

Screen Editor

Stock screening is the process of applying a set of quantifiable criteria to a universe of stocks to isolate those stocks that match the criteria. The way in which programs such as Stock Investor perform this task is by using filters—a collection of comparison statements that are applied to the entire universe of stocks or a subset, such as a portfolio. Arguably the most difficult task for new users of Stock Investor is setting up a custom stock screen with their own filters. This page provides an in-depth discussion of the Screen Editor.

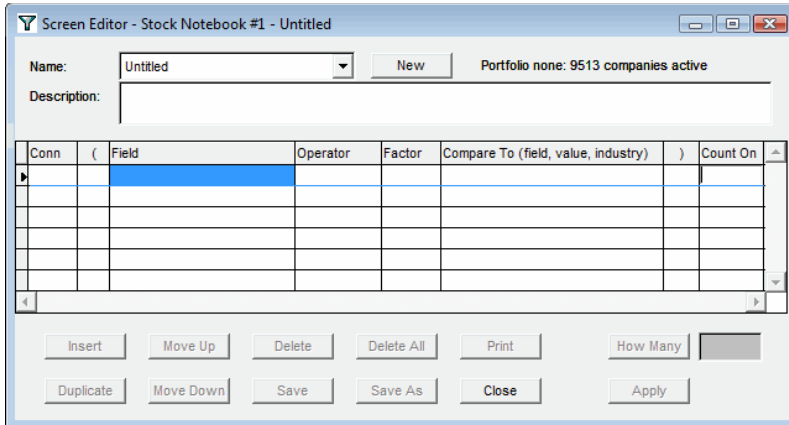
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Opening the Screen Editor

To open the Screen Editor, select **Tools** from the main menu and then select **Screen Editor** (Tools – Screen Editor). You can also select the Screen Editor icon from the toolbar or use the **Alt** and **S** keys (Alt + S).

Following any of these methods will open the Screen Editor:



Screen Editor Overview

At the top of the Screen Editor window, next to Name: is the pulldown menu where you will find the preinstalled screens (those screens marked with a "**") as well as those that you have created yourself and saved. Selecting a screen from this menu will load the criteria that make up the screen into the Screen Editor so that you can either modify the criteria or apply the screen. If a screen has already been applied to the active set of companies in Stock Investor, its name will appear in the dialog box and its criteria will be visible in the Screen Editor.

To the right of the screen pulldown menu is the **New** button. Clicking this button will clear the criteria from the Screen Editor. If you have created a new screen or have been editing an existing screen, you will be prompted as to whether you want to save the screen before it is cleared away. The Description window displays a brief description of a saved screen if one was entered at the time it was saved.

Below the description area you will find the actual "editor," which looks very much like the cells of a spreadsheet and consists of eight columns. It is here that you enter the comparison statements that make up a screen. Lastly, below the screening area are 12 buttons: Insert, Duplicate, Move Up, Move Down, Delete, Save, Delete All, Save As, Print, Close, How Many and Apply.

The Insert button is used when you wish to insert a new line of criteria in between two lines within the Screen Editor. To insert a line, click in the line of criteria where you want to insert a new line and press Insert.

The Duplicate feature allows you to make an exact copy of a line of criteria that already exists in the screen. This is useful if you wish to create a series of statements where only a portion is altered. Highlight the line you wish to duplicate and click on the Duplicate button. The new line will appear as the last line of the screen.

To move selected lines up or down in the editor, you can use the Move Up and or Move Down buttons. As you may guess, the Move Up function allows you to move a selected line of criteria up one line at a time. Click on the line of criteria you wish to move up and click on the Move Up button until the line of criteria is in its desired location. Conversely, the Move Down feature allows you to move a selected line of criteria within a screen down one line at a time. Again, click within the line you wish to move down and click on the Move Down button until it is where you want it.

If you wish to delete a single line of criteria from a screen, use the Delete button. Click on the line you wish to delete and then click on the Delete button. Clicking on the Delete All button will delete all of the criteria in the screen you are working on. The Print button allows you to print out all the criteria of the current screen.

The next two buttons create some confusion among Stock Investor users—How Many and Apply. Within the Screen Editor, there are actually two ways to "run" a screen. At the bottom right-hand side of the Screen Editor window are the **How Many** and **Apply** buttons. If you would like to know how many companies pass a screen, but do not wish the results to be loaded into the Stock Notebook, click on the **How Many** button:

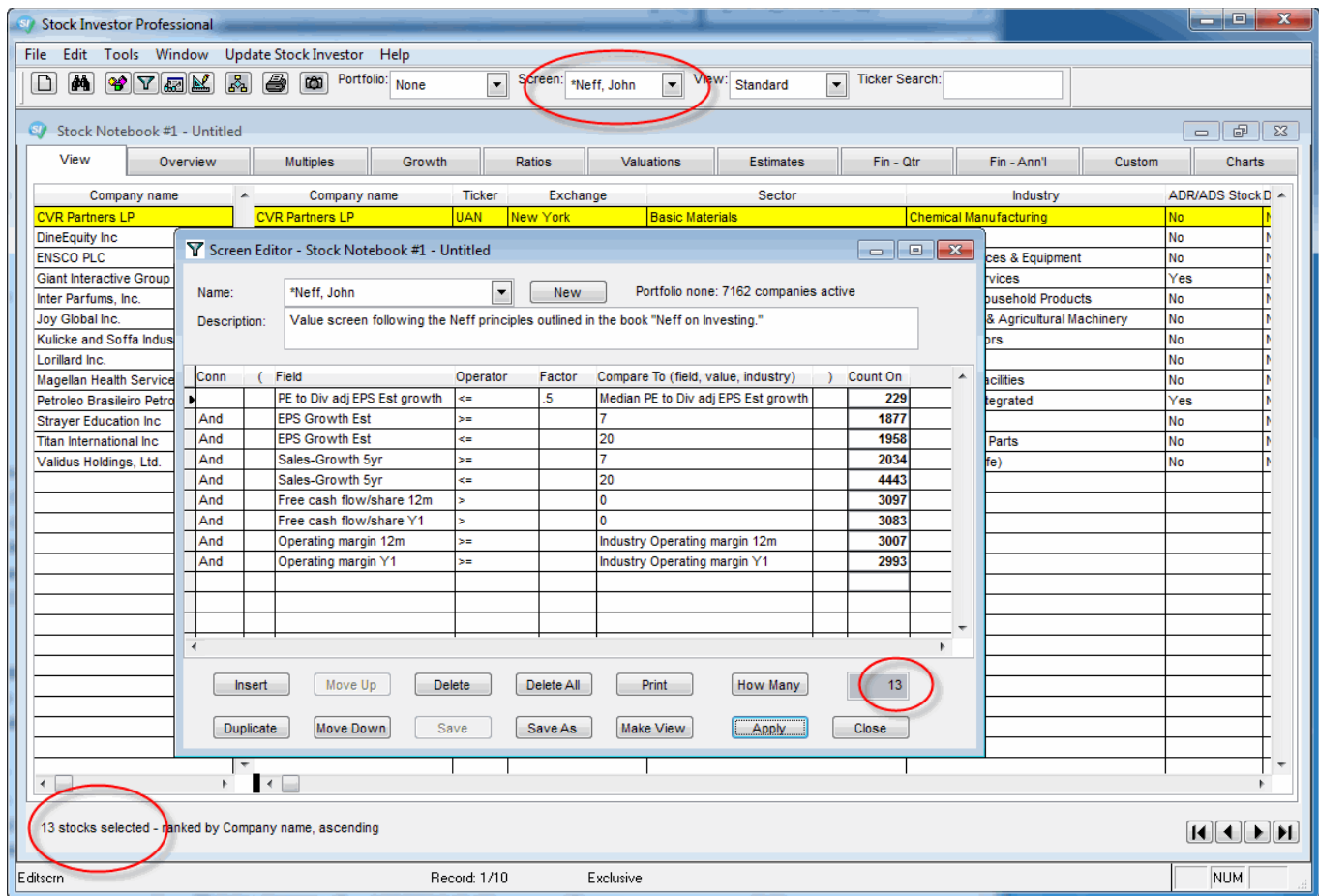
The screenshot shows the 'Screen Editor - Stock Notebook #1 - Untitled' window. The 'Name' field contains '*Neff, John' and the 'Description' field contains 'Value screen following the Neff principles outlined in the book "Neff on Investing."'. The table below lists various criteria:

Conn	Field	Operator	Factor	Compare To (field, value, industry)	Count On
	PE to Div adj EPS Est growth	<=	.5	Median PE to Div adj EPS Est growth	229
And	EPS Growth Est	>=		7	1877
And	EPS Growth Est	<=	20		1958
And	Sales-Growth 5yr	>=	7		2034
And	Sales-Growth 5yr	<=	20		4443
And	Free cash flow/share 12m	>	0		3097
And	Free cash flow/share Y1	>	0		3083
And	Operating margin 12m	>=		Industry Operating margin 12m	3007
And	Operating margin Y1	>=		Industry Operating margin Y1	2993

The 'How Many' button is highlighted with a red circle and shows the number 13. The main window shows a list of companies with 7162 stocks selected, also highlighted with a red circle.

Doing so with the *Neff, John screen tells us that 40 companies pass the screen. However, since the *Neff, John screen does not appear in the Screen menu at the top of the program window, we know that the results of the screen have not been loaded in to the Stock Notebook. Furthermore, we see that the number of passing companies indicated in the Screen Editor (40) does not match the number of companies loaded in the Stock Notebook (9,504). Therefore, if you closed the Screen Editor, the companies you would see in the Stock Notebook would not be the results of the screen on which you ran the How Many function.

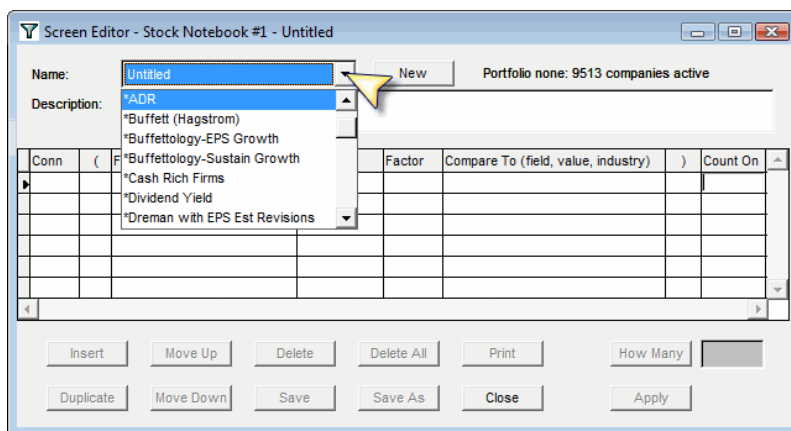
In order to run a screen and have the results—i.e., the passing companies—loaded into the Stock Notebook for viewing and additional analysis, you must click the **Apply** button:



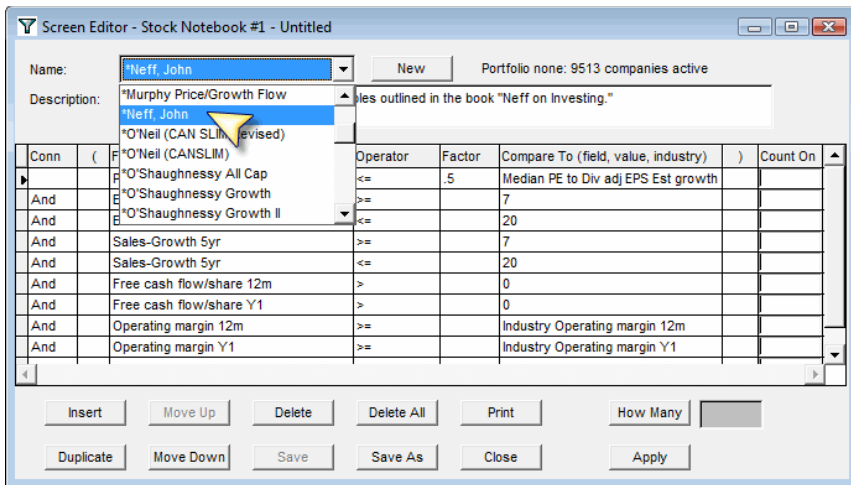
Here we see that the *Neff, John screen is in the Screen pulldown menu and that the number of passing companies matches the number of companies currently loaded in the Stock Notebook. Finally, after creating or modifying a screen, you have two options for saving it—Save or Save As. Clicking on the Save As button allows you to name the screen you are working on and, if you wish, provide a brief description of it. The Save function will save the screen you are working on under its current name, if it is an existing screen (has already been saved). Otherwise, you will be prompted to name the screen before saving it.

Opening an Existing Screen

Clicking on the pulldown menu at the top of the Screen Editor window, next to **Name**, will show you the preinstalled screens (those screens marked with a “*”) as well as those that you have created yourself and saved:



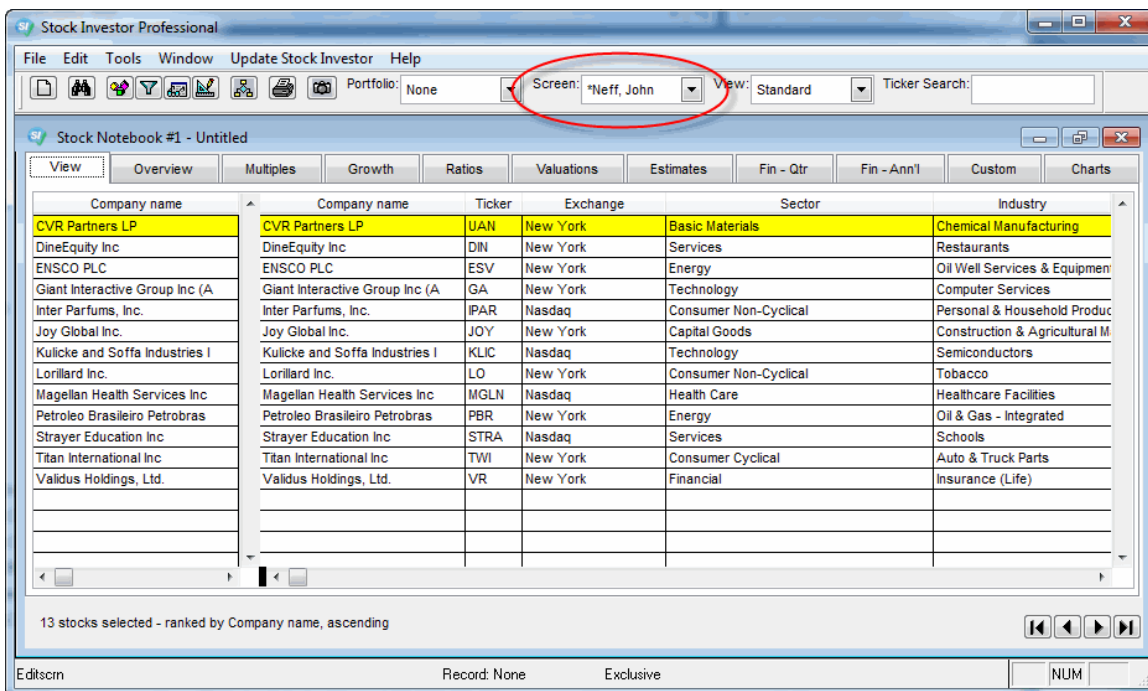
Selecting a screen from this menu will load the criteria into the Screen Editor:



From here, you can modify the criteria or apply it to run the selected screen and load the passing companies into the Stock Notebook.

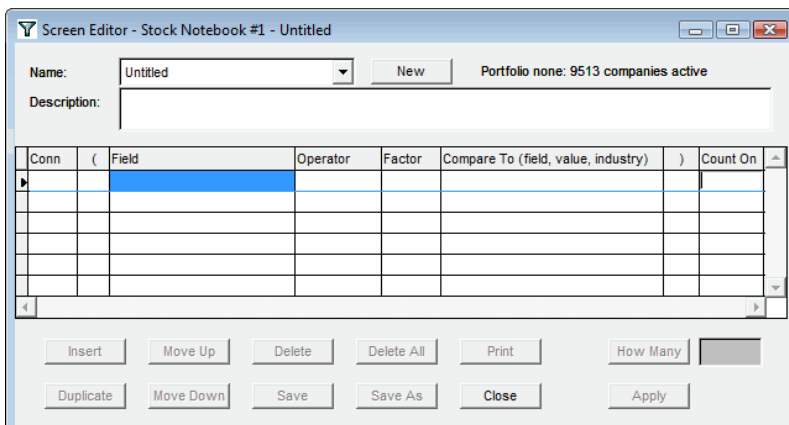
Applying a Screen

Choosing a screen from the pull-down menu will automatically run the screen against the active set of companies and load the passing companies (results of the screen) in the Stock Notebook. You know a screen is loaded because the name of the screen appears in the Screen menu:

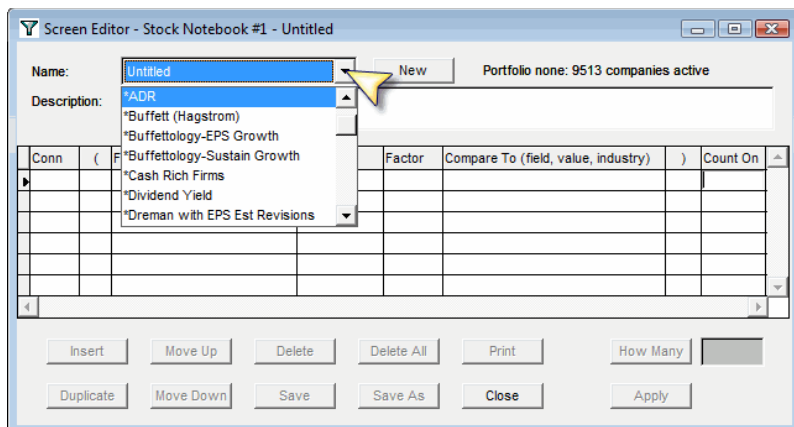


You can also load Stock Investor screens through the Screen Editor. To open the Screen Editor, select **Tools** from the main menu and then select **Screen Editor** (Tools - Screen Editor). You can also select the Screen Editor icon from the toolbar or use the **Alt** and **S** keys (Alt + S).

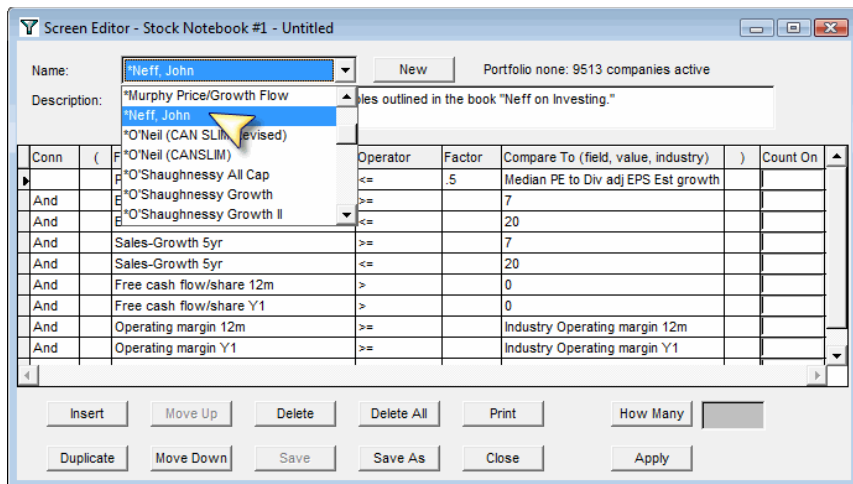
Following any of these methods will open the Screen Editor:



Clicking on the pulldown menu at the top of the Screen Editor window, next to **Name**, will show you the preinstalled screens (those screens marked with a "*"*) as well as those that you have created yourself and saved:



Selecting a screen from this menu will load the criteria into the Screen Editor:



Within the Screen Editor, there are two ways to “run” a screen. At the bottom right-hand side of the Screen Editor window are the **How Many** and **Apply** buttons. If you would like to know how many companies pass a screen, but do not wish the results to be loaded into the Stock Notebook, click on the **How Many** button:

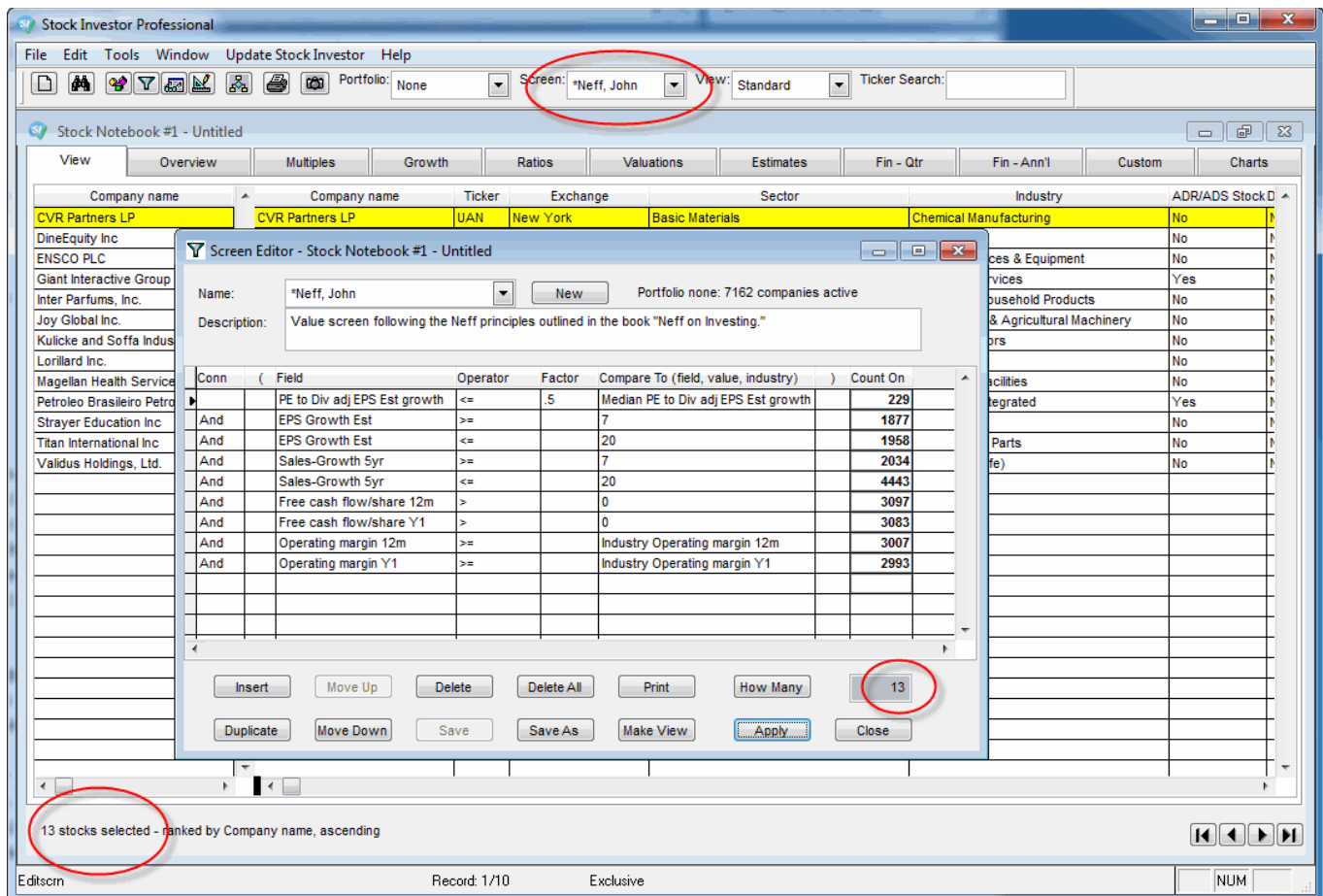
The screenshot shows the 'Stock Investor Professional' interface. At the top, the 'Screen' dropdown menu is set to 'None'. A 'Screen Editor' window is open, displaying a screen named '*Neff, John' with the description 'Value screen following the Neff principles outlined in the book "Neff on Investing."'. The screen editor table shows various criteria and their counts:

Conn	Field	Operator	Factor	Compare To (field, value, industry)	Count On
	PE to Div adj EPS Est growth	<=	.5	Median PE to Div adj EPS Est growth	229
And	EPS Growth Est	>=		7	1877
And	EPS Growth Est	<=	20		1958
And	Sales-Growth 5yr	>=	7		2034
And	Sales-Growth 5yr	<=	20		4443
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And	Free cash flow/share Y1	>	0		3083
And	Operating margin 12m	>=		Industry Operating margin 12m	3007
And	Operating margin Y1	>=		Industry Operating margin Y1	2993

The 'How Many' button in the screen editor is set to 13. The main window shows a list of companies, with the status bar indicating '7162 stocks selected - ranked by Company name, ascending'.

Doing so with the *Neff, John screen tells us that 40 companies pass the screen. However, since the *Neff, John screen does not appear in the Screen menu at the top of the program window, we know that the results of the screen have not been loaded in to the Stock Notebook. Furthermore, we see that the number of passing companies indicated in the Screen Editor (40) does not match the number of companies loaded in the Stock Notebook (9,504). Therefore, if you closed the Screen Editor, the companies you would see in the Stock Notebook would not be the results of the screen on which you ran the How Many function.

In order to run a screen and have the results—i.e., the passing companies—loaded into the Stock Notebook for viewing and additional analysis, you must click the **Apply** button:



Here we see that the *Neff, John screen is in the Screen pulldown menu and that the number of passing companies matches the number of companies currently loaded in the Stock Notebook.

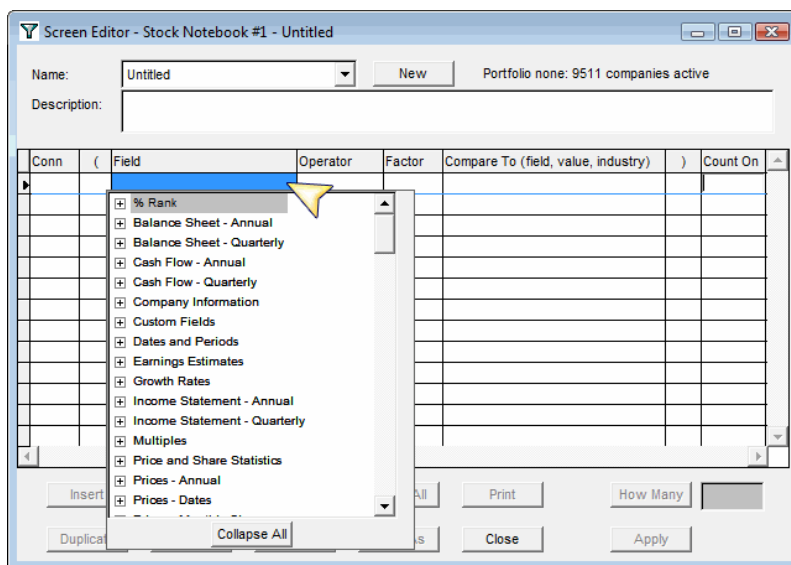
Creating a New Screen

Stock Investor also offers you the ability to create and save your own stock screens. Let's walk through the creation of a simple screen that makes use of some of the unique features of Stock Investor. We are going to attempt to isolate stocks with the following traits:

- Do not trade as American depository receipts (ADRs, shares of foreign stock traded on American exchanges);
- An average annual growth rate in earnings per share from continuing operations over the last five fiscal years of at least 10%;
- A price-earnings (P/E) ratio that is less than or equal to half the median PE for the company's respective industry;
- The price strength relative to the S&P 500 over the last 26 weeks ranks in the top 90% of the entire stock universe.

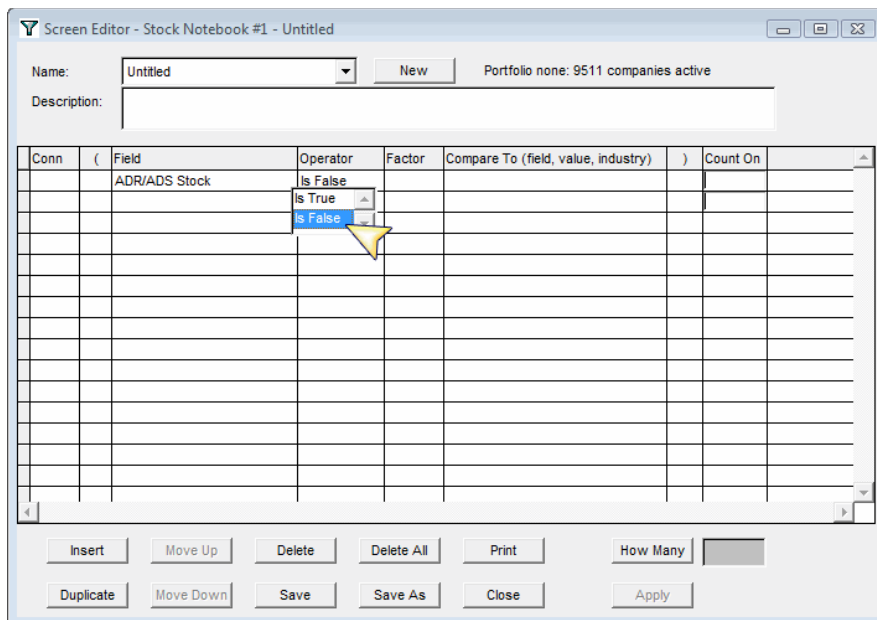
To begin, you will need to open the Screen Editor by following any of the steps outlined earlier. If you are already in the Screen Editor, click on the **New** button at the top of the editor window to reset the editor. You are now ready to enter the first line of criteria.

In the Screen Editor, click on the first open cell (box) located in the Field column. This will bring up the list of the data categories found within Stock Investor:



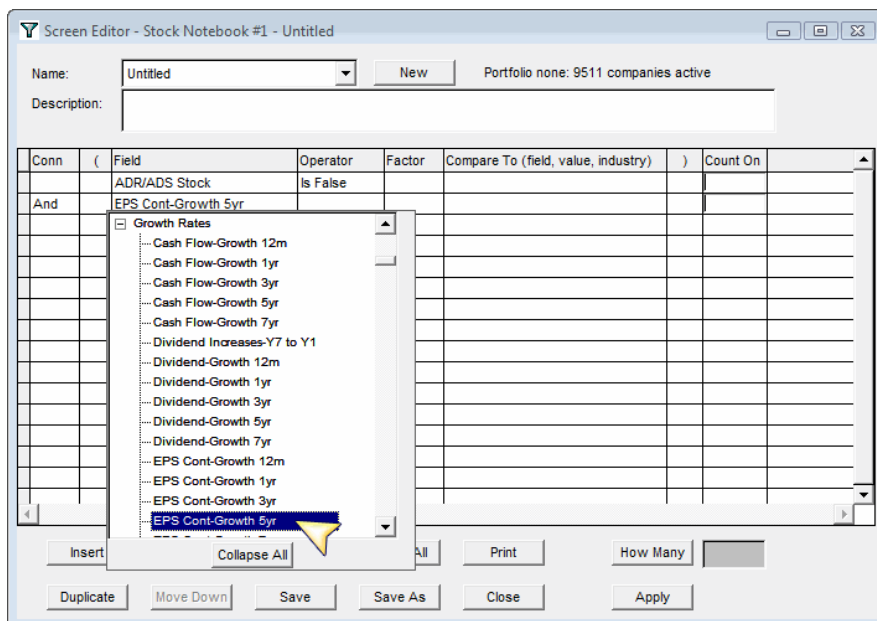
Locate the **Company Information** category and click on the + sign next to Company Information—this will expand the category to show all the data elements within it. Scroll down the list until you find **ADR/ADS Stock** (the fields are in alphabetical order) and double-click on it. Next, click in the first cell in the Operator column and double-click on **Is False**:

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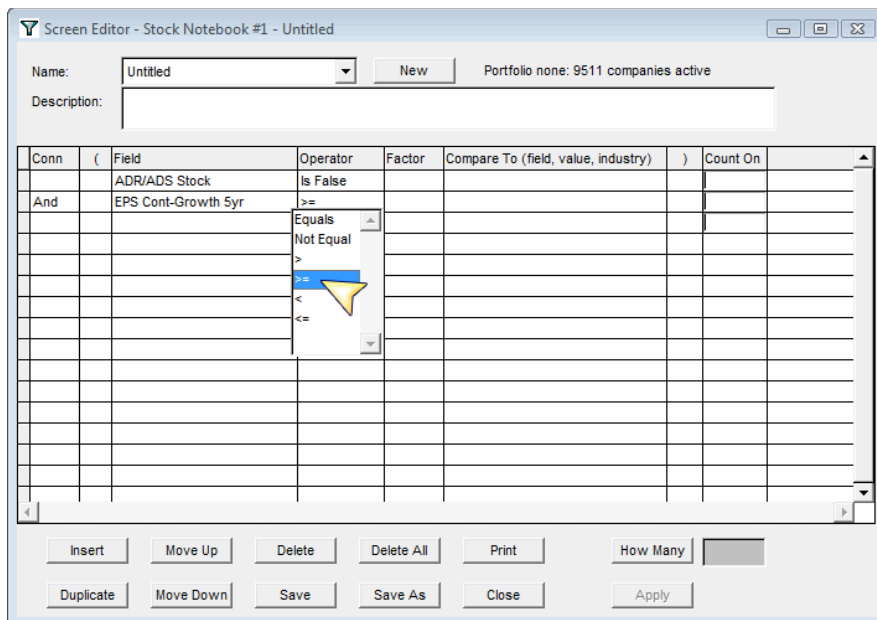
The first line of criteria is now complete.

To begin the second line of criteria, click in the second cell in the Field column. Scroll down the list of data categories until you come to Growth Rates and click on the + next to Growth Rates, scroll down to EPS Cont-Growth 5yr, and double-click on it:

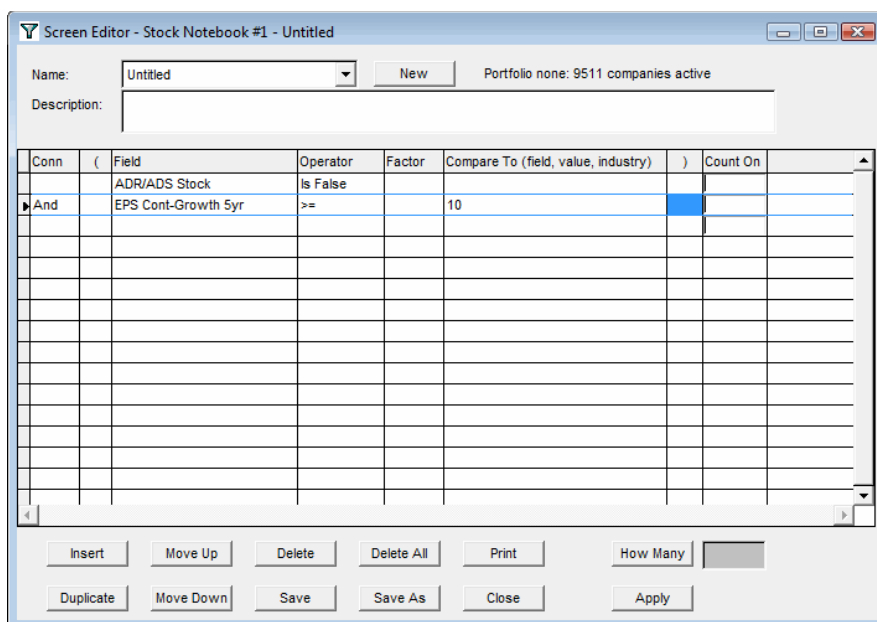


Now, click in the second cell in the Operator column and double click on >= (the greater than or equal to sign):

Canvas Wiki



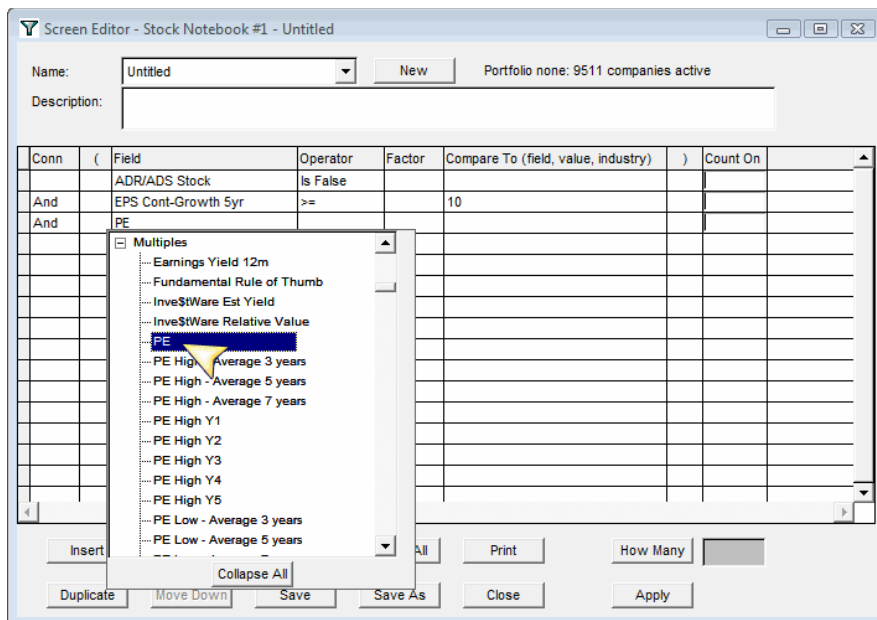
To complete this line of criteria, click in the second cell of the Compare To column (make sure it is the Compare To column and not the Factor column, which we will discuss later). Clicking in this cell one will bring up the field picker. However, since we wish to use a number and not another field, click in the cell again so that you see a blinking cursor in the cell and type in 10:



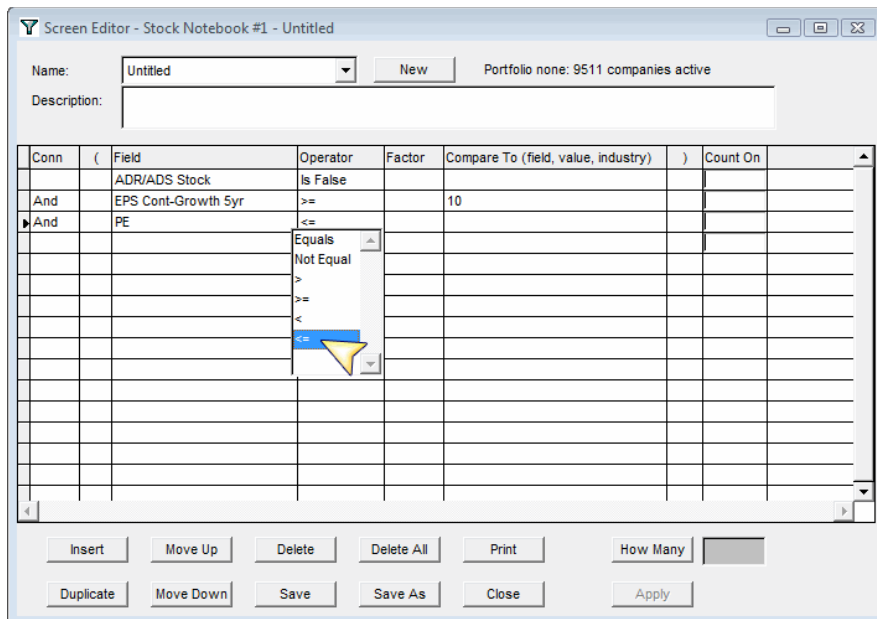
Note: Since the program recognizes growth rates as being percentages you do not need to enter the %. In fact, doing so would render the screen invalid.

For the third line of criteria, click in the third cell in the Field column. Scroll down the list of data categories until you come to Multiples. Click on the + next to Multiples, scroll down to PE, and double-click on it:

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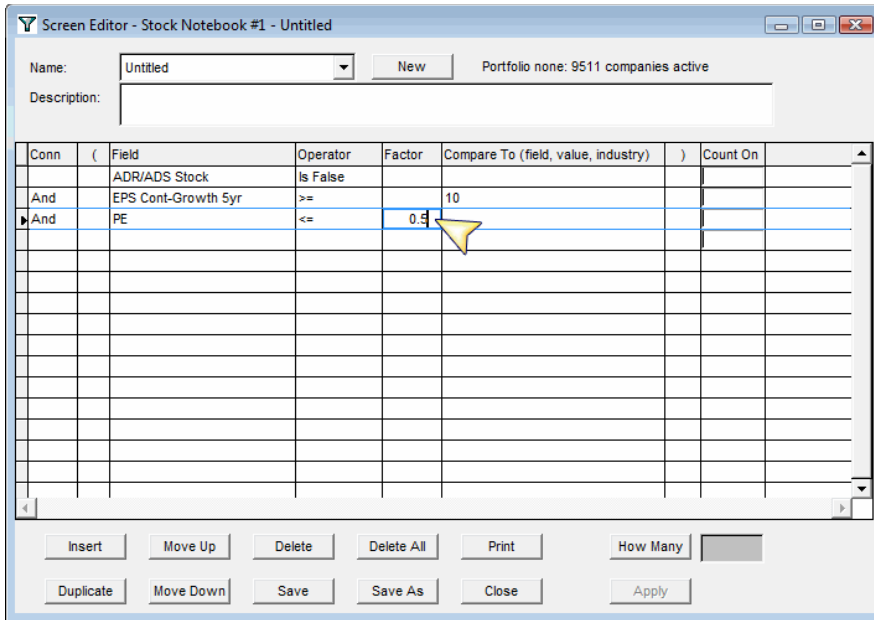


Now, click in the third cell in the Operator column and double click on

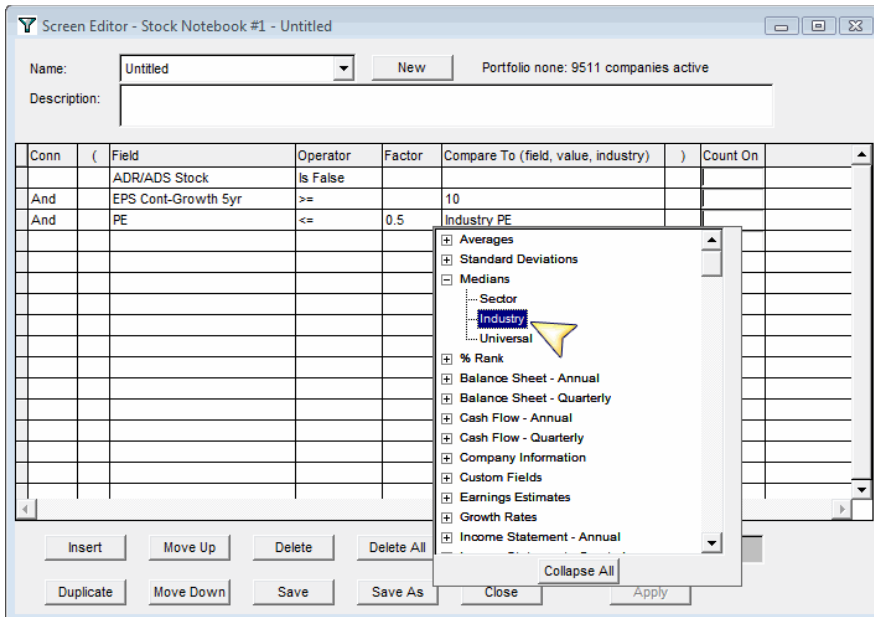


Next we make use of the Factor column: In order to screen for companies whose PE is less than half (50%) of its industry's PE, click in the third cell of the Factor column and type in 0.5:

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To complete this line of criteria, click in the third cell of the Compare To column (make sure it is the Compare To column). Click on the + next to Medians and double-click on Industry:



The last line of criteria for this screen begins by clicking in the fourth cell of the Field column. Click on the + next to % Rank, scroll down to % Rank-Rel Strength 26 week and double-click on it:

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Screen Editor - Stock Notebook #1 - Untitled

Name: New Portfolio none: 9511 companies active

Description:

Conn	(	Field	Operator	Factor	Compare To (field, value, industry)	)	Count On
		ADR/ADS Stock	Is False				
And		EPS Cont-Growth 5yr	>=		10		
And		PE	<=	0.5	Industry PE		
And		% Rank-Rel Strength 26 week					

Insert Duplicate Collapse All Print How Many Close Apply

Click in the fourth cell in the Operator column and double-click on >= (greater than or equal to):

Screen Editor - Stock Notebook #1 - Untitled

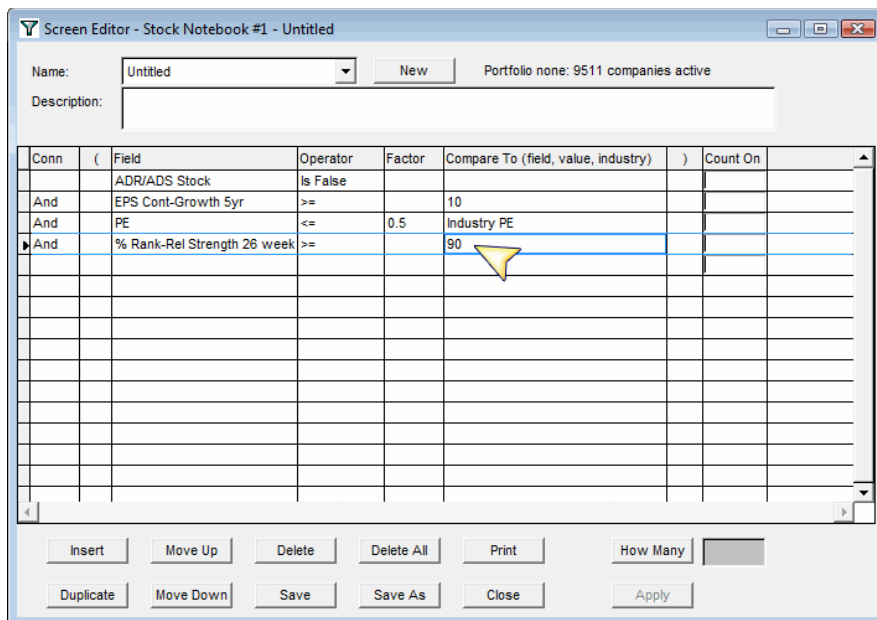
Name: New Portfolio none: 9511 companies active

Description:

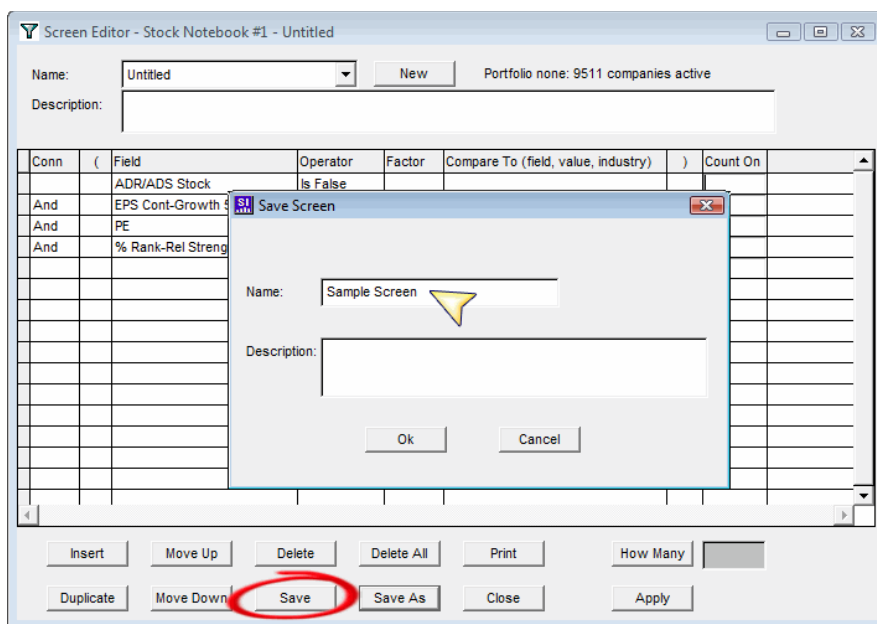
Conn	(	Field	Operator	Factor	Compare To (field, value, industry)	)	Count On
		ADR/ADS Stock	Is False				
And		EPS Cont-Growth 5yr	>=		10		
And		PE	<=	0.5	Industry PE		
And		% Rank-Rel Strength 26 week	>=				

Insert Move Up Delete Delete All Print How Many Duplicate Move Down Save Save As Close Apply

Finally, click in the fourth cell of the Compare To column (not the Factor column). Click on the cell again so that you see a blinking cursor and type in 90. The final screen should look like this:



When you create a new screen, you can also save it. To do so, click on the **Save** button at the bottom of the Screen Editor window. The Save Screen window allows you to name the screen and, if you wish, provide a description of the screen:



Note: You can also use the Save As button to save new screens. The Save As option is most helpful when you wish to save an existing screen under a different name. To view the results of the screen, you can either close or minimize the Screen Editor to view the Stock Notebook. The companies passing the screen will be listed there.

Count On

When you "run" a screen using either the How Many or Apply buttons within the Screen Editor, numbers will appear in the Count On column in each line of screening criteria:

Screen Editor - Stock Notebook #1 - Untitled

Name: O'Neil (CANSLIM) Portfolio none: 9513 companies active

Description: The CANSLIM approach as described by William O'Neil in his book "How to Make Money in Stocks."

Conn	(	Field	Operator	Factor	Compare To (field, value, industry)	)	Count On
		EPS Cont-Growth from Q5 to Q1	>=		20		2690
And		EPS Cont-Growth from Q5 to Q1	>		EPS Cont-Growth from Q6 to Q2		2993
And		EPS-Continuing Q1	>		0		3539
And		EPS-Continuing Q2	>		0		4255
And		EPS-Continuing 12m	>=		EPS-Continuing Y1		5963
And		EPS-Continuing Y1	>		EPS-Continuing Y2		4027
And		EPS-Continuing Y2	>		EPS-Continuing Y3		4808
And		EPS-Continuing Y3	>		EPS-Continuing Y4		5013
And		EPS-Continuing Y4	>		EPS-Continuing Y5		4756
And		EPS Cont-Growth 5yr	>=		25		1644
And		Price as % of 52 Week High	>=		90		248
And		Float	<=		20		4617
And		% Rank-Rel Strength 52 week	>		70		2170
And		Institutional shareholders	>=		5		5526

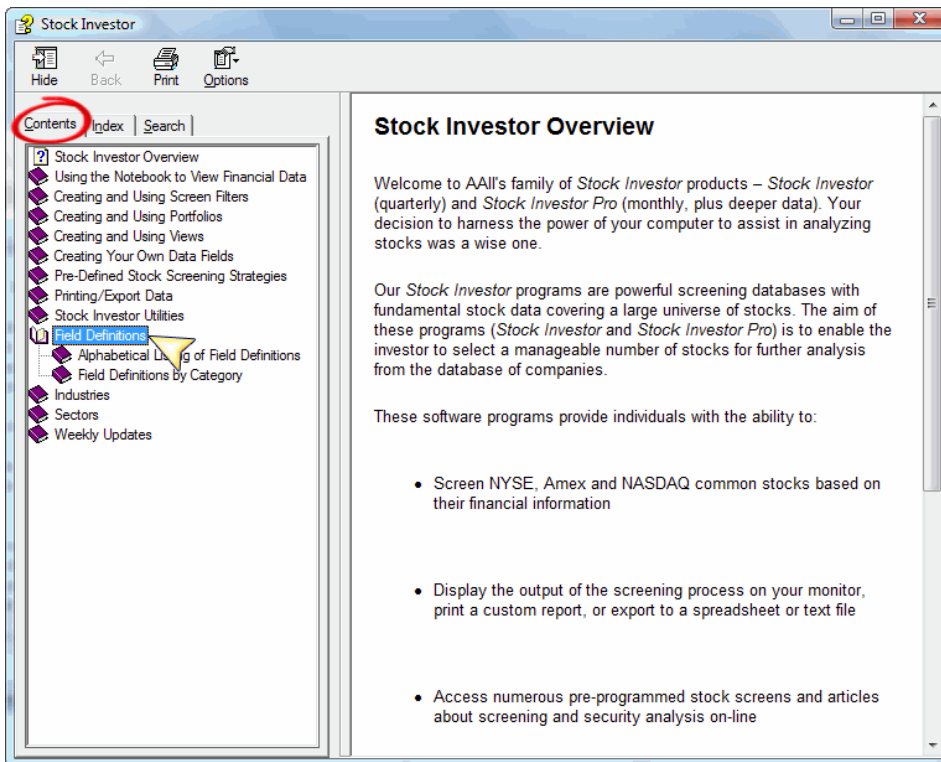
How Many: 0

The numbers in the Count On cells represent the number of companies passing each individual filter of the screen. As the screen shot above shows, no companies passed the William O'Neil CAN SLIM screen, as indicated by the 0 next to How Many. Using the Count On information allows you to identify the most restrictive filters in a given screen. In this case, only 248 companies were within 10% of their 52-week high when this screen was run. Knowing which filters are the most restrictive, you could relax those parameters to possibly allow (more) companies to pass.

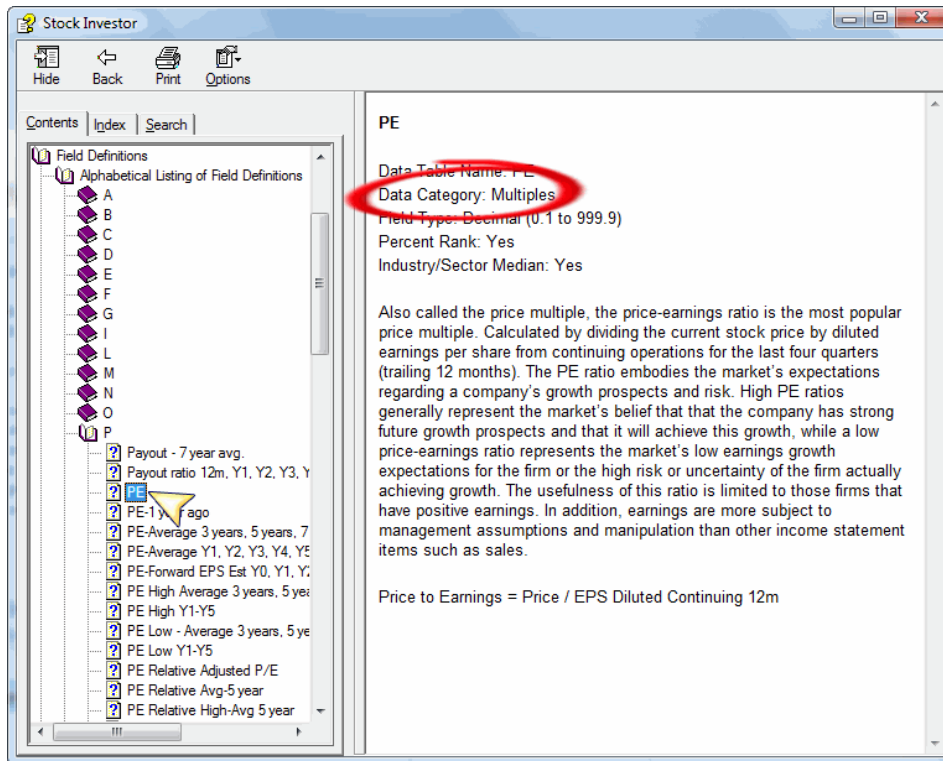
Using Help System When Screening

A common question among Stock Investor users is how to find out which data category in which a particular data field resides. This information is available within the Field Definitions found in the Stock Investor Help System.

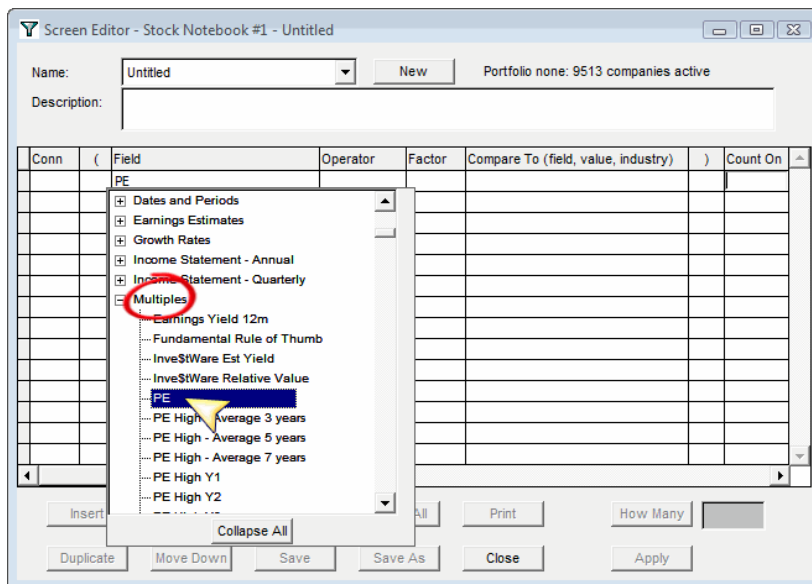
To access the Help System, select **Contents and Index** from the **Help** menu at the top of the program window (Help--Contents and Index). From the Contents tab of the Help Topics window, double-click on Field Definitions:



As an example, to locate the data category for the price-earnings ratio (PE), double-click on Alphabetical Listing of Field Definitions and again on the "P" (for PE). This will list all of the data fields in Stock Investor that start with the letter "P" in alphabetical order. From there, double-click on PE to bring up its field definition window:



The field definition window tells us that the PE field is in the Multiples data category. So, if you wished to use PE in a screen, you would select the Multiples data category from the Screen Editor field picker:

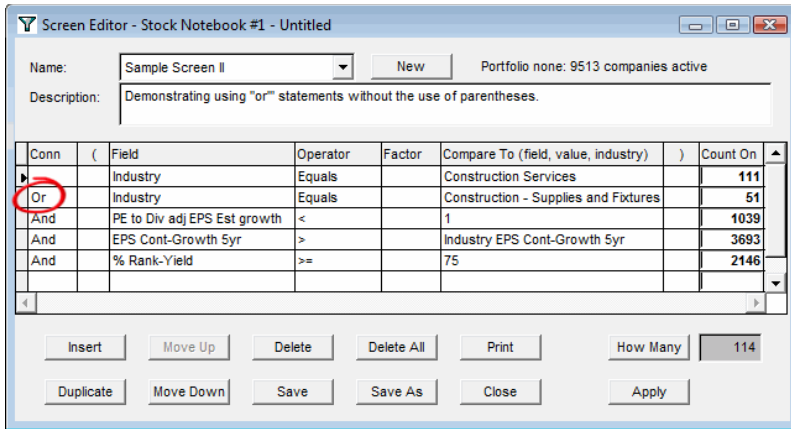


Also from the field definition, we see that the value is displayed in decimal format and the percent rank and industry/sector medians are calculated for the field. You are also given a definition of the ratio.

Using "Or" Statements

Perhaps two of the most under-utilized or misused functions in Stock Investor's Screen Editor are the "or" statement and the parentheses. If used properly, they can save you from having to repeat expressions in your screen, thus making it less cumbersome. However, if used incorrectly, you could end up with misleading screening results.

Consider the following screen:



Here we are looking for companies in relatively similar industries—Construction Services and Construction Supplies & Fixtures—so that we are comparing apples to apples. Note that an "or" connector is used for the filter requiring Construction Supplies & Fixtures firms. Along with the other filters in this screen, 114 companies pass in total. However, upon further investigation, you may begin to question the validity of the results: 114 of the 162 companies (70%) in these two industries passed the screen.

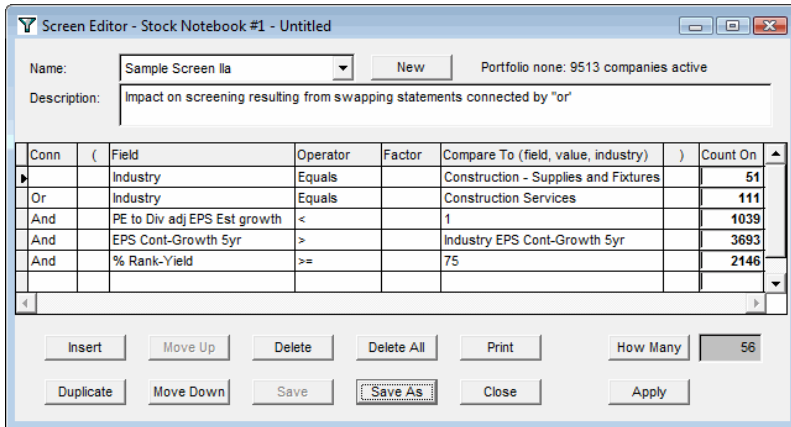
To understand these results, let's look at how Stock Investor screening engine works.

In Stock Investor, the Screen Editor looks at all expressions before an "or" statement, isolates the companies meeting those filters, and, in effect, sets them aside. The screening engine continues on, evaluating the "or" filter and all preceding filters. If there are additional "or" statements contained within the screen, it will perform additional sub-screens and set the results aside.

When the screening engine finishes evaluating all the filters in the screen, it then lumps together those companies that passed each of the sub-screens to arrive at the total number of passing companies.

Referring back to the first criteria statement in the screen shot above, 111 companies are part of the Construction Services industry (as indicated in the Count On column). Since it is the only filter prior to the "or" statement, these 111 companies are set aside. Only three more companies pass the remaining four filters of the screen. Adding the 111 companies that passed the first portion of the screen to the three that passed the second, we arrive at the 114 companies that pass the entire screen.

Using "or" statements in this manner, however, means in our current example that the results would have been different if the first two lines of criteria were switched:



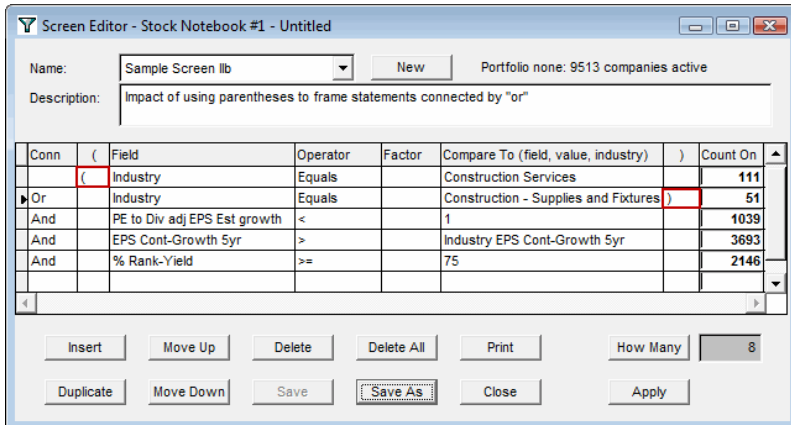
In this case, the filter for companies in the Construction Supplies and Fixtures industry is the only one before the "or" statement, so these 51 companies are set aside. They are then added to the five additional companies that meet the remaining criteria of the screen.

When creating a screen, the order of the criteria normally should not impact the results of the screen. However, as this example shows, this is not always the case. Therefore, there needs to be a way to overcome this. You can do that by using parentheses within the Screen Editor.

Using Parentheses

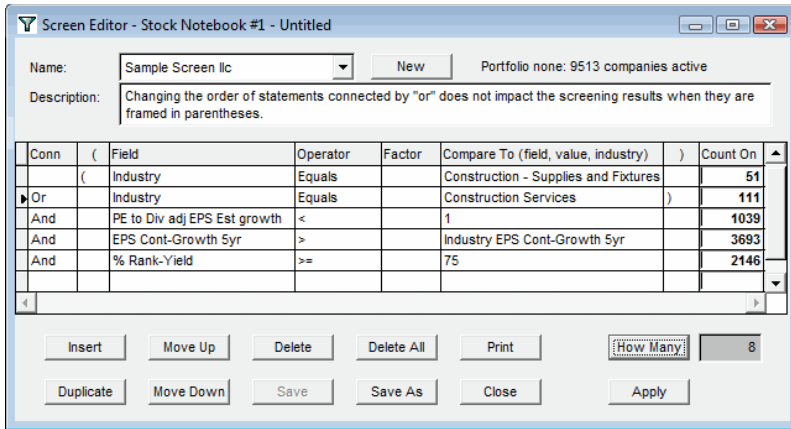
The idea behind the use of parentheses in Stock Investor is the same one you may have learned in a basic algebra class. In the program, just as in a mathematical expression, the items contained within the parentheses are evaluated first. Those companies passing the screen contained within the parentheses are then screened against the remaining criteria. Typically, you will use parentheses in conjunction with "or" statements.

Consider the screen we used in the discussion of "or" statements, only this time the lines of criteria joined by the "or" are framed in parentheses:



We see a dramatic drop in the screen outcome: only eight companies passed the screen. Using the logic discussed above, the Screen Editor will first perform the screen on the expressions within the parentheses, screening for those companies in the Construction Services or Construction Supplies and Fixtures industries. Of the 162 companies in these industries, only eight met the remaining three criteria in the sample screen.

Also, using parentheses to frame statements connected by "or", the order of the criteria no longer impacts the results of the screen:

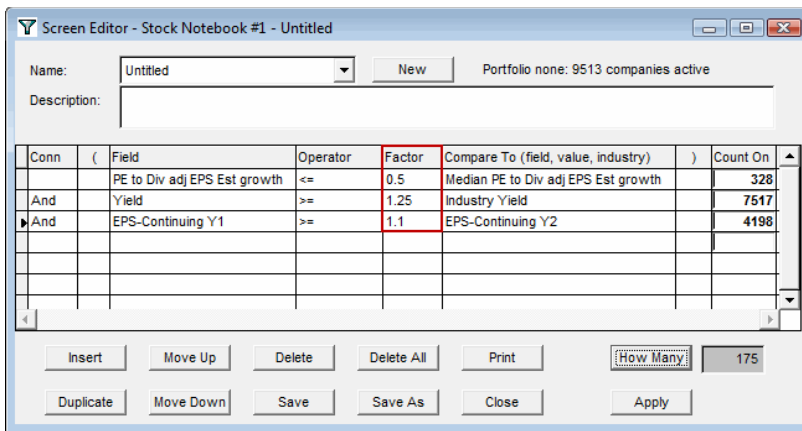


Factors

For most screens, Factors are never used. However, many times users will enter data in these cells unintentionally, rendering a screen non-operable. Therefore, it is important to understand when and how to properly use Factors in the Screen Editor.

When you are creating a screen, there are times when it may be useful to compare a variable against a fraction or multiple of another variable. This is where the "factor" column comes into play.

The following screen shows a few different ways in which factors may be used in the Screen Editor:

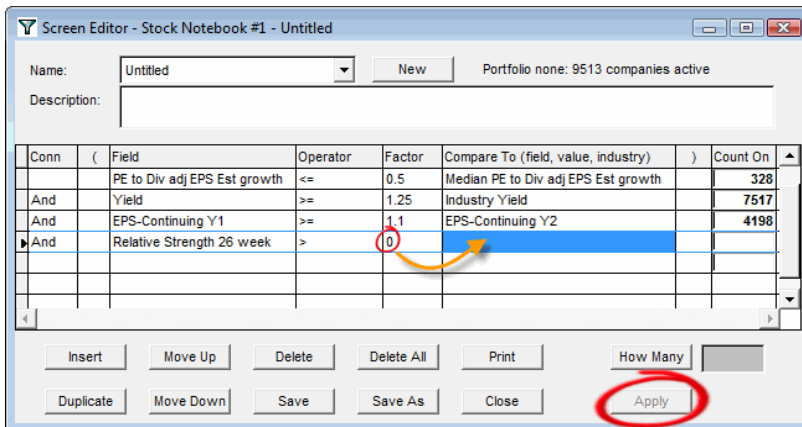


The first expression in this screen is looking for those companies with a dividend-adjusted PEG ratio that is no more than 50% (0.5) of the median value for the entire Stock Investor database.

The second line of criteria seeks out those firms whose current dividend yield is greater than or equal to 150% (1.5) greater than the median yield of the companies in its respective industry.

The final line of screen requires a company to have seen at least 10% growth (1.1) in earnings per share from continuing operations for the last fiscal year.

Remember that whatever value is in the Factor column is multiplied by the field or value entered in the Compare To cell. Sometimes, people will accidentally enter values that are intended for the Compare To column into the Factor column:



In this example, we were intending to screen for companies whose price strength over the last 26 weeks had at least matched that of the S&P 500. However, instead of entering 0 (zero) into the Compare To cell where it belongs, we entered it into the Factor column. Therefore, the 0 in the factor cell is being multiplied by a "null" value, making an invalid expression. As a result, the **Apply** button at the bottom of the Screen Editor is grayed out, meaning we cannot run the screen so the passing companies are loaded into the Stock Notebook. So, if you create a screen and are not able to apply it, chances are you have entered a value in the Factor column that belongs in the Compare To column.