



# Historical Data Providers

by Wayne A. Thorp

In the world of investment analysis, data is oftentimes an overlooked component. However, the depth and accuracy of your data ultimately dictates how useful an investment software application will be.

This is especially true in the realm of technical analysis, which relies on historical price and volume data to attempt to forecast future price movements. Technical analysis programs process thousands of price and volume data points and plot them on a chart, while fundamental analysis applications concentrate on examining company and industry financial statement data. Instead of considering data as an afterthought, ideally, you will spend at least as much time considering your data source as you do the program in which it will be used.

It is common practice, especially with technical analysis programs, for software to be shipped with a token database of historical price and volume data to allow you to begin using the program right out of the box. While such databases may be useful for becoming familiar with the program, they are typically lacking in the scope (the number of securities covered) and depth (number of years provided) required to perform meaningful analysis. The question then becomes, where do I get the data? The answer is a historical data vendor.

This comparison article is devoted to 19 historical data providers that offer price, volume, and breadth statistics on stocks, indexes, mutual funds, options, or futures in the U.S and foreign markets.

## Comparison Grid

The grid on pages 10–17 gives details for each data vendor. These vendors provide data that can be used in both their own proprietary software packages as well as in other, third-party software. The comparison grid covers the methods of delivery used by each service, the depth of the data pro-

vided by each, and the specific data available for each security or indicator offered. The pricing structures of these services are complex and diverse; therefore, this information is listed separately in Table 1. All of the information found both in the grid and on Table 1 was either provided to us by the company or taken from their Web site.

## Time Frame

Technically speaking, once the price and volume of a given trade are posted they become “historical.” Some vendors today collect data right down to the tick as well as on the more common end-of-day basis.

In the world of trading data, every transaction is called a tick. Each trade tick can reveal the time of the transaction, the price of the trade, the number of shares exchanged and the exchange through which the trade took place. The reporting of historical trade data normally consolidates this tick-by-tick data to provide a summary of the trading activity for a specific time period, such as one day.

Our comparison examines security pricing services that provide historical daily price information. The information offered will vary by security type.

Stock data, for example, will typically reveal the price of the first trade of the day, the highest and lowest price at which a trade took place, the price of the last trade during the day, and the sum of the trading volume during the day. Note that these historical trading services do not report on after-hours trading.

Mutual fund data is much more limited. Most open-end mutual funds are only priced once during the day, after the market close. Therefore, the price data will only contain the close for the day without any indication of money invested into or out of the fund. If you follow mutual funds, it is very important to also have access to fund distri-

butions to adjust for the decline in net asset value resulting from any interest or capital gain distributions.

In order for a database to be considered adequate, it must contain enough accurate information to allow you to make informed investment decisions. While this is a subjective definition, it is nonetheless true. Your investment style and the types of analysis techniques you use are key factors to consider when seeking out a historical data provider. For example, the vast majority of investors perform end-of-day analysis based on closing prices on a daily basis.

For backtesting purposes, a database with less than five years probably would be of little use. Ideally, you would like to backtest strategies over at least one economic cycle—peak to peak or bottom to bottom—to gain a better understanding of how the strategy will perform over all stages of the economic cycle. Again, however, different people require different amounts of data in order to backtest with confidence—some may require 10 years, others 20 or more. Among these 19 vendors, you will find a wide range in the number of years the databases cover—from one year to over 30.

The way in which a service maintains its database is also something to keep in mind. Some services, such as Momentum, offer a fixed range for their data (five, 15, or 25 years), while others, such as Commodity Systems Inc. (CSI), offer data beginning in a specific year (1962 for NYSE stocks, 1983 for Amex stocks, and 1970 for Nasdaq stocks). While Momentum drops the oldest year's data off when a new year of data is added, CSI maintains an ever-expanding database.

Some services require you to do a little research on your own to see exactly how deep their data really is. For example, some vendors will string together futures and options contracts on a continuous basis and ignore ex-

(continued on p. 17)

# PRODUCT COMPARISON: HISTORICAL DATA PROVIDERS

<b>Company Name</b>			<b>BeeSoft</b>	<b>CISCO Futures</b>
<b>Program/Service Name</b>			ProTA Daily Quotes & Historical Quotes	
<b>Telephone</b>			(800) 840-3588	(800) 800-7227
<b>Web Site Address</b>			<a href="http://www.beesoft.net">www.beesoft.net</a>	<a href="http://www.cisco-futures.com">www.cisco-futures.com</a>
<b>E-Mail Address</b>			<a href="mailto:support@beesoft.net">support@beesoft.net</a>	<a href="mailto:dljones@cisco-futures.com">dljones@cisco-futures.com</a>
<b>Delivery Medium</b>	<b>Dial-Up</b>	<b>Maximum Speed</b>		
		<b>Toll-Free Number</b>		
	Internet		✓	✓
	Diskette		✓	
	CD-ROM		✓	
<b>Data Format</b>	Other		E-mail	
	ASCII			✓
	Comma-Delimited ASCII			✓
	Tab-Delimited ASCII			
	MetaStock			✓
<b>Software</b>	Other		proprietary format for ProTA software	TradeStation
	Software Included for Retrieval			
	Third-Party Software Needed			
<b>Stocks</b>	Other Means		E-mail, Web browser, FTP	Web browser
	NYSE (No., Years Covered)		All, 20 yrs	
	Amex (No., Years Covered)		All, 20 yrs	
	Nasdaq National Market (No., Years Covered)		All, 20 yrs	
	Data Provided		open, hi, lo, close, vol	
<b>Indexes</b>	Automatic Split Adjustments		✓	
	Number of Indexes Covered		50	5
	Years of Coverage		20 yrs	10 yrs
<b>Mutual Funds</b>	Data Provided		open, hi, lo, close	open, hi, lo, close
	Number of Funds Covered		all listed funds	
	Years of Coverage		20 yrs	
<b>Futures &amp; Options</b>	Data Provided		NAV, price, distrib	
	Number of Futures Covered		all U.S. futures	all U.S. futures
	Number of Options Covered			
	Years of Coverage		20 yrs	20 yrs
	Data Provided		open, hi, lo, close, vol, open int	open, hi, lo, close, volume, c
<b>Breadth Indicators</b>	Continuous Contracts			
	Exchanges		NYSE, Amex, Nasdaq	
	Number of Indicators Covered		3	
<b>International</b>	Years of Coverage		20 yrs	
	Number of Countries			
	<b>Stocks</b>	No., Years of Coverage		
		Data Provided		
		Automatic Split Adjustments		
	<b>Indexes</b>	No., Years of Coverage		
		Data Provided		
	<b>Mutual Funds</b>	No., Years of Coverage		
		Data Provided		
	<b>Futures &amp; Options</b>	No. of Futures		
		No. of Options		
		Years of Coverage		
		Data Provided		
		Continuous Contracts		
	<b>Breadth Indicators</b>	No. of Exchanges		
		No. of Indicators		
		Years of Coverage		

	<b>Commodity Systems Inc. (CSI)</b> UNFAIR ADVANTAGE (800) 274-4727 <a href="http://www.csidata.com">www.csidata.com</a> <a href="mailto:marketing@csidata.com">marketing@csidata.com</a> 56Kbps	<b>CQG Inc.</b> CQG Datafactory, CQG/WIN (800) 525-7082 <a href="http://www.cqg.com">www.cqg.com</a> <a href="mailto:salesdvr@cqg.com">salesdvr@cqg.com</a> T1	<b>Equis International Inc.</b> Reuters DataLink (800) 508-9180 <a href="http://www.reutersdatalink.com">www.reutersdatalink.com</a> <a href="mailto:sales@equis.com">sales@equis.com</a>
	✓	✓	✓
	✓	✓	✓
	✓	FTP	
	✓	✓	
	✓		
	✓		✓
	CSI format	ASCII fixed-width	Can be converted to ASCII, Excel
	✓		✓
	2,934 active/4,841 total, since 1962	all, since 1900 (CQG/WIN only)	all, from 1980
	884 active/1,536 total, since 1983	all, since 1900 (CQG/WIN only)	all, from 1980
	2,934 active/4,841 total, since 1970	all, since 1900 (CQG/WIN only)	all, from 1980
	open, hi, lo, close, vol	open, hi, lo, close, vol	open, hi, lo, close, vol
	✓	✓	✓
	508 active, 663 total	all major	1,800
	since 1928	since 1900	from 1980
	open, hi, lo, close, vol	open, hi, lo, close, vol	close
	15,033 active, 18,757 total		15,744
	since 1985		from 1980
	NAV, price		NAV
	1,918	all major derivatives exchanges	544 base symbols, 5,000+ contracts
	366	all major derivatives exchanges (CQG/WIN only)	
	since 1949	CQG/WIN since 1900, Datafactory since 1987	from 1973 (continuous contracts)
open int	open, hi, lo, close, vol, open int	open, hi, lo, close, vol, open int	open, hi, lo, close, vol, open int
	✓	✓	✓
		Nasdaq	NYSE, Amex, Nasdaq
	8	10	21
	8 yrs	CQG/WIN since 1900, Datafactory since 1987	from 1984
	2	25	1
	4,818 active/8,505 total, since 1995	100, since 1900 (CQG/WIN only)	4,348, from 1980
	open, hi, lo, close, vol	open, hi, lo, close, vol	open, hi, lo, close, vol
	✓	✓	✓
	206 active/231 total, since 1800	150, since 1900 (CQG/WIN only)	5,000+, from 1980
	open, hi, lo, close, vol	open, hi, lo, close, vol	close
	1,575	144	250
	85	46 (CQG/WIN)	
	since 1968	CQG/WIN since 1900, Datafactory since 1987	from 1973 (continuous contracts)
	open, hi, lo, close, vol, open int	open, hi, lo, close, vol, open int	open, hi, lo, close, vol, open int
	✓	✓	✓
			1
			7
			from 1987

# PRODUCT COMPARISON: HISTORICAL DATA PROVIDERS

Company Name			Global Financial Data	Investors FastTrack
Program/Service Name			Global Financial Database	FastTrack for the Web
Telephone			(877) 328-2999	(800) 749-1348
Web Site Address			<a href="http://www.globalfindata.com">www.globalfindata.com</a>	<a href="http://www.fasttrack.net">www.fasttrack.net</a>
E-Mail Address			<a href="mailto:sales@globalfindata.com">sales@globalfindata.com</a>	<a href="mailto:info@fasttrack.net">info@fasttrack.net</a>
Delivery Medium	Dial-Up	Maximum Speed	56+Kpbs	
		Toll-Free Number	✓	
	Internet		✓	✓
	Diskette		✓	
	CD-ROM		✓	✓
Data Format	Other			
	ASCII		✓	✓
	Comma-Delimited ASCII		✓	✓
	Tab-Delimited ASCII			✓
	MetaStock			✓
Software	Other			Excel, Quatro, Lotus
	Software Included for Retrieval		✓	✓
	Third-Party Software Needed			
Stocks	Other Means			
	NYSE (No., Years Covered)			all, from 1988
	Amex (No., Years Covered)			all, from 1988
	Nasdaq National Market (No., Years Covered)			all, from 1988
	Data Provided			close, divs
Indexes	Automatic Split Adjustments			✓
	Number of Indexes Covered		250 current, 400 historical	281
	Years of Coverage		from 1800	from 1988
Mutual Funds	Data Provided		open, hi, lo, close, vol	close
	Number of Funds Covered			18,000
	Years of Coverage			from 1988
Futures & Options	Data Provided			NAV, price, dist, returns
	Number of Futures Covered		20	
	Number of Options Covered			
	Years of Coverage		from 1959	
	Data Provided		open, high, low, close, vol, open int	
Breadth Indicators	Continuous Contracts		✓	
	Exchanges		NYSE, Amex, Nasdaq	NYSE, Amex, Nasdaq
	Number of Indicators Covered		20	22
International	Years of Coverage		from 1932	from 1988
	Number of Countries		80	
	Stocks	No., Years of Coverage		
		Data Provided		
		Automatic Split Adjustments		
	Indexes	No., Years of Coverage	1,800 current, 1,000 historical from 1693	72, from 1988
		Data Provided	open, high, low, close, vol	close
	Mutual Funds	No., Years of Coverage		
		Data Provided		
	Futures & Options	No. of Futures	10	
		No. of Options		
		Years of Coverage	from 1973	
		Data Provided	open, hi, low, close, vol, open int	
		Continuous Contracts	✓	
	Breadth Indicators	No. of Exchanges	Toronto, London	
		No. of Indicators	5	
		Years of Coverage	from 1969	

<b>Marketsource Online</b>	<b>Moby Data</b>	<b>Momentum</b>	<b>Pinnacle Data Corp.</b>
InvestorLink	Moby Data	Stock Market Data CD	IDX Database, CLC Database
(626) 915-0374	(626) 915-4144	(800) 735-0565	(800) 724-4903
<a href="http://www.msodata.com">www.msodata.com</a>	<a href="http://www.mobydata.com">www.mobydata.com</a>	<a href="http://www.momentumcd.com">www.momentumcd.com</a>	<a href="http://www.pinnacledata.com">www.pinnacledata.com</a>
<a href="mailto:support@msodata.com">support@msodata.com</a>	<a href="mailto:sales@mobydata.com">sales@mobydata.com</a>	<a href="mailto:jerryg@momentumcd.com">jerryg@momentumcd.com</a>	<a href="mailto:pinnacle@netacc.net">pinnacle@netacc.net</a>
			54Kbps
✓	✓		✓
✓		✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
	✓	✓	✓
✓		✓	✓
		✓	
E-mail, FTP	Web browser		
all, 12 yrs		all, five to 17 years	
all, 12 yrs		all, five to 17 years	
all, 12 yrs		all, five to 17 years	
open, hi, lo, close, vol		open, hi, lo, close, vol	
✓		✓	
700+	500+	75	10
12+ yrs	from 1990	five to 17 years	100 yrs
open, hi, low, close, vol	open, hi, lo, close, vol	open, hi, lo, close, vol	open, hi, lo, close, vol
14,000		1,100	
10 yrs		five to 17 years	
NAV		NAV, price	
approx 800 per day			70
varies			34 yrs
open, hi, low, close, vol, open int			open, hi, lo, close, vol, open int
✓			✓
NYSE, Amex, Nasdaq, CBOE	NYSE, Amex, Nasdaq	Amex, Nasdaq, NYSE	NYSE, Amex, Nasdaq
50	25	9	33
10+ yrs	10+ yrs	five to 17 years	38 yrs
		12, five to 17 years	
		open, hi, lo, close, vol	
			10
			14 yrs
			open, hi, lo, close, vol, open int
			✓

# PRODUCT COMPARISON: HISTORICAL DATA PROVIDERS

<b>Company Name</b>			<b>Primate Software</b>	<b>Prophet Financial Services</b>
<b>Program/Service Name</b>			Quote Monkey!	ProphetDirect, Prophet
<b>Telephone</b>			(714) 974-8497	(800) 772-8040
<b>Web Site Address</b>			<a href="http://www.primate.com">www.primate.com</a>	<a href="http://www.prophet.net">www.prophet.net</a>
<b>E-Mail Address</b>			<a href="mailto:sales@primate.com">sales@primate.com</a>	<a href="mailto:info@prophet.net">info@prophet.net</a>
<b>Delivery Medium</b>	<b>Dial-Up</b>	<b>Maximum Speed</b>	56Kbps	
		<b>Toll-Free Number</b>	✓	
	<b>Internet</b>		✓	✓
	<b>Diskette</b>		✓	
	<b>CD-ROM</b>		✓	✓
<b>Data Format</b>	<b>Other</b>			FTP
	<b>ASCII</b>		✓	✓
	<b>Comma-Delimited ASCII</b>		✓	✓
	<b>Tab-Delimited ASCII</b>		✓	✓
	<b>MetaStock</b>		✓	✓
<b>Software</b>	<b>Other</b>		proprietary format, ASCII WOW, ASCII fixed-field	Technical Tools
	<b>Software Included for Retrieval</b>		✓	✓
	<b>Third-Party Software Needed</b>			
<b>Stocks</b>	<b>Other Means</b>		integrated w/ Wealth Lab software	MetaStock Download
	<b>NYSE (No., Years Covered)</b>		all, 10 yrs	all, 34 yrs
	<b>Amex (No., Years Covered)</b>		all, 10 yrs	all, 34 yrs
	<b>Nasdaq National Market (No., Years Covered)</b>		all, 10 yrs	all, 30 yrs
	<b>Data Provided</b>		open, hi, lo, close, vol, shares out, divs	open, hi, lo, close, vol
<b>Indexes</b>	<b>Automatic Split Adjustments</b>		✓	✓
	<b>Number of Indexes Covered</b>		1,640	1,200
	<b>Years of Coverage</b>		10 yrs	from 1920
<b>Mutual Funds</b>	<b>Data Provided</b>		open, hi, lo, close, vol	open, hi, lo, close, vol
	<b>Number of Funds Covered</b>		16,730	10,000+
	<b>Years of Coverage</b>		10 yrs	since 1987
<b>Futures &amp; Options</b>	<b>Data Provided</b>		price	NAV, price
	<b>Number of Futures Covered</b>		2,000	300+
	<b>Number of Options Covered</b>		13,000	all U.S.
	<b>Years of Coverage</b>		10 yrs most futures only	45 yrs
	<b>Data Provided</b>		open, hi, lo, close, vol, open int	open, hi, low, close, vol
<b>Breadth Indicators</b>	<b>Continuous Contracts</b>		✓	✓
	<b>Exchanges</b>		NYSE, Nasdaq	NYSE, Amex, Nasdaq
	<b>Number of Indicators Covered</b>		5+	All
<b>International</b>	<b>Years of Coverage</b>		8-10 yrs	since 1972
	<b>Number of Countries</b>		2	10
	<b>Stocks</b>	<b>No., Years of Coverage</b>	2,000, 10 yrs	34,000, since 1990
		<b>Data Provided</b>	open, hi, low, close, vol, shares out	open, hi, lo, close, vol
		<b>Automatic Split Adjustments</b>	✓	✓
	<b>Indexes</b>	<b>No., Years of Coverage</b>	276, 5 yrs	300, since 1990
		<b>Data Provided</b>	open, hi, low, close, vol	open, hi, lo, close
	<b>Mutual Funds</b>	<b>No., Years of Coverage</b>		
		<b>Data Provided</b>		
	<b>Futures &amp; Options</b>	<b>No. of Futures</b>		
		<b>No. of Options</b>		
		<b>Years of Coverage</b>		
		<b>Data Provided</b>		
	<b>Breadth Indicators</b>	<b>Continuous Contracts</b>		
		<b>No. of Exchanges</b>		
		<b>No. of Indicators</b>		
		<b>Years of Coverage</b>		

Systems, Inc. etLink	Quotes Plus QP2 (800) 627-9637 <a href="http://www.qp2.com">www.qp2.com</a> <a href="mailto:info@quotes-plus.com">info@quotes-plus.com</a> 28.8Kbps ✓ ✓ ✓ ✓ ✓ ✓ Excel, Quotes Plus format ✓	Stock Data Corp. Stock Market Data (410) 280-5533 <a href="http://www.stockdata.com">www.stockdata.com</a> <a href="mailto:sales@stockdata.com">sales@stockdata.com</a> 19.2Kbps ✓ ✓ ✓ ✓ ✓ ✓ Binary format ✓	StockWiz StockWiz (800) 909-4218 <a href="http://www.stockwiz.com">www.stockwiz.com</a> <a href="mailto:support@stockwiz.com">support@stockwiz.com</a> ✓ ✓ ✓ ✓ ✓ ✓ StockWiz format ✓
er	all, 10+ yrs all, 10+ yrs all, 10+ yrs open, hi, lo, close, vol, shares out, div ✓ 500 10+ yrs open, hi, lo, close, vol 14,600 up to 11 yrs price, distrib 150+	Snail mail all, 15 yrs all, 15 yrs all, 15 yrs open, hi, lo, close, vol 500 15 yrs open, hi, lo, close, vol 15,000 10 yrs NAV	FTP all, from 1996 all, from 1996 all, from 1996 open, hi, lo, close, vol ✓ 200 from 1996 close 16,400 from 1996 NAV
ol, open int	10+ yrs open, hi, lo, close, vol, open int ✓		
q	All		
	10 yrs		1 2,100, from 1996 open, hi, lo, close, vol ✓ 50, from 1996 close
	approx 15 exchanges		
	10+ yrs		



# PRODUCT COMPARISON: HISTORICAL DATA PROVIDERS

<b>Company Name</b>			<b>Tick Data Inc.</b>	<b>Track Data Corp.</b>
<b>Program/Service Name</b>			High-Frequency Database	Dial/Data
<b>Telephone</b>			(703) 757-1370	(800) 275-5544
<b>Web Site Address</b>			<a href="http://www.tickdata.com">www.tickdata.com</a>	<a href="http://www.trackdata.com">www.trackdata.com</a>
<b>E-Mail Address</b>			<a href="mailto:sales@tickdata.com">sales@tickdata.com</a>	<a href="mailto:dialdata@trackdata.com">dialdata@trackdata.com</a>
<b>Delivery Medium</b>	<b>Dial-Up</b>	<b>Maximum Speed</b>		
		<b>Toll-Free Number</b>		
	Internet		✓	✓
	Diskette			
	CD-ROM		✓	
<b>Data Format</b>	Other		express mail	
	ASCII		✓	✓
	Comma-Delimited ASCII		✓	✓
	Tab-Delimited ASCII		✓	✓
	MetaStock		✓	✓
<b>Software</b>	Other		TradeStation	
	Software Included for Retrieval		✓	
	Third-Party Software Needed		✓	✓
<b>Stocks</b>	Other Means			Telnet
	NYSE (No., Years Covered)		all, since 1991	all, up to 32 yrs
	Amex (No., Years Covered)		all, since 1998	all, up to 32 yrs
	Nasdaq National Market (No., Years Covered)		all, since 1991	all (no pink sheets), up to 15 yrs
	Data Provided		open, hi, lo, close, vol, intraday	open, hi, lo, close, vol, divs
<b>Indexes</b>	Automatic Split Adjustments		✓	
	Number of Indexes Covered		7	most major
	Years of Coverage		since 1983	up to 32 yrs
<b>Mutual Funds</b>	Data Provided		open, hi, lo, close, vol, tick	open, hi, lo, close, vol
	Number of Funds Covered			10,000+
	Years of Coverage			up to 20 yrs
<b>Futures &amp; Options</b>	Data Provided			NAV, distrib
	Number of Futures Covered		59	100+
	Number of Options Covered			all actively traded contracts
	Years of Coverage		since 1974	up to 29 yrs (fut); current yr (opt)
	Data Provided		open, hi, lo, close, tick	open, hi, lo, close, vol, open int
<b>Breadth Indicators</b>	Continuous Contracts		✓	✓
	Exchanges			Amex, NYSE, Nasdaq
	Number of Indicators Covered			25+
<b>International</b>	Years of Coverage			up to 32 yrs
	Number of Countries			7
	<b>Stocks</b>	No., Years of Coverage		approx. 7,000+, up to 12 yrs
		Data Provided		open, hi, lo, close, vol
		Automatic Split Adjustments		
	<b>Indexes</b>	No., Years of Coverage		50+, up to 10+ yrs
		Data Provided		open, hi, lo, close
	<b>Mutual Funds</b>	No., Years of Coverage		10,000+, 10+ yrs
		Data Provided		NAV
	<b>Futures &amp; Options</b>	No. of Futures	6	50+, up to 10 yrs
		No. of Options		
		Years of Coverage	since 1997	
		Data Provided	open, hi, lo, close, tick	open, hi, lo, close, vol, open int
		Continuous Contracts	✓	✓
	<b>Breadth Indicators</b>	No. of Exchanges		
		No. of Indicators		
		Years of Coverage		



**Worden Brothers**  
 TC2000  
 (800) 776-4940  
[www.tc2000.com](http://www.tc2000.com)  
[support@worden.com](mailto:support@worden.com)

✓  
 ✓  
 ✓  
 ✓  
 ✓  
 ✓  
 ✓  
 ✓

all, 16 yrs  
 all, 16 yrs  
 all, 16 yrs  
 open, hi, lo, close, vol, divs  
 ✓  
 103  
 16 yrs  
 open, hi, lo, close, vol  
 10,000 (separate product)  
 16 yrs  
 NAV, price, distrib

16, 16 yrs  
 open, hi, lo, close, vol

piration—thus creating continuous contracts.

### Accessibility

As technology has advanced, individuals have gained access to large amounts of historical price and volume data with increasing speed and ease. Furthermore, the number of companies providing data is growing as well, indicating this data is becoming more readily available to individual investors.

Today, you can retrieve data via the Internet at relatively blistering speeds via cable modems, DSL (digital subscriber lines), T1 or T3 connections, or even satellite links.

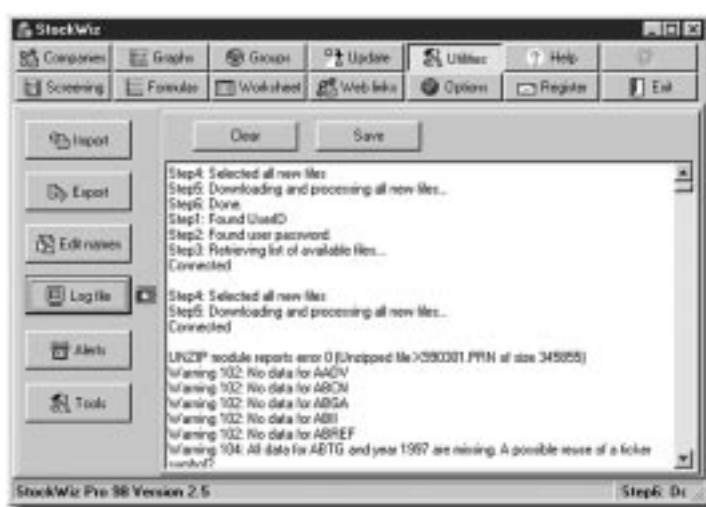
Storage needs, while not the issue they once were, are something to keep in mind—especially if you are nearing capacity on your system's hard drive. Ten years of open/high/low/close/volume data for a single stock will take up around 100 KB of disk space. Older systems or those that contain disk space-intensive applications may be overburdened by significant amounts of historical data. However, today's systems—with an average hard drive of 30 or more gigabytes, 128M RAM, and a CD-ROM or DVD drive—should have no problem handling any data set you may wish to collect.

### Pricing the Price Data

Beyond accuracy, one of the most important factors to consider when looking for a data provider is cost. We found this issue to be too complex for the comparison grid format: Each service has its own method for calculating fees depending on what you need and how often you need it. The pricing plan of each service is presented in Table 1. However, this list is by no means comprehensive and, while the information was supplied by the vendor or taken from their Web site, we suggest you confirm the prices for the specific data set that you plan to collect.

The complexity and diversity of these fee

**Figure 1. StockWiz Error-Checking Module**



plans make it all but impossible to place them on equal footing for comparison. For example, some services charge for a fixed amount of data—a maximum number of quotes per period—while others charge a flat fee for unlimited data downloading over a set period. Charges also tend to vary depending on the method of delivery you use—CD-ROM, Internet, or modem dial-up.

In general, the table shows how straightforward or complex each pricing structure is. For example, services such as Moby Data and Primate Software charge a flat monthly fee for unlimited downloading, while other services such as Dial/Data (from Track Data) and CSI offer multiple pricing plans to accommodate their diverse database of securities.

While hardly an exact science, the best way to compare vendors based on price is first to determine the data you need and how often you will be updating that data. Once you know that, you should be able to get an idea of how much each service will cost based on your data needs.

### Data Delivery

Other important considerations when shopping for a data vendor include the update schedule, mode of delivery, data format, and the actual data itself.

Data timeliness has become more of an issue as markets seem to move with ever-increasing speed. Traditionally, historical data services have provided daily updates to their

**Table 1.**  
**Historical Data Vendor Pricing Structures**

**BeeSoft**

DailyQuotes	\$0.02/ symbol; \$10/mo. min.
Historical Quotes	\$0.25/3 mo. data/symbol

**CISCO Futures**

<i>End-of-Day Data</i>	
End-of-Day Ticks + Previous 10 Days	\$25/mo. first 5 commod.; \$5 add'l
End-of-Day Daily Data + Previous 10 Days	\$9.95/mo.
<i>Historical Data *</i>	
Historical Daily Data	\$20/commodity
Historical Tick Data	\$3/commodity/trading month
*\$50 min. order for all historical data	

**Commodity Services, Inc. (CSI)**

<i>Unfair Advantage*</i>	Direct-Dial Updates
North American Futures**	\$313/yr. for up to 10 yrs. of data
Foreign Futures	\$360 for up to 10 yrs. of data
World Futures (U.S. & foreign)	\$540 for up to 10 yrs. of data
U.S. Stocks & Indexes	\$205 for up to 10 yrs. of data
Non-U.S. Stocks & Non-U.S. Indexes	\$240 for up to 10 yrs. of data
World Options	\$475 for up to 1 yr. of data
Mutual Funds	\$140 for up to 10 yrs. of data
Budget Market Mix	\$288 for up to 10 yrs. of data
(all contracts of 15 futures markets & choice of 50 stocks/funds)	
*additional licensing fee of \$60 to \$175 depending on subscription	
**all prices reflect those for personal/private use	

**CQG**

One-Minute Delay Intraday Data	\$12/mo. per commodity
Two-60 Minute Delay Intraday Data	\$8/mo. per commodity
Daily Data	\$6/mo. per commodity

**Equis International Inc.**

**Reuters DataLink**

Stock Package	\$24.95/mo. or \$269.40/yr.
(All U.S. & Canadian stocks since 1980)	
Futures Package	\$24.95/mo. or \$269.40/yr.
(All U.S. futures markets since 1973)	
Indexes	\$9.95/mo. or \$107.40/yr.
(Market averages, indicators, & international quotes)	
Mutual Funds (U.S. mutual funds)	\$9.95/mo. or \$107.40/yr.
Professional Package (All four packages)	\$64.95/mo. or \$545.52/yr.

**Global Financial Data**

Individual Files: 1980 to Present	\$35 per security*
Entire File	\$55 per security*
*20% discount on Internet orders over \$200	

**Investors FastTrack**

<i>FastTrack for the Web</i>	
Stocks Database	\$40/mo., \$102/qtr., \$336/yr.
Funds Database	\$40/mo., \$102/qtr., \$336/yr.
Stocks 2 Database	\$40/mo., \$102/qtr., \$336/yr.
FastTrack CD	\$29.95

**Marketsource Online**

InvestorLink (on-line retrieval)	\$14.95/mo. or \$149.95/yr.
InvestorLink (historical CD)	\$35

**Moby Data**

Historical Data Files (unlimited access)	\$8/mo.
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**Momentum**

Five-Year Historical Stock Market CD	\$29.95
15-Year Historical Stock Market CD	\$49.95
25-Year Historical Futures CD	\$129.95
25-Year Historical Futures CD + three quarterly updates	\$229.95

**Pinnacle Data Corp.**

COT Database	\$99
(Commitment of Traders Reports for commodities since 1983)	
CLC Database (futures data since 1969)	\$99
Individual Commodity Contracts (LIGHT history—currently active)	\$49
Individual Commodity Contracts (DEEP history—All historical)	\$149
IDX Database	\$249
(12 groups—market breadths, index data, cash/currency prices)	
Single IDX Group	\$49
Any Four IDX Groups	\$149

*Daily Database Updates\*:*

One Database	\$14/mo. or \$144/yr.
Two Databases	\$17/mo. or \$180/yr.
Three Databases	\$20/mo. or \$216/yr.

\*3-month minimum purchase

**Primate Software**

Set-Up Fee	\$24.95
Unlimited Service Plan	\$27.95/mo.
Basic Yearly Plan	\$239.99/yr.

**Prophet Financial Systems, Inc.**

*ProphetLink*

All Stocks	\$24.95/mo. or \$249.50/yr.
Equity/Index Options	\$29.95/mo. or \$299.50/yr.
All Stocks & Options	\$39.95/mo. or \$399.50/yr.
Worldwide Futures	\$29.95/mo. or \$299.50/yr.
All Data	\$49.95/mo. or \$499.50/yr.

*ProphetDirect*

Basic Packages (one-year history)	
Equities	\$19.95/mo. or \$199.50/yr.
Equities + Options	\$29.95/mo. or \$299.50/yr.
Worldwide Futures	\$29.95/mo. or \$299.50/yr.
Everything	\$39.95/mo. or \$399.50/yr.

Historical Packages (all history)

Equities	\$34.95/mo. or \$349.50/yr.
Equities + Options	\$44.95/mo. or \$449.50/yr.
Worldwide Futures	\$39.95/mo. or \$399.50/yr.
Everything	\$49.95/mo. or \$499.50/yr.

**Quotes Plus**

Stocks, Mutual Funds, Market Indexes, Industry Group Information	\$25.95/mo. or \$280.26/yr.
Above + Commodities	\$30.95/mo. or \$334.26/yr.
Commodities only	\$18.95/mo. or \$204.66/yr.

**Stock Data Corp.**

Set-Up Charge	\$25
Internet/Modem Service	\$39.95/mo. or \$475/yr.

(continued on p.19)

Table 1.  
Historical Data Vendor Pricing Structures (con't)

Internet/Modem Serv. w/ Weekly Disk	\$49.95/mo. or \$595/yr.	Indexes, Stocks, & Fundamental—	
One-Year Market History CD	\$50	Six Months History	\$30/mo.
Three-Year Market History CD	\$100	Indexes & Mutual Funds—	
Five-Year Market History CD	\$150	Six Months History	\$15/mo.
10-Year Market History CD	\$275	Options—Six Months History	\$10/mo.
		Complete Package—Six Months History	\$37/mo.
<b>StockWiz</b>	\$19.95/mo.	Indexes, Stocks, & Fundamental—	
		Two Years History	\$40/mo.
<b>Tick Data Inc.*</b>		Indexes, Stocks, Mutual Funds &	
<i>Futures &amp; Index Data:</i>		Fundamental—Two Years History	\$50/mo.
Since Start Date	\$400/symbol	Indexes & Mutual Funds—Two Years History	\$20/mo.
Per Year	\$75/yr. per symbol	Options—Two Years History	\$10/mo.
Pick30	\$750	Futures/Futures Options—Two Years History	\$35/mo.
(30 years of tick history on any combination of markets)		Complete Package—Two Years History	\$70/mo.
Pick15	\$525	Indexes, Stocks, & Fundamental—	
(15 years of tick history on any combination of markets)		Unlimited History	\$50/mo.
Monthly Updates	\$75/yr. per market	Indexes, Stocks, Mutual Funds & Fundamental—Unlimited History	\$60/mo.
<i>Equity Data (one-minute):</i>		Indexes & Mutual Funds—Unlimited History	\$25/mo.
10 Years or Less	\$18/yr. per stock	Options—Unlimited History	\$10/mo.
Next 40 Years	\$15/yr. per stock	Futures/Futures Options—Unlimited	
Greater Than 50 Years	\$10/yr. per stock	History (up to five years)	\$50/mo.
<i>*all futures, index, and one-minute equity data orders are subject to \$150 minimum.</i>		Complete Package—Two Years History	\$85/mo.
		Per Quote Fee	\$0.02/symbol/day
		(\$15 monthly minimum)	
<b>Track Data Corp.</b>		<b>Worden Brothers</b>	
<i>Dial/Data</i>		U.S. Stocks:	
Sign-Up Fee	\$35	Historical Data CD	free
		Delayed Data Download Service	\$29.75/mo.

data, which satisfies the needs of most individual investors.

The methods of delivery are equally diverse and range from toll-free dial-ups and access networks, to CD-ROM discs. It is the Internet, however, that has had the greatest impact on how data is delivered.

The Internet allows users to retrieve data in a quicker, more efficient manner than what is possible via dial-up connections. Over the past several years, services that used to deliver data via network or dial-in connections have migrated their data to the Internet.

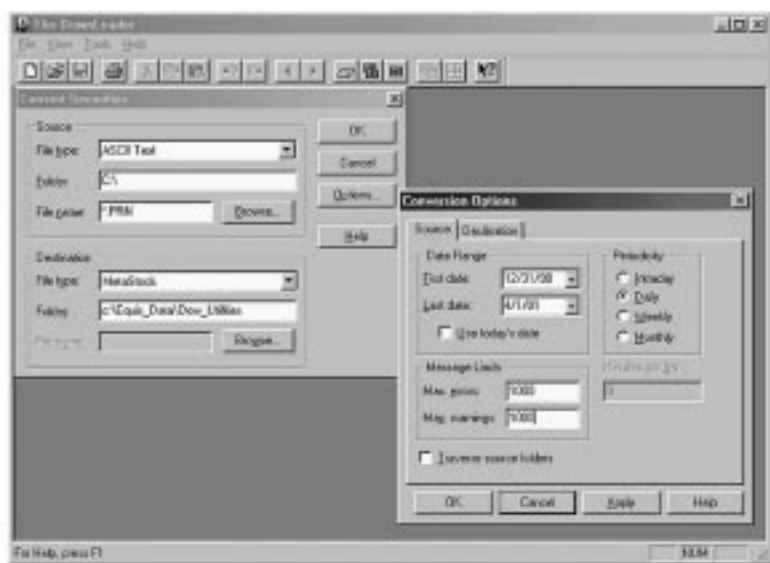
As revealed in the comparison grid, 18 of the 19 companies provide data retrieval via the Internet—the preferred method for data transfer these days. The remaining service, Momentum, ships its data exclusively on CD-ROM.

Another item to keep in mind is that many of these services—13 in all—provide proprietary software that is used to retrieve and manage their data. Most good programs help users look for potentially incorrect or missing data (Fig-

ure 1). In every case, these are Windows-based programs. Therefore, be sure your computer supports the retrieval software before subscribing to

the service—especially important for Mac users. Furthermore, some services have eliminated the middleman and provide charting as well as data col-

**Figure 2. The DownLoader from Equis International**



lection—such as TC2000 from Worden Brothers and Primate Software's Quote Monkey! Deluxe.

### Data Format

The main reason for subscribing to a historical data provider is to use that data with some third-party software package. Therefore, it is important that you confirm whether a company's data can be used with your analysis program—that is, the data is in a compatible format. Most technical analysis programs on the market today can read ASCII format or MetaStock (Equis International) directly or indirectly after some conversion process. Several services such as CSI provide data in a proprietary format, which can be converted for use in other software packages.

You will want to check to see if your analysis program can directly read a specific data format or if some type of conversion is necessary, as well as whether it can perform that conversion. The better full-featured technical analysis programs include downloading utilities to retrieve and manage data directly from the data vendors (Figure 2).

### Data Content

Your ideal situation would be to have several data vendors from which to choose, all offering data on every traded security since its first day of trading. In reality, however, no such vendor exists, so you are left to find the vendor that offers the best combination of data breadth and price. Looking at the comparison grid, you can see just how much the databases vary between vendors, with no two exactly alike.

The grid is divided into six main security categories:

- Stocks,
- Indexes,
- Mutual funds,
- Futures and options,
- Breadth indicators, and
- International.

For each, we report on the number of securities covered, how far back the

data goes, and what specific information is available.

**Stocks:** Stock data is common among the data vendors highlighted here. However, some services focus on “niche” data, such as CISCO Futures, Global Financial Data, Moby Data, and Pinnacle Data. These four do not offer stock data, but instead focus on more specialized data such as index and options/futures data, or international data. Most suppliers of stock data cover stocks traded on the New York Stock Exchange, American Stock Exchange, and Nasdaq National Market. Therefore, when selecting a vendor for stock data, you should be most concerned with the depth of the data—the number of years for which prices are provided.

**Indexes:** All of these data services offer some degree of index data. The number covered ranges from a few to several hundred. Quote Monkey! (from Primate Software), Prophet Financial Systems, and Reuters DataLink (from Equis International) are at the top with each offering data on over 1,200 domestic indexes.

**Mutual funds:** Vendors vary in the mutual fund data provided. However, the majority of vendors offer more than 10,000 funds. All but two vendors reporting data for funds give net asset value (NAV). BeeSoft, Investors FastTrack, Quotes Plus, Track Data, and Worden Brothers offer fund distribution data, but only Investors FastTrack offers return data on funds.

**Futures and options:** Futures and options receive the least coverage among data vendors, with 13 of the 19 companies offering futures data and only five with options data. Six firms do not provide any kind of derivative contract data at all. However, this category is the most complete in the amount of data available from those that do provide it. The time frame and the number of contracts in the database are what set the vendors apart here. Also, note the services that string contracts together to eliminate expirations (continuous contracts). Eleven of the firms offering commodities contract data

also provide continuous contract data.

**Breadth indicators:** Breadth indicators give an indication of how many stocks are participating in a market move. For example, one indicator may show the percentage of advancers or decliners within a day's trading. Other popular indicators include total volume, number of advancing issues, number of declining issues, number of new highs, and number of new lows. Breadth indicators are also called breadth-of-the-market indexes. Fourteen of the vendors offer some breadth indicators.

**International:** All but five of the vendors provide some type of international coverage. For the purposes of this article, Canadian securities are part of the international pool. The international coverage of two of these services—Reuters DataLink and StockWiz—is limited to Canadian securities and indexes. From a raw data standpoint, Dial/Data comes out ahead in its offering of international data, while Global Data covers the most countries with over 1,800 international indexes offered.

### Making Your Choice

Which vendor is right for you? The following is a checklist that may help you narrow the field:

- Focus on the data you need; don't get caught up in all the “bells and whistles” of a given service.
- Consider the price while trying to avoid the confusion; attempt to bring the prices down to a common denominator on which you can compare the services.
- Think about how often you will require data updates and the delivery methods you can utilize.
- Before you pay for a service, confirm its data coverage and depth.

Once you have addressed these issues, you will be better equipped to select a data vendor that will meet your analysis needs.

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