

## eSignal - QLink General Information

### Introduction

QLink is an application that connects to our network to retrieve real-time and historical data and then places that data into a Microsoft Excel spreadsheet. Since Microsoft announced several years ago that DDE (Dynamic Data Exchange) would no longer be a supported technology, QLink represents a more current method for importing data into Excel. We offer a 30 day free trial for QLink and the cost is \$10/mo for eligible existing subscribers thereafter. You can add QLink directly to your account via Account Maintenance and the fee for the first month will be waived.

QLink supports three different data structures.

- Bars – Historical bar data using intraday\*, daily, weekly or monthly intervals (\*QLink currently does **not** support our [Extended Intraday History](#) database).
- TS – Time and sales data displaying streaming trade and quote updates
- Snapshot – Provides quotes and various other fields for the specified symbols

### **Does QLink support the Extended Intraday Data service?**

At this time, QLink does not support the 12+ years of intraday data that comes with this service. This is on the development list to add to the product, however we have no accurate estimate to provide for when this will become available.

**Is DDE or QLink supported with eSignal OnDemand?** Yes, DDE and QLink (\$10/month) are supported functions of the [eSignal OnDemand](#) service. Please note that the QLink add-on (as with most OnDemand add-ons) is available only in USD (US Dollar). Customers billed in non-USD (EUR, GBP, JPY, etc) would need to switch to USD billing to enable add-on services to an OD account.

### Installing QLink

QLink is not automatically installed with your eSignal or QCharts software. In order to use the QLink application, it must be downloaded separately. The QLink installer is located on the main download page for your product.

[eSignal Download Page](#)

[QCharts Download Page](#)

Once the installer has been downloaded, simply run the installation program by double-clicking the icon in your download folder. From there, follow the subsequent instructions to complete the QLink installation.

Note: During the installation the QLink installer will open Microsoft Excel in order to register itself within the application. Please **do not close Excel** during this time.

### Troubleshooting

Some 3rd party toolbars in Outlook (such as MagicJack) may interfere with QLink. In Outlook these can be disabled by clicking View, Toolbars, and unchecking the 3rd party toolbar.

**Are there any Firewall settings I should be aware of?** QLink follows the same port settings used for eSignal. Those settings can be [found here](#).

**I'm getting 'Unable to start DDE server'.** Close eSignal, the Data Manager, any eSignal products, or any 3rd party apps running the DM. Once these programs are closed, launch the Data Manager only followed by QLink.

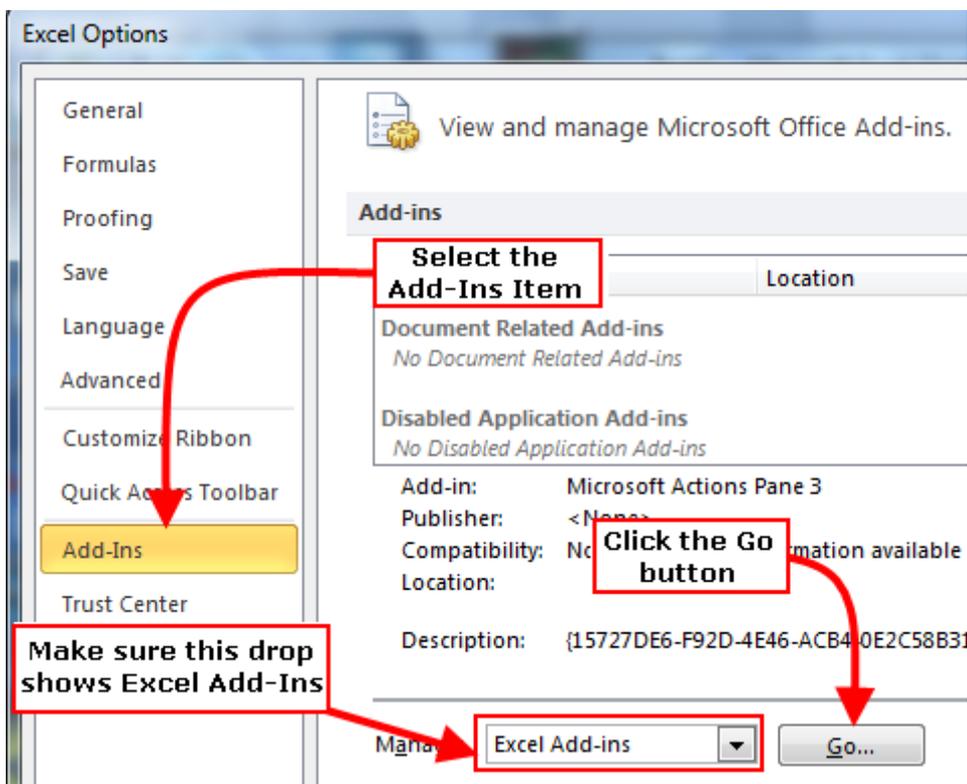
**With DDE there was a 2500 link limit. Does the same apply to QLink?** With QLink 2.0 the same limit applied. However, with QLink 3.0 and newer, that is no longer the case.

**I've installed QLink 3.0 but the Toolbar isn't showing up in the Add-Ins menu?** With Excel 2010, Microsoft's [Click-to-Run](#) installer prevents the QLink 3.0 plug-in from being added to the Excel Add-ins menu.

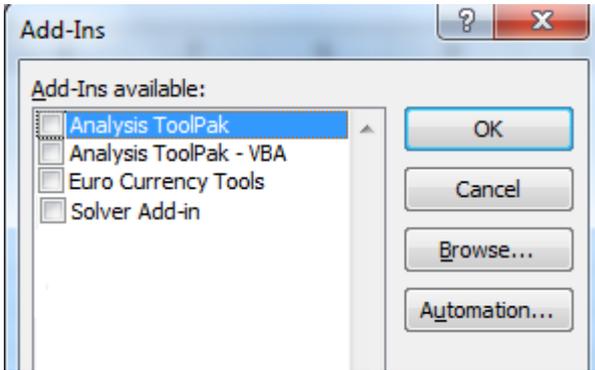
There are 2 workarounds:

1. Uninstall Click-to-Run and install Office 2010 using the instructions under the **Workaround** section from Microsoft's [Click-to-Run](#) article.
2. Manually register/enable the QLink 3.0 plug-in by clicking File, and then Options.

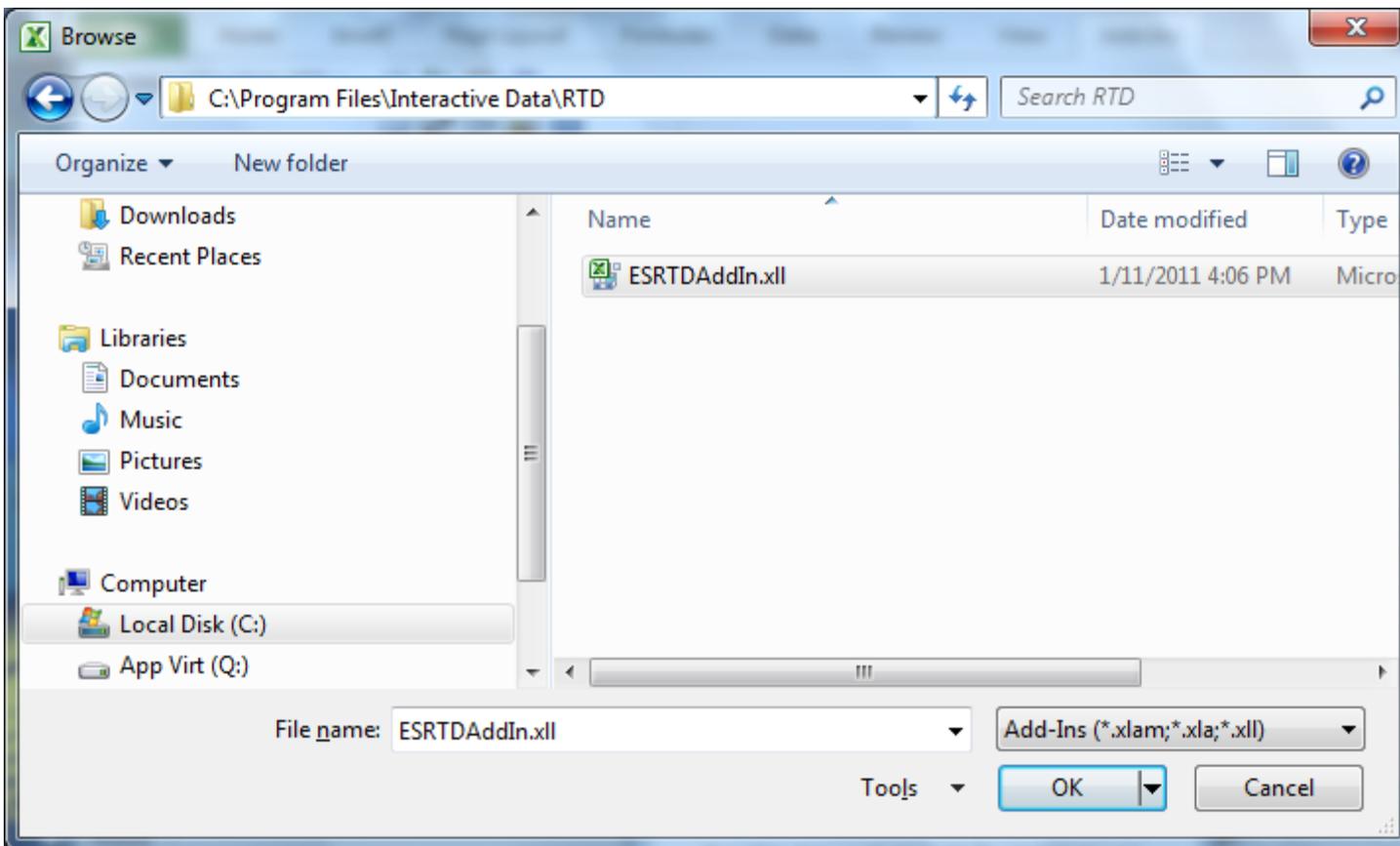
The Excel Options dialog opens up. Click the Add-Ins item in the list along the left edge of the dialog to see the Add-Ins panel. Make sure the Manage dropdown at the bottom shows Excel Add-Ins, then press the Go button.



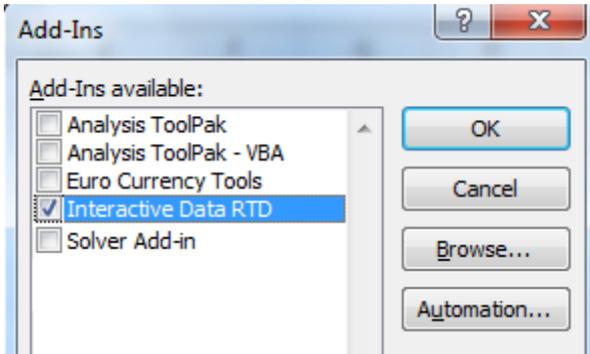
That brings up the Add-Ins dialog. If the add-in for QLink does not appear in the list, click Browse, and use the Browse dialog to locate the add-in file.



Browse to the file location for the QLink 3.0 Add-In which C:\Program Files\Interactive Data\RTD. The file name is ESRTDAddIn.xll. Just click on the file and then click the Ok button.



After clicking the Ok button the Add-Ins Dialog will appear with the Interactive Data RTD Add-In listed. Make sure there is a check mark in the box next to Interactive Data RTD. Press Ok.



The QLink Toolbar will be located at the inside the Add-Ins Tab at the top of Excel 2010.



### **Adding a Data Request**

There are multiple ways you can enter a data request into Excel using QLink. Below we'll look at each method.

#### ***Using the QLink Toolbar***

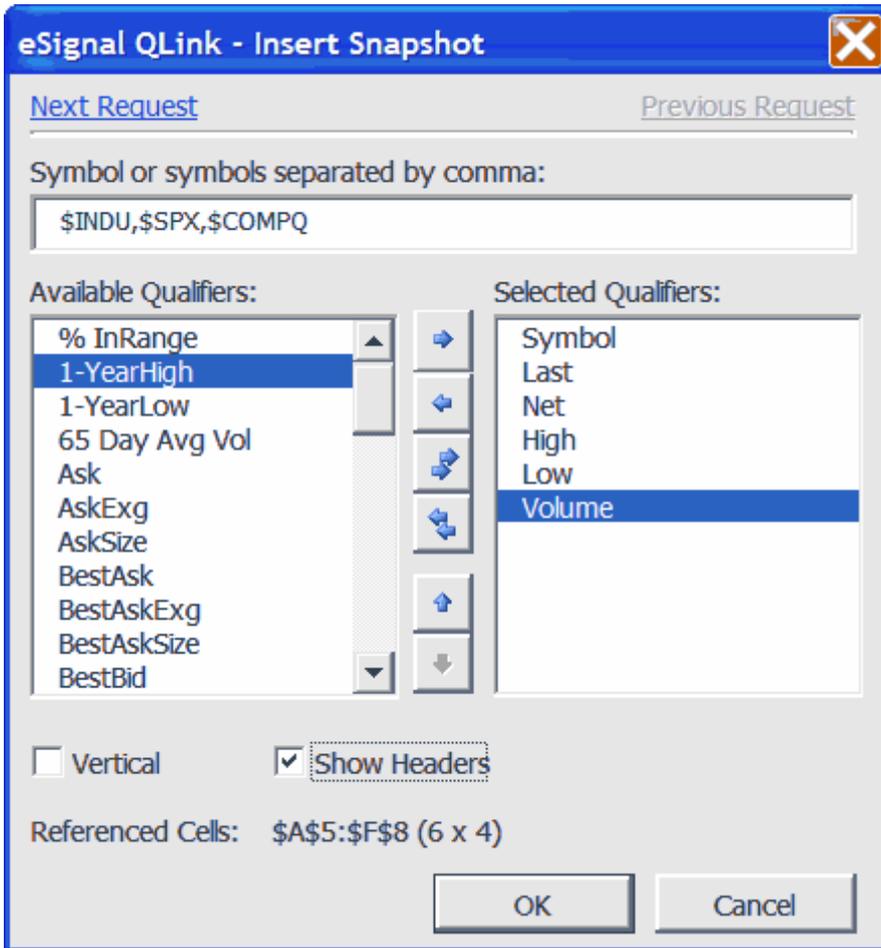
Upon installing the QLink application, a new toolbar will be available inside of Microsoft Excel.



To use one of the toolbar icons, select an area in Excel and then click on a Request icon on the QLink toolbar.

### **Request Snapshot**

The Request Snapshot window makes it easy to enter in a large number of symbols and get a variety of data for those symbols.



**Symbol:** Enter the symbol(s) you wish to get a quote on. Multiple symbols should be separated by a comma.

**Qualifier:** Defines the data you wish to be displayed. To select multiple qualifiers, hold down the Ctrl key.

**Vertical:** Selecting this option will display the snapshot data down the spreadsheet instead of across it.

**Show Headers:** This option places a label at the top of each column for each qualifier that is chosen.

**Referenced Cells:** Displays the currently selected array of cells in Excel.

### **Request Bar**

The Request Bar window allows the user to grab historical bar data from the eSignal servers.

**Symbol:** Enter the symbol you wish to retrieve historical data for.

**Interval:** Choose between an intraday, daily, weekly, monthly or quarterly periods.

**# of Rows:** Controls the number of bars to download. This defaults to the number of rows already selected in the spreadsheet.

**Session:** For intraday charts, this allows the user the ability to customize the start and end times for each intraday session.

**Data Fields:** Defines the data you wish to be downloaded. To select multiple fields, hold down the Ctrl key.

**Show Headers:** This option places a label at the top of each column for each data field that is chosen.

**Fill:** This option fills blank bars with the last known Close value.

**Reverse:** This option changes the direction to display the newest bars first.

### **Request Time & Sales**

The Request Time & Sales window makes it easier to pull in streaming quotes and trades.

**Symbol:** Enter the symbol you wish to retrieve tick data for.

**# of Rows:** Controls the number of quotes and trades to download. This defaults to the number of rows already selected in the spreadsheet.

**Data Fields:** Defines the data you wish to be downloaded. To select multiple fields, hold down the Ctrl key.

**Show Headers:** This option places a label at the top of each column for each data field that is chosen.

**Reverse:** This option changes the direction to display

### **Direct Formula Entry**

Another option of filling in an Excel spreadsheet with eSignal data is to use direct formula entries

Highlight a region inside of an Excel spreadsheet for where you want the data to go into. i.e. Want 50 daily bars with OHLC data? Highlight 50 rows by 4 columns.

Type in a QLink data request formula (syntax below) e.g. =QLink|Bars!'IBM,D,50,OHLC

Hold down **Ctrl** and **Enter** keys and press to enter this formula into the highlighted array you selected earlier.

|    | A     | B     | C       | D     | E | F |
|----|-------|-------|---------|-------|---|---|
| 1  | 95.45 | 96.23 | 95.33   | 96.1  |   |   |
| 2  | 95.8  | 96.45 | 95.57   | 96.21 |   |   |
| 3  | 95.98 | 96.75 | 95.75   | 96.52 |   |   |
| 4  | 96.43 | 96.94 | 96.12   | 96.62 |   |   |
| 5  | 96.4  | 96.8  | 96.1642 | 96.46 |   |   |
| 6  | 96.51 | 96.7  | 94.95   | 95.16 |   |   |
| 7  | 95.03 | 95.82 | 94.53   | 95.67 |   |   |
| 8  | 95.75 | 95.75 | 94.59   | 94.93 |   |   |
| 9  | 94.99 | 96.3  | 94.72   | 96.18 |   |   |
| 10 | 96.3  | 97.66 | 96.02   | 97.12 |   |   |
| 11 | 94.8  | 95.91 | 94.4    | 94.8  |   |   |
| 12 | 94.5  | 94.87 | 94      | 94.29 |   |   |

**Appendix – QLink Syntax**

The below information is designed as a reference for directly entering DDE links to the QLink server. Please see the above sections for the process of getting these formulas into your Excel spreadsheet.

Please note the following about the QLink syntax:

Values in [...] means that you can select one or more of these values in any order.

Values in {...} means they are optional.

**Bars Format**

**=QLink|Bars!'SYMBOL,PERIOD,#BARS,[DTHLVCV],{HEADERS},{HH:MM-HH:MM},{FILL}'**

**Example: =QLink|Bars!'IBM,15,1000,DTHLVCV,HEADERS,09:30-16:00'**

**SYMBOL** – Represents the name of the symbol you wish to see.

**PERIOD** – Use Q for Quarterly, M for Monthly, W for Weekly, D for Daily or for an intraday period just specify the number of minutes.

**#BARS** – Represents the number of bars to display.

**DTOHLCV** – Defines which data fields to display and in which order. See below for a list.

D = Date T = Time O = Open H = High L = Low C = Close V = Volume

**HEADERS** – Use this option to display the names of the fields in columns above the data.

**HH:MM-HH:MM** – Use this option to return only the bars within the specified time range. Applies to intraday intervals only.

**FILL** – Use this option to fill blank bars with the last known Close value

### Time & Sales Format

```
=QLink|TS!'SYMBOL,#ROWS,[DTCIEPS],{HEADERS}'
```

Example: =QLink|TS!'IBM,200,DTPSEC'

**SYMBOL** - Represents the name of the symbol you wish to see.

**#ROWS** - Represents the number of bars to display.

**DTCIEPS** - Defines which data fields to display and in which order. See below for a list.

D = Date T = Time C = Bid, Ask, Trade codes I = Indicators/Trade Conditions (Currently unsupported) E = Exchange code P = Price S = Size

**HEADERS** - Use this option to display the names of the fields in columns above the data.

### Snapshot

```
=QLink|Snapshot!'SYMBOL,[FIELDS],{VERTICAL},{HEADERS}'
```

Example: =QLink|Snapshot!'IBM,SYM,T,N,H,L,V,HEADERS'

Please note: Unlike other request types, the fields in Snapshot are separated by commas.

**SYMBOL** - The name of the symbol you wish to see.

**FIELDS** - Defines which data fields to display and in which order. See below for a list.

| Field | Definition        | Field | Definition         |
|-------|-------------------|-------|--------------------|
| %R    | % In Range        | DY    | Dividend Yield     |
| YH    | 1-Year High       | EPS   | EPS                |
| YL    | 1-Year Low        | EX    | Exchange           |
| A     | Ask               | H     | High               |
| AX    | Ask Exg           | T     | Last               |
| AS    | Ask Size          | L     | Low                |
| 65DAV | Average Volume    | N     | Net                |
| BA    | Best Ask          | %     | Net%               |
| BAX   | Best Ask Exg      | O     | Open               |
| BAS   | Best Ask Size     | OI    | Open Int           |
| BB    | Best Bid          | PER   | P/E Ratio          |
| BBX   | Best Bid Exg      | S     | Settle             |
| BBS   | Best Bid Size     | SO    | Shares Outstanding |
| BETA  | Beta              | SYM   | Symbol             |
| B     | Bid               | TTL   | Title              |
| BX    | Bid Exg           | TR    | Trade              |
| BS    | Bid Size          | TX    | Trade Exg          |
| BASP  | Bid/Ask Spread    | TS    | Trade Size         |
| CR    | Current Ratio     | TT    | Trade Time         |
| D     | Date              | V     | Volume             |
| DER   | Debt Equity Ratio | VWAP  | VWAP               |
| DIV   | Dividend          | Y     | Yest               |

**VERTICAL** - Use this option to display the snapshot data down the spreadsheet instead of across it.

**HEADERS** - Use this option to display the names of the fields in columns above the data.