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How do you save your simulation models and results?

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admin@realoptionsvaluation.com www.realoptionsvaluation.com www.rovusa.com A Risk Simulation model developed in Excel with *Risk Simulator* can be saved in several ways:

- 1. Saving the Excel Model
- 2. Extracting the Simulated Data
- 3. Saving a *. RiskSim File
- 4. Generating a Simulation Report
- 5. Generating a Simulation Statistics Report
- 6. Copying and Pasting Charts
- 7. Generating Live Histogram Charts
- 8. Generating Overlay Charts

1. Saving the Excel Model

When you create a new profile using **Risk Simulator** in your existing Excel model, a hidden worksheet called RiskSim is created in the Excel file itself. All additions and settings made within this profile (e.g., set input assumptions, distribution selected, input parameters set, output forecast, simulation trials, seed values, precisions, decision variables, constraints, objectives, and other settings) are all encrypted and saved in this hidden worksheet. Therefore, when you save the Excel file, all the changes in your model as well as **Risk Simulator** settings will be saved. You can then send this Excel file to another person and when you or that person opens the Excel file, the model will open and the corresponding simulation settings will be available to run. You do not have to recreate these **Risk Simulator** settings and you do not need to send any additional files. Everything is stored in the single Excel file. You can view this hidden worksheet by hitting ALT+F11 to access the Visual Basic Environment (VBE), locate and click on the SheetX(RiskSim) and change the Properties from "xIVeryHidden" to "xIVisible", then exit VBE and go to the now visible worksheet. Please note that the worksheet's data has been encrypted and changing anything on this worksheet will create errors in the simulation settings.

2. Extracting the Simulated Data

A simulation's raw data can be very easily extracted using *Risk Simulator's Data Extraction* routine. Both assumptions and forecasts can be extracted, but a simulation must first be run. The extracted data can then be used for a variety of other analyses and the data can be extracted to different formats—for use in spreadsheets, databases, and other software products.

Procedure

- Open or create a model, define assumptions and forecasts, and run the simulation.
- Select Risk Simulator | Tools | Data Extraction.
- Select the assumptions and/or forecasts you wish to extract the data from and click *OK*.

The data can be extracted to various formats:

- Raw data in a new worksheet where the simulated values (both assumptions and forecasts) can then be saved or further analyzed as required
- Flat text file where the data can be exported into other data analysis software
- *Risk Simulator* file where the results (both assumptions and forecasts) can be retrieved at a later time by selecting *Risk Simulator* | *Tools* | *Data Open/Import*

3. Saving a *. RiskSim File

Another popular choice is to save the simulated results as a *.RiskSim file where the results can be retrieved later, eliminating the need to rerun simulation each time. After running a simulation, you can select *Risk Simulator* | *Tools* | *Data Extraction* and extract as a *.RiskSim file. Then, in the future, you can perform a *Risk Simulator* | *Tools* | *Data Open/Import* to open the saved results. The benefit of this approach is that you can recover the live forecast chart with the simulated results instantly, without having to resimulate the model.

4. Generating a Simulation Report

You can create a simulation report of all the assumptions and forecasts in the model by going to *Risk Simulator* | *Tools* | *Create Report*. Here you can view and store the input assumptions' settings and forecast statistics. Typically, creating a report is all you will need in your modeling.

5. Generating a Simulation Statistics Report

You can create a simulation statistics report where multiple forecasts can be compared side by side. This method is similar to generating a simulation report with the exception that only the forecast statistics and results will be seen and presented as a table for easy comparison and analysis.

6. Copying and Pasting Charts

You can modify a forecast chart (such as its color, chart type, font, and so forth) and then click on *Copy Chart* (this is available in the Global View or in the Preferences tab in Normal View) and paste the chart in another software application such as Word, Excel, or PowerPoint. These charts are static and will be pasted as an image.

7. Generating Live Histogram Charts

You can also click on the Excel button in a forecast chart (this is available in the Global View or in the Preferences tab in Normal View) and a live editable histogram chart will be created as a new worksheet in Excel. You can modify this chart as you would normally any other chart created in Excel. Be aware that you may have to enable macros when prompted as some chart macros are required to make the chart work.

8. Generating Overlay Charts

After running a simulation, select *Risk Simulator* | *Tools* | *Overlay Charts* and create an overlay chart where you can "overlay" multiple assumptions and forecast charts. These generated charts can be saved or copied and pasted into another software application such as Word, Excel, or PowerPoint.