



Overview

Zacks Research Wizard 4.0 (RW) has two components:

I. The Research Wizard 4.0 software – resides on your hard drive or network. With RW 4.0 you can:

- **Screen** (or select) stocks by desired criteria.
- Create, save, and modify RW **Portfolios** (lists of tickers).
- **EZ Screen** by pre-set criteria using an easy-to-understand interface.
- **Backtest** your screen (stock selection parameters) and compare its performance against the S&P 500 going back up to 2 years.
- Design your own **Reports** or use pre-configured reporting tools such as Alerts and Snapshot.
- Generate **Alerts** (pre-configured reports) for price-driving events like EPS surprises or changes in broker recommendations.
- Use **Snapshot** to produce 18 pre-defined single-company reports.

II. Zacks Databases – reside on Zacks server, and are accessed via the Internet. RW default database is DBCM.DBS (Current Market). It contains current market information, such as consensus quarterly and annual EPS estimates, market data, fundamental data, growth rates, valuation ratios, and supplementary descriptive information on over 6,000 companies. A data element or field is called an Item. EX.: TICKER, EST EPS, MKT VALUE.

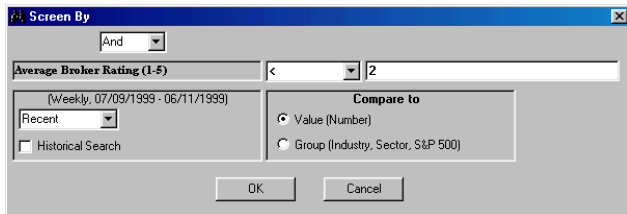
Screen

Screening defines your active universe. Any screens you run create an active universe that is a sub-set of the full universe of the database or of your portfolio universe. See the Portfolios section for instructions on screening a portfolio.

RW's main display is the screening interface. It has two large windows: **Categories** and **Items**, and two narrow windows at the bottom of the screen: **Screening Criteria** and **Report Definition**. You can screen by *Database Item* or by *Calculation Expression*.

Screening by Database Item

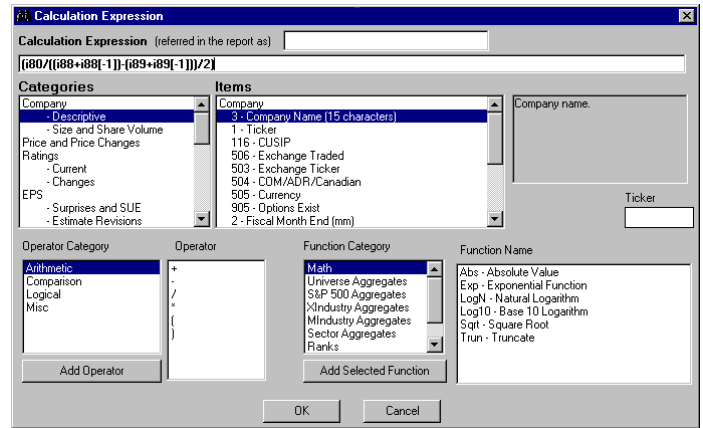
1. Click on a category in the **Categories** window, for example Ratings-Current. It brings up the list of available items included in this category in the **Items** window.
2. Highlight an item. Note that the description of that item appears in the narrow window at the top of the screen, below the toolbar.
3. Double-click on an item, or click on or select *Screen By Database Item* from the **Screen** pull-down menu, or right-click on a desired item and select *Screen By Database Item*. The **Screen By** dialog box comes up:



4. Select an operator and type in a value. In the example above, RW will check the entire database for companies with the Average Broker Rating less than 2.
5. For sequential screening select "And" at the top of the **Screen By** box. Each screen will be a sub-set of a previous run and each ticker in the output will have passed all screening definitions. For parallel screening select "Or". Each screening definition with "Or" applies your criteria to the initial universe of tickers, thus broadening your screen.
6. Click **OK**. You return to the main RW window. Notice that your screening criterion is now displayed in the **Screening Criteria** window as well as in the **Report Definition** window.
7. Repeat steps 1 through 5 until all screening criteria have been defined.
8. Click on RW displays the results of your screen in the default format. You can view and modify the tickers that passed your screen by clicking on , and you can save them as a portfolio by clicking on . See the Reports section for instructions on customizing, sorting, and exporting RW's output.
9. Use at the top of the screen to toggle between the main interface (RW's main display) and the output interface (the results of running a query).
10. To save a screen definition (as a *.und file), select *Save Screen Definition* from the **Screen** menu. Type a file name in the **File Name** window, and click the **Save** button. Each time you run a saved screen, it generates an updated list of companies that meet your criteria.

Screening by Calculation Expression

1. Click on or select *Screen By Calculation Expression* from the **Screen** menu. The **Calculation Expression** dialog box comes up:



The first window at the top of the dialog box is the **Calculation Expression** window that displays your calculation expression. The three windows in the middle allow you to select categories and items and to see the description of a highlighted item. Note that each item in the **Items** window has a number associated with it. These numbers are used in calculation expressions. For example, Total Current Liabilities is item 89 or **i89**. The four bottom windows allow you to select operators and functions.

2. Enter your calculation expression. You can type an expression directly in the **Calculation Expression** window, or enter it by first selecting an appropriate category and then double-clicking on necessary items, operators, and functions. You can also use **Add Operator** and **Add Function of Select Item** buttons.
3. Click **OK**. The **Screen By** dialog box comes up. The rest of the screening process is the same as when screening by database item, see steps 4 through 10.

Example: Suppose you want to screen based on the ratio of annual sales to average net working capital. To begin building your expression you need to find the item number for annual sales. Annual sales usually appear on the Income Statement, so highlight the Income Statement category to view available items. You will see that annual sales is **i80**. Similarly you can find items **88** (Total Current Assets) and **89** (Total Current Liabilities) that are required to calculate net working capital. To calculate average net working capital you need to use average values for **i88** and **i89**. An expression for average total current assets is $(i88+i88[-1])/2$ where **[-1]** next to **i88** means that the value from the previous period should be used. The complete expression for the ratio of annual sales to average net working capital is $i80/((i88+i88[-1])-(i89+i89[-1])/2)$.

IMPORTANT! "Top %", "Top #", "Bottom %", and "Bottom #" operators in the **Screen By** dialog box refer to the value of a data item and do not imply qualitative characteristics of an item. In other words, "Top" does not mean best; it just points to the largest value. For example, to screen for 15 best broker-rated companies, select "Bottom #" and type 15, because the best rating is Strong Buy and has a value of 1, whereas the worst rating has a value of 5.

Portfolios

A RW portfolio is a text file containing a list of tickers. You can create multiple portfolios; for example a Current Holdings portfolio, a portfolio of Candidates for Investment, and a Risky portfolio. These portfolios can be used for further screening, for example you can create a "divestment" screen and run it periodically on your current holdings portfolio to identify stocks to be sold. Reports can be created easily to evaluate and monitor a portfolio's performance.

Creating Portfolios

There are three ways to create portfolios.

- I. Enter tickers manually. Select *Enter New Ticker List* from the **Portfolio** menu. The **Ticker List** dialog box comes up. Highlight a ticker or a company name in the right-hand window containing the full universe of stocks. Then click the **Add** button, or double-click a ticker or a name. Your portfolio is displayed in the left window. You can also type a ticker in a small window at the top left-hand corner of the **Ticker List** dialog box, and then click the **Add Ticker** button. In addition, you can import an existing portfolio by clicking the **Add TrkList** button and selecting a desired text file.

To find a ticker, type at least the first letter of the company name in the **Search** window and press Enter. The best matches are displayed in alphabetical order in the window below the **Search**.

To save a created portfolio, click the **Save As** button. To accept a newly created portfolio ⇒



⇒ as the active universe, click on **Apply**. This brings you back to RW's main interface. The portfolio file path and name are displayed in the **Screening Criteria** window.

II. Save the result of a screen or series of screens. After you execute a screen, click on or select *Save Tickers As List* from the **Portfolio** menu.

III. Save a text file of tickers generated by any other program, or created manually in WordPad or Notepad. When creating a list of tickers manually, use Enter after each ticker and remember to press Enter after the last ticker, otherwise RW does not see the last entry. Save the file as a text (*.txt) file.

Screening Portfolios

Select *Open Ticker List* from the **Portfolio** menu. Highlight a portfolio (*.txt) file that you want to screen. Click **Open**. You return to the main interface. The tickers of the selected portfolio become your active universe. The name and the location of the open portfolio file are displayed in the **Screening Criteria** window. You can start screening using the steps described in the Screen section. Note that you can not run EZ Screen on a portfolio.

Modifying Portfolios

Select *Open Ticker List* from the **Portfolio** menu. Highlight a portfolio (*.txt) file that you want to modify. Click **Open**. You return to the main interface. Select *View/Edit Active Tickers* from the **Portfolio** menu. It brings up the **Ticker List** dialog box where you can make necessary changes using the **Add**, **Add Ticker**, **Add TkrList**, **Remove**, and **Remove All** buttons. Alternatively, you can open a portfolio file in WordPad or Notepad and make changes directly.

EZ Screen

EZ Screen allows you to run screens on the entire universe of stocks. The major distinguishing feature is an easy-to-use interface, which makes EZ Screen a good choice for simple screens.

To start EZ Screen, click on . The **EZScreen** dialog box comes up:

Item	Criteria	Priority
Market Value (mil)	Top 25%	3
Zacks Rank	Top 10%	2
% Change Price - 1 Week	Not Applicable	
% Change Price - 4 Weeks	Not Applicable	
% Change Price - YTD	Top 50%	5
Average Broker Rating	Top 10%	4
Last EPS Surprise	Not Applicable	
Estimate Revisions - % Change F(1) - 4 Weeks	Top 10%	1
Growth - EPS Projected - Next Year = F(1)/F(0)	Top 25%	6
Growth - EPS Projected - Next 3-5 Years (%/yr)	Not Applicable	
PE to Growth Ratio (PEG)	Not Applicable	
P/E using F(1) Estimate	Not Applicable	
Current Yield (%)	Top 25%	7

Buttons: Run, Save, Open, Exit

To select an item for your screen, choose an appropriate criterion, for example "Top 25%", from the corresponding **Criteria** option box. Items with *Not Applicable* setting are excluded from your screen. EZ Screen runs the query from top to bottom. To specify a different order, assign a **Priority** rank (1-13) to each item.

After making your selections, click the **Run** button to execute the screen and generate a report. You can save your EZ Screen

definitions (as an *.ezd file) by clicking the **Save** button. To run a saved EZ Screen, first open the **EZ Screen** dialog box, and then click the **Open** button. Select a desired definition and click **Run**.

IMPORTANT! "Top" and "Bottom" in the **EZ Screen** dialog box have qualitative meaning, as opposed to "Top" and "Bottom" in the **Screen By** dialog box. In other words, "Top" means the best performer, and "Bottom" means the worst performer.

Backtest

The Backtest feature in RW allows you to test the performance of a saved screen definition, and compare it against the S&P 500 going back up to 2 years.

To run a backtest:

1. Click on **Backtest** at the Research Wizard menu. The **Backtest Screen Definition** dialog box comes up.
2. Specify the screen file (*.und) to be tested in the **Screen Definition** window. Use to browse.
3. Set the time period for your backtest using the **From** and **To** pull-down menus.
4. Select a desired holding period at the **Holding Period** window.
5. Choose the benchmark: S&P 500 (market weighted) or the Equal Weighted index.
6. Click the **Run** button to display the *Historical Performance of the Screen* report.

Reports

A report is a way to organize and display data on the tickers in your active universe. RW allows you to create customized multi-company reports, to save your report definitions, and to export reports to Microsoft® Excel® or a text file.

Creating and Saving Reports

Every report has two default columns: *Company* and *Ticker*. To add a new column, highlight a desired item in the **Items** window (at the main interface) and click on , or choose *Add Database Item* from the **Report** menu, or right-click on a desired item and select *Add Database Item To Report*. To add a calculation expression, click on , or select *Add Calculation Expression* from the **Report** menu. The **Calculation Expression** dialog box is displayed. Enter your expression just like in Screening By Calculation Expression, and then click **OK**. A new column is added to the **Report Definition** window at the bottom of the main interface. Continue the process until all desired report columns have been defined. Select *Save Report Definition* from the **Report** menu to save your report (as an *.rpd file).

Running and Printing Reports

To run a report, you need an active universe of tickers. There are three ways to define an active universe – to enter screening criteria; to open a saved screen (*.und); or to open a portfolio (*.txt). To run a saved report, select *Open Report Definition* from the **Report** menu. Select a desired *.rpd file and click **Open**. Then click **Run Query**. To print a report, click on , or choose *Print Report* from the **File** menu.

Organizing, Sorting and Exporting Reports

To organize and sort reports click on , or select *Organize/Sort* from the **Data** menu at the report interface. The **Organize/Sort** dialog box is displayed. Select desired settings at the **Organize by** and **Sort by** windows. Click **OK**. To export a report to Microsoft® Excel® or to a text file, select an appropriate command from the **Data** menu.

Modifying Reports

Open a report definition that requires modification. To add columns use the same commands as when creating a report. To modify, delete, cut, or copy a column, first highlight a column in the **Report Definition** window, then right-click on it and select a desired command. You can access the same menu by selecting *Edit Report Definition* from the **Report** menu.

Alerts

Alerts is a multi-company reporting tool designed to alert you to price-driving events like changes in broker recommendations or EPS surprises.

To run an alert report:

1. Click on to access the **Alert Reports** interface.
2. Select a report from the report categories.
3. Select the universe for a report (**Portfolio** or **Full Universe**), and specify additional parameters, when applicable.
4. To limit the output to a percent or a number of top (best) or bottom (worst) companies if the **Full Universe** option is selected, specify the desired parameters in the dialog box. To enable this feature for the **Portfolio** option, mark the **Screening** check-box.
5. Click the **Run Report** button to display the report.

Snapshot

Snapshot is a single-company reporting tool. It allows you to run 18 pre-configured reports.

To run a company report:

1. Click on to access the **Company Reports** menu.
2. Type a ticker symbol into the **Enter Ticker** box.
3. Specify the report type (Zacks Company Snapshot or Expanded Company Reports) by selecting the corresponding radio button.
4. If you specified the Zacks Company Snapshot option, click **OK** to display the report. If you specified the Expanded Company Reports option, select a report from the **Reports** pull-down menu, and then click **OK**. The report is displayed in your Web browser's window.

TIP: To access the Zacks Company Snapshot from the report view, highlight a company name or a ticker and right-click on it. You also have an option to launch the Zacks Integrated Company Analysis software (ICA). If you follow the ICA link, it displays the Price Action graph for the company selected in the Snapshot report with price and trading volume information for the last two years.

Refer to Zacks Research Wizard 4.0 documentation or contact Zacks Customer Support for additional instructions.