eSignal, Inc., a wholly-owned subsidiary of Interactive Data Corporation (NYSE: IDC).

eSignal QLink

User's Guide

Version 2.0
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1. Introduction

eSignal QLink is a DDE server that makes connections to the eSignal network to retrieve real-time and historical data and then place that data into an Microsoft Excel spreadsheet.

QLink supports three different data structures.

- Bars – Historical bar data using intraday, daily, weekly or monthly intervals.
- TS – Time and sales data displaying streaming trade and quote updates
- Snapshot – Provides quotes and various other fields for the specified symbols

2. Installing eSignal 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 can be 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 eSignal QLink installation.

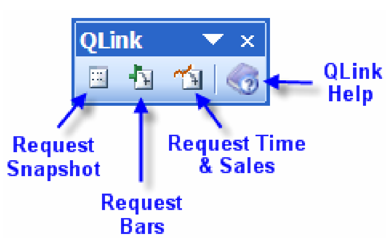
Note: During the installation the QLink installer will open Microsoft Excel in order to register itself within the application. Please **do not close Excel** during this time.

3. Adding a Data Request

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

3.1. Using the QLink Toolbar

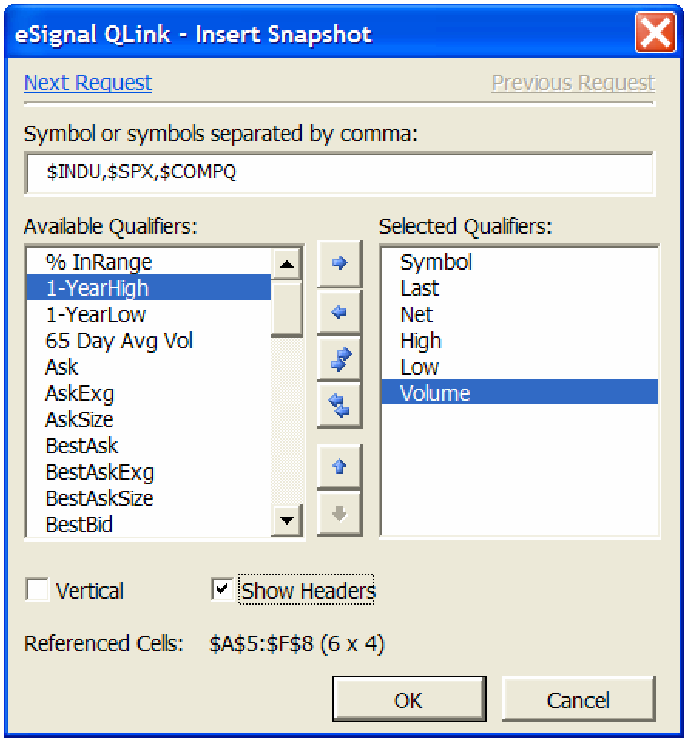
Upon installing the eSignal QLink application, a new toolbar will be available inside of Microsoft Excel.



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

3.1.1. 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.

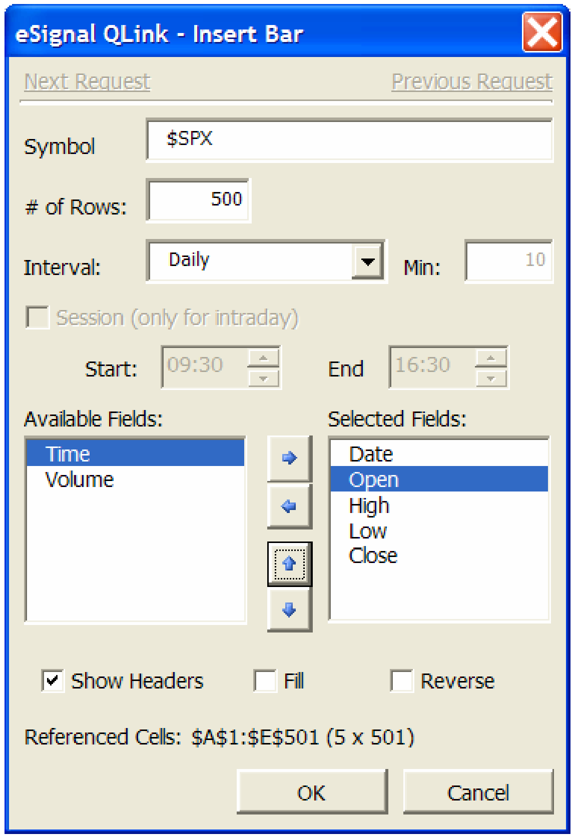
Vertical: Selecting this option will display the snapshot data down the spreadsheet instead of across it.

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.

3.1.2. 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.

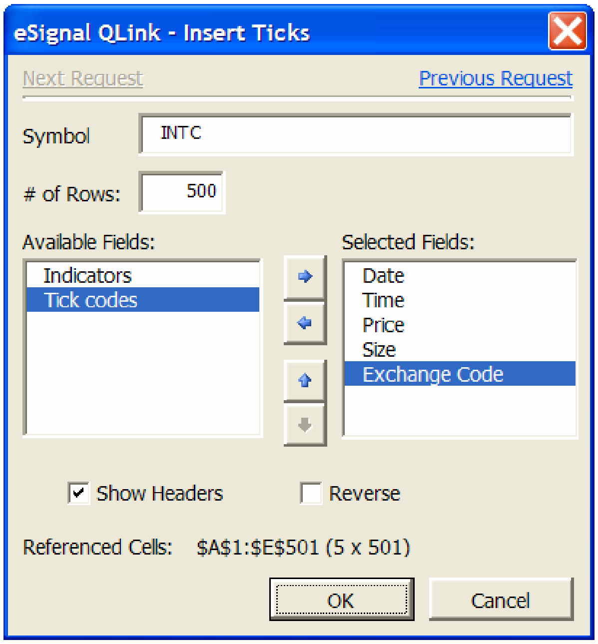
Show Headers: This option places a label at the top of each column for each data field that is chosen.

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

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

3.1.3. 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 the newest quotes and trades at the top, and stream downward.

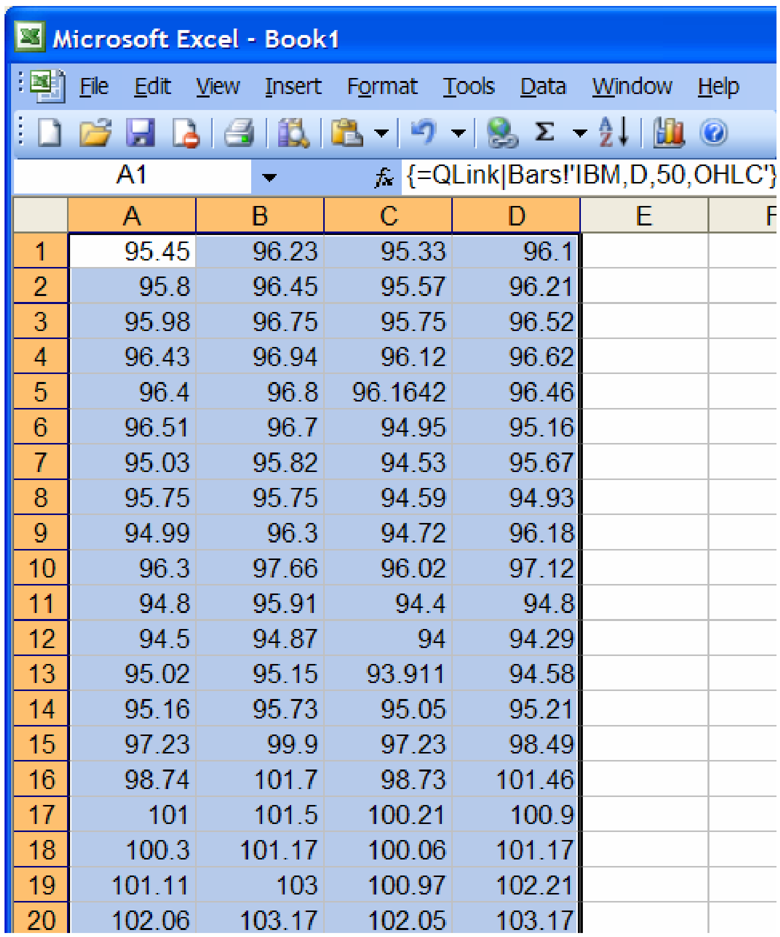
3.2. *Direct Formula Entry*

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

1. 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.

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

3. Hold down <Ctrl> and <Shift> keys and press <Enter> 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		
13	95.02	95.15	93.911	94.58		
14	95.16	95.73	95.05	95.21		
15	97.23	99.9	97.23	98.49		
16	98.74	101.7	98.73	101.46		
17	101	101.5	100.21	100.9		
18	100.3	101.17	100.06	101.17		
19	101.11	103	100.97	102.21		
20	102.06	103.17	102.05	103.17		

4. 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.

4.1. Bars Format

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

Example: =QLink|Bars!'IBM,15,1000,DTOHLCV,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

4.2. 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.

4.3. 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.