Scanner of Fibonacci Retracement

Questions: I would like to know if the scanner can identify stocks or futures contracts that have made a Fibonacci Retracement of 30% – 70% from their most recent top price, using a look-back period of 30 bars.

Additionally, can these parameters—such as daily/weekly bars and look-back period—be easily modified within the scanner?

Answer: Yes, I will show you the setup so you get an idea of the flexibility available to you.

I will use 3 things in my solution:

1. A portfolio to identify which symbols to scan.
2. A template that makes the Fibonacci calculation.
3. The Scanner to prepare the report.

Portfolio

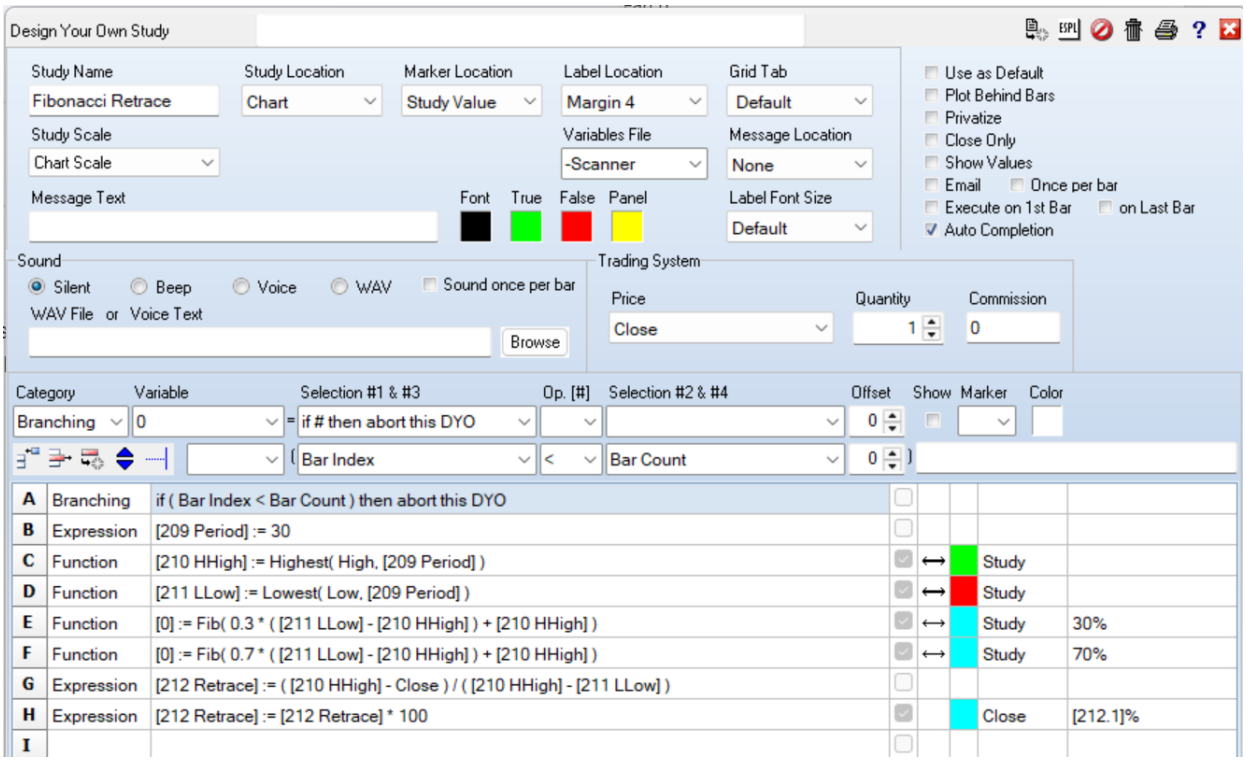
I have a list of 67 stock symbols that I follow on the IQFeed in a portfolio. Your portfolio could be from any of the supported data feed vendors and be a mix of any of their symbols. Below is a partial view of my portfolio. The portfolio's symbol list is established in Ensign 10 on the Setup | Feeds form for the data vendor you receive data from.

	Symbol	Last	Net	Name	High	Low
IQ	ARM	116.38	-9.17	ARM HOLDINGS PLC ADS	121.80	114.38
IQ	ASML	683.11	-49.11	ASML HOLDING	699.00	676.00
IQ	AVGO	184.45	-10.51	BROADCOM LIMITED ORDINARY	191.98	180.43
IQ	CHAT	35.67	-1.76	ROUNDHILL GENERATIVE AI &	36.63	35.29
IQ	CIEN	65.53	-3.40	CIENA CORPORTION	66.92	64.01
IQ	CLS	81.15	-6.38	CELESTICA	84.61	78.33
IQ	CRM	272.90	-9.99	SALESFORCE INC	278.35	270.72
IQ	CVX	157.57	1.23	CHEVRON	160.37	156.17
IQ	DELL	90.34	-1.12	DELL TECHNOLOGIES INC	91.77	88.69
IQ	DGRO	62.47	-0.84	ISHARS CORE DIVIDEND GROWT	63.34	62.05
IQ	DVY	133.39	-0.91	ISHARES DOW JONES SELECT D	135.19	132.22
IQ	EEM	43.36	-1.06	ISHARES MSCI EMERGING MARK	43.88	43.09
IQ	FDN	224.09	-9.67	FIRST TRUST DOW JONES INTE	229.14	221.38
IQ	GEV	270.13	-19.17	GE VERNOVA INC	281.37	266.47

Template

I added a Design Your Own study to a chart, and configured the DYO study to make the Fibonacci calculations. These calculations are saved in Global Variables so that their values can be printed on the Scanner report. I will now explain the DYO line by line. This study was then saved as a Template named Fib Scanner which I will explain under the Scanner section of my reply. I will discuss how the DYO study looks on this example chart.

Below is the DYO that created the lines on the chart.



Row A - The calculation and lines only need to be created for the last bar on the chart. So calculations that could have been made for each bar on the chart are skipped until Bar Index = Bar Count.

Row B - Set global variable [209] with a value of 30. There are 1000 global variables available for use in calculations. The value in [209] will be used on rows C and D for the look back period. Edit this row to change the look back period.

Row C - Use the Highest function to find the Highest High across the look back period [209], from the set of chart bar Highs. This value is saved in variable [210], and a green line is drawn at this value across the width of the chart.

Row D - Use the Lowest function to find the Lowest Low across the look back period [209], from the set of chart bar Lows. This value is saved in variable [211], and a red line is drawn at this value across the width of the chart.

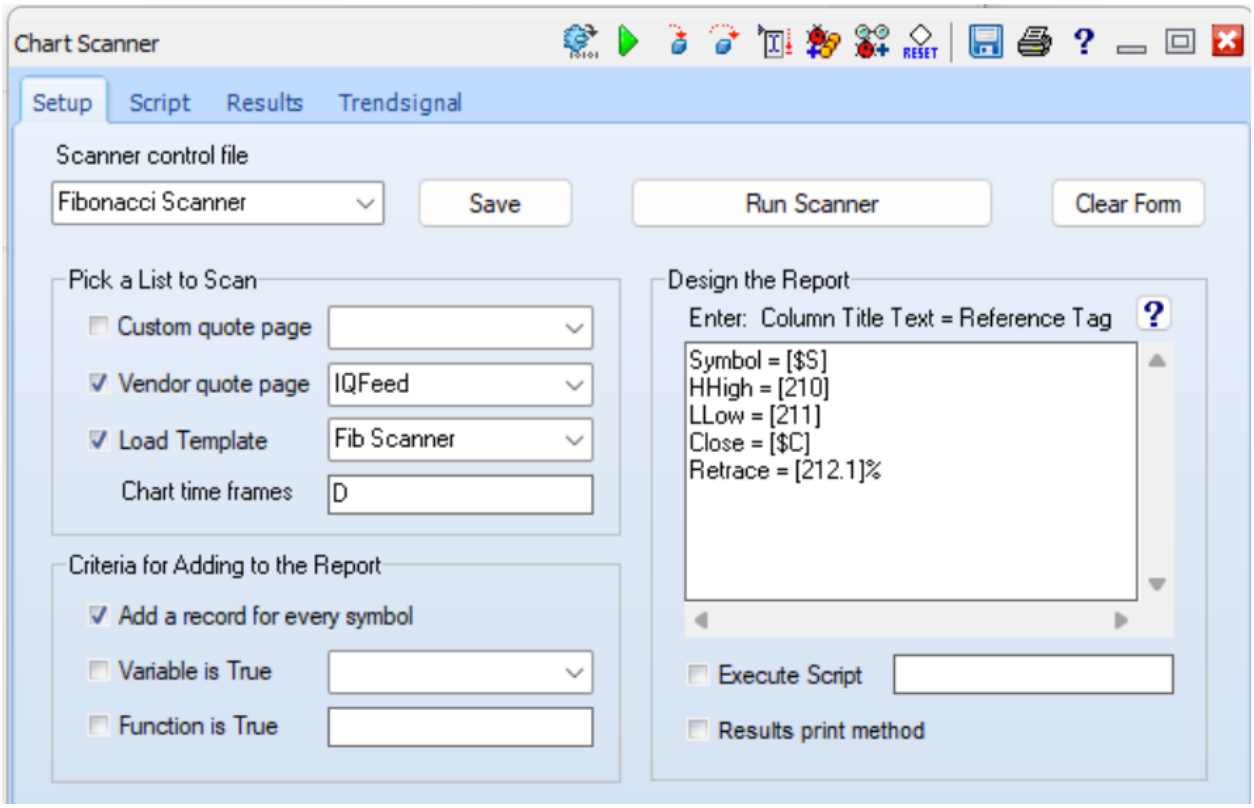
Row E and F - Use the Fibonacci function to calculate the 30% and the 70% levels based on the Highest High in [210] and the Lowest Low in [211]. Draw cyan lines across the chart and label these lines with 30% and 70%.

Row G - Calculate the retracement percent of the current Close from the Highest High in the range of the Highest High and Lowest Low.

Row H - Multiply the Row G value that was saved in variable [212] by 100 for display in the Scanner report. Show this value on the chart in the right side Margin at the value of the bar's Close. The [212.1]% means the following. The variable to display is [212]. The .1 in the brackets formats the result to show 1 decimal. The % is an added character.

Chart Scanner

The Scanner is a flexible design that performs the function of opening a chart one at a time for each symbol on the portfolio list, applying a template to the chart which calculates the Fibonacci retrace value, and creates a report. I will now explain the scanner setup.



In the Pick a List to Scan frame, the box is checked to use a Vendor quote page, and in the drop down I selected the quote page for the IQFeed data vendor. This page has my list of 67 stock symbols.

The box for Load Template is checked and the drop down has selected the Fib Scanner template that was saved when the DYO study was created. Thus, when the chart is opened, the DYO will be put on the chart, calculate, and populate values in the global variables. The time frame of the chart that is opened is a Daily chart. Other time frames

could be scanned with this scanner design by changing the time frame tag, such as W for weekly.

In the frame for Criteria for Adding to the Report, I have the box checked for Add a record for every symbol. There are other choices, which you can read about in the documentation about the Chart Scanner via this link.

Ensign Scanner

In the frame for the Design the Report, I have added 5 lines which will make a report with 5 columns. The text on the left side of the = sign will become the column title. And the tokens on the right side of the = sign will be the column contents.

[$S] is a token for the chart's symbol.

[210] is the global variable where the DYO stored the Highest High.

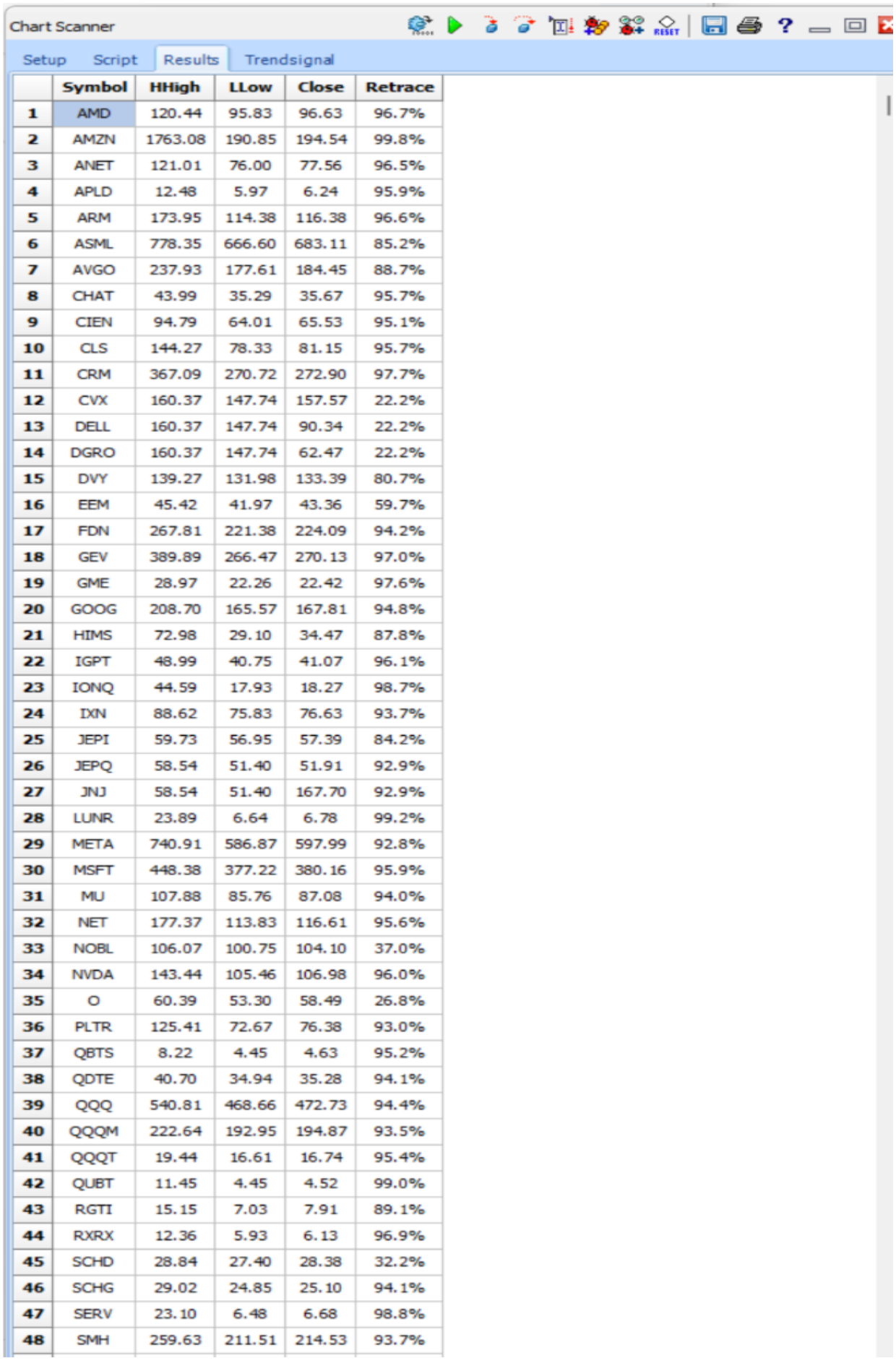
[211] is the global variable where the DYO stored the Lowest Low.

[$C] is a token for the close for the chart obtained from the portfolio, which is also the chart's last bar close.

[212.1]% is the global variable where the DYO stored the retrace calculation. The value is formatted to show 1 decimal.

A % character is added to the displayed number.

The design was given a name of Fibonacci Scanner and the Save button was clicked. Thus the design can be loaded again by selecting Fibonacci Scanner and clicking the Run Scanner button. Below is the result.



	Symbol	HHigh	LLow	Close	Retrace
1	AMD	120.44	95.83	96.63	96.7%
2	AMZN	1763.08	190.85	194.54	99.8%
3	ANET	121.01	76.00	77.56	96.5%
4	APLD	12.48	5.97	6.24	95.9%
5	ARM	173.95	114.38	116.38	96.6%
6	ASML	778.35	666.60	683.11	85.2%
7	AVGO	237.93	177.61	184.45	88.7%
8	CHAT	43.99	35.29	35.67	95.7%
9	CIEN	94.79	64.01	65.53	95.1%
10	CLS	144.27	78.33	81.15	95.7%
11	CRM	367.09	270.72	272.90	97.7%
12	CVX	160.37	147.74	157.57	22.2%
13	DELL	160.37	147.74	90.34	22.2%
14	DGRO	160.37	147.74	62.47	22.2%
15	DVY	139.27	131.98	133.39	80.7%
16	EEM	45.42	41.97	43.36	59.7%
17	FDN	267.81	221.38	224.09	94.2%
18	GEV	389.89	266.47	270.13	97.0%
19	GME	28.97	22.26	22.42	97.6%
20	GOOG	208.70	165.57	167.81	94.8%
21	HIMS	72.98	29.10	34.47	87.8%
22	IGPT	48.99	40.75	41.07	96.1%
23	IONQ	44.59	17.93	18.27	98.7%
24	IXN	88.62	75.83	76.63	93.7%
25	JEPI	59.73	56.95	57.39	84.2%
26	JEPQ	58.54	51.40	51.91	92.9%
27	JNJ	58.54	51.40	167.70	92.9%
28	LUNR	23.89	6.64	6.78	99.2%
29	META	740.91	586.87	597.99	92.8%
30	MSFT	448.38	377.22	380.16	95.9%
31	MU	107.88	85.76	87.08	94.0%
32	NET	177.37	113.83	116.61	95.6%
33	NOBL	106.07	100.75	104.10	37.0%
34	NVDA	143.44	105.46	106.98	96.0%
35	O	60.39	53.30	58.49	26.8%
36	PLTR	125.41	72.67	76.38	93.0%
37	QBTS	8.22	4.45	4.63	95.2%
38	QDTE	40.70	34.94	35.28	94.1%
39	QQQ	540.81	468.66	472.73	94.4%
40	QQQM	222.64	192.95	194.87	93.5%
41	QQQT	19.44	16.61	16.74	95.4%
42	QUBT	11.45	4.45	4.52	99.0%
43	RGTI	15.15	7.03	7.91	89.1%
44	RXRX	12.36	5.93	6.13	96.9%
45	SCHD	28.84	27.40	28.38	32.2%
46	SCHG	29.02	24.85	25.10	94.1%
47	SERV	23.10	6.48	6.68	98.8%
48	SMH	259.63	211.51	214.53	93.7%

The results from the Run Scanner show on the tab for Results. The report shows the Symbol, Highest High, Lowest Low, Close, and Retracement as a percentage.

The report could be fancier with more information, or more selective than to have a record added for every symbol. But this is an illustration to show you the flexibility of how Ensign 10 can be used as a chart scanner.

Sincerely, Howard Arrington

Related Links

Chart Scanner
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