TwoHundredDayMovingAverage")	
ChangeFromMA50	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"ChangeFromFiftyDayMovingAverage")	
ChangeFromMA200	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"ChangeFromTwoHundredDayMovingAverage")	
PercentChangeFromMA50	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PercentChangeFromFiftyDayMovingAverage")	
PercentChangeFromMA200	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PercentChangeFromTwoHundredDayMovingAverage")	
AverageDailyVolume	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"AverageDailyVolume")	
OneYearTargetPrice	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"OneYrTargetPrice")	
PE	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PERatio")	
PEG	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PEGRatio")	
EPSEstCurrentYear	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"EPSEstimateCurrentYear")	
EPSEstNextQuarter	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"EPSEstimateNextQuarter")	
EPSEstNextYear	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"EPSEstimateNextYear")	
EarningsShare	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"EarningsShare")	
MarketCap	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"MarketCapitalization")	
MarketCap\$	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"MarketCapitalization\$")	
DividendYield	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"DividendYield")	
DividendShare	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"DividendShare")	
ExDividendDate	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"ExDividendDate")	
DividendPayDate	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"DividendPayDate")	
BookValue	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"BookValue")	
PriceBook	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PriceBook")	
PriceSales	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PriceSales")	
PriceEPSEstCurrentYear	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PriceEPSEstimateCurrentYear")	
PriceEPSEstNextYear	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"PriceEPSEstimateNextYear")	
EBITDA	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"EBITDA")	

EBITDA\$	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"EBITDA\$")
CompanyName	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"Name")
StockExchange	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"StockExchange")
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"rtd_LastError")
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"rtd_LastMessage")
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"rtd_LastUpdate")
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"rtd_LastUpdateDate")
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceQuotesCSV",[Symbol],"rtd_LastUpdateTime")

Synonyms: ChangeInPercent, ChangePercent, and PercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 15 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:15:00, 15 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

Yahoo Finance Website.

Usage

Excel formula:

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=RTD("gartle.rtd",,"YahooFinanceFinancials",<Ticker>,<Report>,<Column>,<Row>)
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Examples:

```
=RTD("gartle.rtd",,"YahooFinanceFinancials","YHOO","IncomeStatement",1,"Total Revenue")
```

```
=RTD("gartle.rtd",,"YahooFinanceFinancials","YHOO","BalanceSheet",1,"Goodwill")
```

```
=RTD("gartle.rtd",,"YahooFinanceFinancials","YHOO","CashFlow",1,"Total Cash Flow From Operating Activities")
```

Available reports:

- IncomeStatement
- IncomeStatementAnnual
- BalanceSheet
- BalanceSheetAnnual
- CashFlow
- CashFlowAnnual

See available rows and columns at Yahoo! Finance Financials web pages:

- <http://finance.yahoo.com/q/is?s=AAPL>
- <http://finance.yahoo.com/q/is?s=AAPL+Income+Statement&annual>
- <http://finance.yahoo.com/q/bs?s=AAPL>
- <http://finance.yahoo.com/q/bs?s=AAPL+Balance+Sheet&annual>
- <http://finance.yahoo.com/q/cf?s=AAPL>
- <http://finance.yahoo.com/q/cf?s=AAPL+Cash+Flow&annual>

You may copy row names from Yahoo! Finance web pages directly.

Also, you may copy ready-to-use formulas from the tables below.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Also, see ready-to-use workbook templates in the downloaded package.

Income Statement Quarterly Data

Excel Column	Excel Formula	Copy Copy(-)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Period Ending")	
Total Revenue	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Total Revenue")	
Cost of Revenue	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Cost of Revenue")	
Gross Profit	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Gross Profit")	
Operating Expenses	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Operating Expenses")	
Research Development	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Research Development")	
Selling General and Administrative	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Selling General and Administrative")	
Non Recurring	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Non Recurring")	
Others	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Others")	
Total Operating Expenses	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Total Operating Expenses")	
Operating Income or Loss	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Operating Income or Loss")	
Income from Continuing Operations	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Income from Continuing Operations")	
Total Other Income/Expenses Net	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Total Other Income/Expenses Net")	
Earnings Before Interest And Taxes	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Earnings Before Interest And Taxes")	
Interest Expense	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Interest Expense")	
Income Before Tax	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Income Before Tax")	
Income Tax Expense	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Income Tax Expense")	
Minority Interest	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Minority Interest")	
Net Income From Continuing Ops	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Net Income From Continuing Ops")	
Non-recurring Events	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Non-recurring Events")	
Discontinued Operations	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Discontinued Operations")	
Extraordinary Items	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Extraordinary Items")	
Effect Of Accounting Changes	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Effect Of Accounting Changes")	
Other Items	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Other Items")	
Net Income	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Net Income")	
Preferred Stock And Other Adjustments	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Preferred Stock And Other Adjustments")	
Net Income Applicable To Common Shares	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Net Income Applicable To Common Shares")	
rtd_LastError	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "IncomeStatement", [Column], "rtd_LastUpdateTime")	

Income Statement Annual Data

Excel Column	Excel Formula	Copy Copy(-)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Period Ending")	
Total Revenue	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Total Revenue")	
Cost of Revenue	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Cost of Revenue")	
Gross Profit	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Gross Profit")	
Operating Expenses	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Operating Expenses")	
Research Development	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Research Development")	
Selling General and Administrative	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Selling General and Administrative")	
Non Recurring	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Non Recurring")	
Others	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Others")	
Total Operating Expenses	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Total Operating Expenses")	
Operating Income or Loss	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Operating Income or Loss")	
Income from Continuing Operations	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income from Continuing Operations")	
Total Other Income/Expenses Net	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Total Other Income/Expenses Net")	
Earnings Before Interest And Taxes	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Earnings Before Interest And Taxes")	
Interest Expense	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Interest Expense")	
Income Before Tax	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income Before Tax")	
Income Tax Expense	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income Tax Expense")	
Minority Interest	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Minority Interest")	
Net Income From Continuing Ops	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Net Income From Continuing Ops")	
Non-recurring Events	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Non-recurring Events")	
Discontinued Operations	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Discontinued Operations")	
Extraordinary Items	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Extraordinary Items")	
Effect Of Accounting Changes	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Effect Of Accounting Changes")	
Other Items	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Other Items")	
Net Income	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Net Income")	
Preferred Stock And Other Adjustments	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Preferred Stock And Other Adjustments")	
Net Income Applicable To Common Shares	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Net Income Applicable To Common Shares")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastError")	
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rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastUpdateDate")	
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Balance Sheet Quarterly Data

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Assets	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Assets")	
Current Assets	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Current Assets")	
Cash And Cash Equivalents	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Cash And Cash Equivalents")	
Short Term Investments	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Short Term Investments")	
Net Receivables	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Net Receivables")	
Inventory	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Inventory")	
Other Current Assets	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Other Current Assets")	
Total Current Assets	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Total Current Assets")	
Long Term Investments	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Long Term Investments")	
Property Plant and Equipment	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Property Plant and Equipment")	
Goodwill	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Goodwill")	
Intangible Assets	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Intangible Assets")	
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Other Assets	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Other Assets")	
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Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Liabilities")	
Current Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Current Liabilities")	
Accounts Payable	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Accounts Payable")	
Short/Current Long Term Debt	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Short/Current Long Term Debt")	
Other Current Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Other Current Liabilities")	
Total Current Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Total Current Liabilities")	
Long Term Debt	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Long Term Debt")	
Other Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Other Liabilities")	
Deferred Long Term Liability Charges	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Deferred Long Term Liability Charges")	
Minority Interest	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Minority Interest")	
Negative Goodwill	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Negative Goodwill")	
Total Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Total Liabilities")	
Stockholders' Equity	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Stockholders' Equity")	
Misc Stocks Options Warrants	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Misc Stocks Options Warrants")	
Redeemable Preferred Stock	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Redeemable Preferred Stock")	
Preferred Stock	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Preferred Stock")	
Common Stock	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Common Stock")	
Retained Earnings	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Retained Earnings")	
Treasury Stock	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Treasury Stock")	
Capital Surplus	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Capital Surplus")	
Other Stockholder Equity	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Other Stockholder Equity")	
Total Stockholder Equity	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Total Stockholder Equity")	
Net Tangible Assets	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "Net Tangible Assets")	
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rtd_LastUpdate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "BalanceSheet", [Column], "rtd_LastUpdateTime")	

Balance Sheet Annual Data

Excel Column	Excel Formula	Copy Copy(-)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Period Ending")	
Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Assets")	
Current Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Current Assets")	
Cash And Cash Equivalents	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Cash And Cash Equivalents")	
Short Term Investments	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Short Term Investments")	
Net Receivables	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Net Receivables")	
Inventory	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Inventory")	
Other Current Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Current Assets")	
Total Current Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Current Assets")	
Long Term Investments	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Long Term Investments")	
Property Plant and Equipment	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Property Plant and Equipment")	
Goodwill	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Goodwill")	
Intangible Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Intangible Assets")	
Accumulated Amortization	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Accumulated Amortization")	
Other Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Assets")	
Deferred Long Term Asset Charges	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Deferred Long Term Asset Charges")	
Total Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Assets")	
Liabilities	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Liabilities")	
Current Liabilities	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Current Liabilities")	
Accounts Payable	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Accounts Payable")	
Short/Current Long Term Debt	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Short/Current Long Term Debt")	
Other Current Liabilities	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Current Liabilities")	
Total Current Liabilities	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Current Liabilities")	
Long Term Debt	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Long Term Debt")	
Other Liabilities	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Liabilities")	
Deferred Long Term Liability Charges	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Deferred Long Term Liability Charges")	
Minority Interest	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Minority Interest")	
Negative Goodwill	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Negative Goodwill")	
Total Liabilities	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Liabilities")	
Stockholders' Equity	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Stockholders' Equity")	
Misc Stocks Options Warrants	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Misc Stocks Options Warrants")	
Redeemable Preferred Stock	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Redeemable Preferred Stock")	
Preferred Stock	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Preferred Stock")	
Common Stock	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Common Stock")	
Retained Earnings	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Retained Earnings")	
Treasury Stock	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Treasury Stock")	
Capital Surplus	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Capital Surplus")	
Other Stockholder Equity	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Stockholder Equity")	
Total Stockholder Equity	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Stockholder Equity")	
Net Tangible Assets	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Net Tangible Assets")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastUpdateTime")	

Cash Flow Quarterly Data

Excel Column	Excel Formula	Copy Copy(-)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Period Ending")	
Net Income	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Net Income")	
Operating Activities, Cash Flows Provided By or Used In	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Operating Activities, Cash Flows Provided By or Used In")	
Depreciation	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Depreciation")	
Adjustments To Net Income	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Adjustments To Net Income")	
Changes In Accounts Receivables	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Changes In Accounts Receivables")	
Changes In Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Changes In Liabilities")	
Changes In Inventories	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Changes In Inventories")	
Changes In Other Operating Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Changes In Other Operating Activities")	
Total Cash Flow From Operating Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Total Cash Flow From Operating Activities")	
Investing Activities, Cash Flows Provided By or Used In	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Investing Activities, Cash Flows Provided By or Used In")	
Capital Expenditures	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Capital Expenditures")	
Investments	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Investments")	
Other Cash flows from Investing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Other Cash flows from Investing Activities")	
Total Cash Flows From Investing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Total Cash Flows From Investing Activities")	
Financing Activities, Cash Flows Provided By or Used In	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Financing Activities, Cash Flows Provided By or Used In")	
Dividends Paid	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Dividends Paid")	
Sale Purchase of Stock	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Sale Purchase of Stock")	
Net Borrowings	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Net Borrowings")	
Other Cash Flows from Financing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Other Cash Flows from Financing Activities")	
Total Cash Flows From Financing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Total Cash Flows From Financing Activities")	
Effect Of Exchange Rate Changes	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Effect Of Exchange Rate Changes")	
Change In Cash and Cash Equivalents	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "Change In Cash and Cash Equivalents")	
rtd_LastError	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastUpdateTime")	

Cash Flow Annual Data

Excel Column	Excel Formula	Copy Copy(!)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Period Ending")	
Net Income	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Net Income")	
Operating Activities, Cash Flows Provided By or Used In	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Operating Activities, Cash Flows Provided By or Used In")	
Depreciation	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Depreciation")	
Adjustments To Net Income	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Adjustments To Net Income")	
Changes In Accounts Receivables	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Changes In Accounts Receivables")	
Changes In Liabilities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Changes In Liabilities")	
Changes In Inventories	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Changes In Inventories")	
Changes In Other Operating Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Changes In Other Operating Activities")	
Total Cash Flow From Operating Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Total Cash Flow From Operating Activities")	
Investing Activities, Cash Flows Provided By or Used In	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Investing Activities, Cash Flows Provided By or Used In")	
Capital Expenditures	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Capital Expenditures")	
Investments	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Investments")	
Other Cash flows from Investing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Other Cash flows from Investing Activities")	
Total Cash Flows From Investing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Total Cash Flows From Investing Activities")	
Financing Activities, Cash Flows Provided By or Used In	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Financing Activities, Cash Flows Provided By or Used In")	
Dividends Paid	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Dividends Paid")	
Sale Purchase of Stock	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Sale Purchase of Stock")	
Net Borrowings	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Net Borrowings")	
Other Cash Flows from Financing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Other Cash Flows from Financing Activities")	
Total Cash Flows From Financing Activities	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Total Cash Flows From Financing Activities")	
Effect Of Exchange Rate Changes	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Effect Of Exchange Rate Changes")	
Change In Cash and Cash Equivalents	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Change In Cash and Cash Equivalents")	
rtd_LastError	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd", "YahooFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "rtd_LastUpdateTime")	

Data Provider Settings

The data provider is configured to loading data every 12 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	12:00:00, 12 hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The provider parses Yahoo! Finance Financials web pages.
Each report is loaded as a separate page.

Yahoo! Finance Key Statistics

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceKeyStatistics", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"YahooFinanceKeyStatistics", "YHOO", "% Held by Insiders")
```

Use <http://finance.yahoo.com/> to find tickers. See also the complete list of [Yahoo! Finance exchanges](#).

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
% Held by Insiders	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"% Held by Insiders")	
% Held by Institutions	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"% Held by Institutions")	
200-Day Moving Average	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"200-Day Moving Average")	
5 Year Average Dividend Yield	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"5 Year Average Dividend Yield")	
50-Day Moving Average	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"50-Day Moving Average")	
52-Week Change	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"52-Week Change")	
52-Week High	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"52-Week High")	
52-Week Low	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"52-Week Low")	
Avg Vol (10 day)	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Avg Vol (10 day)")	
Avg Vol (3 month)	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Avg Vol (3 month)")	
Beta	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Beta")	
Book Value Per Share	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Book Value Per Share")	
Current Ratio	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Current Ratio")	
Diluted EPS	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Diluted EPS")	
Dividend Date	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Dividend Date")	
EBITDA	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"EBITDA")	
EBITDA\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"EBITDA\$")	
Enterprise Value	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Enterprise Value")	
Enterprise Value\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Enterprise Value\$")	
Enterprise Value/EBITDA	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Enterprise Value/EBITDA")	
Enterprise Value/Revenue	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Enterprise Value/Revenue")	
Ex-Dividend Date	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Ex-Dividend Date")	
Financial Highlights	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Financial Highlights")	
Fiscal Year Ends	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Fiscal Year Ends")	
Float	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Float")	
Float\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Float\$")	
Forward Annual Dividend Rate	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Forward Annual Dividend Rate")	
Forward Annual Dividend Yield	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Forward Annual Dividend Yield")	
Forward P/E	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Forward P/E")	
Gross Profit	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Gross Profit")	
Gross Profit\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Gross Profit\$")	
Last Split Date	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Last Split Date")	
Last Split Factor	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Last Split Factor")	
Levered Free Cash Flow	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Levered Free Cash Flow")	
Levered Free Cash Flow\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Levered Free Cash Flow\$")	
Market Cap	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Market Cap")	
Market Cap\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Market Cap\$")	
Most Recent Quarter	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Most Recent Quarter")	
Net Income Avl to Common	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Net Income Avl to Common")	
Net Income Avl to Common\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Net Income Avl to Common\$")	
Operating Cash Flow	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Operating Cash Flow")	
Operating Cash Flow\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Operating Cash Flow\$")	
Operating Margin	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Operating Margin")	
Payout Ratio	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Payout Ratio")	
PEG Ratio	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"PEG Ratio")	
Price/Book	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Price/Book")	
Price/Sales	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Price/Sales")	
Profit Margin	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Profit Margin")	
Qtrly Earnings Growth	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Qtrly Earnings Growth")	

Qtrly Revenue Growth	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Qtrly Revenue Growth")
Return on Assets	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Return on Assets")
Return on Equity	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Return on Equity")
Revenue	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Revenue")
Revenue\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Revenue\$")
Revenue Per Share	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Revenue Per Share")
S&P500 52-Week Change	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"S&P500 52-Week Change")
Shares Outstanding	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Shares Outstanding")
Shares Outstanding\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Shares Outstanding\$")
Shares Short	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Shares Short")
Shares Short\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Shares Short\$")
Shares Short (prior month)	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Shares Short (prior month)")
Shares Short (prior month)\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Shares Short (prior month)\$")
Short % of Float	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Short % of Float")
Short Ratio	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Short Ratio")
Symbol	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Symbol")
Total Cash	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Total Cash")
Total Cash\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Total Cash\$")
Total Cash Per Share	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Total Cash Per Share")
Total Debt	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Total Debt")
Total Debt\$	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Total Debt\$")
Total Debt/Equity	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Total Debt/Equity")
Trailing Annual Dividend Yield	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Trailing Annual Dividend Yield")
Trailing P/E	=RTD("gartle.rtd",,"YahooFinanceKeyStatistics",[Symbol],"Trailing P/E")

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

Yahoo! Finance Key Statistics

Example:

<https://finance.yahoo.com/q/ks?s=AAPL+Key+Statistics>

Yahoo! Finance Summary

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceSummary", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"YahooFinanceSummary", "YHOO", "Days Range")  
=RTD("gartle.rtd",,"YahooFinanceSummary", "YHOO170120C00033000", "Days Range")
```

This provider is unique as you may get Open, High and Low values for options.

Use <http://finance.yahoo.com/> to find tickers. See also the complete list of [Yahoo! Finance exchanges](#).

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Company Name	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Company Name")	
Stock Exchange	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Stock Exchange")	
Earnings Date	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Earnings Date")	
Last Trade Date	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Last Trade Date")	
Last Trade Time	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Last Trade Time")	
Last Trade DateTime	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Last Trade DateTime")	
Bid	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Bid")	
Ask	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Ask")	
Bid Size	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Bid Size")	
Ask Size	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Ask Size")	
BidX	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"BidX")	
AskX	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"AskX")	
Last	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Change")	
Change In Percent	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Change In Percent")	
Open	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Low")	
Volume	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Volume")	
OpenInterest	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"OpenInterest")	
Previous Close	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Previous Close")	
Days Range	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Days Range")	
Beta	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Beta")	
52-Week High	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"52-Week High")	
52-Week Low	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"52-Week Low")	
52-Week Range	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"52-Week Range")	
Change from 52-Week High	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Change from 52-Week High")	
Change from 52-Week Low	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Change from 52-Week Low")	
% Change from 52-Week High	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"% Change from 52-Week High")	
% Change from 52-Week Low	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"% Change from 52-Week Low")	
Avg Vol (3 Month)	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Avg Vol (3 Month)")	
Market Cap	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Market Cap")	
Market Cap \$	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Market Cap \$")	
P/E	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"P/E")	
PEG Ratio	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"PEG Ratio")	
Price/Sales	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Price/Sales")	
One Year Target Price	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"One Year Target Price")	
Mean Recommendation	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Mean Recommendation")	
EPS Estimate Current Year	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"EPS Estimate Current Year")	
EPS Estimate Next Quarter	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"EPS Estimate Next Quarter")	
Forward Annual Dividend Rate	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Forward Annual Dividend Rate")	
Forward Annual Dividend Yield	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Forward Annual Dividend Yield")	
Ex-Dividend Date	=RTD("gartle.rtd",,"YahooFinanceSummary",[Symbol],"Ex-Dividend Date")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 15 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:15:00, 15 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

Yahoo! Finance Website.

Example:

<https://finance.yahoo.com/q?s=AAPL>

Yahoo! Finance Industry

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceIndustry","<Ticker>","<Data Field>")
```

Examples:

```
=RTD("gartle.rtd",,"YahooFinanceIndustry","YHOO","Sector")
```

```
=RTD("gartle.rtd",,"YahooFinanceIndustry","YHOO","Industry")
```

Use <http://finance.yahoo.com/> to find tickers. See also a full list of [Yahoo! Finance exchanges](#).

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Sector	=RTD("gartle.rtd",,"YahooFinanceIndustry",[Symbol],"Sector")	
Industry	=RTD("gartle.rtd",,"YahooFinanceIndustry",[Symbol],"Industry")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceIndustry",[Symbol],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceIndustry",[Symbol],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceIndustry",[Symbol],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceIndustry",[Symbol],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceIndustry",[Symbol],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 12 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	12:00:00, 12 hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

Web pages like <http://finance.yahoo.com/q/in?s=YHOO>

Yahoo! Finance Historical CSV

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV", "YHOO", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV", "YHOO", "", "Close")
```

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

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

Historical data for one ticker symbol are downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Yahoo! website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Yahoo! Finance website.

Example:

<http://real-chart.finance.yahoo.com/table.csv?s=AAPL&ignore=.csv>

Yahoo! Finance Historical Days

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalDays", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalDays", "YHOO", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"YahooFinanceHistoricalDays", "YHOO", "", "Close")
```

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

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

Historical data for one ticker symbol are downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Yahoo! website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(=)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(=)
Symbol		
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalDays",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Yahoo! Finance website.

Example:

<http://finance.yahoo.com/quote/AAPL?p=AAPL>

Yahoo! Finance Historical Months

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths", "YHOO", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths", "YHOO", "", "Close")
```

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

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

Historical data for one ticker symbol are downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Yahoo! website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of months to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalMonths",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading months are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the months for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Yahoo! Finance website.

Example:

<http://finance.yahoo.com/quote/AAPL?p=AAPL>

Yahoo! Finance Historical Weeks

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks", "YHOO", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks", "YHOO", "", "Close")
```

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

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

Historical data for one ticker symbol are downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Yahoo! website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of weeks to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalWeeks",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading weeks are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the weeks for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Yahoo! Finance website.

Example:

<http://finance.yahoo.com/quote/AAPL?p=AAPL>

Yahoo! Finance Historical 1 Min

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceHistorical1min", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceHistorical1min", "YHOO", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"YahooFinanceHistorical1min", "YHOO", "", "Close")
```

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

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

Historical data for one ticker symbol are downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Yahoo! website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of records to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistorical1min",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading records are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the records for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Yahoo! Finance website.

Example:

<http://finance.yahoo.com/quote/AAPL?p=AAPL>

Yahoo! Finance Historical 5 Min

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceHistorical5min", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceHistorical5min", "YHOO", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"YahooFinanceHistorical5min", "YHOO", "", "Close")
```

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

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

Historical data for one ticker symbol are downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Yahoo! website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	<u>Copy</u> <u>Copy(!)</u>
Symbol		
Date		
Open	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of records to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistorical5min",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading records are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the records for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Yahoo! Finance website.

Example:

<http://finance.yahoo.com/quote/AAPL?p=AAPL>

Yahoo! Finance Currencies

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceCurrencies", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"YahooFinanceCurrencies", "EURUSD=X", "Last")
```

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

Supported ticker formats, on the EURUSD pair example:

EURUSD, UER/USD, EUR-USD, EUR_USD, EURUSD=X

You may get these codes using the Symbol1 - Symbol5 columns.

Important Notes

The data are loaded from the yahoo.finance.quoteslist table as for stocks.

However, this provider loads data for all currencies in one request.

This feature ensures that the data for all pairs are loaded at the same time.

Due this, you may request the Yahoo! Finance web service more frequently.

For example, for 1-minute requests, it is $24 * 60 = 1440$ requests per day for any number of pairs.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
LastTradeDateTime	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"LastTradeDateTime")	
LastTradeDate	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"LastTradeTime")	
Bid	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Bid")	
Ask	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Ask")	
Last	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"PercentChange")	
Open	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Low")	
Symbol1	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Symbol1")	
Symbol2	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Symbol2")	
Symbol3	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Symbol3")	
Symbol4	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Symbol4")	
Symbol5	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"Symbol5")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceCurrencies",[Symbol],"rtd_LastUpdateTime")	

Synonyms: ChangeInPercent, ChangePercent, and PercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

The ChangeInPercent value is calculated by RealTimeToExcel.

Data Provider Settings

The data provider is configured to loading data every 5 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:05:00, 5 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	0, loading as for other days.
LoadOnSunday	0, loading as for other days.

Data Source

http://query.yahooapis.com/v1/public/yql?q=select%20*%20from%20yahoo.finance.quoteslist

Special thanks to <http://www.philadelphia-reflections.com/blog/2392.htm>

Yahoo! Finance Options

Usage

Excel formula for **using option codes**:

```
=RTD("gartle.rtd",,"YahooFinanceOptions","<Option Code>","<Data Field>")
```

Option code format:

```
[.]<Option Symbol><Expiration Date><Option Type Char><Strike>
```

Expiration date format:

yymmdd

Option type char: C or P

Strike format:

8 digits with leading zero as strike * 1000 (Yahoo! Finance format)
7 digits with leading zero as strike * 100
6 digits with leading zero as strike * 10
strike as is with or without decimal part (common strike format)

Examples:

```
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO170120C00050000","OpenInt")  
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO170120C00050","OpenInt")  
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO170120C50","OpenInt")  
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO170120C50.0","OpenInt")  
=RTD("gartle.rtd",,"YahooFinanceOptions",".YHOO170120C50.0","OpenInt") (Thinkorswim format)
```

Excel formula for **using option specifications**:

```
=RTD("gartle.rtd",,"YahooFinanceOptions","<Option Symbol>,<Expiration Date>,<Strike>","<Option Type>","<Data Field>")
```

Expiration date formats:

yymmdd
yyyy-mm-dd
mmmmdd,yy
mmmmdd'yy

Option type format: C or CALL, P or PUT

Examples:

```
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO", "170120", 50, "CALL","OpenInt")  
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO", "2017-01-20", 50, "C","OpenInt")  
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO", "JAN20,17", 50, "PUT","OpenInt")  
=RTD("gartle.rtd",,"YahooFinanceOptions","YHOO", "JAN20'17", 50, "P","OpenInt")
```

Use <http://finance.yahoo.com/> to find option codes. Options data is available for US exchanges and may be not available for other world's exchanges.

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

RealTimeToExcel loads one page to get the data for all options of the month. This feature significantly reduces amount of requests to the Yahoo! website.

Data Fields and Excel Formulas

Formulas for getting data by option codes:

Excel Column	Excel Formula	Copy Copy(!)
Code	AAPL170120C00100000	
OptionCode	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"OptionCode")	
Symbol	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"Symbol")	
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")	
ImpliedVolatility	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"ImpliedVolatility")	
Strike~0	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"Strike~0")	
Strike+0	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"Strike+0")	
Strike-0	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"Strike-0")	
Strike+1	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"Strike+1")	
Strike-1	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"Strike-1")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceOptions",[Code],"rtd_LastUpdateTime")	

Formulas for getting data by option contract specifications:

Excel Column	Excel Formula	Copy Copy(!)
OptionSymbol	AAPL	
ExpDate	170120	
Strike	100	
Type	CALL	
OptionCode	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"OptionCode")	
Symbol	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Symbol")	
Last	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Last")	
Change	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Change")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"ChangeInPercent")	
Mark	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Mark")	
Bid	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Bid")	
Ask	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Ask")	
Volume	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Volume")	
OpenInt	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"OpenInt")	
ImpliedVolatility	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"ImpliedVolatility")	
Strike~0	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike~0")	
Strike+0	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike+0")	
Strike-0	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike-0")	
Strike+1	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike+1")	
Strike-1	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike-1")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdateTime")	

Symbol, OptionSymbol, Exp, Strike, and Type are calculated by parsing the option code.

OptionCode is the option code in the standard Yahoo! Finance format.

OptionSymbol ends with 7 for Mini Options, and with 1 for some options before splits.

The ChangeInPercent, ChangePercent, and Percent values are calculated by RealTimeToExcel and are the same. The Mark value is calculated as (Bid+Ask)/2.

Use Strike~0 to find the ATM strike, Strike+0 or Strike-0 to find equal or the nearest strikes, and Strike+ 1 and Strike-1 to find the nearest strikes above and below the strike.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every hour when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	01:00:00, one hour
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

YQL web service query:

http://query.yahooapis.com/v1/public/yql?q=select%20*%20from%20yahoo.finance.options

Yahoo! Finance website link example:

<http://finance.yahoo.com/q/op?s=AAPL+Options>

Google Finance

RealTimeToExcel allows loading historical prices and option data from Google Finance.

RealTimeToExcel uses undocumented features.

These providers are added to replace Yahoo! Finance data when Yahoo! Finance data are temporary not available or corrupted.

Data Providers

- [Google Finance Financials](#)
- [Google Finance Historical CSV](#)
- [Google Finance Options](#)

Complying with Google Finance Terms of Services

RealTimeToExcel loads data from the Google Finance website using undocumented features.

See important documents about Google Finance data use:

- Google Terms of Service at <http://www.google.com/intl/en/policies/terms/>

Usage

Excel formula:

```
=RTD("gartle.rtd",,"GoogleFinanceFinancials",<Ticker>,<Report>,<Column>,<Row>)
```

Examples:

```
=RTD("gartle.rtd",,"GoogleFinanceFinancials","GOOGL","IncomeStatement",1,"Revenue")
```

```
=RTD("gartle.rtd",,"GoogleFinanceFinancials","GOOGL","BalanceSheet",1,"Goodwill, Net")
```

```
=RTD("gartle.rtd",,"GoogleFinanceFinancials","GOOGL","CashFlow",1,"Cash from Operating Activities")
```

Available reports:

- IncomeStatement
- IncomeStatementAnnual
- BalanceSheet
- BalanceSheetAnnual
- CashFlow
- CashFlowAnnual

See available rows and columns at Google Finance Financials web pages:

<https://www.google.com/finance?q=AAPL&fstype=ii>

You may copy row names from Google Finance web pages directly.

Also, you may copy ready-to-use formulas from the tables below.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Also, see ready-to-use workbook templates in the downloaded package.

Income Statement Quarterly Data

Excel Column	Excel Formula	Copy Copy(-)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Period Ending")	
In Millions of USD (except for per share items)	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "In Millions of USD (except for per share items)")	
Revenue	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Revenue")	
Other Revenue, Total	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Other Revenue, Total")	
Total Revenue	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Total Revenue")	
Cost of Revenue, Total	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Cost of Revenue, Total")	
Gross Profit	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Gross Profit")	
Selling/General/Admin. Expenses, Total	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Selling/General/Admin. Expenses, Total")	
Research & Development	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Research & Development")	
Depreciation/Amortization	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Depreciation/Amortization")	
Interest Expense(Income) - Net Operating	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Interest Expense(Income) - Net Operating")	
Unusual Expense (Income)	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Unusual Expense (Income)")	
Other Operating Expenses, Total	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Other Operating Expenses, Total")	
Total Operating Expense	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Total Operating Expense")	
Operating Income	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Operating Income")	
Interest Income(Expense), Net Non-Operating	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Interest Income(Expense), Net Non-Operating")	
Gain (Loss) on Sale of Assets	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Gain (Loss) on Sale of Assets")	
Other, Net	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Other, Net")	
Income Before Tax	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Income Before Tax")	
Income After Tax	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Income After Tax")	
Minority Interest	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Minority Interest")	
Equity In Affiliates	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Equity In Affiliates")	
Net Income Before Extra. Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Net Income Before Extra. Items")	
Accounting Change	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Accounting Change")	
Discontinued Operations	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Discontinued Operations")	
Extraordinary Item	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Extraordinary Item")	
Net Income	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Net Income")	
Preferred Dividends	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Preferred Dividends")	
Income Available to Common Excl. Extra Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Income Available to Common Excl. Extra Items")	
Income Available to Common Incl. Extra Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Income Available to Common Incl. Extra Items")	
Basic Weighted Average Shares	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Basic Weighted Average Shares")	
Basic EPS Excluding Extraordinary Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Basic EPS Excluding Extraordinary Items")	
Basic EPS Including Extraordinary Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Basic EPS Including Extraordinary Items")	
Dilution Adjustment	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Dilution Adjustment")	
Diluted Weighted Average Shares	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Diluted Weighted Average Shares")	
Diluted EPS Excluding Extraordinary Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Diluted EPS Excluding Extraordinary Items")	
Diluted EPS Including Extraordinary Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Diluted EPS Including Extraordinary Items")	
Dividends per Share - Common Stock Primary Issue	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Dividends per Share - Common Stock Primary Issue")	
Gross Dividends - Common Stock	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Gross Dividends - Common Stock")	
Net Income after Stock Based Comp. Expense	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Net Income after Stock Based Comp. Expense")	
Basic EPS after Stock Based Comp. Expense	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Basic EPS after Stock Based Comp. Expense")	
Diluted EPS after Stock Based Comp. Expense	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Diluted EPS after Stock Based Comp. Expense")	
Depreciation, Supplemental	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Depreciation, Supplemental")	
Total Special Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Total Special Items")	
Normalized Income Before Taxes	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "IncomeStatement", [Column], "Normalized Income Before Taxes")	

Effect of Special Items on Income Taxes	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"Effect of Special Items on Income Taxes")
Income Taxes Ex. Impact of Special Items	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"Income Taxes Ex. Impact of Special Items")
Normalized Income After Taxes	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"Normalized Income After Taxes")
Normalized Income Avail to Common	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"Normalized Income Avail to Common")
Basic Normalized EPS	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"Basic Normalized EPS")
Diluted Normalized EPS	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"Diluted Normalized EPS")
rtd_LastError	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"rtd_LastError")
rtd_LastMessage	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"rtd_LastMessage")
rtd_LastUpdate	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"rtd_LastUpdate")
rtd_LastUpdateDate	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"rtd_LastUpdateDate")
rtd_LastUpdateTime	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatement",[Column],"rtd_LastUpdateTime")

Income Statement Annual Data

Excel Column	Excel Formula	Copy Copy(!)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Period Ending")	
In Millions of USD (except for per share items)	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"In Millions of USD (except for per share items)")	
Revenue	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Revenue")	
Other Revenue, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Other Revenue, Total")	
Total Revenue	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Total Revenue")	
Cost of Revenue, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Cost of Revenue, Total")	
Gross Profit	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Gross Profit")	
Selling/General/Admin. Expenses, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Selling/General/Admin. Expenses, Total")	
Research & Development	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Research & Development")	
Depreciation/Amortization	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Depreciation/Amortization")	
Interest Expense(Income) - Net Operating	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Interest Expense(Income) - Net Operating")	
Unusual Expense (Income)	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Unusual Expense (Income)")	
Other Operating Expenses, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Other Operating Expenses, Total")	
Total Operating Expense	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Total Operating Expense")	
Operating Income	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Operating Income")	
Interest Income(Expense), Net Non-Operating	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Interest Income(Expense), Net Non-Operating")	
Gain (Loss) on Sale of Assets	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Gain (Loss) on Sale of Assets")	
Other, Net	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Other, Net")	
Income Before Tax	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income Before Tax")	
Income After Tax	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income After Tax")	
Minority Interest	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Minority Interest")	
Equity In Affiliates	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Equity In Affiliates")	
Net Income Before Extra. Items	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Net Income Before Extra. Items")	
Accounting Change	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Accounting Change")	
Discontinued Operations	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Discontinued Operations")	
Extraordinary Item	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Extraordinary Item")	
Net Income	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Net Income")	
Preferred Dividends	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Preferred Dividends")	
Income Available to Common Excl. Extra Items	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income Available to Common Excl. Extra Items")	
Income Available to Common Incl. Extra Items	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income Available to Common Incl. Extra Items")	
Basic Weighted Average Shares	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Basic Weighted Average Shares")	
Basic EPS Excluding Extraordinary Items	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Basic EPS Excluding Extraordinary Items")	
Basic EPS Including Extraordinary Items	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Basic EPS Including Extraordinary Items")	

Dilution Adjustment	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Dilution Adjustment")
Diluted Weighted Average Shares	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Diluted Weighted Average Shares")
Diluted EPS Excluding Extraordinary Items	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Diluted EPS Excluding Extraordinary Items")
Diluted EPS Including Extraordinary Items	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Diluted EPS Including Extraordinary Items")
Dividends per Share - Common Stock Primary Issue	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Dividends per Share - Common Stock Primary Issue")
Gross Dividends - Common Stock	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Gross Dividends - Common Stock")
Net Income after Stock Based Comp. Expense	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Net Income after Stock Based Comp. Expense")
Basic EPS after Stock Based Comp. Expense	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Basic EPS after Stock Based Comp. Expense")
Diluted EPS after Stock Based Comp. Expense	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Diluted EPS after Stock Based Comp. Expense")
Depreciation, Supplemental	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Depreciation, Supplemental")
Total Special Items	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Total Special Items")
Normalized Income Before Taxes	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Normalized Income Before Taxes")
Effect of Special Items on Income Taxes	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Effect of Special Items on Income Taxes")
Income Taxes Ex. Impact of Special Items	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Income Taxes Ex. Impact of Special Items")
Normalized Income After Taxes	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Normalized Income After Taxes")
Normalized Income Avail to Common	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Normalized Income Avail to Common")
Basic Normalized EPS	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Basic Normalized EPS")
Diluted Normalized EPS	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"Diluted Normalized EPS")
rtd_LastError	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastError")
rtd_LastMessage	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastMessage")
rtd_LastUpdate	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastUpdate")
rtd_LastUpdateDate	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastUpdateDate")
rtd_LastUpdateTime	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"IncomeStatementAnnual",[Column],"rtd_LastUpdateTime")

Balance Sheet Quarterly Data

Excel Column	Excel Formula	Copy Copy(-)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Period Ending")	
In Millions of USD (except for per share items)	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"In Millions of USD (except for per share items)")	
Cash & Equivalents	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Cash & Equivalents")	
Short Term Investments	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Short Term Investments")	
Cash and Short Term Investments	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Cash and Short Term Investments")	
Accounts Receivable - Trade, Net	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Accounts Receivable - Trade, Net")	
Receivables - Other	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Receivables - Other")	
Total Receivables, Net	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Receivables, Net")	
Total Inventory	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Inventory")	
Prepaid Expenses	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Prepaid Expenses")	
Other Current Assets, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Other Current Assets, Total")	
Total Current Assets	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Current Assets")	
Property/Plant/Equipment, Total - Gross	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Property/Plant/Equipment, Total - Gross")	
Accumulated Depreciation, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Accumulated Depreciation, Total")	
Goodwill, Net	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Goodwill, Net")	
Intangibles, Net	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Intangibles, Net")	
Long Term Investments	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Long Term Investments")	
Other Long Term Assets, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Other Long Term Assets, Total")	
Total Assets	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Assets")	
Accounts Payable	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Accounts Payable")	
Accrued Expenses	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Accrued Expenses")	
Notes Payable/Short Term Debt	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Notes Payable/Short Term Debt")	
Current Port. of LT Debt/Capital Leases	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Current Port. of LT Debt/Capital Leases")	
Other Current liabilities, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Other Current liabilities, Total")	
Total Current Liabilities	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Current Liabilities")	
Long Term Debt	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Long Term Debt")	
Capital Lease Obligations	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Capital Lease Obligations")	
Total Long Term Debt	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Long Term Debt")	
Total Debt	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Debt")	
Deferred Income Tax	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Deferred Income Tax")	
Minority Interest	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Minority Interest")	
Other Liabilities, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Other Liabilities, Total")	
Total Liabilities	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Liabilities")	
Redeemable Preferred Stock, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Redeemable Preferred Stock, Total")	
Preferred Stock - Non Redeemable, Net	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Preferred Stock - Non Redeemable, Net")	
Common Stock, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Common Stock, Total")	
Additional Paid-In Capital	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Additional Paid-In Capital")	
Retained Earnings (Accumulated Deficit)	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Retained Earnings (Accumulated Deficit)")	
Treasury Stock - Common	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Treasury Stock - Common")	
Other Equity, Total	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Other Equity, Total")	
Total Equity	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Equity")	
Total Liabilities & Shareholders' Equity	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Liabilities & Shareholders' Equity")	
Shares Outs - Common Stock Primary Issue	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Shares Outs - Common Stock Primary Issue")	
Total Common Shares Outstanding	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"Total Common Shares Outstanding")	
rtd_LastError	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd","GoogleFinanceFinancials",[Symbol],"BalanceSheet",[Column],"rtd_LastUpdateTime")	

Balance Sheet Annual Data

Excel Column	Excel Formula	Copy Copy(!)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Period Ending")	
In Millions of USD (except for per share items)	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"In Millions of USD (except for per share items)")	
Cash & Equivalents	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Cash & Equivalents")	
Short Term Investments	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Short Term Investments")	
Cash and Short Term Investments	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Cash and Short Term Investments")	
Accounts Receivable - Trade, Net	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Accounts Receivable - Trade, Net")	
Receivables - Other	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Receivables - Other")	
Total Receivables, Net	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Receivables, Net")	
Total Inventory	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Inventory")	
Prepaid Expenses	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Prepaid Expenses")	
Other Current Assets, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Current Assets, Total")	
Total Current Assets	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Current Assets")	
Property/Plant/Equipment, Total - Gross	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Property/Plant/Equipment, Total - Gross")	
Accumulated Depreciation, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Accumulated Depreciation, Total")	
Goodwill, Net	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Goodwill, Net")	
Intangibles, Net	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Intangibles, Net")	
Long Term Investments	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Long Term Investments")	
Other Long Term Assets, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Long Term Assets, Total")	
Total Assets	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Assets")	
Accounts Payable	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Accounts Payable")	
Accrued Expenses	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Accrued Expenses")	
Notes Payable/Short Term Debt	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Notes Payable/Short Term Debt")	
Current Port. of LT Debt/Capital Leases	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Current Port. of LT Debt/Capital Leases")	
Other Current liabilities, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Current liabilities, Total")	
Total Current Liabilities	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Current Liabilities")	
Long Term Debt	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Long Term Debt")	
Capital Lease Obligations	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Capital Lease Obligations")	
Total Long Term Debt	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Long Term Debt")	
Total Debt	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Debt")	
Deferred Income Tax	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Deferred Income Tax")	
Minority Interest	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Minority Interest")	
Other Liabilities, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Liabilities, Total")	
Total Liabilities	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Liabilities")	
Redeemable Preferred Stock, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Redeemable Preferred Stock, Total")	
Preferred Stock - Non Redeemable, Net	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Preferred Stock - Non Redeemable, Net")	
Common Stock, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Common Stock, Total")	
Additional Paid-In Capital	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Additional Paid-In Capital")	
Retained Earnings (Accumulated Deficit)	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Retained Earnings (Accumulated Deficit)")	
Treasury Stock - Common	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Treasury Stock - Common")	
Other Equity, Total	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Other Equity, Total")	
Total Equity	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Equity")	
Total Liabilities & Shareholders' Equity	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Liabilities & Shareholders' Equity")	
Shares Outs - Common Stock Primary Issue	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Shares Outs - Common Stock Primary Issue")	
Total Common Shares Outstanding	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"Total Common Shares Outstanding")	
rtd_LastError	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"BalanceSheetAnnual",[Column],"rtd_LastUpdateTime")	

Cash Flow Quarterly Data

Excel Column	Excel Formula	Copy Copy(!)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Period Ending")	
In Millions of USD (except for per share items)	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "In Millions of USD (except for per share items)")	
Net Income/Starting Line	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Net Income/Starting Line")	
Depreciation/Depletion	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Depreciation/Depletion")	
Amortization	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Amortization")	
Deferred Taxes	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Deferred Taxes")	
Non-Cash Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Non-Cash Items")	
Changes in Working Capital	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Changes in Working Capital")	
Cash from Operating Activities	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Cash from Operating Activities")	
Capital Expenditures	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Capital Expenditures")	
Other Investing Cash Flow Items, Total	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Other Investing Cash Flow Items, Total")	
Cash from Investing Activities	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Cash from Investing Activities")	
Financing Cash Flow Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Financing Cash Flow Items")	
Total Cash Dividends Paid	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Total Cash Dividends Paid")	
Issuance (Retirement) of Stock, Net	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Issuance (Retirement) of Stock, Net")	
Issuance (Retirement) of Debt, Net	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Issuance (Retirement) of Debt, Net")	
Cash from Financing Activities	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Cash from Financing Activities")	
Foreign Exchange Effects	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Foreign Exchange Effects")	
Net Change in Cash	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Net Change in Cash")	
Cash Interest Paid, Supplemental	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Cash Interest Paid, Supplemental")	
Cash Taxes Paid, Supplemental	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "Cash Taxes Paid, Supplemental")	
rtd_LastError	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlow", [Column], "rtd_LastUpdateTime")	

Cash Flow Annual Data

Excel Column	Excel Formula	Copy Copy(!)
Symbol	AAPL	
Column	1	
Period Ending	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Period Ending")	
In Millions of USD (except for per share items)	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "In Millions of USD (except for per share items)")	
Net Income/Starting Line	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Net Income/Starting Line")	
Depreciation/Depletion	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Depreciation/Depletion")	
Amortization	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Amortization")	
Deferred Taxes	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Deferred Taxes")	
Non-Cash Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Non-Cash Items")	
Changes in Working Capital	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Changes in Working Capital")	
Cash from Operating Activities	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Cash from Operating Activities")	
Capital Expenditures	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Capital Expenditures")	
Other Investing Cash Flow Items, Total	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Other Investing Cash Flow Items, Total")	
Cash from Investing Activities	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Cash from Investing Activities")	
Financing Cash Flow Items	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Financing Cash Flow Items")	
Total Cash Dividends Paid	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Total Cash Dividends Paid")	
Issuance (Retirement) of Stock, Net	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Issuance (Retirement) of Stock, Net")	
Issuance (Retirement) of Debt, Net	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Issuance (Retirement) of Debt, Net")	
Cash from Financing Activities	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Cash from Financing Activities")	
Foreign Exchange Effects	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Foreign Exchange Effects")	
Net Change in Cash	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Net Change in Cash")	
Cash Interest Paid, Supplemental	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Cash Interest Paid, Supplemental")	
Cash Taxes Paid, Supplemental	=RTD("gartle.rtd", "GoogleFinanceFinancials", [Symbol], "CashFlowAnnual", [Column], "Cash Taxes Paid, Supplemental")	

rtd_LastError	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"CashFlowAnnual",[Column],"rtd_LastError")
rtd_LastMessage	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"CashFlowAnnual",[Column],"rtd_LastMessage")
rtd_LastUpdate	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"CashFlowAnnual",[Column],"rtd_LastUpdate")
rtd_LastUpdateDate	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"CashFlowAnnual",[Column],"rtd_LastUpdateDate")
rtd_LastUpdateTime	=RTD("gartle.rtd",,"GoogleFinanceFinancials",[Symbol],"CashFlowAnnual",[Column],"rtd_LastUpdateTime")

Synonyms

Google Finance and Yahoo! Finance have different sets of indicators and different names for the same indicators.

The Google Finance Financials provider adds synonym rows to be compatible with Yahoo! Finances on major indicators.

Google Finance Row	Yahoo Finance Row
Cost of Revenue, Total	Cost of Revenue
Research & Development	Research Development
Total Operating Expense	Total Operating Expenses
Operating Income	Operating Income or Loss
Net Income Before Extra. Items	Net Income From Continuing Ops
Total Equity	Total Stockholder Equity
Net Income/Starting Line	Net Income
Depreciation/Depletion	Depreciation
Cash from Operating Activities	Total Cash Flow From Operating Activities
Cash from Investing Activities	Total Cash Flows From Investing Activities
Cash from Financing Activities	Total Cash Flows From Financing Activities
Net Change in Cash	Change In Cash and Cash Equivalents

Data Provider Settings

The data provider is configured to loading data every 12 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	12:00:00, 12 hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The provider parses Google Finance Financials web pages.
All reports are loaded as a single page.

Google Finance Historical CSV

Usage

Excel formula:

```
=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV", "GOOG", "2014-12-31", "Close")
=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV", "GOOG", "", "Close")
```

Use <https://www.google.com/finance> to find tickers.

Important Notes

Do not request the Google website frequently. Otherwise, your IP can be banned by the Google website.

Historical data for one ticker symbol is downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Google website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"GoogleFinanceHistoricalCSV",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd","GoogleFinanceHistoricalCSV",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, twelve hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Google Finance website.

Example:

<http://www.google.com/finance/historical?q=AAPL&output=csv>

Google Finance Options

Usage

Excel formula for **using option codes**:

```
=RTD("gartle.rtd",,"GoogleFinanceOptions","<Option Code>","<Data Field>")
```

Option code format:

```
[.]<Option Symbol><Expiration Date><Option Type Char><Strike>
```

Expiration date format:

yymmdd

Option type char: C or P

Strike format:

8 digits with leading zero as strike * 1000 (Google Finance format)

7 digits with leading zero as strike * 100

6 digits with leading zero as strike * 10

strike as is with or without decimal part (common strike format)

Examples:

```
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00170120C00050000","OpenInt")
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00170120C00050","OpenInt")
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00170120C50","OpenInt")
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00170120C50.0","OpenInt")
=RTD("gartle.rtd",,"GoogleFinanceOptions",".YH00170120C50.0","OpenInt") (Thinkorswim format)
```

Excel formula for **using option specifications**:

```
=RTD("gartle.rtd",,"GoogleFinanceOptions","<Option Symbol>,<Expiration Date>,<Strike>","<Option Type>","<Data Field>")
```

Expiration date formats:

yymmdd
yyyy-mm-dd
rmmdd,yy
rmmdd'yy

Option type format: C or CALL, P or PUT

Examples:

```
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00", "170120", 50, "CALL","OpenInt")
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00", "2017-01-20", 50, "C","OpenInt")
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00", "JAN20,17", 50, "PUT","OpenInt")
=RTD("gartle.rtd",,"GoogleFinanceOptions","YH00", "JAN20'17", 50, "P","OpenInt")
```

Use <https://www.google.com/finance> to find option codes. Options data is available for US exchanges and may be not available for other world's exchanges.

Important Notes

Do not request the Google website frequently. Otherwise, your IP can be banned by the Google website.

RealTimeToExcel loads one page to get the data for all options of the one expiration date. This feature significantly reduces the amount of requests to the Google website.

Data Fields and Excel Formulas

Formulas for getting data by option codes:

Excel Column	Excel Formula	Copy Copy(!)
Code	AAPL170120C00100000	
OptionCode	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"OptionCode")	
Symbol	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Symbol")	
OptionSymbol	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"OptionSymbol")	
ExpDate	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Exp")	
Strike	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Strike")	
Type	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Type")	
Last	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Last")	
Change	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"PercentChange")	
Mark	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Mark")	
Bid	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Bid")	
Ask	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Ask")	
Volume	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Volume")	
OpenInt	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"OpenInt")	
Strike~0	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Strike~0")	
Strike+0	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Strike+0")	
Strike-0	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Strike-0")	
Strike+1	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Strike+1")	
Strike-1	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"Strike-1")	
rtd_LastError	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"GoogleFinanceOptions",[Code],"rtd_LastUpdateTime")	

Formulas for getting data by option contract specifications:

Excel Column	Excel Formula	Copy Copy(!)
OptionSymbol	AAPL	
ExpDate	170120	
Strike	100	
Type	CALL	
OptionCode	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"OptionCode")	
Symbol	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Symbol")	
Last	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Last")	
Change	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"PercentChange")	
Mark	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Mark")	
Bid	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Bid")	
Ask	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Ask")	
Volume	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Volume")	
OpenInt	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"OpenInt")	
Strike~0	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike~0")	
Strike+0	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike+0")	
Strike-0	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike-0")	
Strike+1	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike+1")	
Strike-1	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike-1")	
rtd_LastError	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"GoogleFinanceOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdateTime")	

Symbol, OptionSymbol, Exp, Strike, and Type are calculated by parsing the option code.

OptionCode is the option code in the standard OCC format.

OptionSymbol ends with 7 for Mini Options, and with 1 for some options before splits.

The ChangeInPercent, ChangePercent, and Percent values are calculated by RealTimeToExcel and are the same. The Mark value is calculated as (Bid+Ask)/2.

Use Strike~0 to find the ATM strike, Strike+0 or Strike-0 to find equal or the nearest strikes, and Strike+ 1 and Strike-1 to find the nearest strikes above and below the strike.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every hour when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	01:00:00, one hour
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The Google Finance website.

Example:

https://www.google.com/finance/option_chain?q=AAPL

MSN Money

RealTimeToExcel allows loading data from the MSN Money website and web services.

You may load data for stocks, currencies, and options.

Only the MSN Money Quotes provider uses the official Microsoft web service used for getting quotes in Microsoft Excel.

The other providers use undocumented features. You may use them at your own risk.

Data Providers

- [MSN Money Quotes2](#)
- [MSN Money Historical Days](#)
- [MSN Money Historical Weeks](#)
- [MSN Money Historical 15 Minutes](#)
- [MSN Money Historical 5 Minutes](#)
- [MSN Money Currencies](#)
- [MSN Money Options](#)

Complying with MSN Money Terms of Services

RealTimeToExcel loads data from the MSN Money website using undocumented features.

See important documents about MSN Money data use:

- Microsoft Services Agreement at <http://windows.microsoft.com/en-us/windows/microsoft-services-agreement>

MSN Money Quotes2

Usage

Excel formula:

```
=RTD("gartle.rtd",,"MsnMoneyQuotes2","<Ticker>","<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"MsnMoneyQuotes2","MSFT","Last")
```

Use <http://www.msn.com/en-us/money> to find tickers.

Unlike the [MsnMoneyQuotes](#) provider, this provider allows using MSN codes to get data like 151.1.GLEN.LON.

So, you may get data for any stock or ETF available on MSN like this:

Code	Las	Last	Change	%Change	Open	High	Low	Volume	PrevClose	YearHigh	YearLow	CompanyName	Market	Currency
AAPL	📈	111.96	-0.09	-0.08%	111.62	112.17	111.33	9 658 836	112.05	134.54	92.00	Apple Inc	USA	USD
FB	📉	111.02	+0.52	0.47%	110.62	111.70	110.45	10 749 928	110.51	117.59	72.00	Facebook Inc	USA	USD
GOOG	📈	754.90	+3.49	0.46%	754.01	757.27	752.90	253 352	751.41	789.87	515.18	Alphabet Inc	USA	USD
LNKD	📈	116.96	+3.66	3.23%	113.43	118.23	113.06	1 271 514	113.30	265.56	98.25	LinkedIn Corp	USA	USD
MSFT	📈	55.31	-0.04	-0.07%	55.22	55.46	55.07	5 309 286	55.35	56.85	39.72	Microsoft Corp	USA	USD
ORCL	📈	41.39	+0.08	0.18%	41.31	41.46	41.18	2 600 933	41.32	45.24	33.13	Oracle Corporation	USA	USD
YHOO	📈	37.14	-0.16	-0.43%	37.47	37.50	36.85	4 897 949	37.30	46.13	26.15	Yahoo! Inc	USA	USD
127.1.ABX.TSE	📉	20.36	-0.20	-0.97%	20.48	20.68	20.30	2 239 970	20.56	21.32	7.89	Barrick Gold Corp	CAN	CAD
127.1.EMA.TSE	📈	47.19	+0.09	0.19%	47.36	47.47	46.97	97 896	47.10	48.54	39.12	Emera Inc	CAN	CAD
151.10.UKX	📈	6365.99	+3.10	0.05%	6362.89	6373.93	6335.40	0	6362.89	7122.74	5499.51	FTSE 100	GBR	GBP
151.1.GLEN.LON	📈	159.35	+0.85	0.54%	157.05	161.36	152.20	66 285 004	158.50	318.46	66.67	Glencore PLC	GBR	GBX
151.1.BARC.LON	📈	168.55	+1.75	1.05%	166.90	168.60	162.58	43 225 509	166.80	289.90	143.91	Barclays PLC	GBR	GBX
151.1.BLT.LON	📈	899.90	+17.10	1.94%	884.80	914.00	869.10	17 156 272	882.80	1637.50	571.60	BHP Billiton PLC	GBR	GBX
151.1.RIO.LON	📈	2251.50	+6.50	0.29%	2241.50	2286.50	2203.00	4 687 332	2245.00	3072.00	1557.00	Rio Tinto PLC	GBR	GBX
146.1.BHP.ASX	📈	18.87	+0.95	5.30%	18.75	18.95	18.65	21 751 111	17.92	33.35	14.06	BHP Billiton Ltd	AUS	AUD
146.1.RIO.ASX	📈	48.60	+1.22	2.57%	48.60	49.32	48.13	4 398 147	47.38	59.90	36.53	Rio Tinto Ltd	AUS	AUD
213.10.DAX	📈	10087.88	+61.78	0.62%	10042.28	10098.44	10016.17	0	10026.10	12339.81	8699.29	FSE DAX	DEU	XXP
200.1.CBK.FRA	📈	8.35	+0.05	0.63%	8.32	8.44	8.19	72 933	8.30	13.38	6.20	Commerzbank AG	DEU	EUR
200.1.EOAN.FRA	📈	8.65	+0.07	0.82%	8.61	8.65	8.55	34 114	8.58	14.84	7.09	E On SE	DEU	EUR
160.1.ACA.PAR	📈	9.82	+0.08	0.77%	9.75	9.86	9.58	4 950 624	9.74	14.49	7.59	Crédit Agricole	FRA	EUR
160.1.BNP.PAR	📈	45.47	+0.21	0.45%	45.50	45.97	44.91	2 898 525	45.27	61.00	37.00	BNP Paribas	FRA	EUR
160.1.FP.PAR	📈	42.83	+0.27	0.62%	42.30	42.90	41.96	4 458 672	42.57	50.30	35.21	Total SA	FRA	EUR
160.1.AIR.PAR	📈	56.90	-0.71	-1.23%	57.38	57.82	56.18	2 215 500	57.61	68.50	49.96	Airbus Group SE	FRA	EUR

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Symbol	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Symbol")	
MSN Symbol	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"MSN Symbol")	
Company Name	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Company Name")	
Short Name	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Short Name")	
Stock Exchange	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Stock Exchange")	
Market	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Market")	
Currency	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Currency")	
Type	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Type")	
TimeZone	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"TimeZone")	
UTC Offset	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"UTC Offset")	
Last Trade Date	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Last Trade Date")	
Last Trade Time	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Last Trade Time")	
Last Trade DateTime	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Last Trade DateTime")	
Bid	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Bid")	
Ask	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Ask")	
Bid Size	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Bid Size")	
Ask Size	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Ask Size")	
BidX	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"BidX")	
AskX	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"AskX")	
Last	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Change")	
Change In Percent	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Change In Percent")	
Open	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Open")	
High	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyQuotes2",[Symbol],"Low")	

Volume	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Volume")
Previous Close	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Previous Close")
Days Range	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Days Range")
52-Week High	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"52-Week High")
52-Week Low	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"52-Week Low")
52-Week Range	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"52-Week Range")
Change from 52-Week High	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Change from 52-Week High")
Change from 52-Week Low	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Change from 52-Week Low")
% Change from 52-Week High	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"% Change from 52-Week High")
% Change from 52-Week Low	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"% Change from 52-Week Low")
Average Daily Volume	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Average Daily Volume")
Market Cap	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Market Cap")
P/E	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"P/E")
Dividend/Share	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Dividend/Share")
Dividend Yield	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"Dividend Yield")
rtd_LastError	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"rtd_LastError")
rtd_LastMessage	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"rtd_LastMessage")
rtd_LastUpdate	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"rtd_LastUpdate")
rtd_LastUpdateDate	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"rtd_LastUpdateDate")
rtd_LastUpdateTime	=RTD("gartle.rtd","MsnMoneyQuotes2",[Symbol],"rtd_LastUpdateTime")

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 15 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:15:00, 15 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

MSN Money web services

MSN Money Historical Days

Usage

Excel formula:

```
=RTD("gartle.rtd",,"MsnMoneyHistoricalDays","<Ticker>",<date>,"<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"MsnMoneyHistoricalDays","GOOG","2014-12-31","Close")  
=RTD("gartle.rtd",,"MsnMoneyHistoricalDays","GOOG",,"Close")
```

Use <http://www.msn.com/en-us/money> to find tickers.

Important Notes

Do not request the MSN Money website frequently. Otherwise, your IP can be banned by the MSN Money website.

Historical data for one ticker symbol is downloaded by one request to a web service. This feature significantly reduces the amount of requests to the MSN Money website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Date],"rtd_LastUpdateTime")	

Fields like AdjClose are added for compatibility with Yahoo! Finance data.

Synonyms: ChangeInPercent, ChangePercent, and PercentChange; AdjChangeInPercent, AdjChangePercent, and AdjPercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalDays",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The MSN Money website.

Example:

<http://www.msn.com/en-us/money/stockdetails/historical-price/fi-126.1.AAPL.NAS>

MSN Money Historical Weeks

Usage

Excel formula:

```
=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks", "GOOG", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks", "GOOG", "", "Close")
```

Use <http://www.msn.com/en-us/money> to find tickers.

Important Notes

Do not request the MSN Money website frequently. Otherwise, your IP can be banned by the MSN Money website.

Historical data for one ticker symbol is downloaded by one request to a web service. This feature significantly reduces the amount of requests to the MSN Money website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Date],"rtd_LastUpdateTime")	

Fields like AdjClose are added for compatibility with Yahoo! Finance data.

Synonyms: ChangeInPercent, ChangePercent, and PercentChange; AdjChangeInPercent, AdjChangePercent, and AdjPercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalWeeks",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The MSN Money website.

Example:

<http://www.msn.com/en-us/money/stockdetails/historical-price/fi-126.1.AAPL.NAS>

MSN Money Historical Months

Usage

Excel formula:

=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths", "<Ticker>", [<date>], "<Data Field>")

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths","GOOG","2014-12-31","Close")
=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths","GOOG",,"Close")
```

Use <http://www.msn.com/en-us/money> to find tickers.

Important Notes

Do not request the MSN Money website frequently. Otherwise, your IP can be banned by the MSN Money website.

Historical data for one ticker symbol is downloaded by one request to a web service. This feature significantly reduces the amount of requests to the MSN Money website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(-)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Date],"rtd_LastUpdateTime")	

Fields like AdjClose are added for compatibility with Yahoo! Finance data.

Synonyms: ChangeInPercent, ChangePercent, and PercentChange; AdjChangeInPercent, AdjChangePercent, and AdjPercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of months to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Months

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistoricalMonths",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading months are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the months for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The MSN Money website.

Example:

<http://www.msn.com/en-us/money/stockdetails/historical-price/fi-126.1.AAPL.NAS>

MSN Money Historical 5 Min

Usage

Excel formula:

```
=RTD("gartle.rtd",,"MsnMoneyHistorical5min", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"MsnMoneyHistorical5min", "GOOG", "2014-12-31 09:45", "Close")  
=RTD("gartle.rtd",,"MsnMoneyHistorical5min", "GOOG", "", "Close")
```

Use <http://www.msn.com/en-us/money> to find tickers.

Important Notes

Do not request the MSN Money website frequently. Otherwise, your IP can be banned by the MSN Money website.

Historical data for one ticker symbol is downloaded by one request to a web service. This feature significantly reduces the amount of requests to the MSN Money website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Date],"rtd_LastUpdateTime")	

Fields like AdjClose are added for compatibility with Yahoo! Finance data.

Synonyms: ChangeInPercent, ChangePercent, and PercentChange; AdjChangeInPercent, AdjChangePercent, and AdjPercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistorical5min",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 5 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:05:00, 5 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The MSN Money website.

Example:

<http://www.msn.com/en-us/money/stockdetails/historical-price/fi-126.1.AAPL.NAS>

MSN Money Historical 15 Min

Usage

Excel formula:

```
=RTD("gartle.rtd",,"MsnMoneyHistorical15min", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"MsnMoneyHistorical15min", "GOOG", "2014-12-31 09:45", "Close")  
=RTD("gartle.rtd",,"MsnMoneyHistorical15min", "GOOG", "", "Close")
```

Use <http://www.msn.com/en-us/money> to find tickers.

Important Notes

Do not request the MSN Money website frequently. Otherwise, your IP can be banned by the MSN Money website.

Historical data for one ticker symbol is downloaded by one request to a web service. This feature significantly reduces the amount of requests to the MSN Money website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Date],"rtd_LastUpdateTime")	

Fields like AdjClose are added for compatibility with Yahoo! Finance data.

Synonyms: ChangeInPercent, ChangePercent, and PercentChange; AdjChangeInPercent, AdjChangePercent, and AdjPercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Day		
Day	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Date	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyHistorical15min",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 15 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:05:00, 15 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The MSN Money website.

Example:

<http://www.msn.com/en-us/money/stockdetails/historical-price/fi-126.1.AAPL.NAS>

MSN Money Currencies

Usage

Excel formula:

```
=RTD("gartle.rtd",,"MsnMoneyCurrencies", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"MsnMoneyCurrencies", "EUR/USD", "Last")
```

You may get the data for currencies listed at <http://www.msn.com/en-us/money/currencyconverter>.

Supported ticker formats, on the EURUSD pair example:

EURUSD, UER/USD, EUR-USD, EUR_USD, EURUSD=X

You may get these codes using the Symbol1 - Symbol5 columns.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
LastTradeDateTime	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"LastTradeDateTime")	
LastTradeDate	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"LastTradeTime")	
Last	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"PercentChange")	
Open	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Open")	
High	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Low")	
Symbol1	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Symbol1")	
Symbol2	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Symbol2")	
Symbol3	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Symbol3")	
Symbol4	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Symbol4")	
Symbol5	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"Symbol5")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyCurrencies",[Symbol],"rtd_LastUpdateTime")	

Synonyms: ChangeInPercent, ChangePercent, and PercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

The ChangeInPercent value is calculated by RealTimeToExcel.

Data Provider Settings

The data provider is configured to loading data every 5 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:05:00, 5 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	0, loading as for other days.
LoadOnSunday	0, loading as for other days.

Data Source

<http://www.msn.com/en-us/money/currencyconverter>

MSN Money Options

Usage

Excel formula for **using option codes**:

```
=RTD("gartle.rtd",,"MsnMoneyOptions","<Option Code>","<Data Field>")
```

Option code format:

```
[.]<Option Symbol><Expiration Date><Option Type Char><Strike>
```

Expiration date format:

yymmdd

Option type char: C or P

Strike format:

8 digits with leading zero as strike * 1000 (Google Finance format)
7 digits with leading zero as strike * 100
6 digits with leading zero as strike * 10
strike as is with or without decimal part (common strike format)

Examples:

```
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00170120C00050000","OpenInt")  
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00170120C00050","OpenInt")  
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00170120C50","OpenInt")  
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00170120C50.0","OpenInt")  
=RTD("gartle.rtd",,"MsnMoneyOptions",".YH00170120C50.0","OpenInt") (Thinkorswim format)
```

Excel formula for **using option specifications**:

```
=RTD("gartle.rtd",,"MsnMoneyOptions","<Option Symbol>,<Expiration Date>,<Strike>,<Option Type>","<Data Field>")
```

Expiration date formats:

yymmdd
yyyy-mm-dd
mmmmdd,yy
mmmmdd'yy

Option type format: C or CALL, P or PUT

Examples:

```
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00", "170120", 50, "CALL","OpenInt")  
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00", "2017-01-20", 50, "C","OpenInt")  
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00", "JAN20,17", 50, "PUT","OpenInt")  
=RTD("gartle.rtd",,"MsnMoneyOptions","YH00", "JAN20'17", 50, "P","OpenInt")
```

Use <http://www.msn.com/en-us/money> to find option codes. Options data is available for US exchanges and may be not available for other world's exchanges.

You may use MSN Money stock codes like fi-126.1.AAPL.NAS as a symbol. You may copy such codes directly from the MSN Money URLs.

Important Notes

Do not request the MSN Money website frequently. Otherwise, your IP can be banned by the MSN Money website.

RealTimeToExcel loads one page to get the data for all options of the one expiration date. This feature significantly reduces amount of requests to the MSN Money website.

Data Fields and Excel Formulas

Formulas for getting data by option codes:

Excel Column	Excel Formula	Copy Copy(!)
Code	AAPL170120C00100000	
OptionCode	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"OptionCode")	
Symbol	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Symbol")	
OptionSymbol	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"OptionSymbol")	
ExpDate	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Exp")	
Strike	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Strike")	
Type	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Type")	
Last	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Last")	
Change	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"PercentChange")	
TimeValue	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"TimeValue")	
Mark	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Mark")	
Bid	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Bid")	
Ask	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Ask")	
Volume	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Volume")	
OpenInt	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"OpenInt")	
Strike~0	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Strike~0")	
Strike+0	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Strike+0")	
Strike-0	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Strike-0")	
Strike+1	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Strike+1")	
Strike-1	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"Strike-1")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyOptions",[Code],"rtd_LastUpdateTime")	

Formulas for getting data by option contract specifications:

Excel Column	Excel Formula	Copy Copy(!)
OptionSymbol	AAPL	
ExpDate	170120	
Strike	100	
Type	CALL	
OptionCode	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"OptionCode")	
Symbol	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Symbol")	
Last	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Last")	
Change	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"PercentChange")	
TimeValue	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"TimeValue")	
Mark	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Mark")	
Bid	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Bid")	
Ask	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Ask")	
Volume	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Volume")	
OpenInt	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"OpenInt")	
Strike~0	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike~0")	
Strike+0	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike+0")	
Strike-0	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike-0")	
Strike+1	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike+1")	
Strike-1	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"Strike-1")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyOptions",[OptionSymbol],[ExpDate],[Strike],[Type],"rtd_LastUpdateTime")	

Symbol, OptionSymbol, Exp, Strike, and Type are calculated by parsing the option code.

OptionCode is the option code in the standard OCC format.

OptionSymbol ends with 7 for Mini Options, and with 1 for some options before splits.

The ChangeInPercent, ChangePercent, and Percent values are calculated by RealTimeToExcel and are the same. The Mark value is calculated as (Bid+Ask)/2.

Use Strike~0 to find the ATM strike, Strike+0 or Strike-0 to find equal or the nearest strikes, and Strike+1 and Strike-1 to find the nearest strikes above and below the strike.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every hour when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	01:00:00, one hour
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The MSN Money website.

Example:

<http://www.msn.com/en-us/money/stockdetails/options/fi-126.1.AAPL.NAS>

Obsolete Providers

The following providers are obsolete as their return empty or outdated data.

You may use new providers instead.

Obsolete provider	New provider
Yahoo! Finance WatchList	Yahoo! Finance Quotes CSV or Yahoo! Finance Summary
Yahoo! Finance Quotes	Yahoo! Finance Quotes CSV
Yahoo! Finance Stocks	Yahoo! Finance Industry or Yahoo! Finance Quotes CSV
Yahoo! Finance Historical Data	Yahoo! Finance Historical CSV
MSN Money Quotes	MSN Money Quotes2

Yahoo! Finance Quotes

This provider is obsolete. Use [Yahoo! Finance Quotes CSV](#) instead.

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceQuotes", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"YahooFinanceQuotes", "YHOO", "Last")
```

Use <http://finance.yahoo.com/> to find tickers. See also the complete list of [Yahoo! Finance exchanges](#).

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
LastTradeDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"LastTradeDate")	
LastTradeTime	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"LastTradeTime")	
Bid	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Bid")	
Ask	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Ask")	
Last	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"PercentPercent")	
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")	
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")	
ExDividendDate2	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"ExDividendDate2")	
DividendPayDate	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendPayDate")	
DividendPayDate2	=RTD("gartle.rtd",,"YahooFinanceQuotes",[Symbol],"DividendPayDate2")	
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")
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")
rtd_LastError	=RTD("gartle.rtd","YahooFinanceQuotes",[Symbol],"rtd_LastError")
rtd_LastMessage	=RTD("gartle.rtd","YahooFinanceQuotes",[Symbol],"rtd_LastMessage")
rtd_LastUpdate	=RTD("gartle.rtd","YahooFinanceQuotes",[Symbol],"rtd_LastUpdate")
rtd_LastUpdateDate	=RTD("gartle.rtd","YahooFinanceQuotes",[Symbol],"rtd_LastUpdateDate")
rtd_LastUpdateTime	=RTD("gartle.rtd","YahooFinanceQuotes",[Symbol],"rtd_LastUpdateTime")

Synonyms: ChangeInPercent, ChangePercent, and PercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 15 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:15:00, 15 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

http://query.yahooapis.com/v1/public/yql?q=select%20*%20from%20yahoo.finance.quotes

Special thanks to <http://www.philadelphia-reflections.com/blog/2392.htm>

Yahoo! Finance WatchList

This provider is obsolete. Use [Yahoo! Finance Quotes CSV](#) instead.

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceWatchList", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"YahooFinanceWatchList", "YHOO", "Last")
```

Use <http://finance.yahoo.com/> to find tickers. See also a full list of [Yahoo! Finance exchanges](#).

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
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")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"PercentChange")	
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")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceWatchList",[Symbol],"rtd_LastUpdateTime")	

Synonyms: ChangeInPercent, ChangePercent, and PercentChange.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

The ChangeInPercent value is calculated by RealTimeToExcel.

Data Provider Settings

The data provider is configured to loading data every 15 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:15:00, 15 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

http://query.yahooapis.com/v1/public/yql?q=select%20*%20from%20yahoo.finance.quoteslist

Special thanks to <http://www.philadelphia-reflections.com/blog/2392.htm>

Yahoo! Finance Stocks

This provider is obsolete. Use [Yahoo! Finance Industry](#) or [Yahoo! Finance Quotes CSV](#) instead.

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceStocks", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"YahooFinanceStocks", "YHOO", "FullTimeEmployees")
```

Use <http://finance.yahoo.com/> to find tickers. See also a full list of [Yahoo! Finance exchanges](#).

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
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")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceStocks",[Symbol],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

http://query.yahooapis.com/v1/public/yql?q=select%20*%20from%20yahoo.finance.stocks

Special thanks to <http://www.philadelphia-reflections.com/blog/2392.htm>

Yahoo! Finance Historical Data

This provider is obsolete. Use [Yahoo! Finance Historical CSV](#) instead.

Usage

Excel formula:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalData", "<Ticker>", [<date>], "<Data Field>")
```

where <date> is a Microsoft Excel date value or a string value as "yyyy-mm-dd".

If <date> is empty or equal to 0 then the last trade date is used by default. It is useful to monitor the last trade date data.

Example:

```
=RTD("gartle.rtd",,"YahooFinanceHistoricalData", "YHOO", "2014-12-31", "Close")  
=RTD("gartle.rtd",,"YahooFinanceHistoricalData", "YHOO", "", "Close")
```

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

Important Notes

Do not request the Yahoo! website frequently. Otherwise, your IP can be banned by the Yahoo! website.

Historical data for one ticker symbol are downloaded by one request to a web service. This feature significantly reduces the amount of requests to the Yahoo! website.

The amount of data depends on the entire data period that is calculated for all stocks in opened workbooks.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(-)
Symbol		
Date		
Open	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"Open")	
High	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"High")	
Low	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"Low")	
Close	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"Close")	
Change	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PercentChange")	
AdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"AdjClose")	
AdjChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"AdjChange")	
AdjChangeInPercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"AdjChangeInPercent")	
AdjChangePercent	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"AdjChangePercent")	
AdjPercentChange	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"AdjPercentChange")	
Volume	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"Volume")	
PrevDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PrevDate")	
PrevOpen	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PrevOpen")	
PrevHigh	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PrevHigh")	
PrevLow	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PrevLow")	
PrevClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PrevClose")	
PrevAdjClose	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PrevAdjClose")	
PrevVolume	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"PrevVolume")	
rtd_LastError	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"YahooFinanceHistoricalData",[Symbol],[Date],"rtd_LastUpdateTime")	

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Change, ChangeInPercent, AdjChange, and AdjChangeInPercent calculated by RealTimeToExcel.

Aggregate Functions

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Day		
Day	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"Day")	
Date	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"Date")	
AverageVolume	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"AverageVolume")	
rtd_LastError	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],[Day],"rtd_LastUpdateTime")	

If the stock history has no required number of days to calculate aggregates then the average volume is not calculated (= 0), and the Day and Date fields contain the last values of the period.

Trading Days

Excel Column	Excel Formula	Copy Copy(:)
Symbol		
Date	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],"TradingDay",[Day])	
rtd_LastError	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],"TradingDay","rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],"TradingDay","rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],"TradingDay","rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],"TradingDay","rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd","YahooFinanceHistoricalData",[Symbol],"TradingDay","rtd_LastUpdateTime")	

All the trading days are loaded from one file, and the functions work very fast.

You may use the only one stock symbol to get the days for other tickers.

Data Provider Settings

The data provider is configured to loading data every 6 hours when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	06:00:00, six hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

http://query.yahooapis.com/v1/public/yql?q=select%20*%20from%20yahoo.finance.historicaldata

MSN Money Quotes

This provider is obsolete. Use [MSN Money Quotes2](#) instead.

Usage

Excel formula:

```
=RTD("gartle.rtd",,"MsnMoneyQuotes", "<Ticker>", "<Data Field>")
```

Example:

```
=RTD("gartle.rtd",,"MsnMoneyQuotes", "YHOO", "Last")
```

Use <http://www.msn.com/en-us/money> to find tickers.

This provider works fine only for US market. To get data for international markets, use the [MsnMoneyQuotes2](#) provider.

Data Fields and Excel Formulas

Excel Column	Excel Formula	Copy Copy(!)
Symbol		
Last	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"Last")	
Change	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"Change")	
ChangeInPercent	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"ChangeInPercent")	
ChangePercent	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"ChangePercent")	
PercentChange	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"PercentChange")	
High	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"High")	
Low	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"Low")	
Volume	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"Volume")	
PrevClose	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"PrevClose")	
52 Wk High	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"52 Wk High")	
52 Wk Low	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"52 Wk Low")	
YearHigh	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"YearHigh")	
YearLow	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"YearLow")	
P/E Ratio	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"P/E Ratio")	
PE	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"PE")	
EPS	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"EPS")	
MarketCap	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"MarketCap")	
Shares	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"Shares")	
rtd_LastError	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"rtd_LastError")	
rtd_LastMessage	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"rtd_LastMessage")	
rtd_LastUpdate	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"rtd_LastUpdate")	
rtd_LastUpdateDate	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"rtd_LastUpdateDate")	
rtd_LastUpdateTime	=RTD("gartle.rtd",,"MsnMoneyQuotes",[Symbol],"rtd_LastUpdateTime")	

Synonyms: ChangeInPercent, ChangePercent, and PercentChange; 52 Wk High and YearHigh; 52 Wk Low and YearLow; P/E Ratio and PE.

See [Copying formulas](#) about inserting formulas into Excel spreadsheets.

Data Provider Settings

The data provider is configured to loading data every 15 minutes when the Excel workbook is open.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	00:15:00, 15 minutes
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

<http://moneycentral.msn.com/investor/external/excel/quotes.asp?SYMBOL=AAPL>

Universal Providers

RealTimeToExcel allows loading and refreshing data from web pages containing tables.

This is a cool feature as you may load data from various websites using universal providers.

For example, in the downloaded package, you may find examples that show loading data from powerful financial websites BarChart.com and Finanzen.Net.

Data Providers

- [HTML Provider](#)

Complying with Terms of Services

RealTimeToExcel loads and parses web pages directly from websites.

Please visit the websites before loading data, read and accept their Terms of Services.

HTML Provider

Usage

Excel formula:

```
=RTD("gartle.rtd",,"html",<URL>,<Column>,<Row>)
```

Examples:

```
=RTD("gartle.rtd",,"html","http://www.barchart.com/stocks/indices.php",2,"$SPX")
```

```
=RTD("gartle.rtd",,"html","http://www.barchart.com/stocks/sp500.php?_dtp1=0",2,"AAPL")
```

```
=RTD("gartle.rtd",,"html","http://www.finanzen.net/bilanz_guv/Deutsche_Bank",7,"Dividende je Aktie")
```

This provider parses HTML tables of the specified web page.

You may copy row names to formulas from the web pages directly.

See several examples, for BarChart and FinanzenNet, in the downloaded package.

Data Provider Settings

The data provider is configured to loading data every 12 hours when the Excel workbook is open.

You may change this setting. However, do not request websites frequently. Otherwise, your IP can be banned.

See [Data provider settings](#).

Parameter	Value
RefreshInterval	12:00:00, 12 hours
NextRequestDelay	1000, one second
DataStartTime	00:00:00 -05:00
DataEndTime	24:00:00 -05:00
LoadEndTime	24:00:00 -05:00
LoadOnSaturday	1, loading Friday's data once.
LoadOnSunday	1, loading Friday's data once.

Data Source

The provider parses Google Finance Financials web pages.

All reports are loaded as a single page.

Databases

RealTimeToExcel allows refreshing data from databases in Microsoft Excel using RTD formulas.

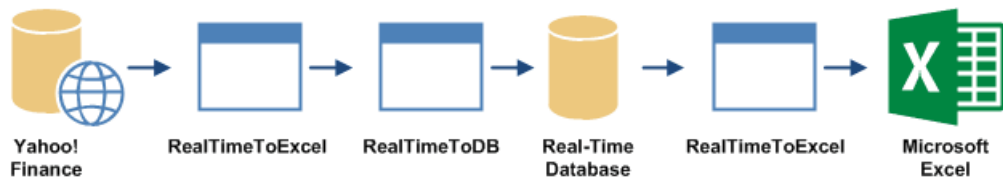


This feature is useful when you need to refresh the data in complex models that have non-regular structures.

Otherwise, you may load and refresh the data using native Excel features.

See [Database Providers](#) about configuring connections.

The second scenario is saving data from Yahoo! Finance, Google Finance, and MSN Money in databases.



You may use a companion product, RealTimeToDB, that loads data from RealTimeToExcel and saves the data to databases.

RealTimeToDB includes preconfigured databases. So you may quickly get a working process.

See [Real-Time Database](#).

Database Providers

Basics

RealTimeToExcel allows getting and updating data from databases in Microsoft Excel using native RTD formulas.

Excel formula format:

```
=RTD("gartle.rtd",,"<Database provider>","<Database table name>",<First key column value>
[,<Second key column value>[,...]],"<Data field>")
```

For example:

```
=RTD("gartle.rtd",,"rtd-sqlce","QuotesYahoo","AAPL","Last")
=RTD("gartle.rtd",,"rtd-mysql","fundamentals_yahoo","AAPL","OneYearTargetPrice")
=RTD("gartle.rtd",,"rtd-mysql","fundamentals_day_history_yahoo","AAPL","12/31/2014","OneYearTargetPrice")
```

In the example above, the first formula uses the **rtd-sqlce** database provider, and the second one uses the **rtd-mysql** database provider.

Database providers are the text files located in the **DataProviders** subdirectory and named as <database provider>.config.

So, you may create multiple database providers for various databases on various database platforms.

Here is an example of the rtd-sqlce database provider:

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <appSettings>
    <add key="RefreshInterval" value="00:00:05" />
    <add key="NextRequestDelay" value="0" />
    <add key="DataStartTime" value="09:20:00 -05:00" />
    <add key="DataEndTime" value="16:30:00 -05:00" />
    <add key="LoadEndTime" value="24:00:00 -05:00" />
    <add key="LoadOnSaturday" value="1" />
    <add key="LoadOnSunday" value="1" />
    <add key="DefaultSchema" value="" />
  </appSettings>
  <connectionStrings>
    <add name="sqlce-rtdxls" connectionString="Data Source=%LOCALAPPDATA%\Gartle\RealTimeToDB\rtd.sdf"
      providerName="System.Data.SqlServerCe.4.0" />
  </connectionStrings>
</configuration>
```

The **appSettings** section contains configuration parameters described below.

You may use any text file editor to edit the parameters. For example, notepad.exe.

The **connectionStrings** section contains the connection string to the target database.

RealTimeToExcel uses only the first connection string. So, the database provider describes only one database connection.

You may use [gConnectionManager](#) to edit connection strings in visual mode and to encrypt the strings.

[gConnectionManager](#) is a companion product integrated with RealTimeToExcel.

Table names, key columns, and data fields depend on a database. Read the database documentation to get the correct values.

Key Columns

Database tables can contain several keys with different columns.

RealTimeToExcel **uses the first available primary key, unique key, or unique index with the same number of key columns** as specified in the RTD formula.

First of all, only unique keys and indexes are used. So, each formula gets only the one value identified by the key and the data column. This works fast.

The second. The first key or index with the same number of columns is used as there is no way to detect the key using the simplest formula format.

Otherwise, the Excel formula should contain column names like "Symbol", "YHOO", "Date", "31/12/2014", etc. This approach is not implemented.

This rule requires eliminating the ambiguity of keys.

For example, a table should not have an ID auto-incremented field and a unique key for another column.

If the second column is unique in the table, remove the ID column.

Another example, two unique keys or indexes are in a table: (Symbol, Date) and (Date, Symbol).

To get one unique key per table, make another index non-unique.

Table, Views, and Stored Procedures

Only tables can be used in formulas.

The views have no metadata about keys and indexes. So there is no way to apply the table logic to views.

Stored procedures potentially can be used in formulas as the procedures have well-known parameters and developers can secure selecting single row only.

If you interested in this feature, please, contact us.

Database Provider Configuration Parameters

DefaultSchema

This string value defines the default schema of the databases tables.

This feature allows users to use only table names in Excel formulas.

The default schema is empty.

RefreshInterval

This time value defines the interval of row data refreshing.

The default value is 00:00:05, 5 seconds.

NextRequestDelay

This integer value defines the interval between requests to a data source server, in milliseconds.

The default value is 0, no delay.

DataStartTime

This time value defines the time when the data source server starts publishing data.

For example, this is 09:30:00 -05:00 for US exchanges.

The default value is 09:20:00 -05:00.

DataEndTime

This time value defines the time when the data source server ends publishing data.

For example, this is 16:00:00 -05:00 for US exchanges.

The default value is 16:30:00 -05:00.

LoadEndTime

This time value defines the latest time when today's data can be loaded.

For example, this is 24:00:00 -05:00 for US exchanges.

This is the default value.

LoadOnSaturday

This integer value defines the behavior of data loading on Saturday:

0 - Load data as for other working days.

1 - Load Friday's data once.

2 - Do not load the data.

The default value is 1.

LoadOnSunday

This integer value defines the behavior of data loading on Sunday and has the same values as LoadOnSaturday.

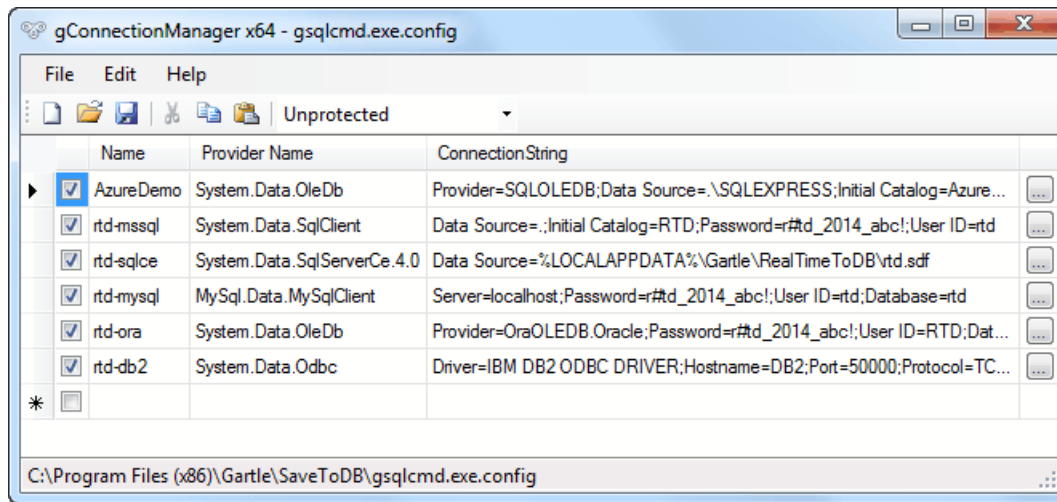
gConnectionManager

gConnectionManager is a companion product that allows editing connections in application configuration files.

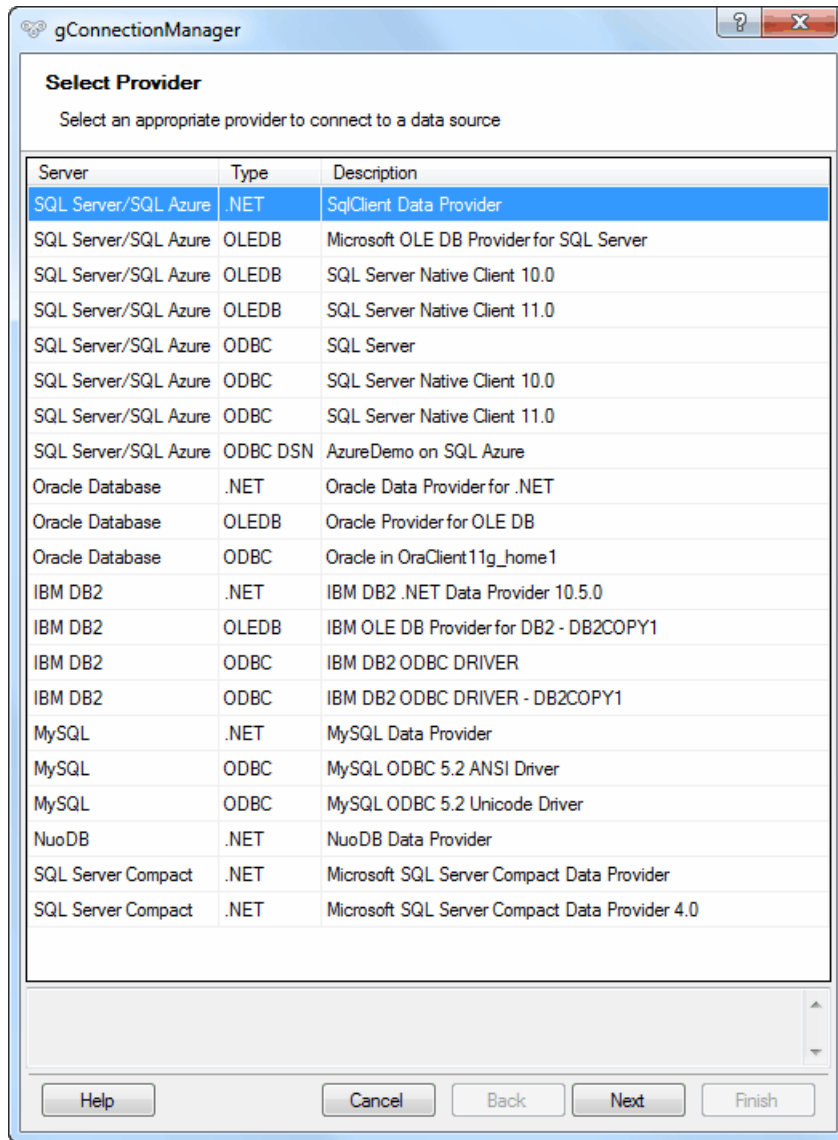
Use gConnectionManager to edit [database provider](#) configuration files in the **DataProviders** directory.

Click on the help menu of gConnectionManager to get the help.

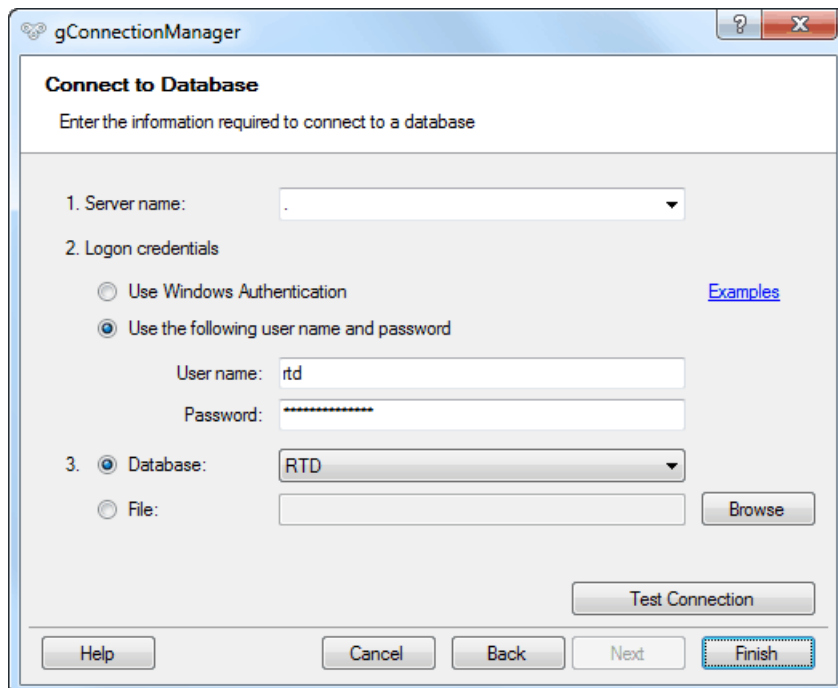
Here is a configuration file example:



Here is an example of selecting a connection provider:



Here is an example of connecting to a database:



Real-Time Database

Overview

RealTimeToExcel is deeply integrated with a companion product RealTimeToDB.

RealTimeToDB allows updating databases with real-time data from RTD and DDE servers including the RealTimeToExcel RTD server.

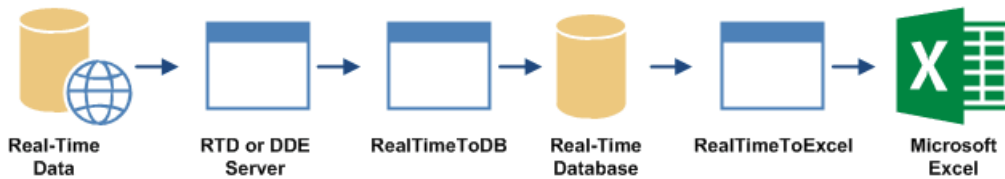
RealTimeToDB has preconfigured databases for all supported database platforms and several real-time data servers.

You may use these databases for getting real-time data in Microsoft Excel.

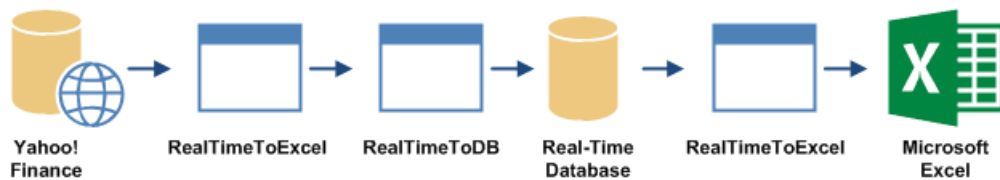
The default RTD database for Microsoft SQL Server Compact is integrated into the SaveToDB add-in and works by default.

You may open the workbook template from the External Tools wizard and get working examples.

The common schema looks like this:



For Yahoo! Finance data, the schema looks like this:



Usage

See RealTimeToDB Help to get the complete list of available tables and Excel formulas.

From the RealTimeToExcel side, you have to configure the real-time database provider in the **DataProviders** directory.

Formulas to get the data are simple. For example:

```
=RTD("gartle.rtd",,"rtd-sqlce","QuotesYahoo","AAPL","Last")
=RTD("gartle.rtd",,"rtd-mysql","fundamentals_yahoo","AAPL","OneYearTargetPrice")
```

In the example above, the first formula uses the **rtd-sqlce** database provider, and the second one uses the **rtd-mysql** database provider.

The other formula parts are regular for the RealTimeToExcel and described in the RealTimeToDB help.

For example, RealTimeToDB 3.0 includes the following preconfigured real-time tables:

SQL Server and SQL Server Compact	MySQL, MariaDB, and PostgreSQL	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
QuotesMsnMoney	quotes_msnmoney	QUOTES_MSNMONEY
QuoteDayHistoryMsnMoney	quote_day_history_msnmoney	QUOTE_DAY_HISTORY_MSNMONEY
QuoteTimeHistoryMsnMoney	quote_time_history_msnmoney	QUOTE_TIME_HISTORY_MSNMONEY
QuoteTickHistoryMsnMoney	quote_tick_history_msnmoney	QUOTE_TICK_HISTORY_MSNMONEY
OptionsYahoo	options_yahoo	OPTIONS_YAHOO
OptionDayHistoryYahoo	option_day_history_yahoo	OPTION_DAY_HISTORY_YAHOO
OptionTickHistoryYahoo	option_tick_history_yahoo	OPTION_TICK_HISTORY_YAHOO
OptionsGoogle	options_google	OPTIONS_GOOGLE
OptionDayHistoryGoogle	option_day_history_google	OPTION_DAY_HISTORY_GOOGLE
OptionTickHistoryGoogle	option_tick_history_google	OPTION_TICK_HISTORY_GOOGLE
OptionsMsnMoney	options_msnmoney	OPTIONS_MSNMONEY
OptionDayHistoryMsnMoney	option_day_history_msnmoney	OPTION_DAY_HISTORY_MSNMONEY
OptionTickHistoryMsnMoney	option_tick_history_msnmoney	OPTION_TICK_HISTORY_MSNMONEY

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
CurrenciesYahoo	currencies_yahoo	CURRENCIES_YAHOO
CurrenciesDayHistoryYahoo	currencies_day_history_yahoo	CURRENCIES_DAY_HISTORY_YAHOO
CurrenciesTimeHistoryYahoo	currencies_time_history_yahoo	CURRENCIES_TIME_HISTORY_YAHOO
CurrenciesTickHistoryYahoo	currencies_tick_history_yahoo	CURRENCIES_TICK_HISTORY_YAHOO
CurrenciesMsnMoney	currencies_msnmoney	CURRENCIES_MSNMONEY
CurrenciesDayHistoryMsnMoney	currencies_day_history_msnmoney	CURRENCIES_DAY_HISTORY_MSNMONEY
CurrenciesTimeHistoryMsnMoney	currencies_time_history_msnmoney	CURRENCIES_TIME_HISTORY_MSNMONEY
CurrenciesTickHistoryMsnMoney	currencies_tick_history_msnmoney	CURRENCIES_TICK_HISTORY_MSNMONEY

Where:

Yahoo	Yahoo! Finance
Google	Google Finance
MsnMoney	MSN Money
TOS	Thinkorswim thinkDesktop
TWS	InteractiveBrokers Trader Workstation (TWS)
ES	eSignal FutureSource
VFX	Hybrid Solutions VertexFX Trader (VFX)

Technical Support

You may find multiple examples of different data providers in the **RealTimeToExcel Examples** folder of the downloaded package and the installation folder like %ProgramFiles%\Gartle\RealTimeToExcel.

Use these examples to test features quickly and troubleshoot formulas or loading data.

You may download the latest releases at www.stock-data-solutions.com.

You may contact us via email support@stock-data-solutions.com.

See also [Frequently Asked Questions](#).

We recommend you to subscribe to the **RealTimeToExcel Tips and Tricks** newsletter.

Just send an email to realtimetoexcel_tips_and_tricks@getresponse.com.

You may unsubscribe at any time.

Frequently Asked Questions

Microsoft Excel shows #N/A values. What to do?

#N/A means that the data is "Not available."

Possible reasons are

1. An error server in the formula. Check the correct value: "gartle.rtd" (lowercase is correct too).
2. An error in arguments. Check the provider, symbol, and the data field.
3. A bad ticker. Check the ticker at <http://finance.yahoo.com/>.
4. Data absent in a data source. For example, Open, DaysHigh, and DaysLow can be not available during non-trading hours.

The data are not refreshing. What to do?

Add formulas to monitor data status: rtd_LastUpdate, rtd_LastError, rtd_InQueue, rtd_RefreshInterval.

See complete description in [RealTimeToExcel Fields](#).

If you work with non-US exchanges, check [Data provider settings](#). Possibly, the DataStartTime is incorrect in your case.

Can you add another data source?

Yes, definitely.

Please write us a request.

Can we add another data source?

Yes, definitely.

Please write us a request. We will send you data provider source.

How to get historical prices into Microsoft Excel table for a particular period at once?

You may use our product [SaveToDB](#), a Microsoft Excel add-in, for getting web data into Microsoft Excel.

You may load web data in HTML, XML, JSON, and CSV formats. Yahoo! Finance and Google Finance publish historical prices for free.