Model analyzer For Excel

Overview

What is Model Analyzer for Excel?

Model Analyzer for Excel is an add-in for Microsoft Excel with which you can analyse the data in your spreadsheets, in an automatic, fast and intuitive manner.

What can I do with Model Analyzer for Excel?

You can perform the following analyses:

- Centralised management of input and output variables in your spreadsheets.
- Multiple-scenario analyses.
- What-if analysis (tornado and spider analysis and sensitivity tables).
- Analysis to find multiple target values.
- Break-even analysis.
- Monte Carlo simulation with the main statistical distributions.
- Other useful tools.

Who can use Model Analyzer for Excel?

Any type of user that utilises Microsoft Excel for his or her projects. It can be used by financial analysts, engineers, biologists, mathematicians, economists, teachers, and students in general, scientists, people working in marketing, sales, purchases, accounting, etc.

I have older versions, what should I do to use this new version?

Based on feedback from our users, we have made important changes compared with former versions. As a result, you will have to re-create with this version the models you created with former versions. We thank you for understanding, as this will happen this only time and will not happen again in the future.

What changes are included in this new version 2.0?

It includes the following changes:

- Analyses with Monte Carlos simulation have been added.
- The 'Go' button that appeared in the scenarios spreadsheet has been removed and replaced by a 'Run' button directly accessed from the ribbon (Excel 2007).
- Input/Output management has been centralised.
- All interfaces (dialogs and buttons) have been improved for a more intuitive use; however, your suggestions for further improvement will always be welcomed.

- Cells watcher, is now a form better adpated to work with Model Analyzer for Excel, and has been improved.

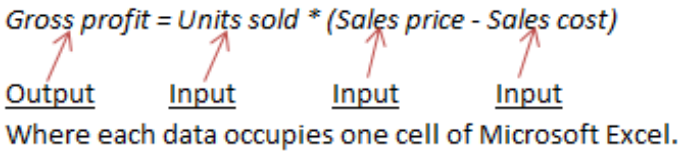
How do I start using Model Analyzer for Excel?

First of all, you have to add inputs and outputs with the Manage Inputs and Manage Outputs tools. Then you can use any of the other tools, such as creating scenarios, what-if analysis, simulations, and cells watcher.

Basic Concepts

Model in Microsoft Excel

A model is a construct in Microsoft Excel of an abstraction of reality, case study, or objective analysis. Each model should be developed in only one Excel book, for a more centralized use of data. You can develop from very basic models to very complex ones that contain numerous sheets. For example, the following structure is a basic model:



Where each data occupies one cell of Microsoft Excel.

Input

Independent variable whose value is not a function of another variable. In the example above, Units Sold, Sales Price and Sales Cost are the inputs. Each cell in Excel represents an input, it must not have precedents but it must have dependents.

Output

Dependent variable whose value is a function of other variable(s) (inputs) In the above example, there is only one output, Gross Profit, which is derived from the inputs specified. Each Excel cell containing an output should have precedents. Intermediate formulas could be outputs.

Analysis of Models

This process involves varying inputs and analysing the resulting behaviour of output variables. Input variables may be entered using multiple-scenario, what-if or simulation analysis. Conversely, based on target or desired output variables, you may find the input values required to get such target values.

Scenario

A set of variables which combined represent a possible situation for a model. Typically, a model can consider, say, three scenarios, such as Optimistic, Pesimistic and Neutral. However, with the Scenarios tool of Model Analyzer for Excel, you can generate hundreds of scenarios, where each scenario is represented by one column in the Scenarios sheet.

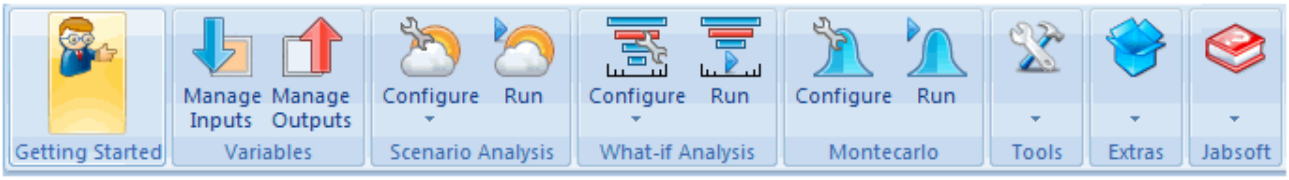
What-if

This process consists in giving values to inputs and see how outputs are affected.

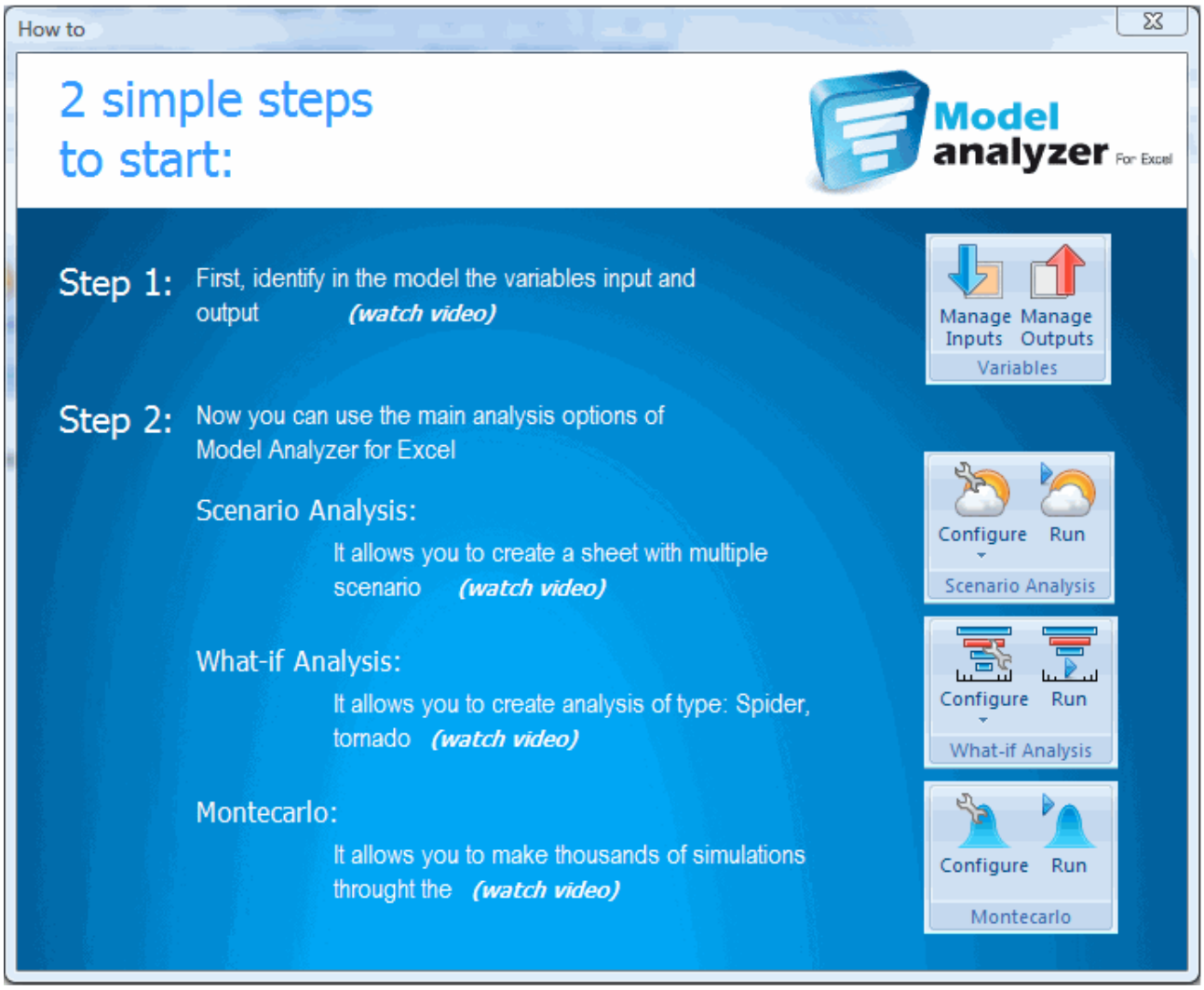
Goal Seeker

With this technique you can find the values inputs should take to get the desired output values.

Getting Started



This access gives us a way to quickly start using the tool.



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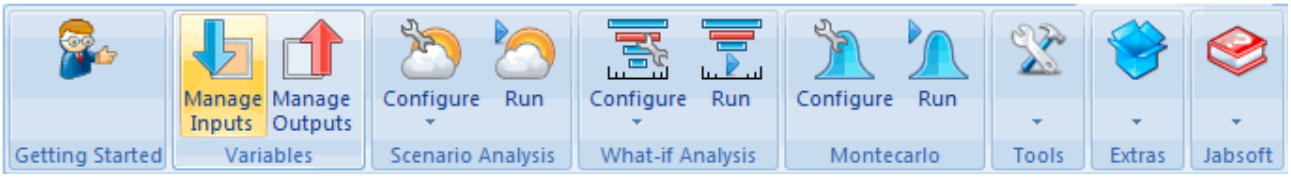
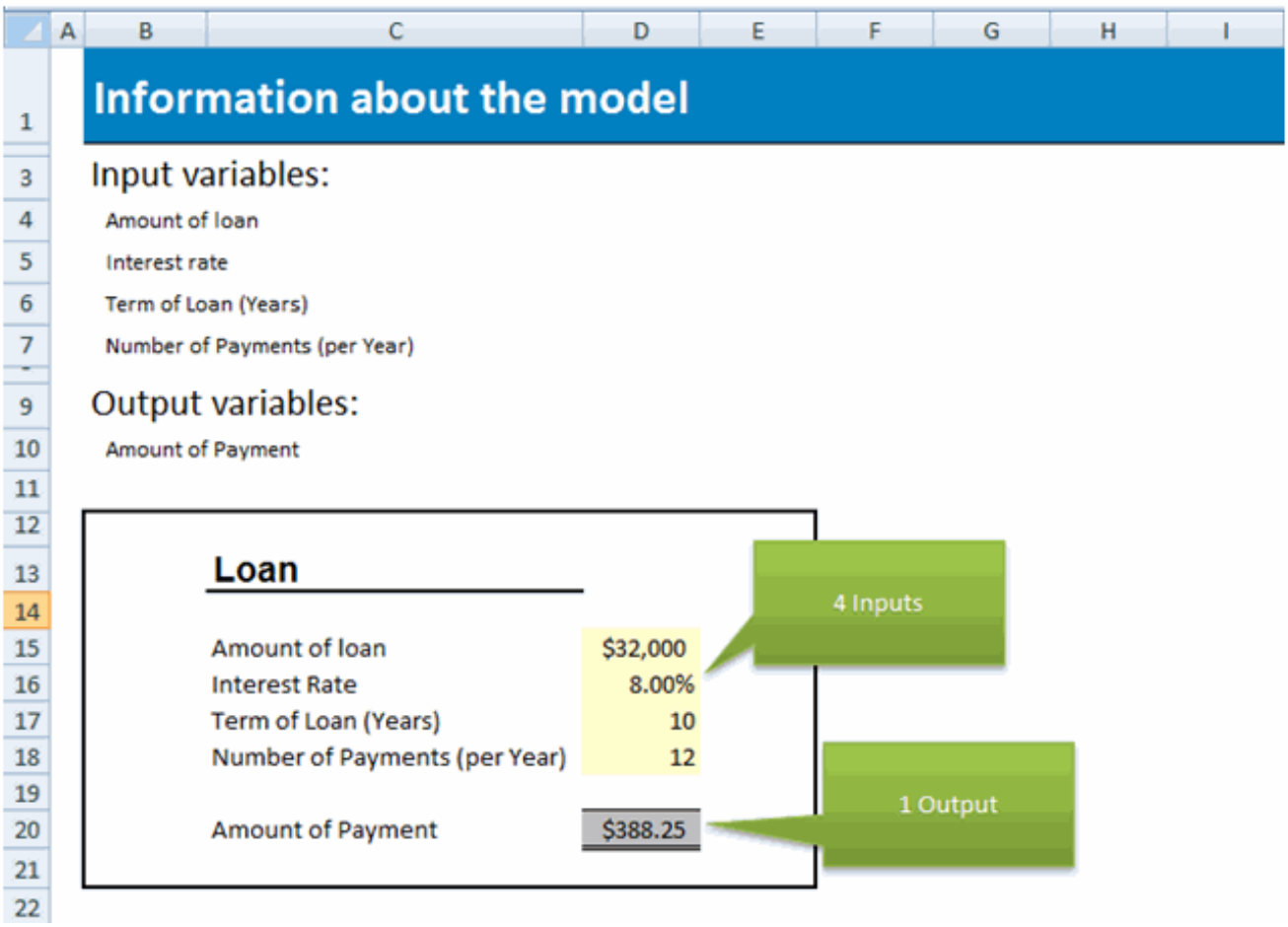
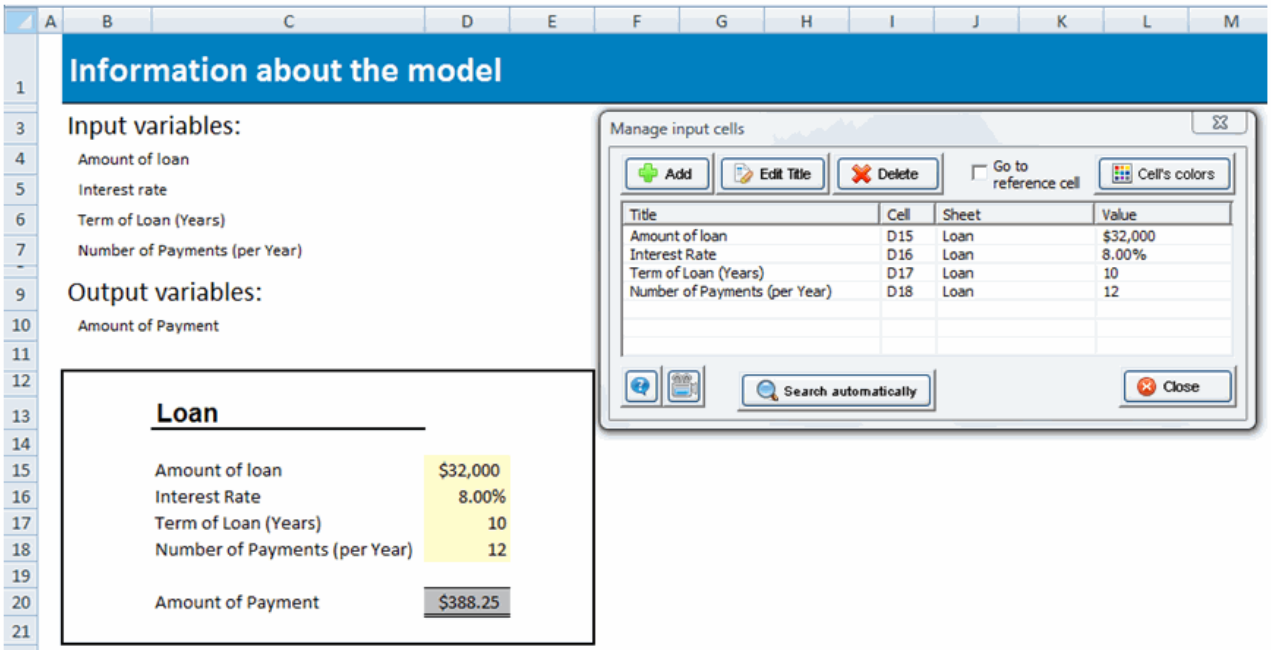
Manage Inputs



Use this function to add and remove input variables to and from your models.
We will elaborate on the following basic model.



Go to the **Variables** section and select **Manage Inputs** , and the dialog below pops up.



- **Add:** Use this button to add a new Input variables.
- **Edit:** Use this button to edit the title of each variables (this is optional since the tool captures automatic titles). The title must be making reference to a cell and not write a text manually.
- **Delete:** Serves to eliminate an Input variable.
- **Go to reference cell:** It serves to navigate by each variable. First activate the cell, then click on each element of the list of variables.
- **Cell's colors:** It automatically gives color to the chosen input cells. It has a color by default.
- **Search automatically:** Automatically looks for inputs in specific sheets of the book. This offers a quicker way to begin using this tool.

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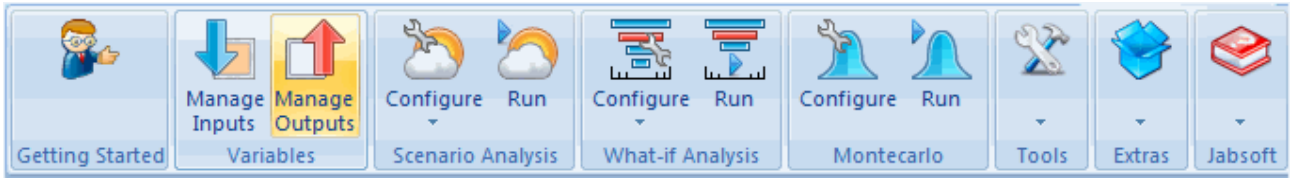
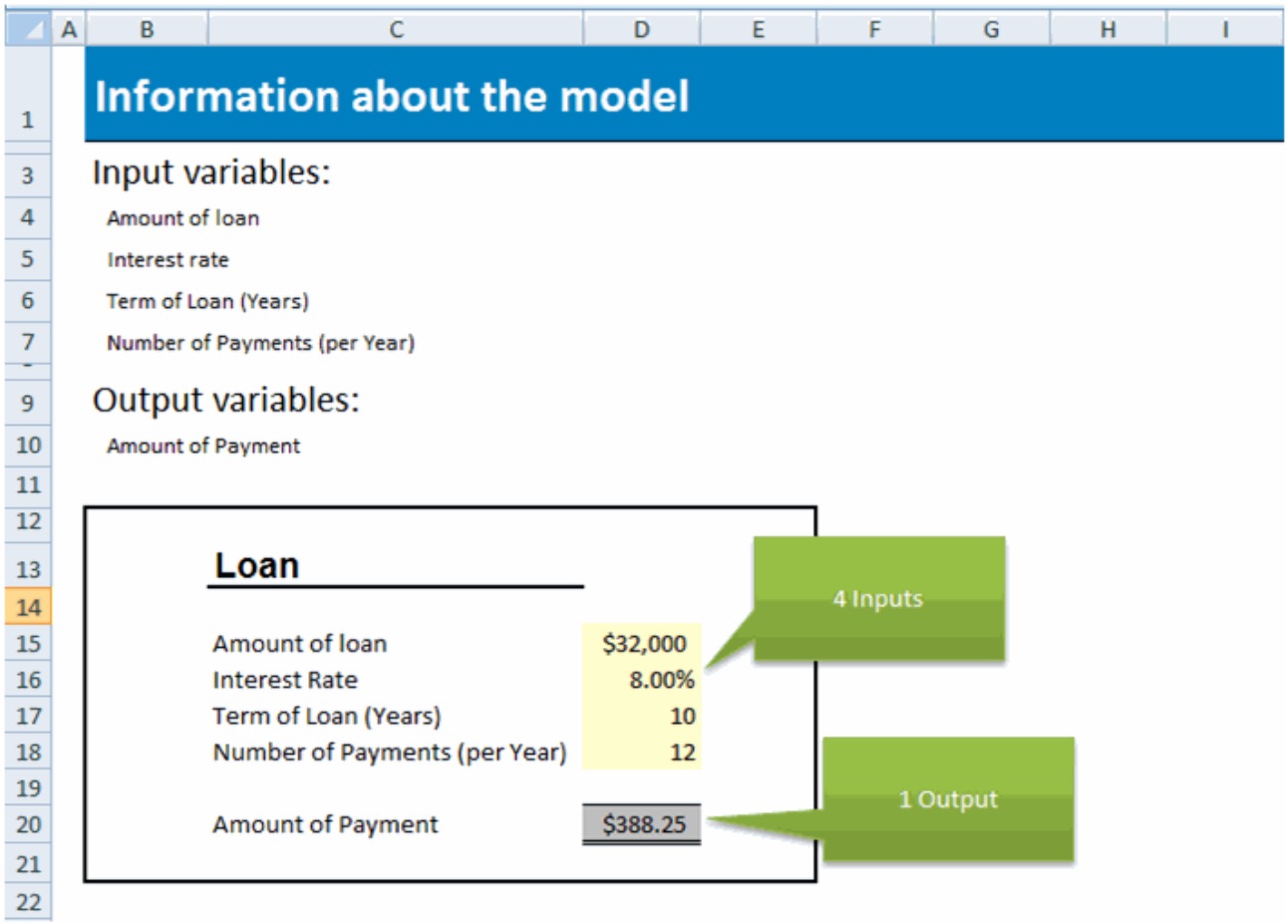
Manage Outputs



Use this function to add and remove output variables to and from your models.
We will elaborate on the following basic model.



Go to the **Variables** section and select **Manage Outputs** , and the dialog below pops up.

Information about the model

Input variables:

Amount of loan

Interest rate

Term of Loan (Years)

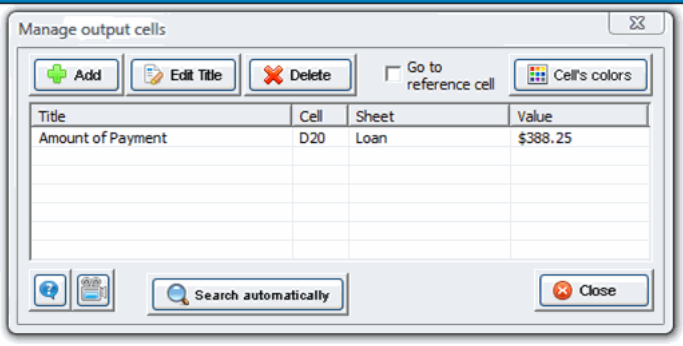
Number of Payments (per Year)

Output variables:

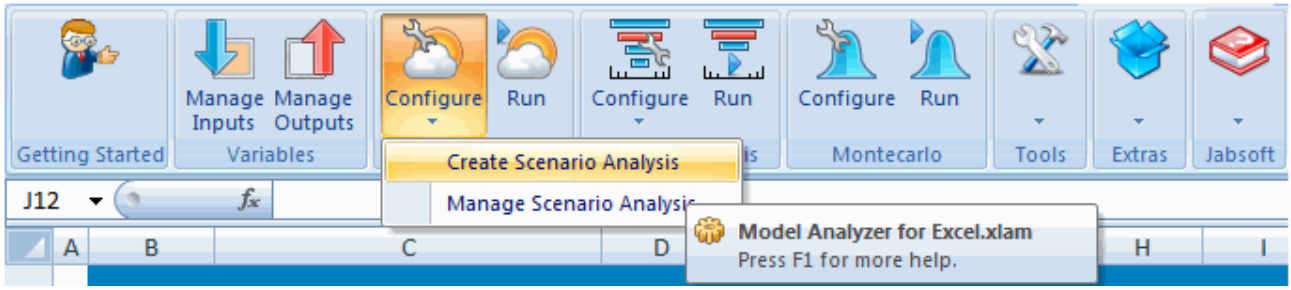
Amount of Payment

Loan

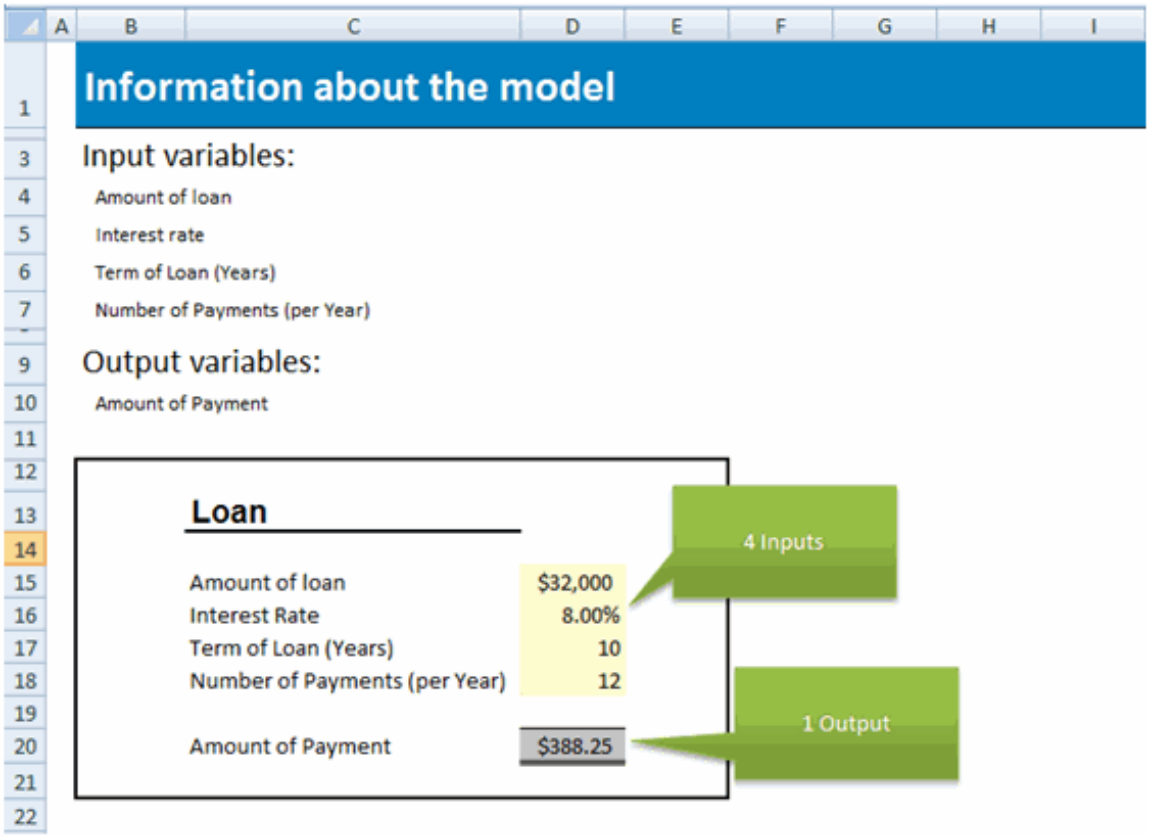
Amount of loan	$32,000
Interest Rate	8.00%
Term of Loan (Years)	10
Number of Payments (per Year)	12
Amount of Payment	$388.25



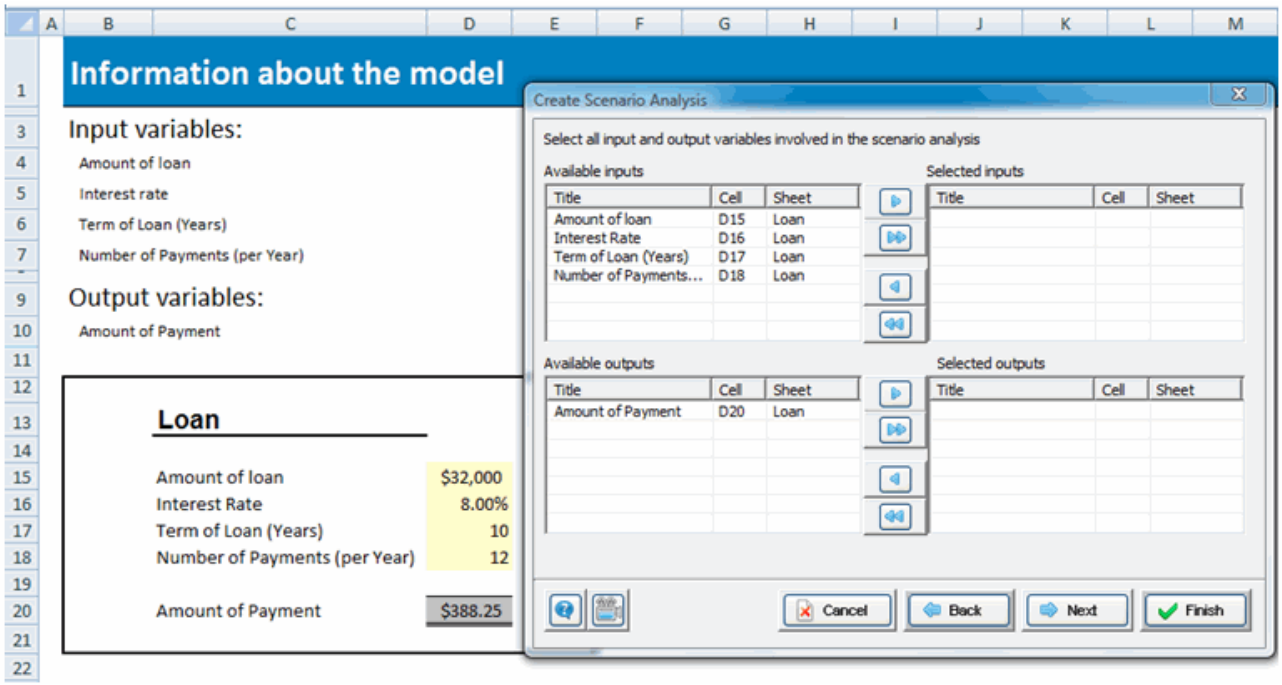
Create Scenario Analysis

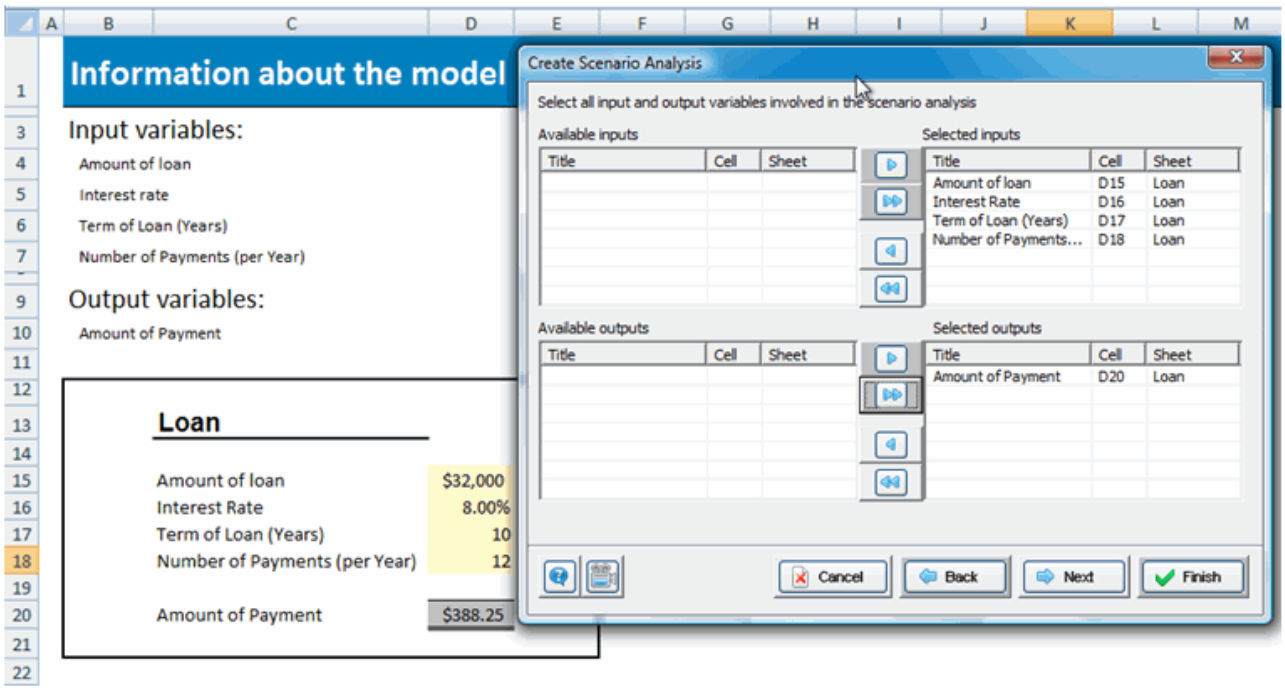


When models are large and complex, and you wish to have input and output variables centralised, it is time to use the Create Scenario Analysis tool. With this tool, you can create quickly a new sheet in the same book, with the input and output cells you want to analyse, managing as much scenarios as columns are in the Microsoft Excel spreadsheet.
As we have already loaded the inputs and outpus using Manage Inputs and Manage Outputs now just go to the section **Scenario Analysis** and select **Create Scenario Analysis** , taking the following model as example.

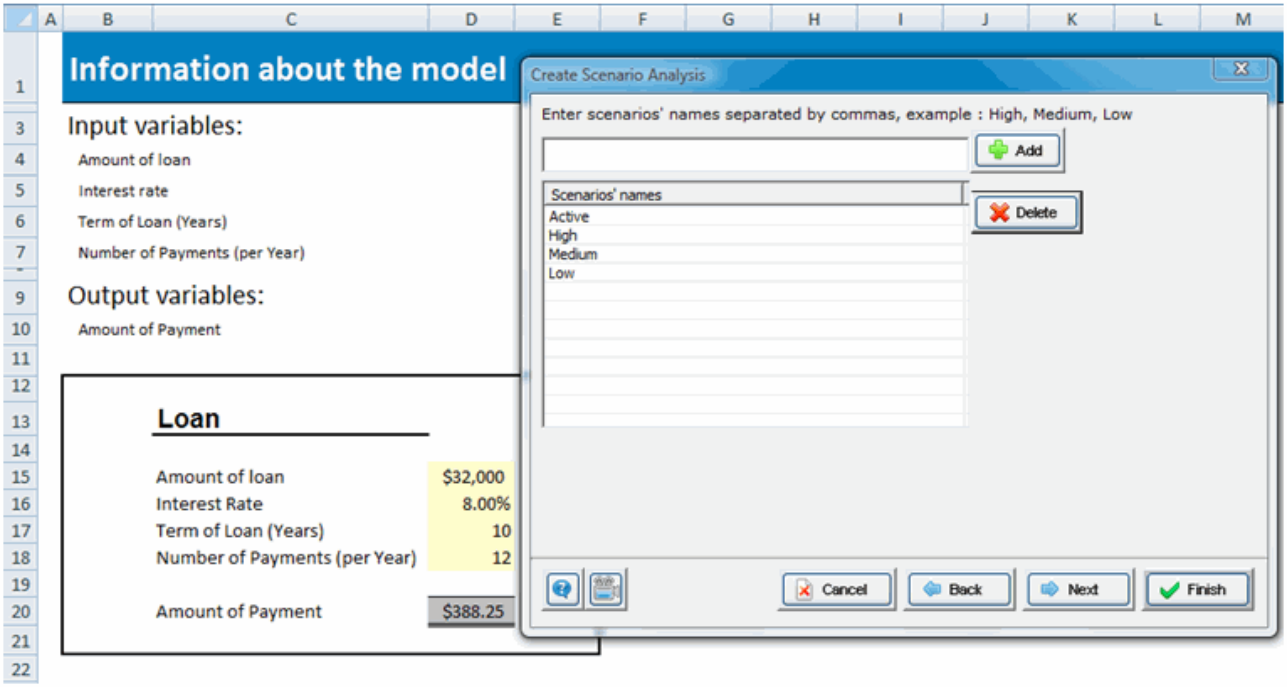


First choose the inputs and outputs from the left-side lists and move it to the right-side list. To do it see the following image:

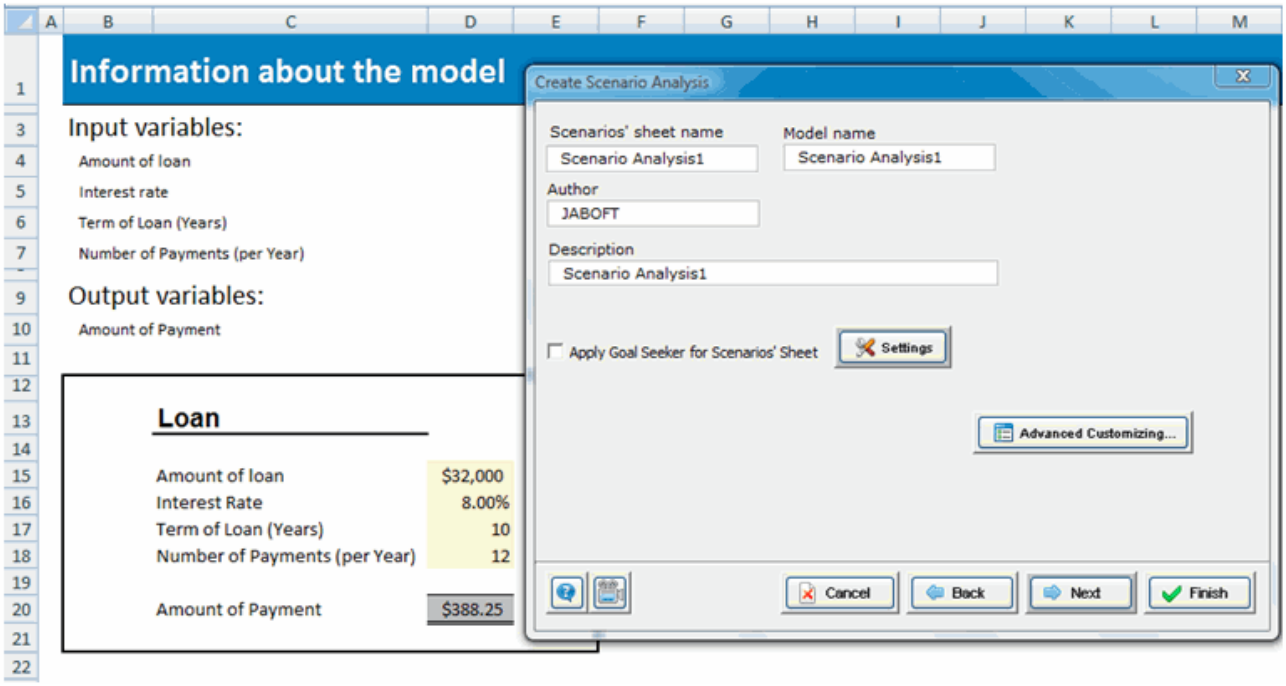




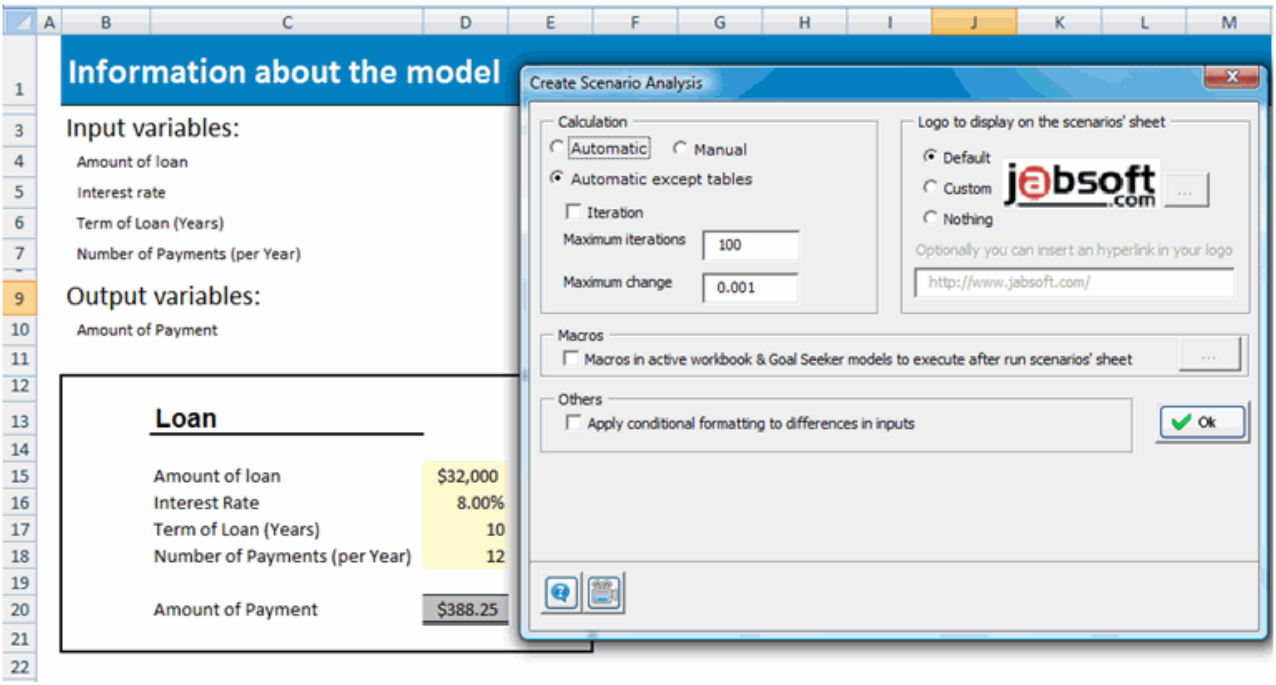
Click **Next** to enter the scenarios.
The default number of scenarios is fourth, but you can add others by entering their names directly, separated by commas.



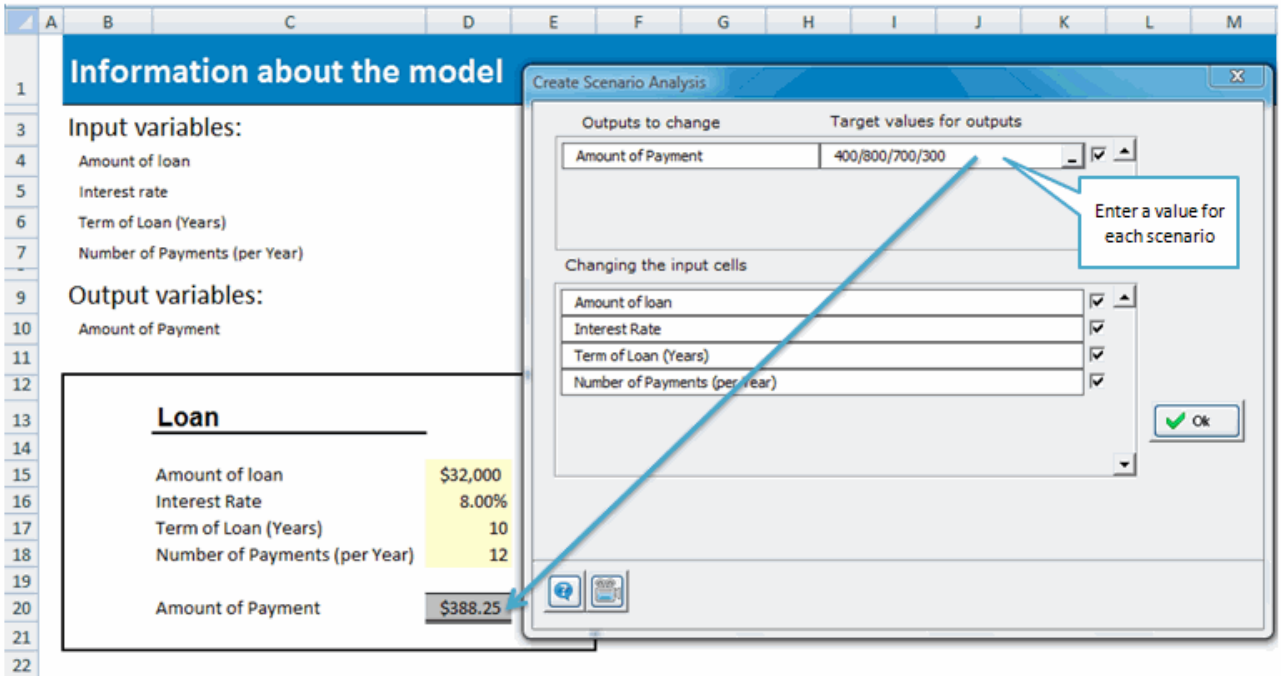
Click **Next** . Enter the information about the scenarios sheet you are going to create.



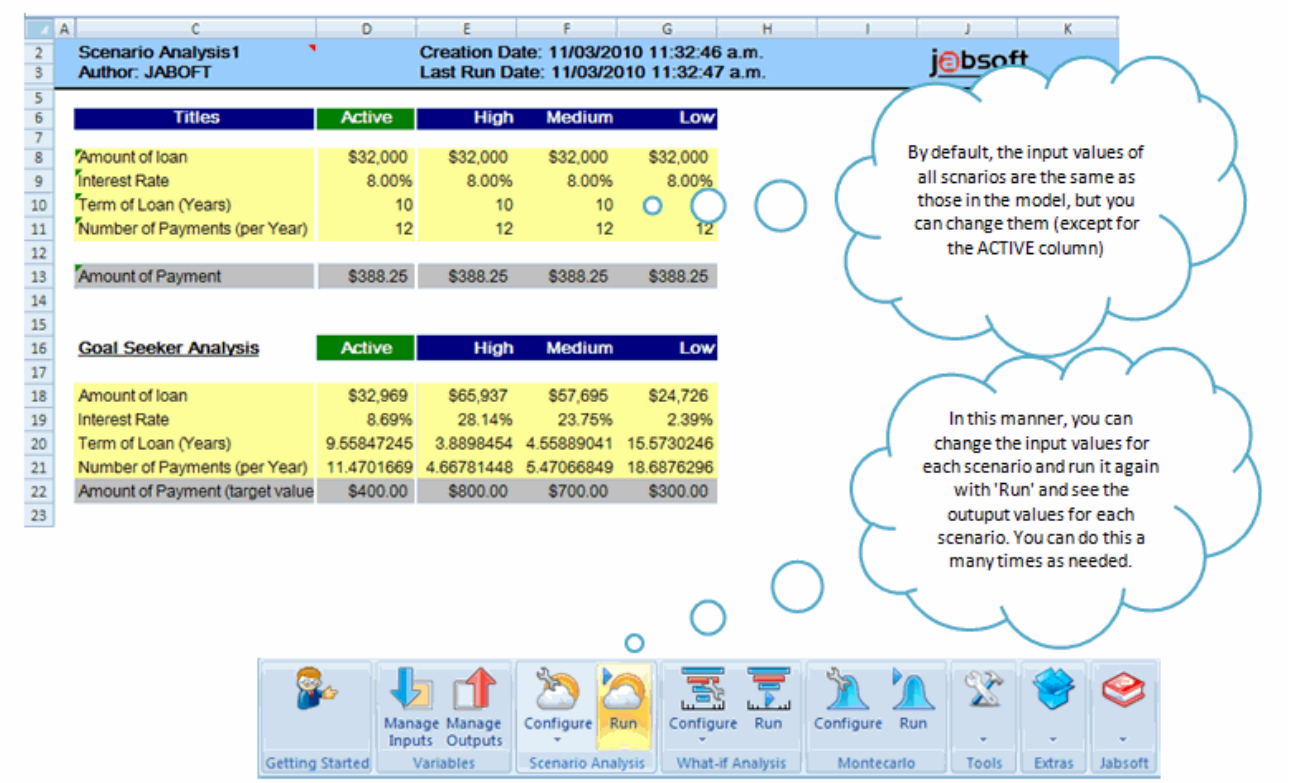
(OPTIONAL) If you click the **Advanced customizing** button, you will be able to configure certain advaced features, but you don't have to. You can create the scenarios sheet without customizing these options.



(**OPTIONAL)** If you click the **Apply Goal Seeker for Scenarios' Sheet** checkbox, you will be able to configure Goal Seeker for Scenario Analysis, but you don't have to. You can create the scenarios sheet without customizing these options.



When you click Finish, the following **scenarios sheet** will appear.



Important: if you want to add or remove inputs, output or scenarios in the scenarios sheet don't do it manually; use the Manage Scenario Analysis tool.

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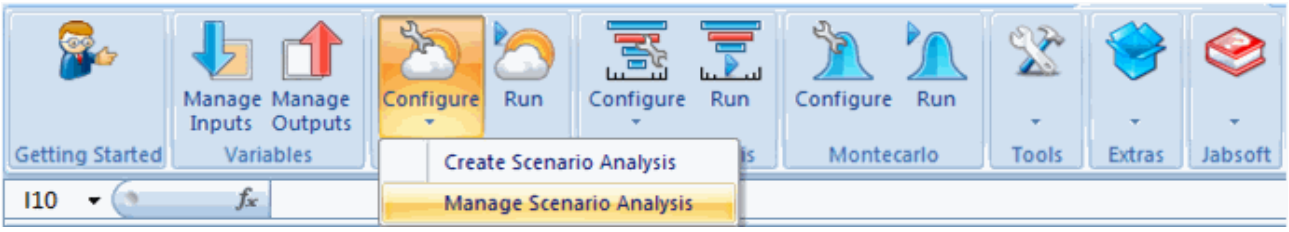
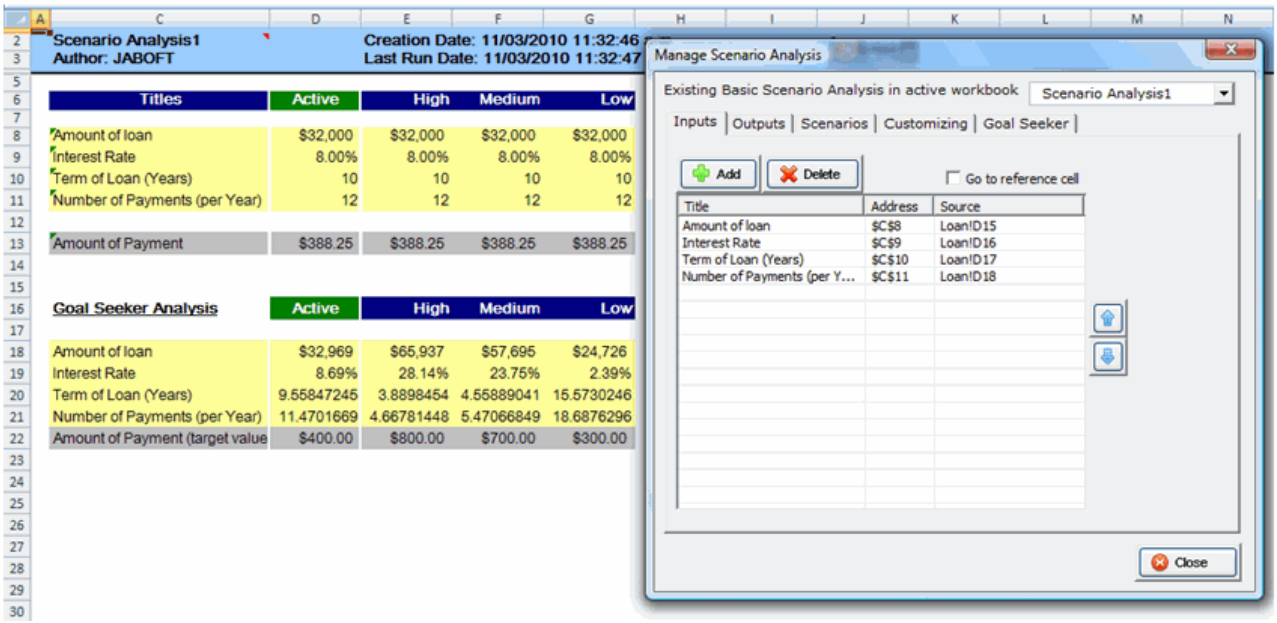
Manage Scenario Analysis

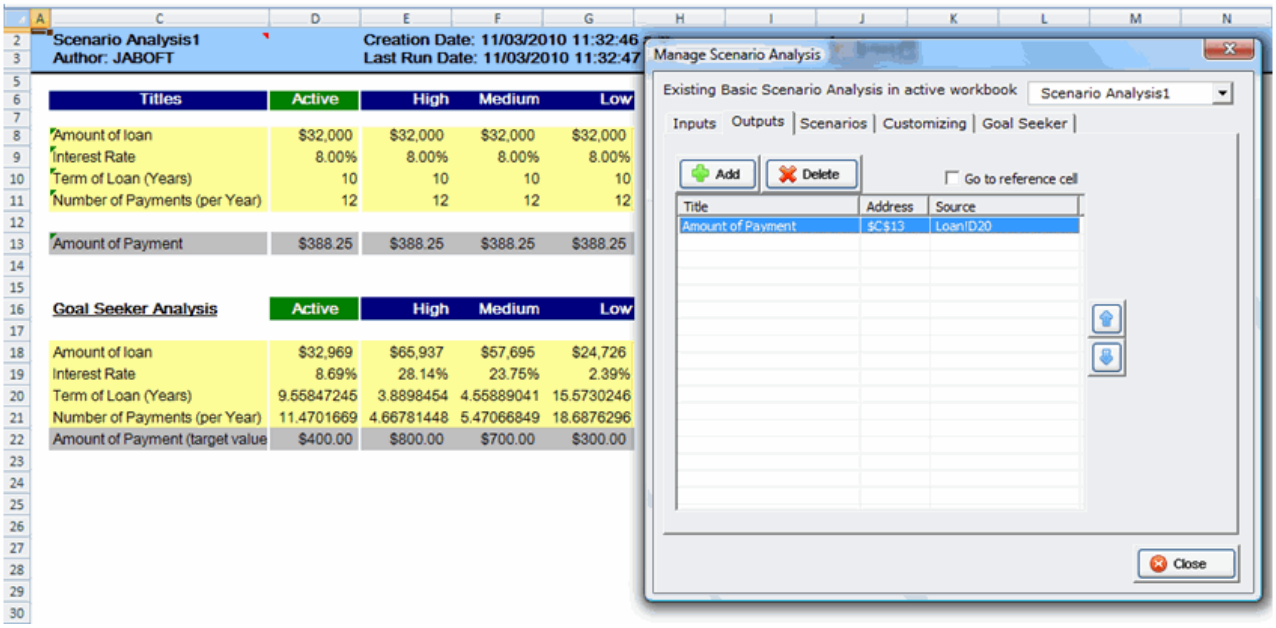


Use this tool to add or remove inputs, outputs and scenarios to or from a scenarios sheet created with Create Scenario Analysis .
Do not try to make changes manually without using this tool or you will cause errors in you Excel model.

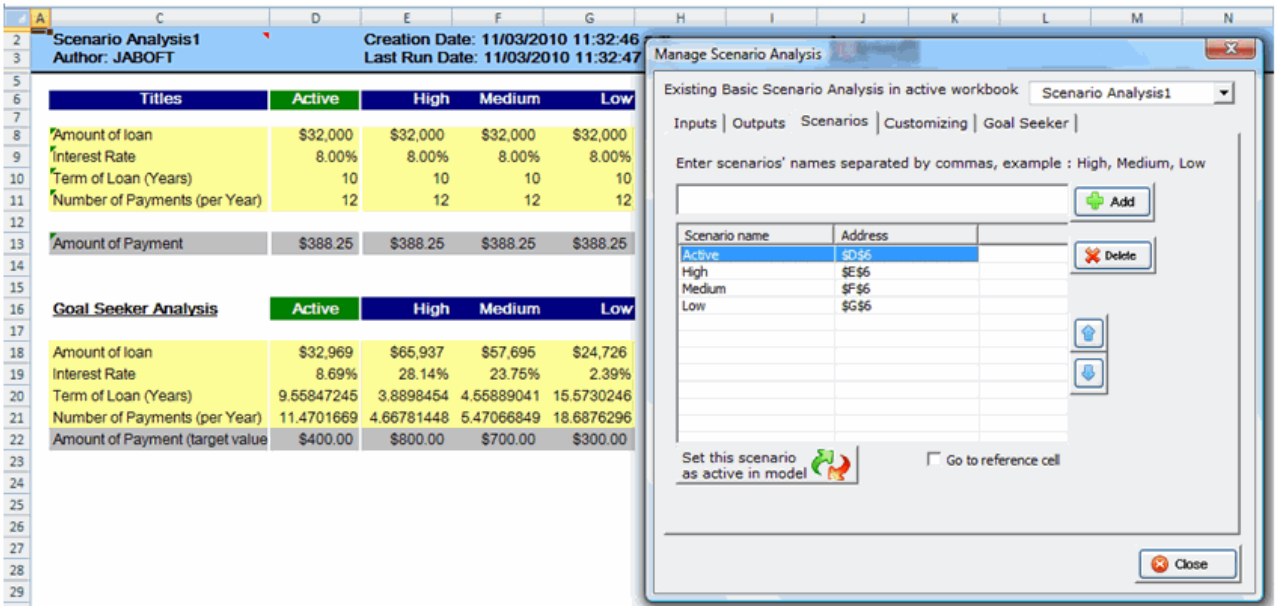
In this section you can **add and remove inputs** , or move them up and down a list of inputs.



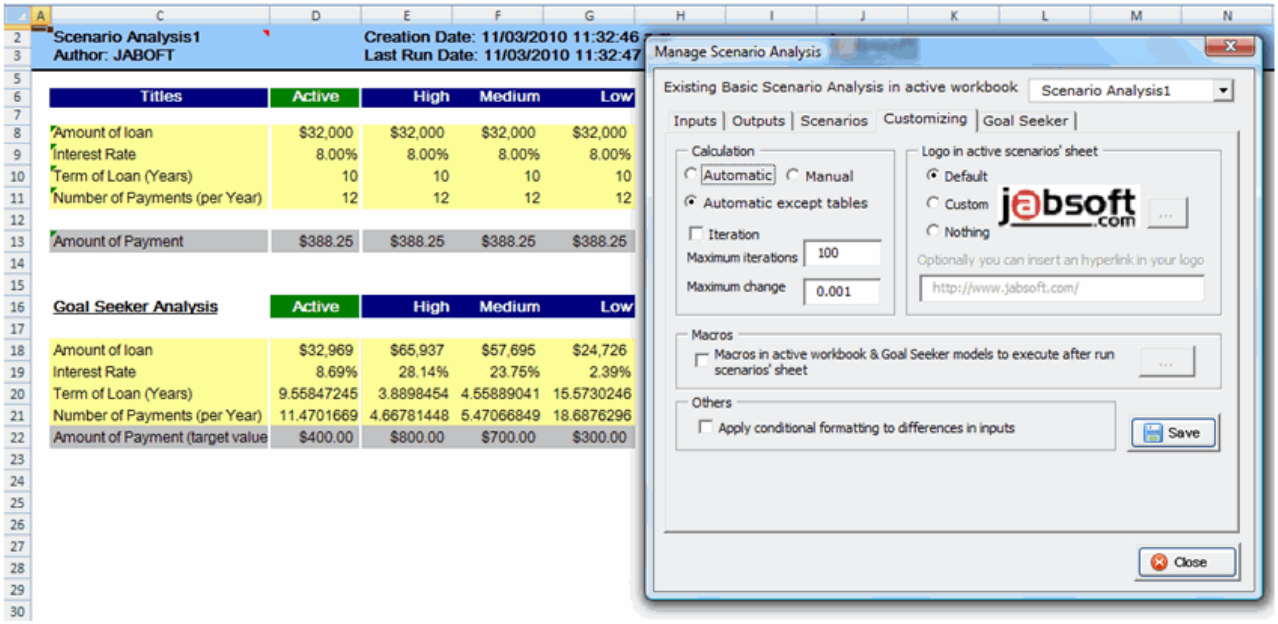
You can **add and remove outputs** , or sort them by moving them up and down.



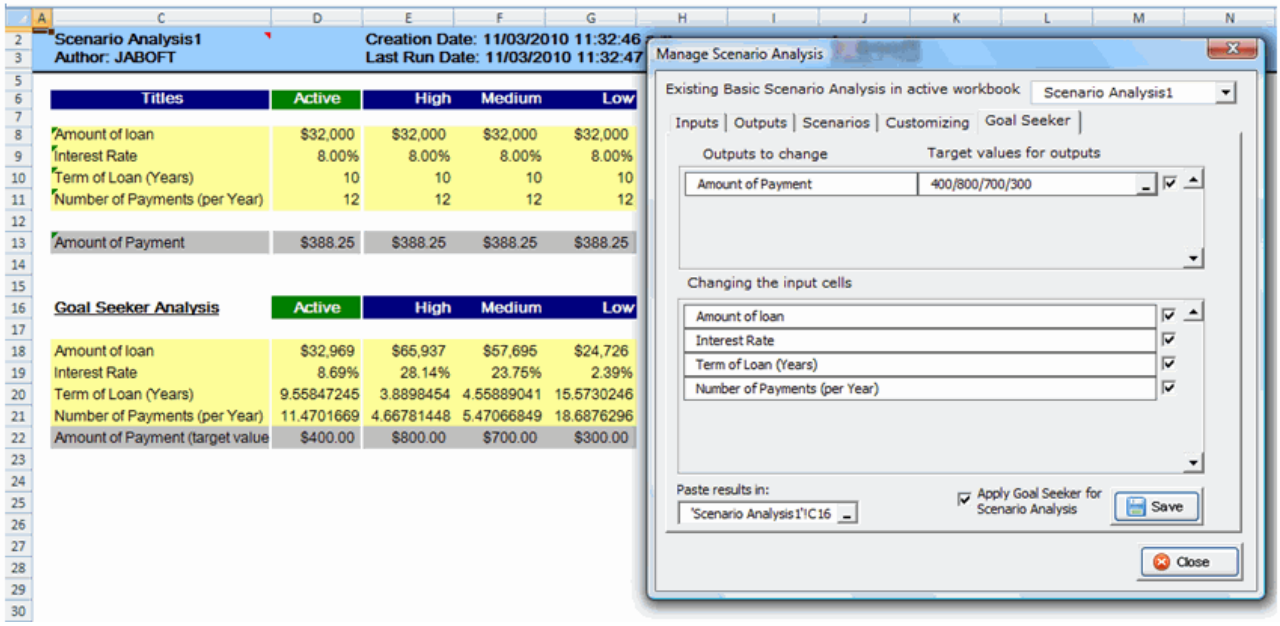
You can **add or remove scenarios** , and sort them by moving them left or right.



You can also **customize advanced options** as well as apply customized macros and conditional formats to show if the inputs have been changed to the original or active values in the model.



You can also **customize goal seeker analysis** for scenario analysis.



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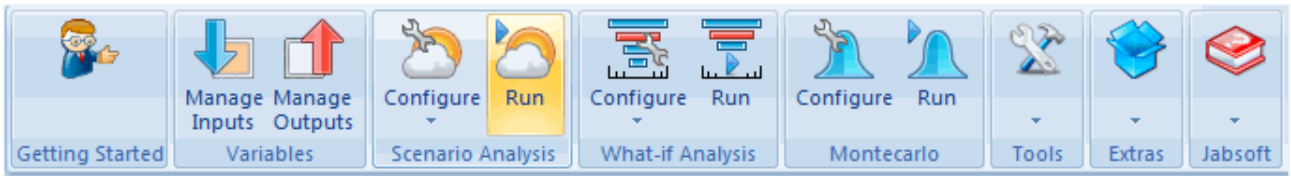
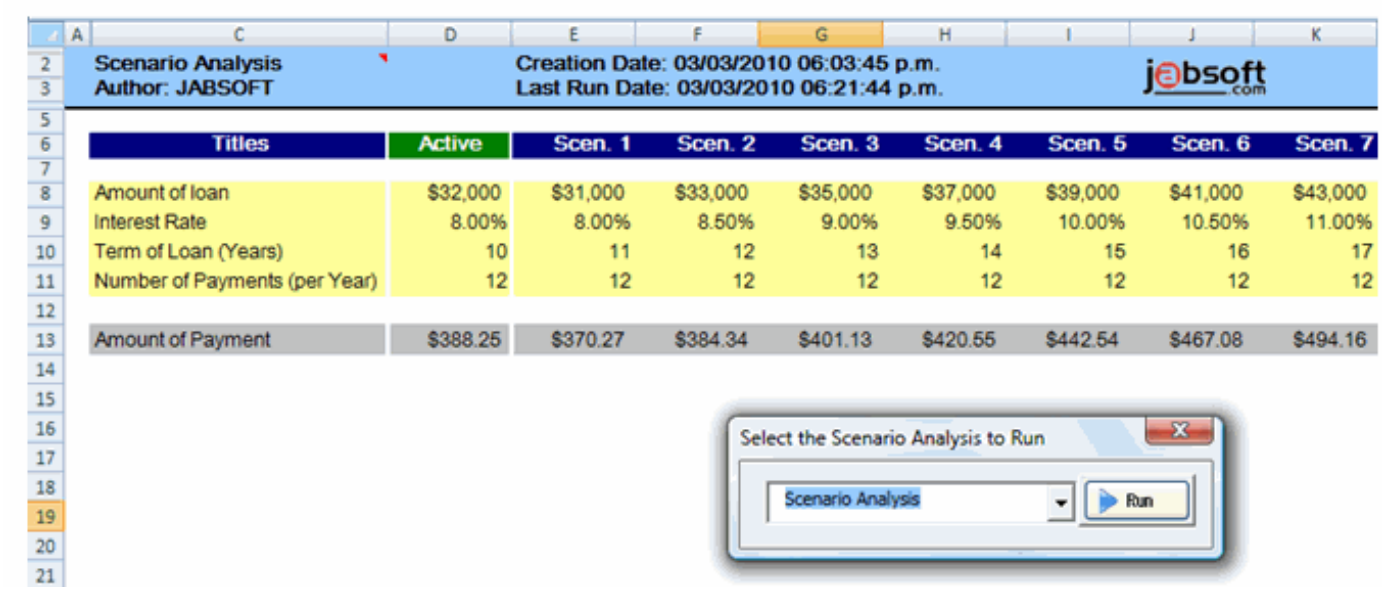
Run Scenario Analysis



From this dialog, you can run directly any **Scenario Analysis** .



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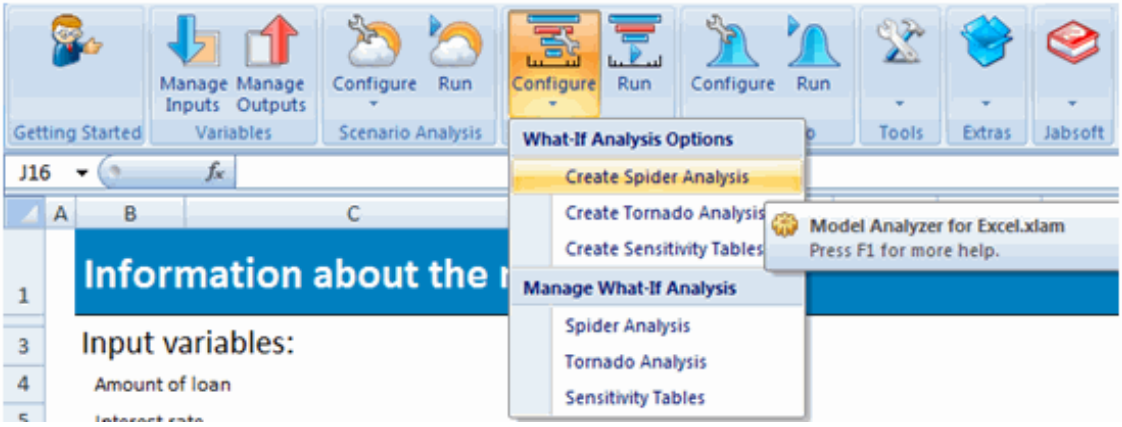
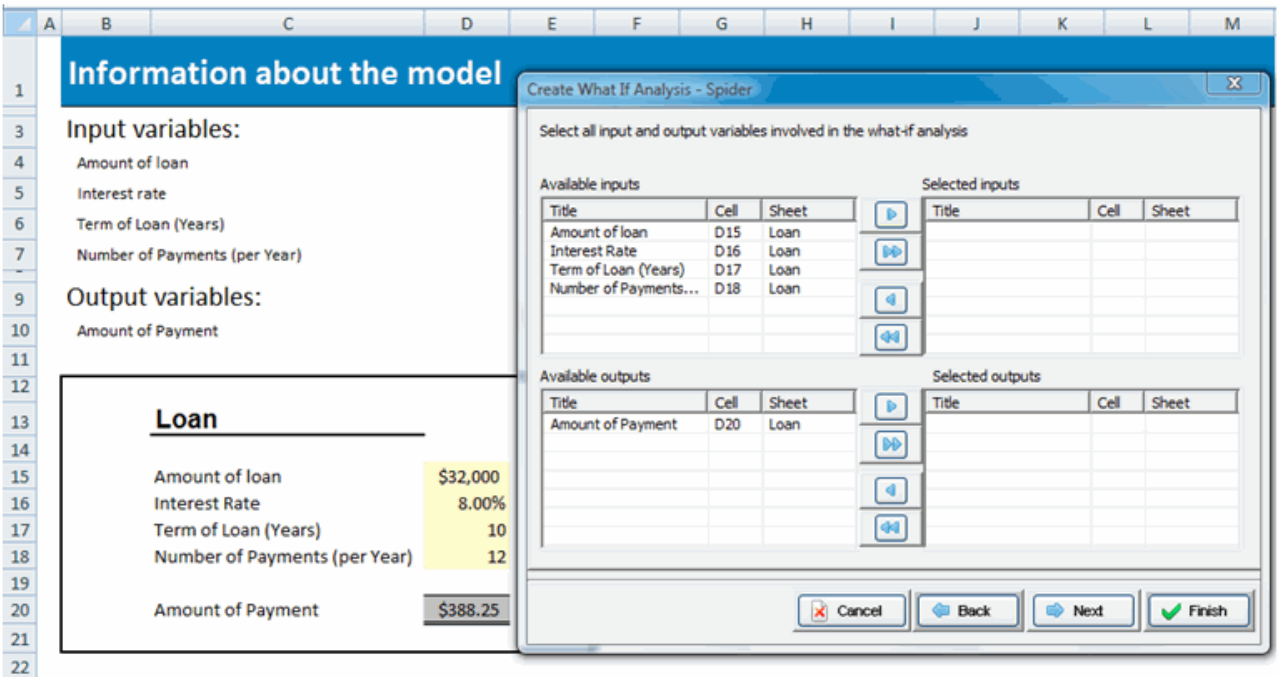
Create Spider Analysis

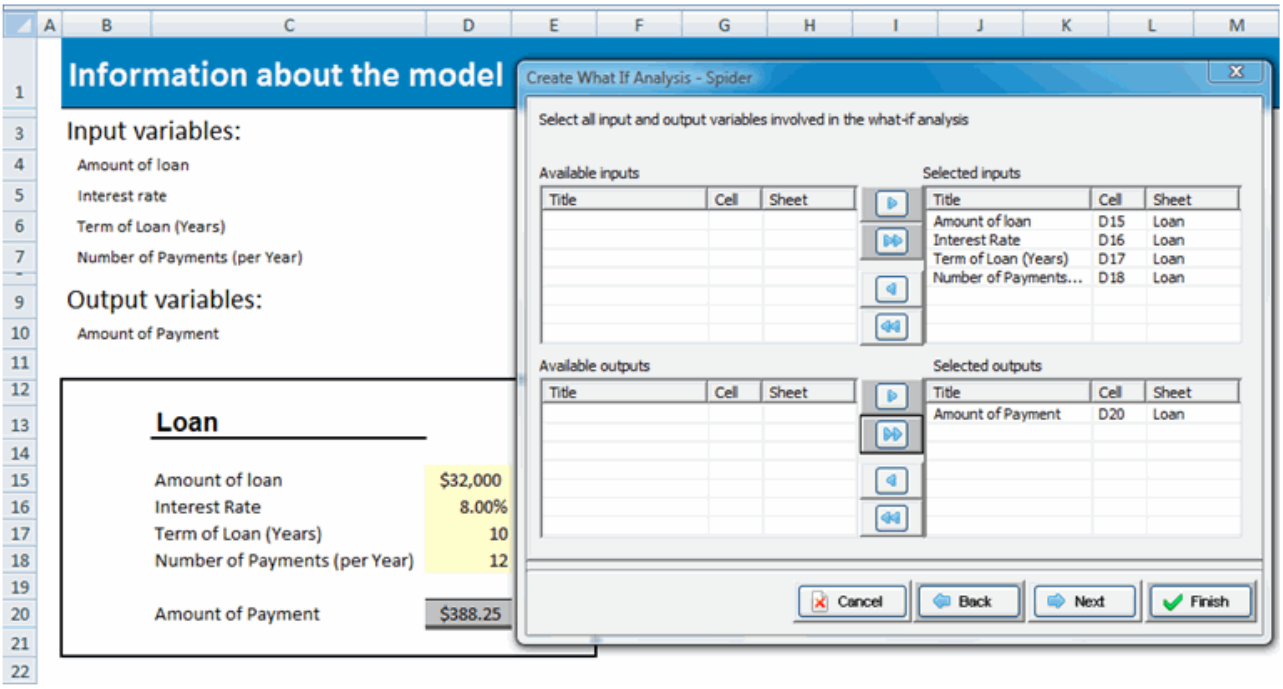


You can use this function to apply the same percent variation to all selected inputs from a base percentage value, an increase and top value.

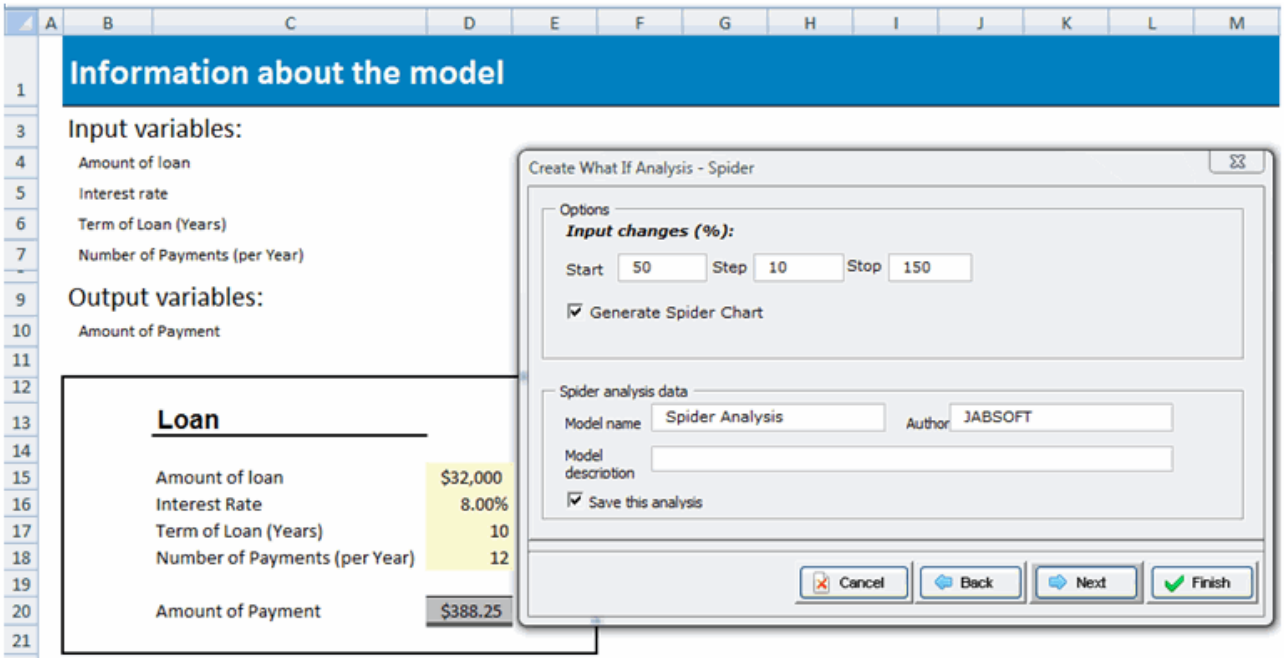
It shows the impact of these percent changes on the selected output. In addition, it shows a spider chart, where you can see how the output variable changes with changes in the input variable and know if they change in the same or opposite direction.

You should first choose the input and output variables. You can select as many as 20 inputs and 1 output for each run.





Then you should enter the initial, change, and final percent values for all input variables.
Alternatively, you can save this spider analysis and rerun it from Run What-If Analysis .
You can edit a saved model with Manage Spider Analysis .



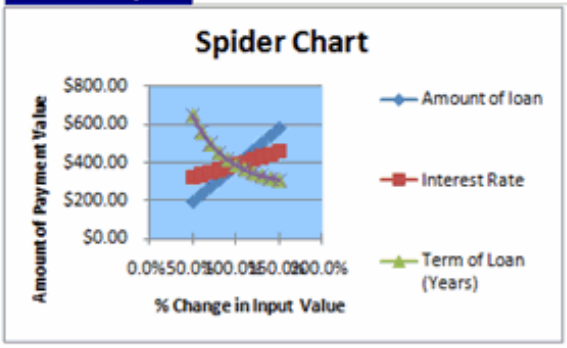
The result is shown below.

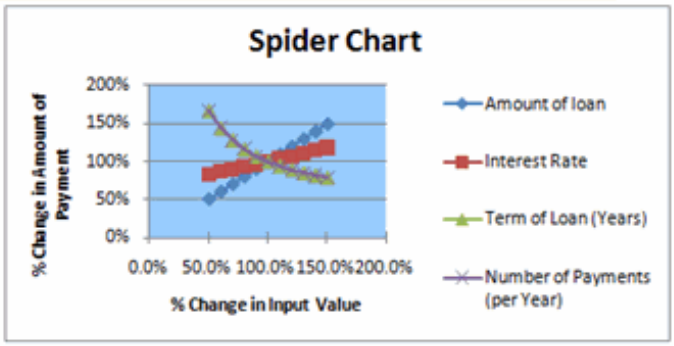
Sensibility's analysis for "Amount of Payment"

	Input Variables Values										
	50.0%	60.0%	70.0%	80.0%	90.0%	100.0%	110.0%	120.0%	130.0%	140.0%	150.0%
Amount of loan	$16,000	$19,200	$22,400	$25,600	$28,800	$32,000	$35,200	$38,400	$41,600	$44,800	$48,000
Interest Rate	4.00%	4.80%	5.60%	6.40%	7.20%	8.00%	8.80%	9.60%	10.40%	11.20%	12.00%
Term of Loan (Years	5	6	7	8	9	10	11	12	13	14	15
Number of Payments	6	7.2	8.4	9.6	10.8	12	13.2	14.4	15.6	16.8	18

	Output Variable Values "Amount of Payment"										
	50.0%	60.0%	70.0%	80.0%	90.0%	100.0%	110.0%	120.0%	130.0%	140.0%	150.0%
Amount of loan	$194.12	$232.95	$271.77	$310.60	$349.42	$388.25	$427.07	$465.90	$504.72	$543.55	$582.37
Interest Rate	$323.98	$336.29	$348.87	$361.73	$374.85	$388.25	$401.91	$415.83	$430.00	$444.43	$459.11
Term of Loan (Years	$648.84	$561.06	$498.76	$452.37	$416.60	$388.25	$365.29	$346.38	$330.58	$317.22	$305.81
Number of Payments	$648.84	$561.06	$498.76	$452.37	$416.60	$388.25	$365.29	$346.38	$330.58	$317.22	$305.81

	Output Variable Percent Variation "Amount of Payment"										
	50.0%	60.0%	70.0%	80.0%	90.0%	100.0%	110.0%	120.0%	130.0%	140.0%	150.0%
Amount of loan	50.00%	60.00%	70.00%	80.00%	90.00%	100.00%	110.00%	120.00%	130.00%	140.00%	150.00%
Interest Rate	83.45%	86.62%	89.86%	93.17%	96.55%	100.00%	103.52%	107.10%	110.75%	114.47%	118.25%
Term of Loan (Years	167.12%	144.51%	128.46%	116.52%	107.30%	100.00%	94.09%	89.22%	85.15%	81.71%	78.77%
Number of Payments	167.12%	144.51%	128.46%	116.52%	107.30%	100.00%	94.09%	89.22%	85.15%	81.71%	78.77%





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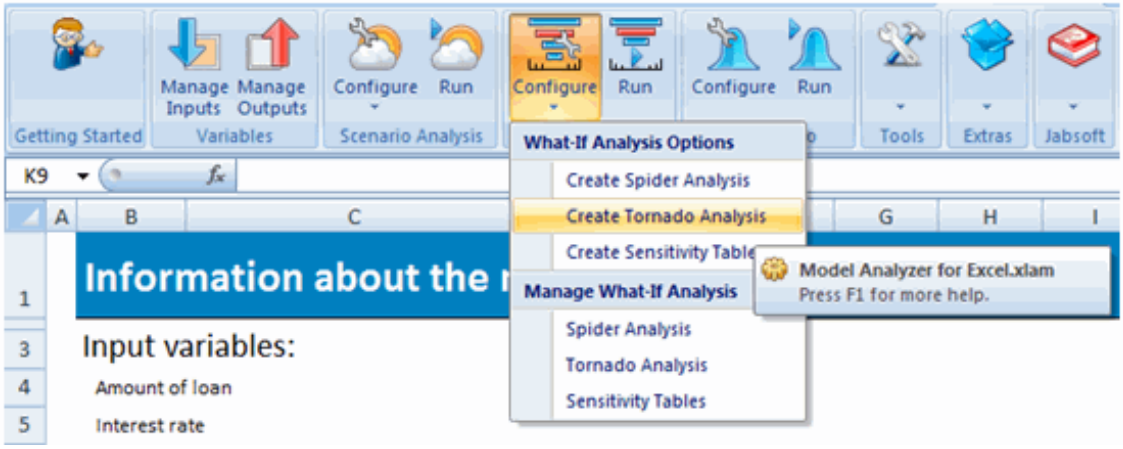
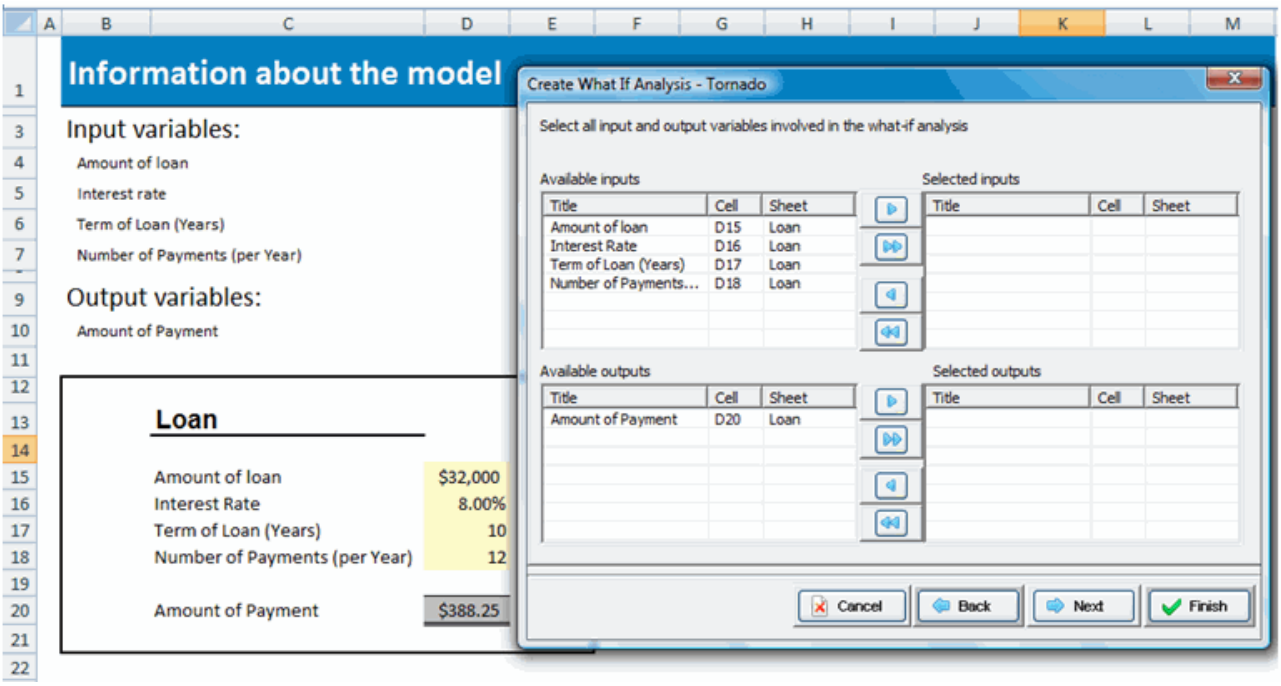
Create Tornado Analysis

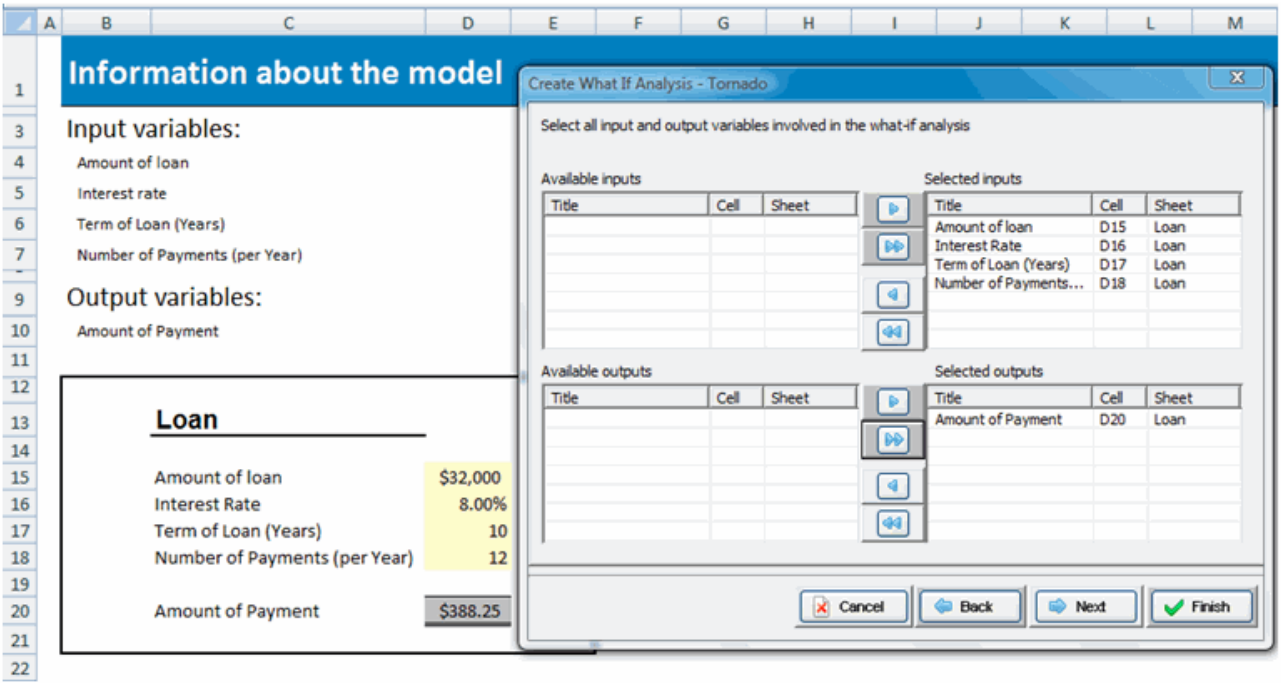


With it, you can apply to input variable values a percent variation to the left and another of the same size to the right. This allows you to immediately spot which inputs the resulting output variables are most sensitive to; in addition, you can see a chart that shows the input variables ordered from the most to the least impact on the output.

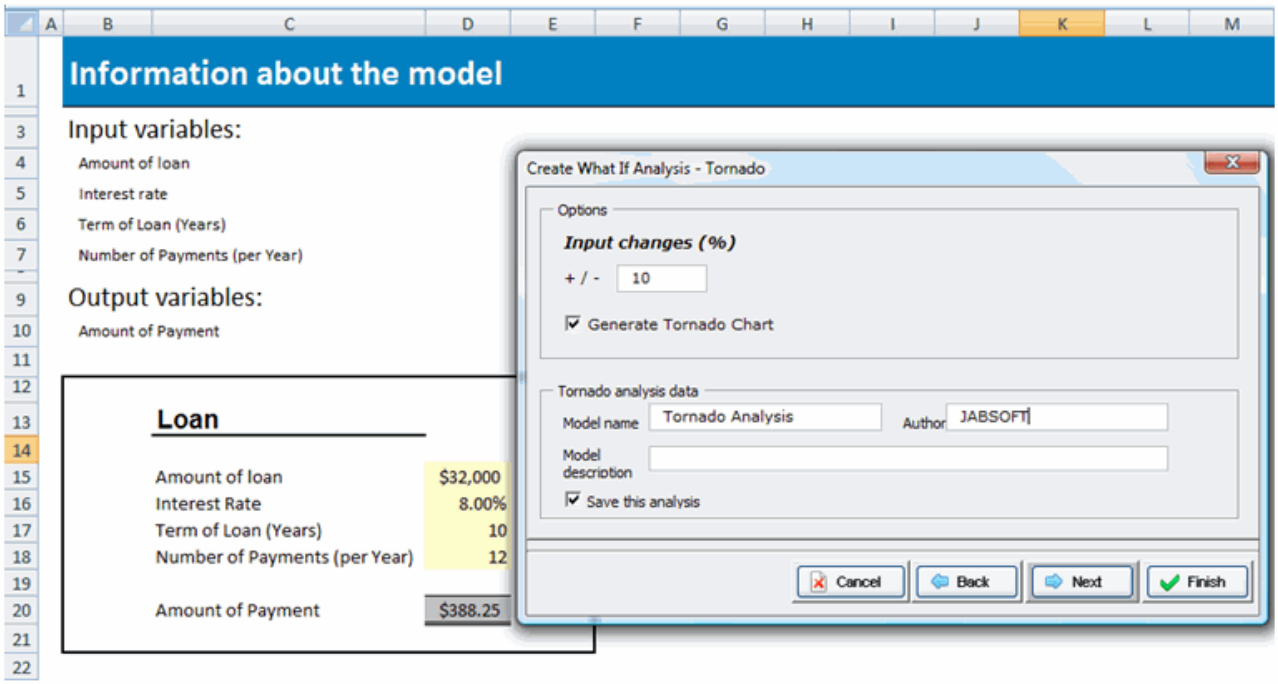
You will find this tool helpful when you don't know which variables should be handled more carefully on account of the resulting variations in the model, as a small change in them may have large impact on the output.

You should first select the input variables and the output variable, as shown in the screenshots below. You can work with as many as 20 inputs and 1 output each time you run the tool.





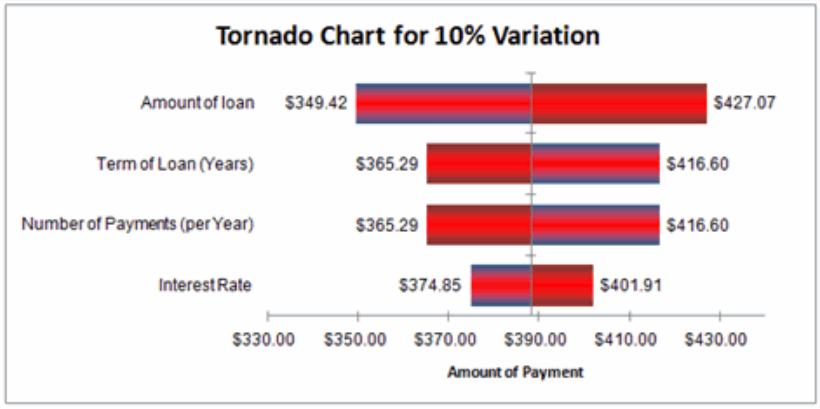
When you click Next, a dialog will pop up as that shown below. Here you can modify the default percent change value for all inputs. In addition, you can save the tornado analysis and rerun it with Run What-If Analysis .
You can edit a saved model with Manage Tornado Analysis .



You can see the result in the following image.

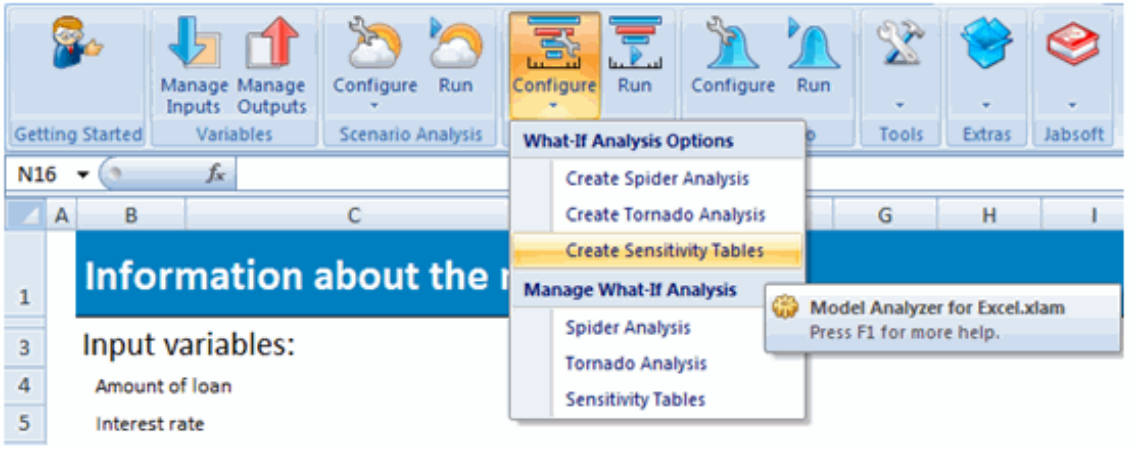
Sensibility's analysis for variations of 10% to input values

Input Variables	Input Values Low	Base	High	Output Values "Amount of Payment" Low	Base	High	Low Variation	High Variation	Absolute Variance	Percent Variance
Amount of loan	$28,800	$32,000	$35,200	$349.42	$388.25	$427.07	-10.0%	10.0%	$77.65	50.14%
Term of Loan (Years)	9	10	11	$416.60	$388.25	$365.29	7.3%	-5.9%	$51.30	21.89%
Number of Payments (per Year)	10.8	12	13.2	$416.60	$388.25	$365.29	7.3%	-5.9%	$51.30	21.89%
Interest Rate	7.20%	8.00%	8.80%	$374.85	$388.25	$401.91	-3.4%	3.5%	$27.05	6.09%



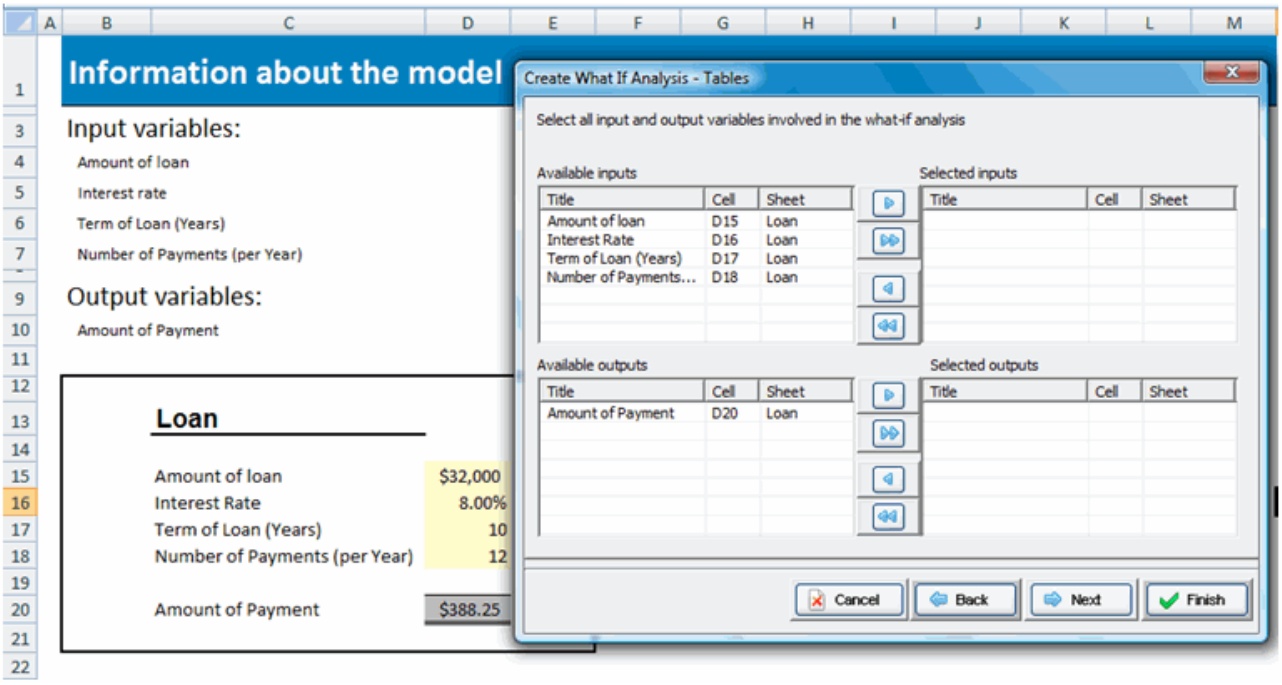
Model analyzer For Excel

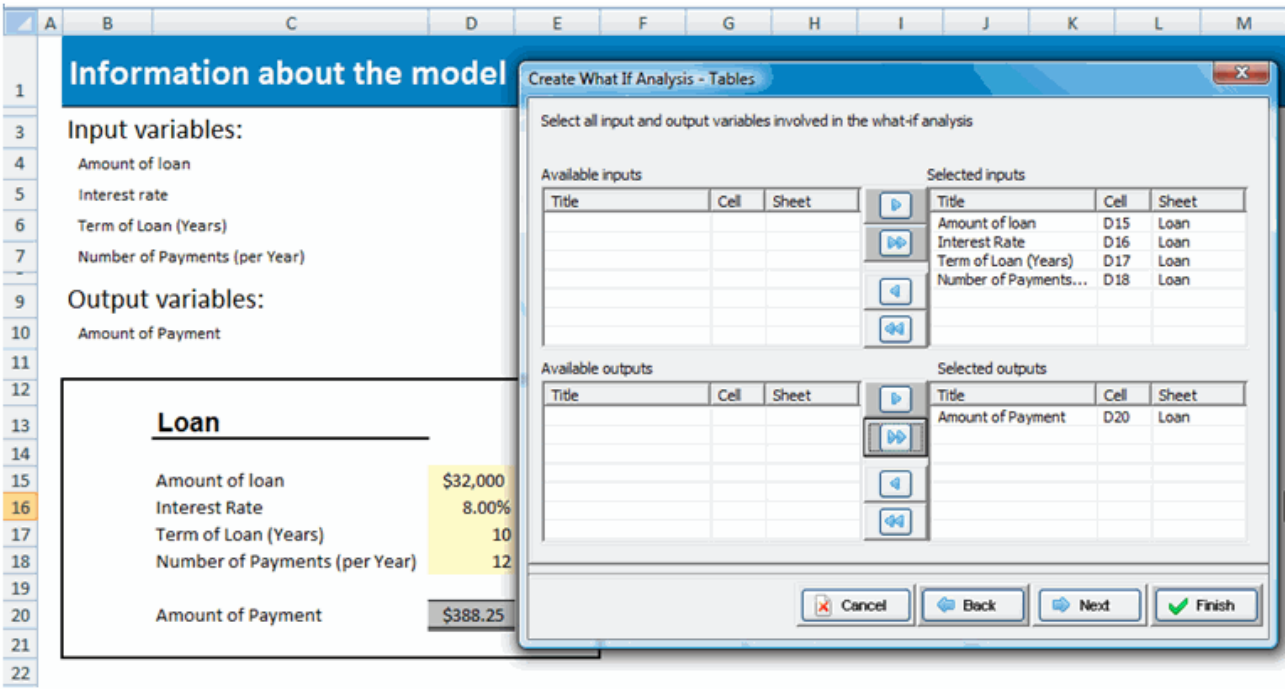
Create Sensitivity Tables



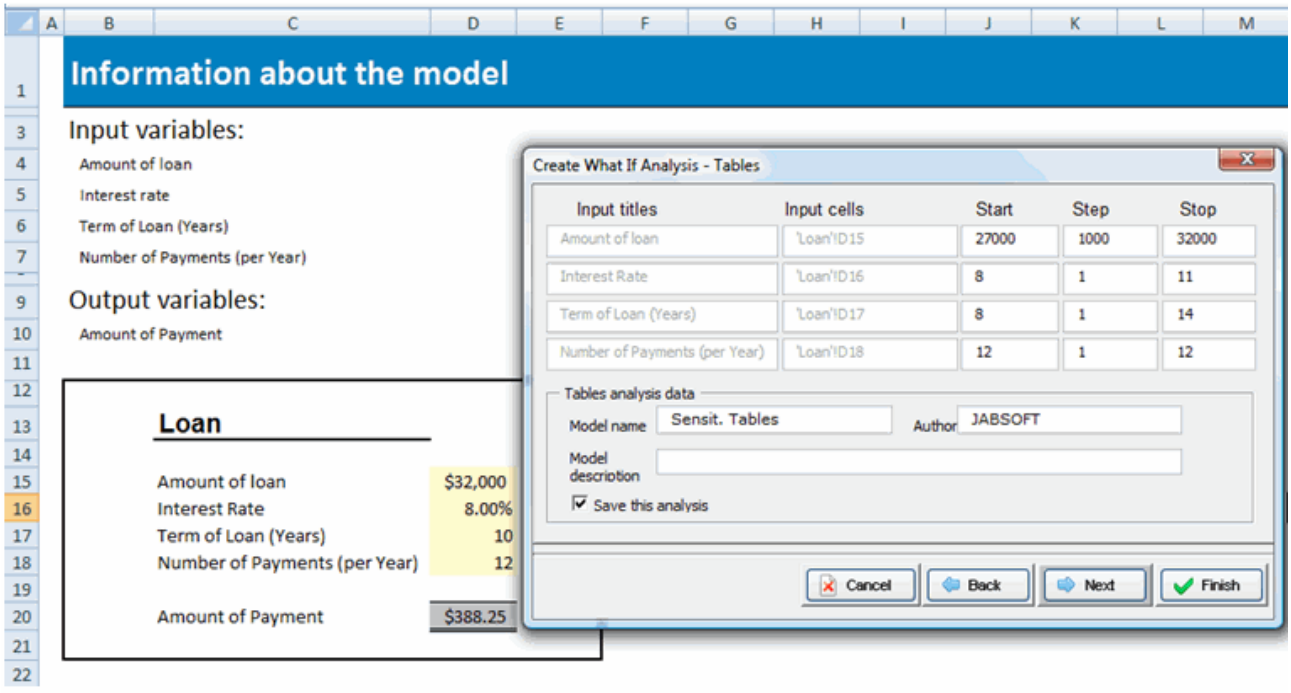
With this tool, you can change inputs at a constant change rate; change rate may different for each input. Then you combine all these changes in all inputs and show the result in the output. This is most convenient when you seek a combination of input values causing a desired impact on the output variable.

First, you have to choose the inputs and outputs as in the following images, as many as 10 inputs and 10 outputs.





Now click Next. A dialog will pop up where you can enter the change rate values for each input variable.
Alternatively, you can save this data analysis to run it directly later with Run What-If Analysis .
You can edit a saved model with Manage Sensitivity Tables .



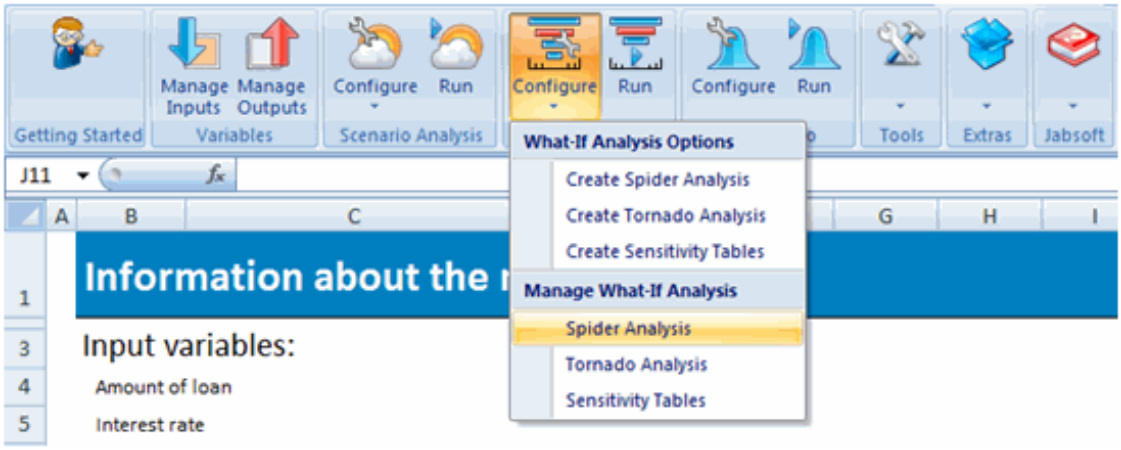
You can see the result in the following image.
As you can see, changes in the outputs are shown after input changes are made;
with this information, you can find the set of values most adequate for your decision making.

Sensibility's analysis

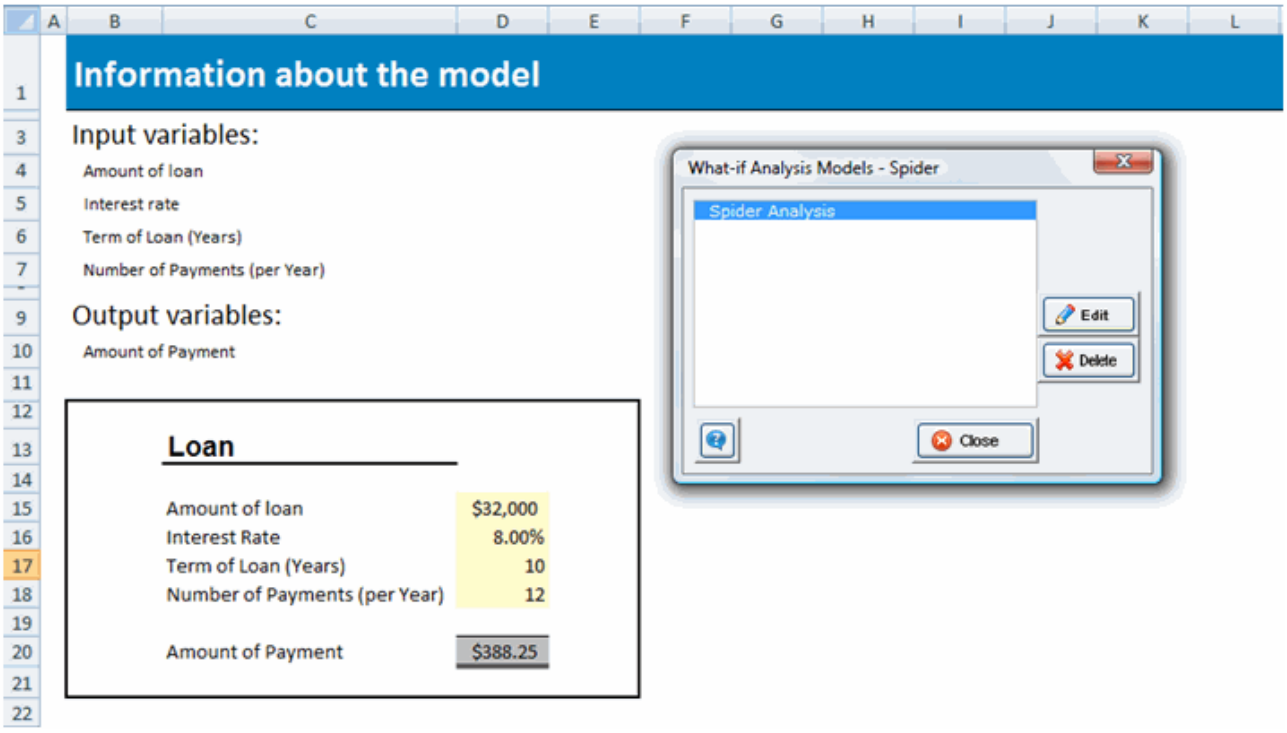
Amount of loan	Interest Rate	Term of Loan (Years)	Number of Payments (per Year)	Amount of Payment
$27,000	8.00%	8	12	$381.69
$27,000	8.00%	9	12	$351.51
$27,000	8.00%	10	12	$327.58
$27,000	8.00%	11	12	$308.22
$27,000	8.00%	12	12	$292.26
$27,000	8.00%	13	12	$278.93
$27,000	8.00%	14	12	$267.66
$27,000	9.00%	8	12	$395.56
$27,000	9.00%	9	12	$365.66
$27,000	9.00%	10	12	$342.02
$27,000	9.00%	11	12	$322.94
$27,000	9.00%	12	12	$307.27
$27,000	9.00%	13	12	$294.21
$27,000	9.00%	14	12	$283.21
$27,000	10.00%	8	12	$409.70
$27,000	10.00%	9	12	$380.12
$27,000	10.00%	10	12	$356.81
$27,000	10.00%	11	12	$338.04
$27,000	10.00%	12	12	$322.67
$27,000	10.00%	13	12	$309.92
$27,000	10.00%	14	12	$299.21
$27,000	11.00%	8	12	$424.13
$27,000	11.00%	9	12	$394.90
$27,000	11.00%	10	12	$371.93
$27,000	11.00%	11	12	$353.49
$27,000	11.00%	12	12	$338.46
$27,000	11.00%	13	12	$326.03
$27,000	11.00%	14	12	$315.64
$28,000	8.00%	8	12	$395.83
$28,000	8.00%	9	12	$364.52
$28,000	8.00%	10	12	$339.72

Model analyzer For Excel

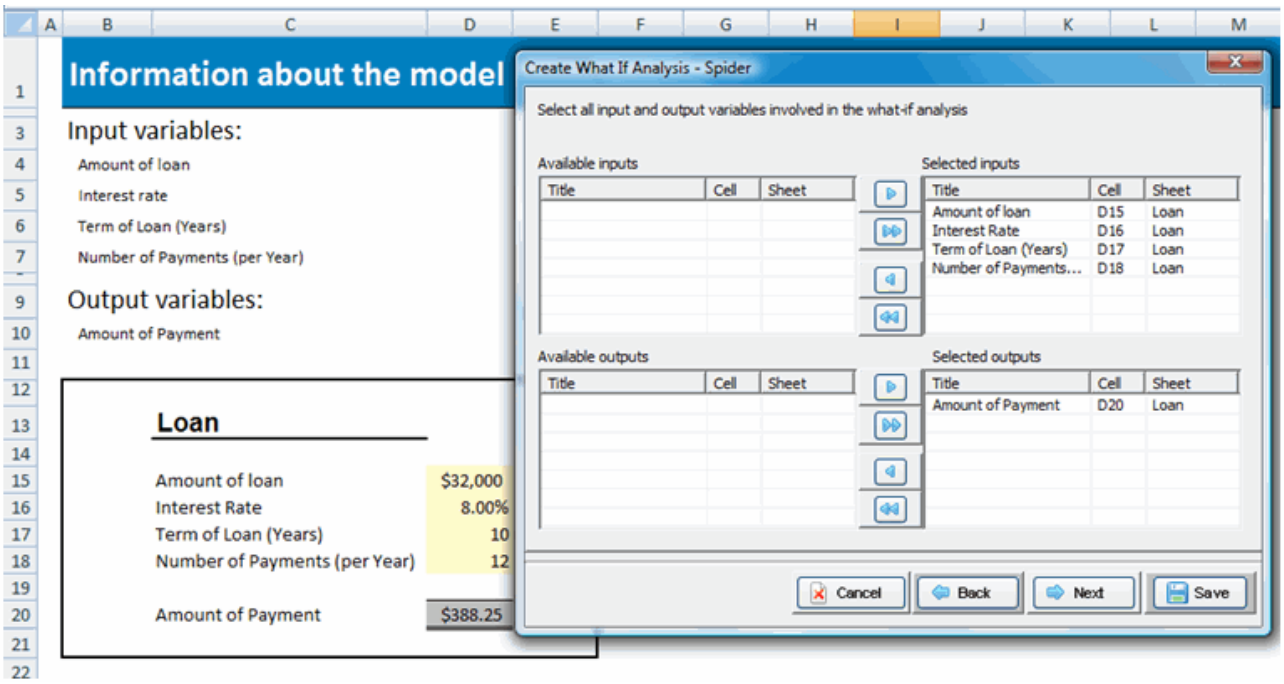
Manage Spider Analysis



You can edit any spider data analysis you have saved.
The following dialog will pop up:

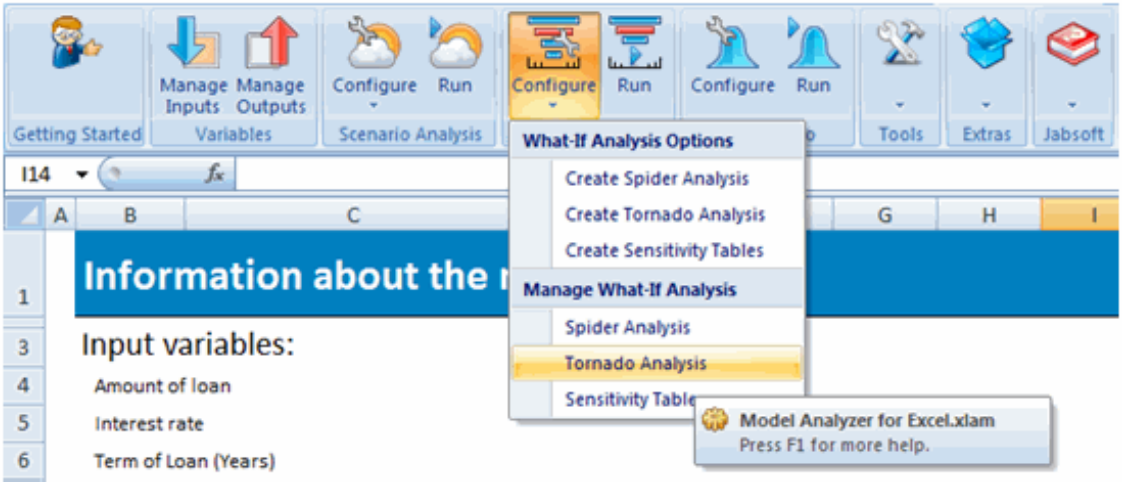


Select an item of the list and the dialogs will appear as those when you created the spider analysis, just follow the wizard.

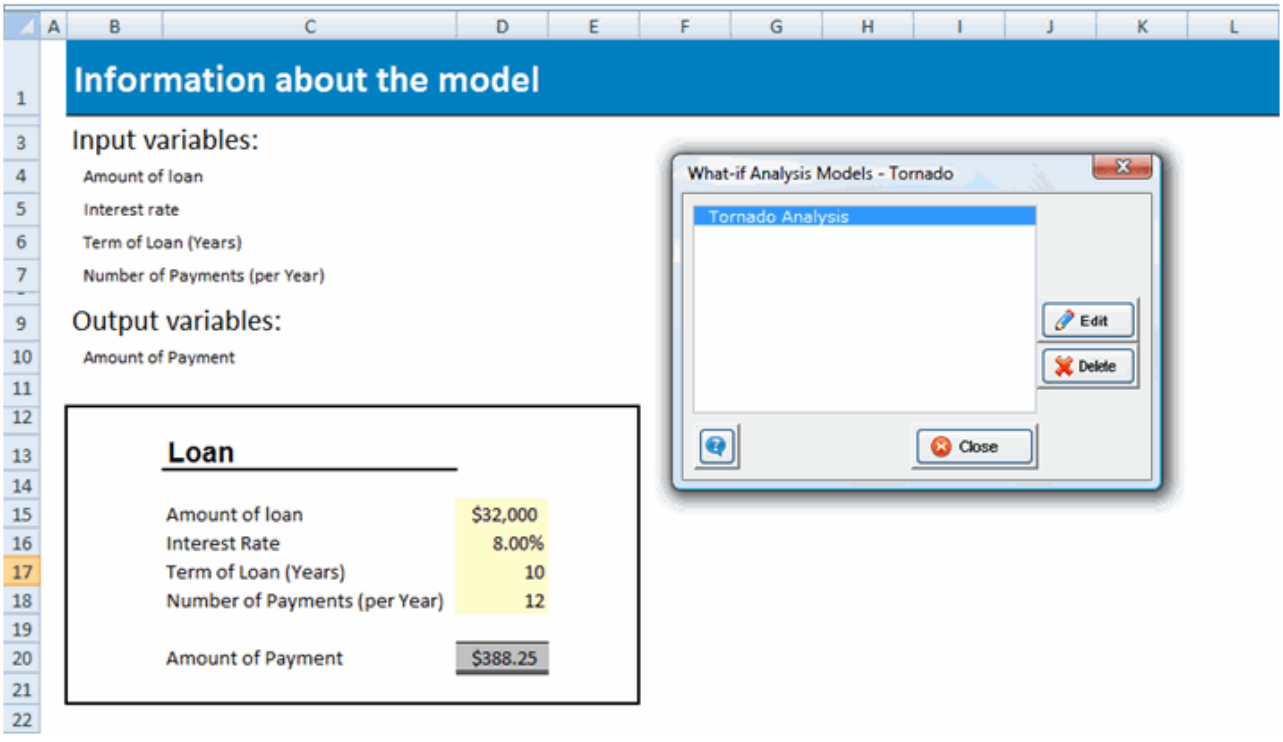

Information about the model
Input variables:
Amount of loan
Interest rate
Term of Loan (Years)
Number of Payments (per Year)
Output variables:
Amount of Payment
Loan
Amount of loan $32,000
Interest Rate 8.00%
Term of Loan (Years) 10
Number of Payments (per Year) 12
Amount of Payment $388.25
Create What If Analysis - Spider
Select all input and output variables involved in the what-if analysis
Available inputs
Title Cell Sheet
Selected inputs
Title Cell Sheet
Amount of loan D15 Loan
Interest Rate D16 Loan
Term of Loan (Years) D17 Loan
Number of Payments... D18 Loan
Available outputs
Title Cell Sheet
Selected outputs
Title Cell Sheet
Amount of Payment D20 Loan
Cancel
Back
Next
Save

Model analyzer For Excel

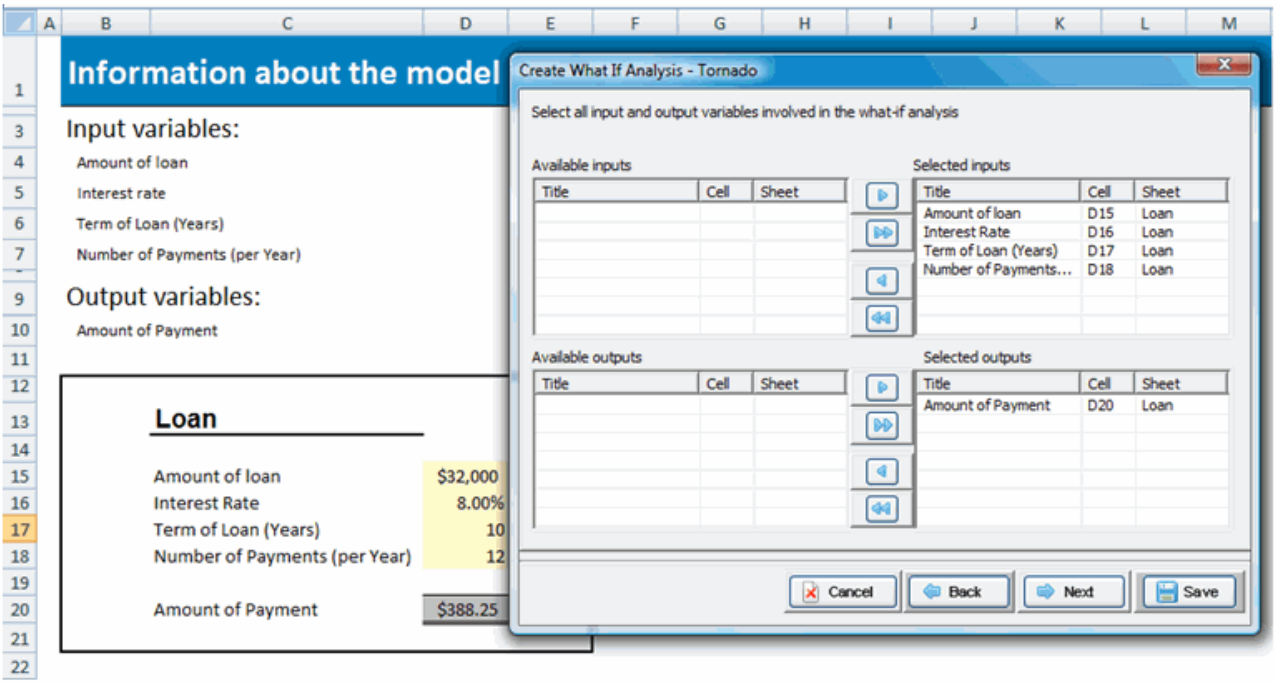
Manage Tornado Analysis



You can edit any tornado data analysis you have saved.
The following dialog will pop up.

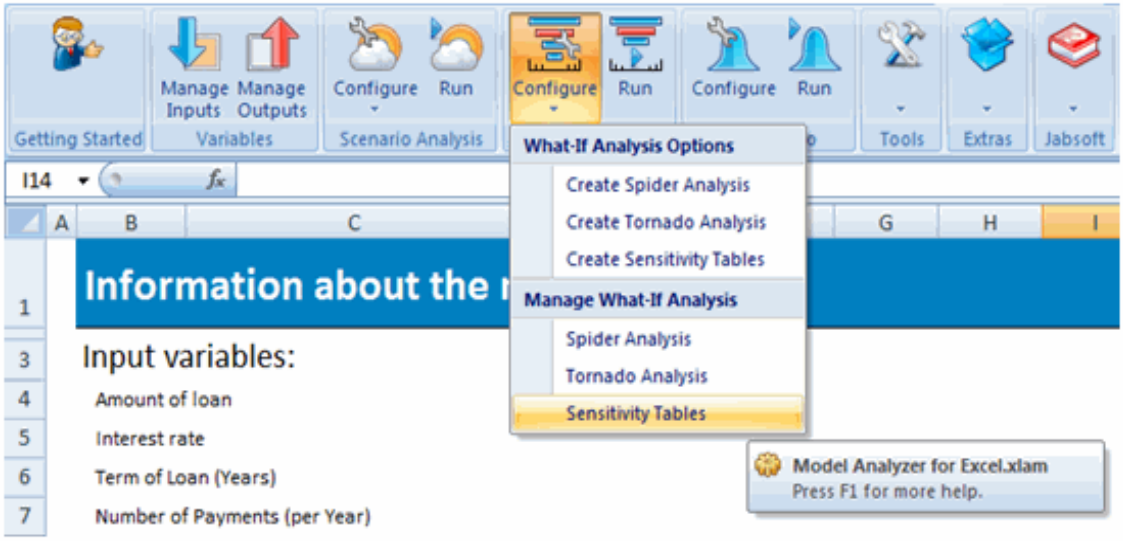


Select an item from the list and the same dialogs will appear as those when you created the tornado analysis, just follow the wizard.

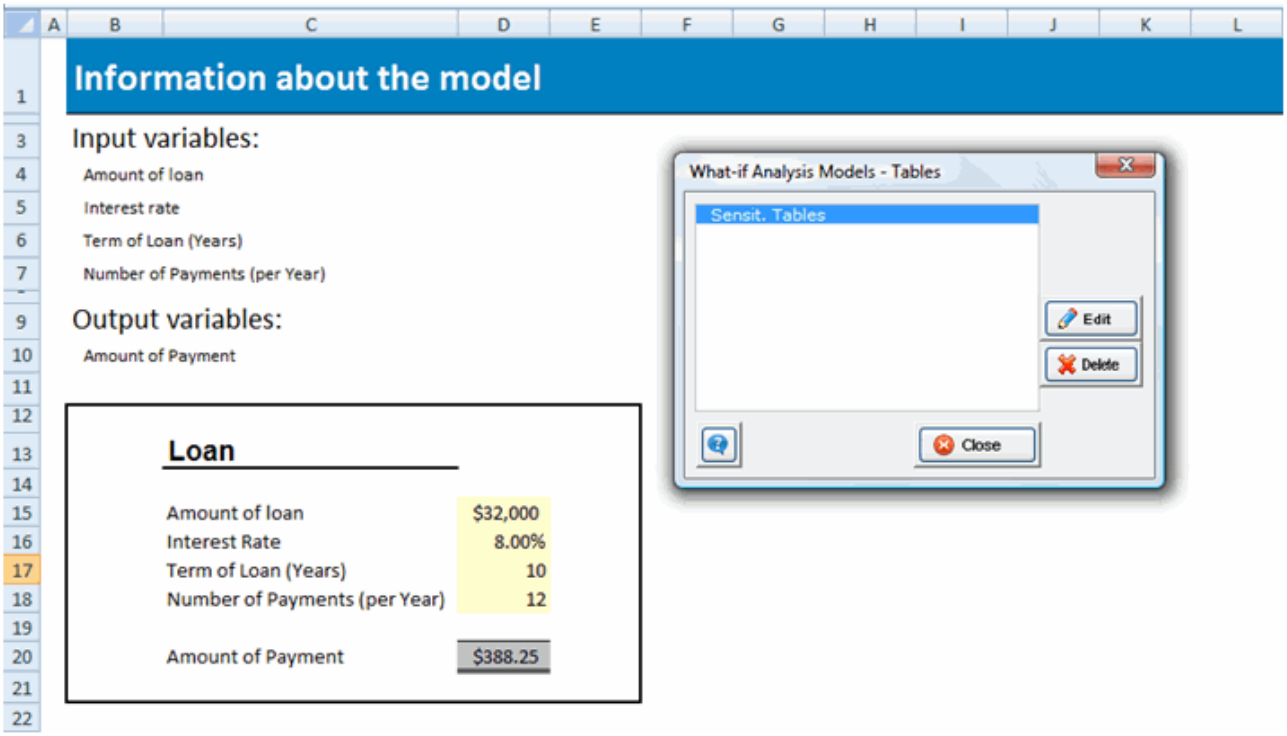

Information about the model
Input variables:
Amount of loan
Interest rate
Term of Loan (Years)
Number of Payments (per Year)
Output variables:
Amount of Payment
Loan
Amount of loan $32,000
Interest Rate 8.00%
Term of Loan (Years) 10
Number of Payments (per Year) 12
Amount of Payment $388.25
Create What If Analysis - Tornado
Select all input and output variables involved in the what-if analysis
Available inputs
Title Cell Sheet
Selected inputs
Title Cell Sheet
Amount of loan D15 Loan
Interest Rate D16 Loan
Term of Loan (Years) D17 Loan
Number of Payments... D18 Loan
Available outputs
Title Cell Sheet
Selected outputs
Title Cell Sheet
Amount of Payment D20 Loan
Cancel
Back
Next
Save

Model analyzer For Excel

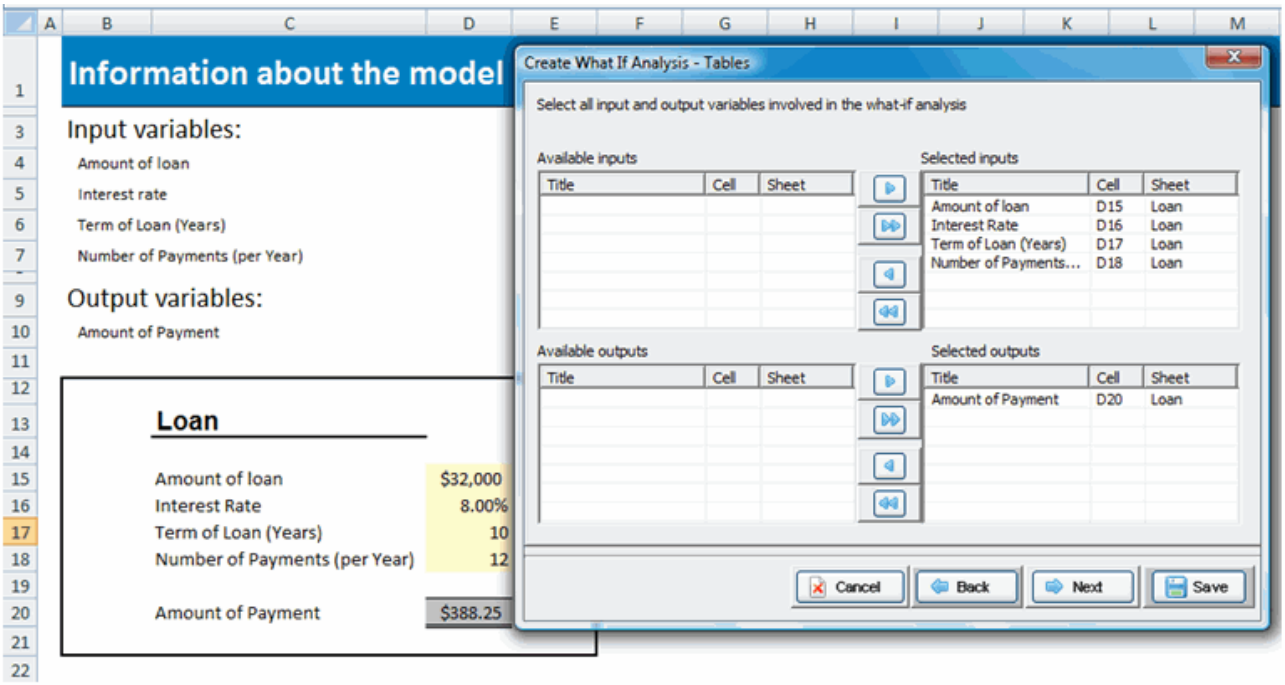
Manage Sensitivity Tables



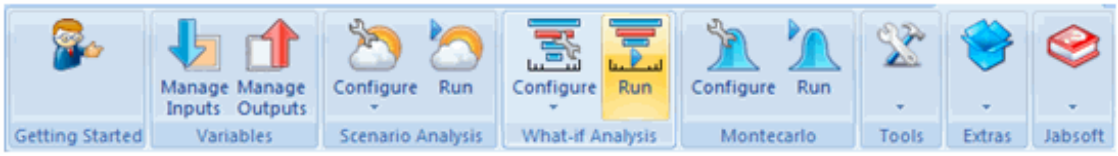
You can edit any sensitivity tables data analysis you have saves.
The following dialog will pop up:



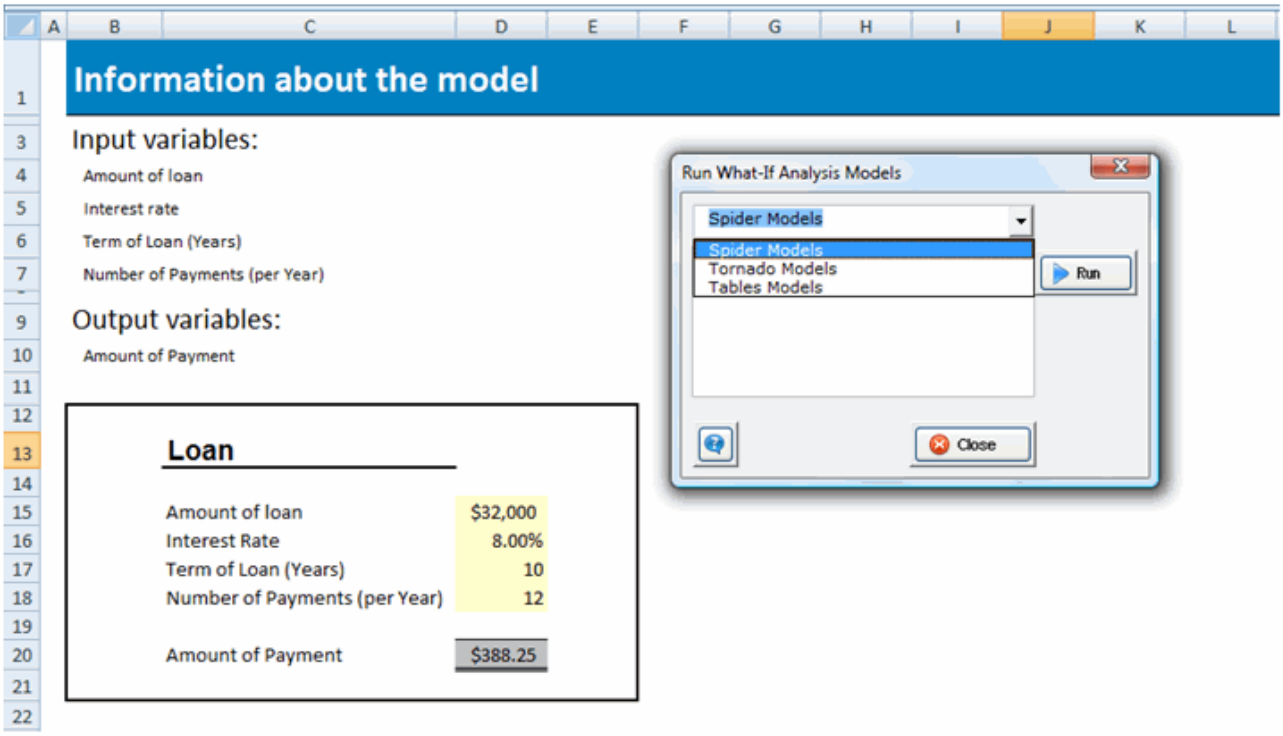
Select an item from the list and the same dialogs will appear as those when you created the sensitivity tables analysis, just follow the wizard.


Information about the model
Input variables:
Amount of loan
Interest rate
Term of Loan (Years)
Number of Payments (per Year)
Output variables:
Amount of Payment
Loan
Amount of loan $32,000
Interest Rate 8.00%
Term of Loan (Years) 10
Number of Payments (per Year) 12
Amount of Payment $388.25
Create What If Analysis - Tables
Select all input and output variables involved in the what-if analysis
Available inputs
Title Cell Sheet
Selected inputs
Title Cell Sheet
Amount of loan D15 Loan
Interest Rate D16 Loan
Term of Loan (Years) D17 Loan
Number of Payments... D18 Loan
Available outputs
Title Cell Sheet
Selected outputs
Title Cell Sheet
Amount of Payment D20 Loan
Cancel
Back
Next
Save

Run What-if Analysis



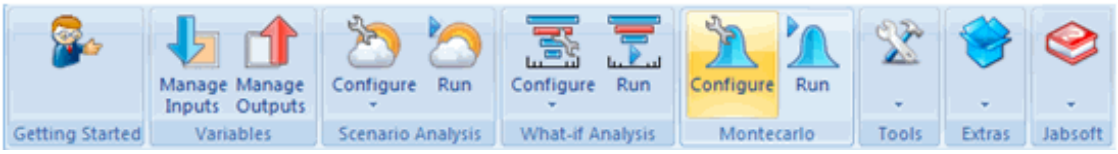
From this dialog, you can run directly any What-If data analysis you have saved; just select the type of data analysis and all items of that type will be listed for you to select and run.



Important: the results of this section will replace the results sheet you had created initially.
Be careful with this, because you will lose any values contained in the sheet created originally.

Model analyzer For Excel

Montecarlo



A little bit of theory

Simulation with Model Analyzer for Excel uses the Monte Carlo technique. With this technique, random values are generated for the input variables so we can see their impact on output variables, thus generating thousands of parallel scenarios.

To do this, you first have to relate the input variable with wich you want to run the analysis with certain types of probability distributions. A probability distribution shows all possible results of a random experiment and the probability of each result, precisely, the random values generated by the Monte Carlo technique.

This version of Model Analyzer for Excel has five types of common probability distributions available:

- Normal
- Triangular
- Uniforme
- Poisson
- Logística
- Discreta

For example, if you have the variable people's height o weight, you will soon realize that most values tend towards a central value, the mean, and the farther away the values, the smaller their probability; in this case, you could use the **Normal** distribution.

If, for example, you have the variables sales price, production costs, interest rates, and similar, each susceptible of taking three values -a minimum, a most likely and a maximum value- in this case you can use a **Triangular** distribution, as suggested by its name.

If, on the contrary, there is no central value as in the normal distribution, but rather all values within a range have the same probability of being chosen, then you can use the **Uniform** distribution. Consider for example that fuel prices may range between 100 and 120 dollars the barrel in the coming two years, then the possible values 100, 101, 102, ..., 120 have the same probability of occurrence; that is, none of them is more likely to occur.

To exemplify a variable that follows the Poisson distribution, consider the following case: You know, based on historical information of your company, that every customer's purchase has 1.2% chance of resulting in a complaint for any reason. Based on this data, you may analyze and determine the probability that 5 complaints will occur from 800 sales. You should think of applying Poisson here. The Poisson distribution is applicable when there is a large number of experiments or events with a very low probability of occurring. The following parameters apply:

n: "number of times the experiment is performed".
p: "probability of occurrence each time".

The restrictions to apply **Poisson** are:

p < 10%
n * p < 10

If your input variable meets these characteristics, then you can apply Poisson.

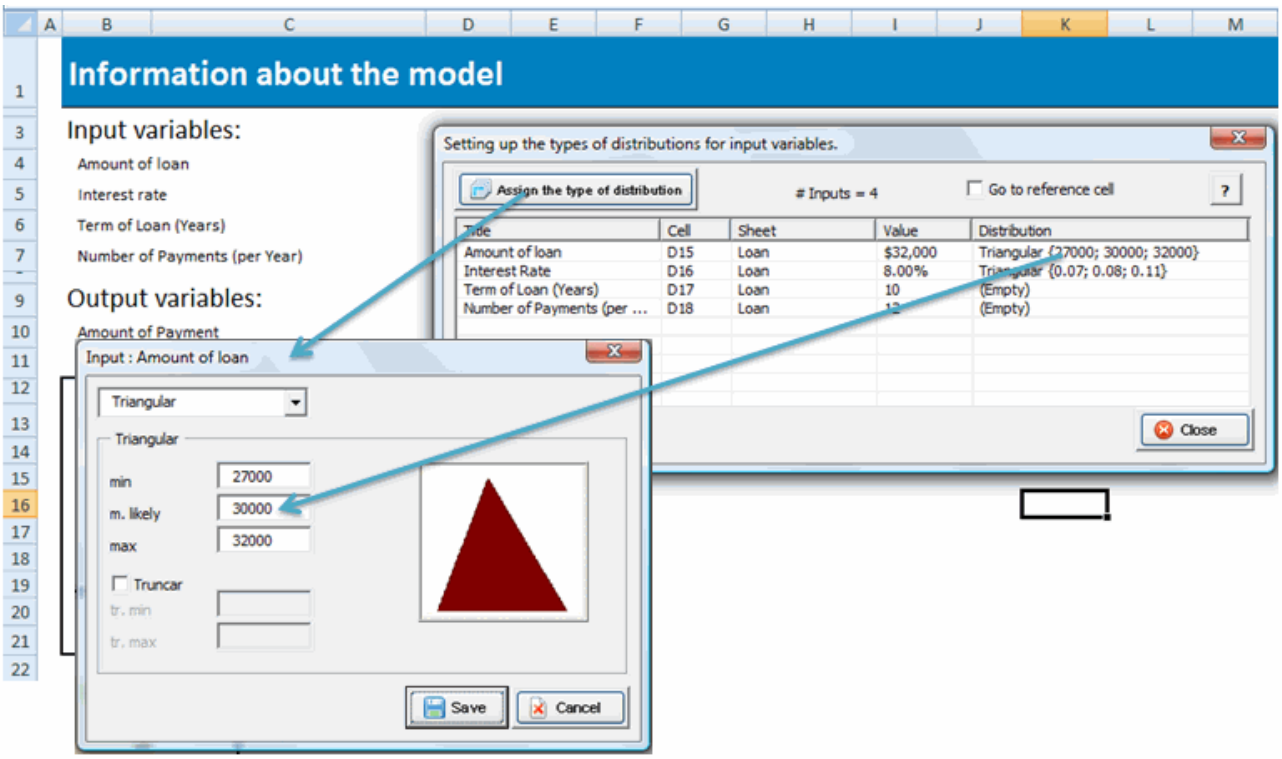
For variables with temporary growth, such as demographic variables, for example, the growth of bacteria populations- you can apply the **Logistic** distribution.

You should use the **Discrete** distribution when you have variables with a definite number of probable values, and the sum of their probabitlities add up to 100%.

With Model Analyzer for Excel, you will find simulations uncomplicated; the only thing you need to do is to identify the type of input variables and define their parameters, and now you're ready to perform simulations. We do not intend to give you an advance course on statistical distributions-there are plenty of books on this already that you can purchase.
If this subject is new to you, it would be convenient for you to read about the types of distributions handled in this version of Model Analyzer for Excel.

How to do a simulation

First you have to relate the input variables involved in the experiment to the type of distribución most suitable for such variables, and enter the required parameters. In the following dialog, select the input and click the **Assign the type of distribution** button to assign parameters.

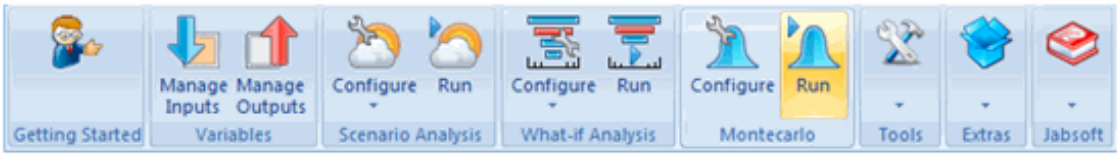


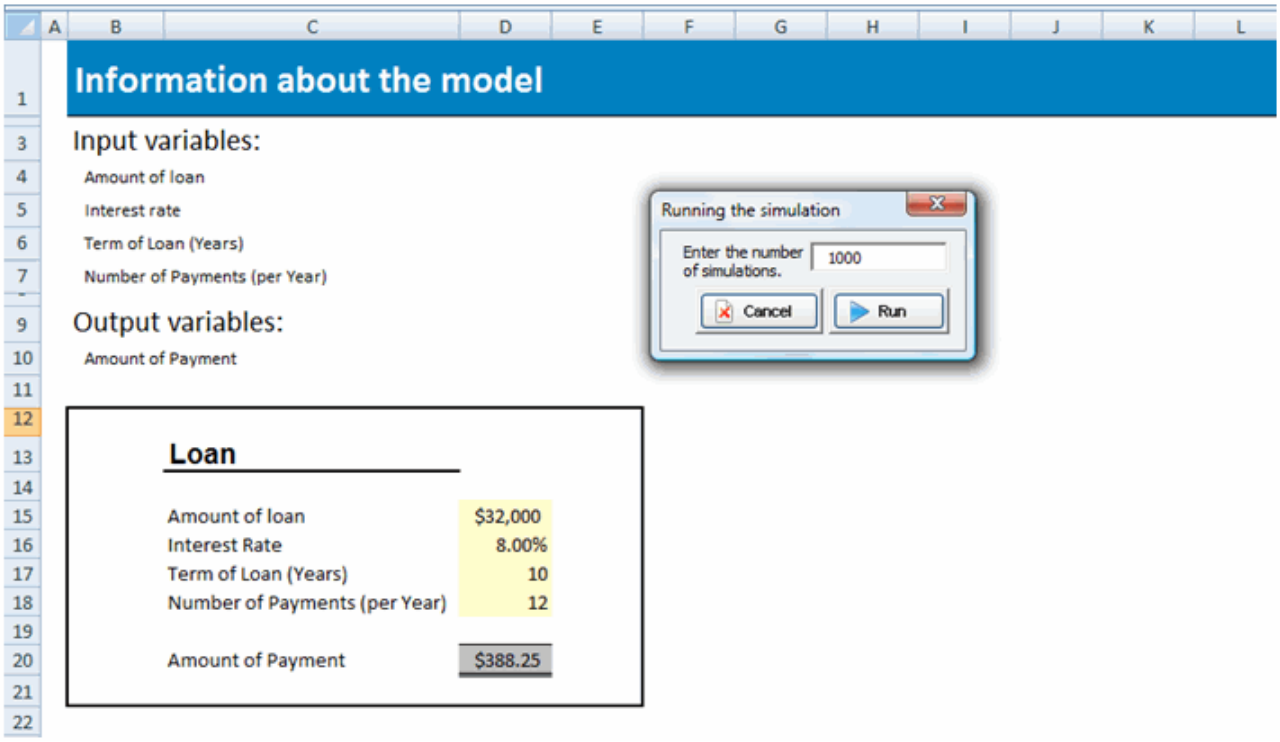
The required parameters for each type of distribution are:

Order of the distributions parameters.

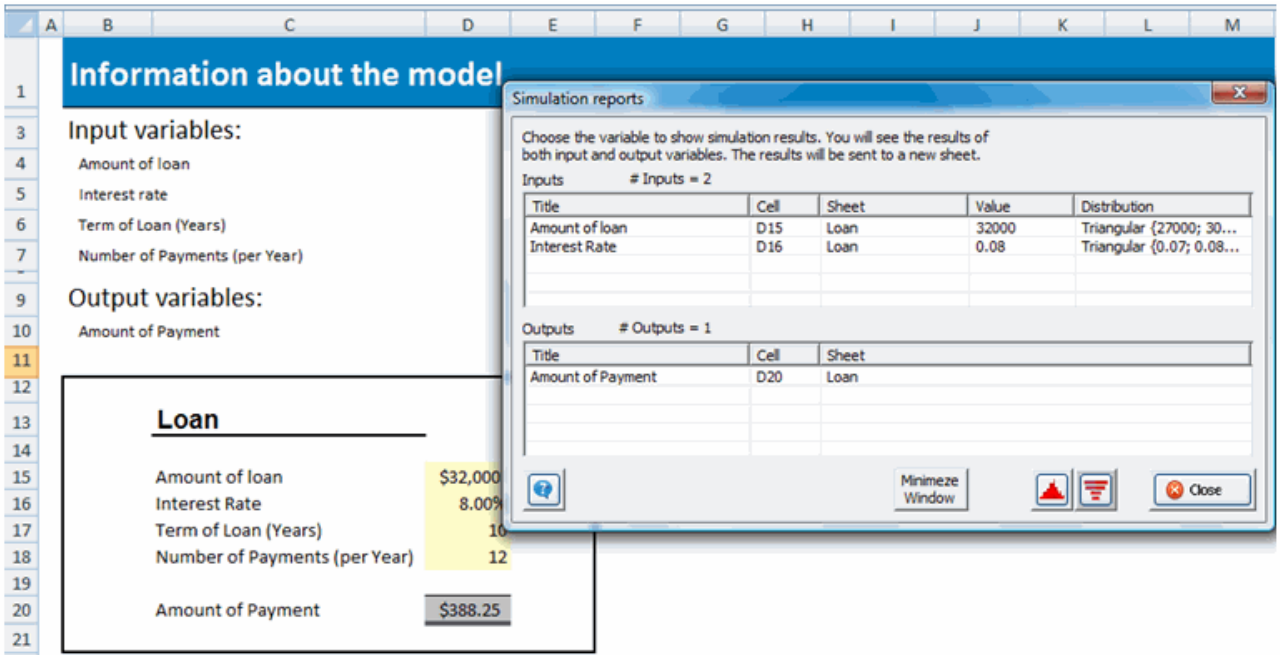
Normal {mean; std.dev.; [tr.min]; [tr.max]}
Triangular {min; m.likely; max; [tr.min]; [tr.max]}
Uniform {min; max}
Logistic {alpha; beta}
Poisson {lambda}
Discrete {{val1, val2, val3, val4, val5, val6};
{prob1,prob2,prob3,prob4,prob5,prob6}}

The second step is to run the simulation, which prompts you to specify the number of simulations.
With Model Analyzer for Excel you can complete as many as 1,000,000 simulations for each experiment.
In the following case, only 1000 will be performed.

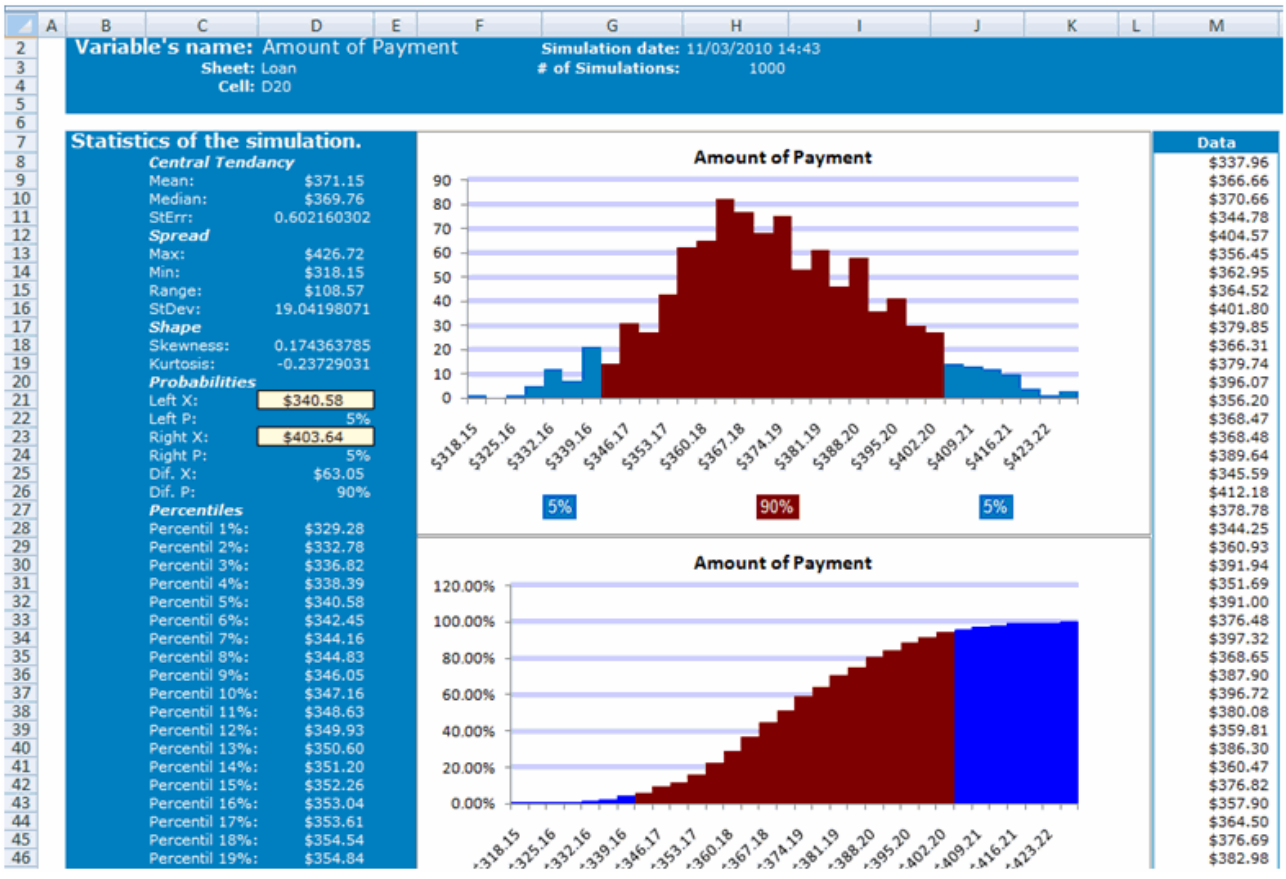




Once the simulation is completed, the results are shown in a window as the following:



Just select an output and click the  button to show the results for the distribution.



You can also select an output and press the  button to show a tornado chart, which shows the relative importance of each input for the output variable, through a correlation between all inputs and the ouput, as shwon below:

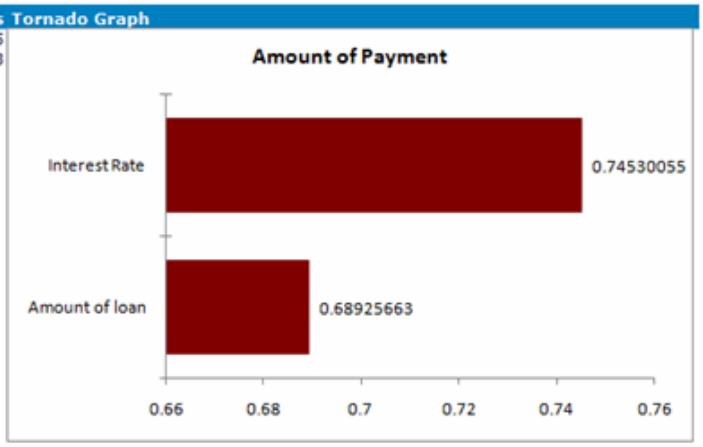
Variable's name: Amount of Payment **Simulation date:** 11/03/2010 14:45

Sheet: Loan

Cell: D20

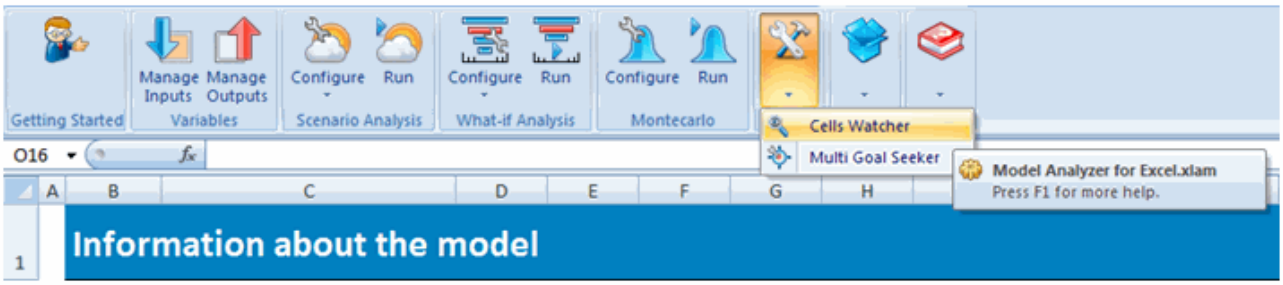
Inputs	Correlations
Interest R	0.74530055
Amount of	0.68925663

Tornado Graph

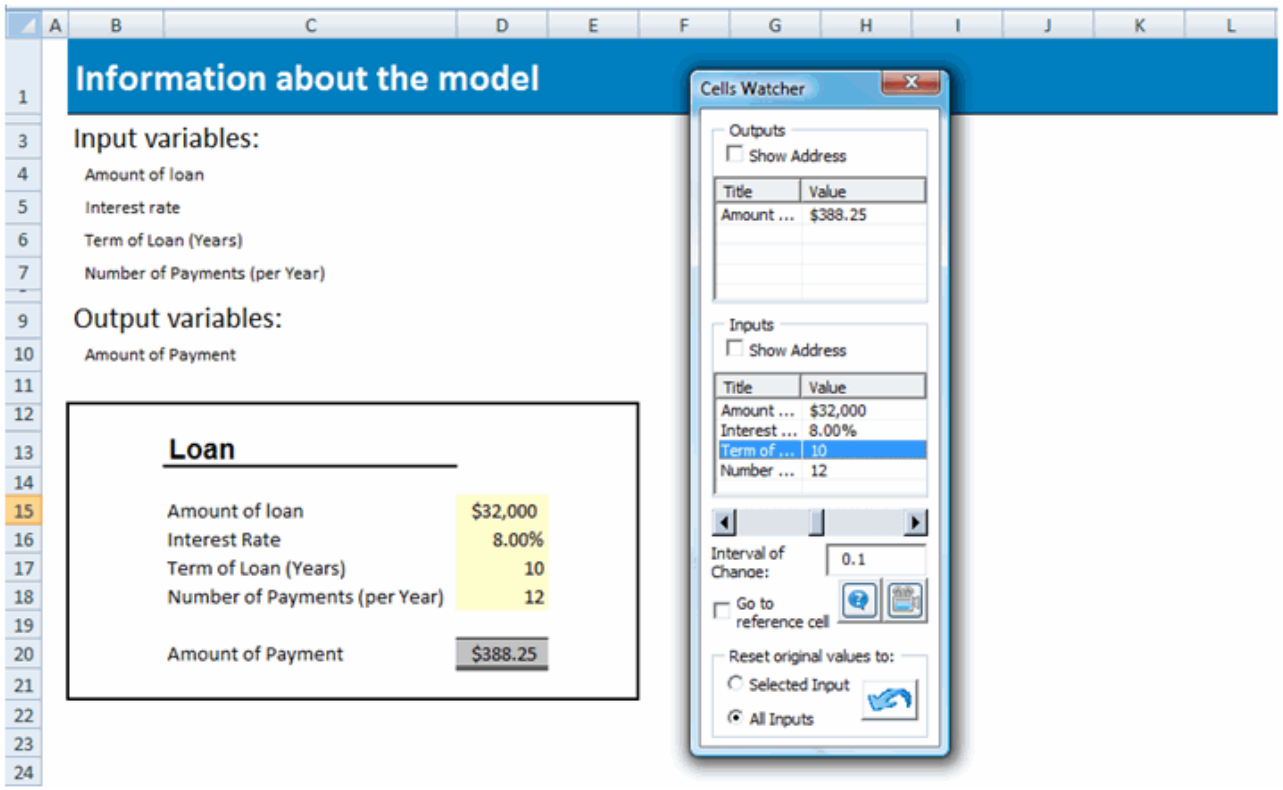


Model analyzer For Excel

Cells Watcher

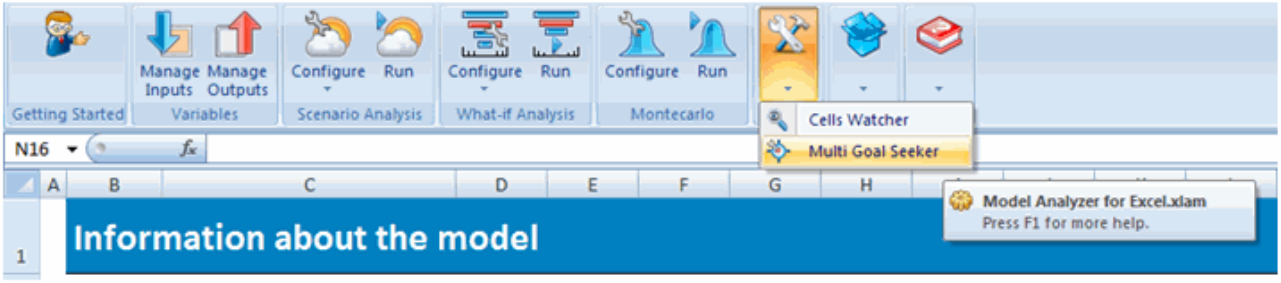


With this tool you can change inputs directly in your model in Excel and and see the changes in real time Then you can undo all changes and reset the original values; this will be possible as long as you do not close the cless watcher dialog.
This is a very useful tool when you want to change the inputs in large models, where a centralized analysis of inputs and outputs cannot be done.

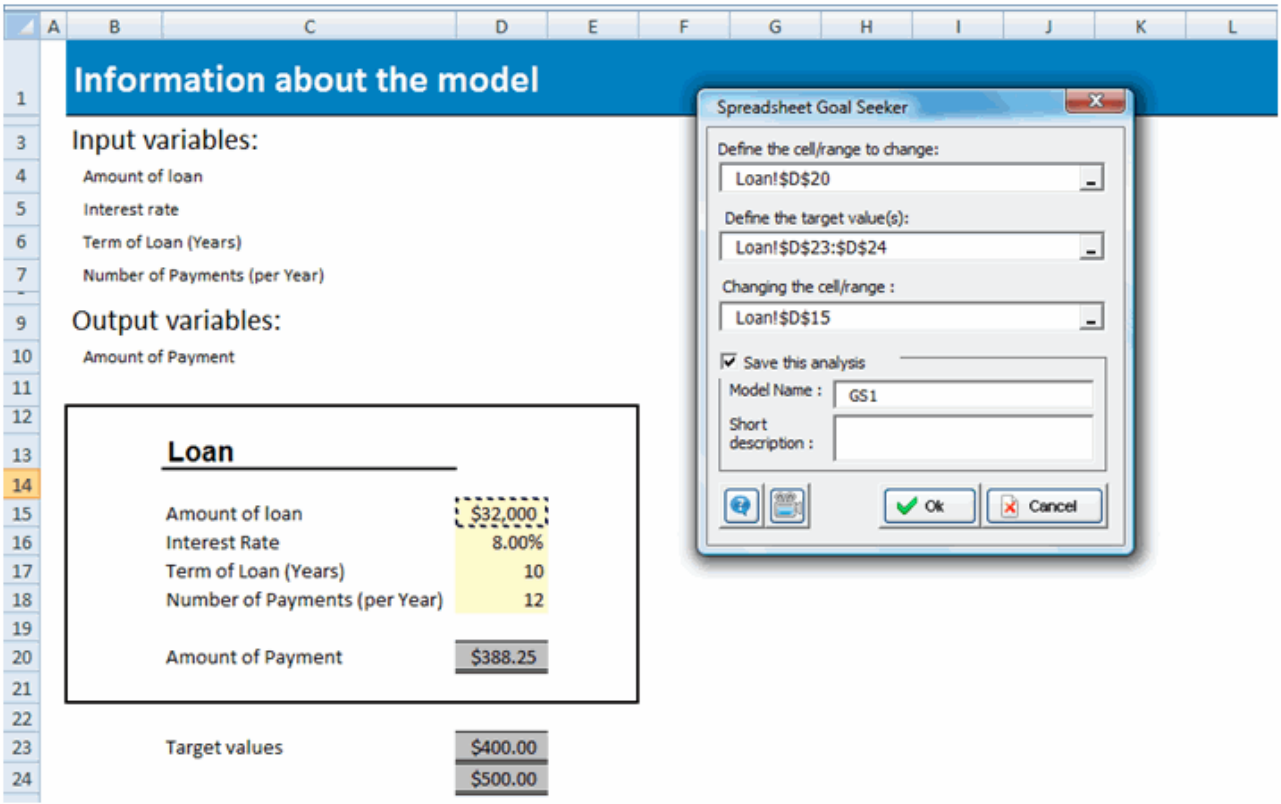


Model analyzer For Excel

Create Goal Seeker Analysis

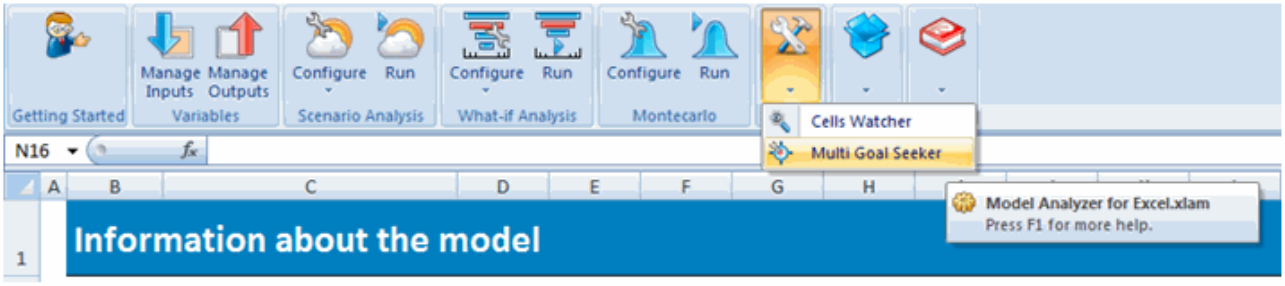


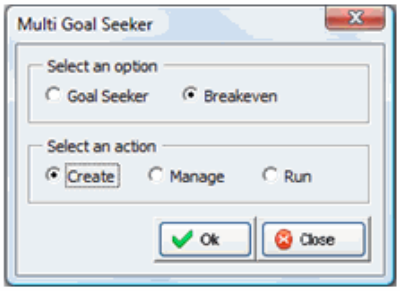
With this function you can find the input values required to get certain target output values.
As shown in the following screenshot, you need to have the target values in rows with the same number of columns as the inputs.



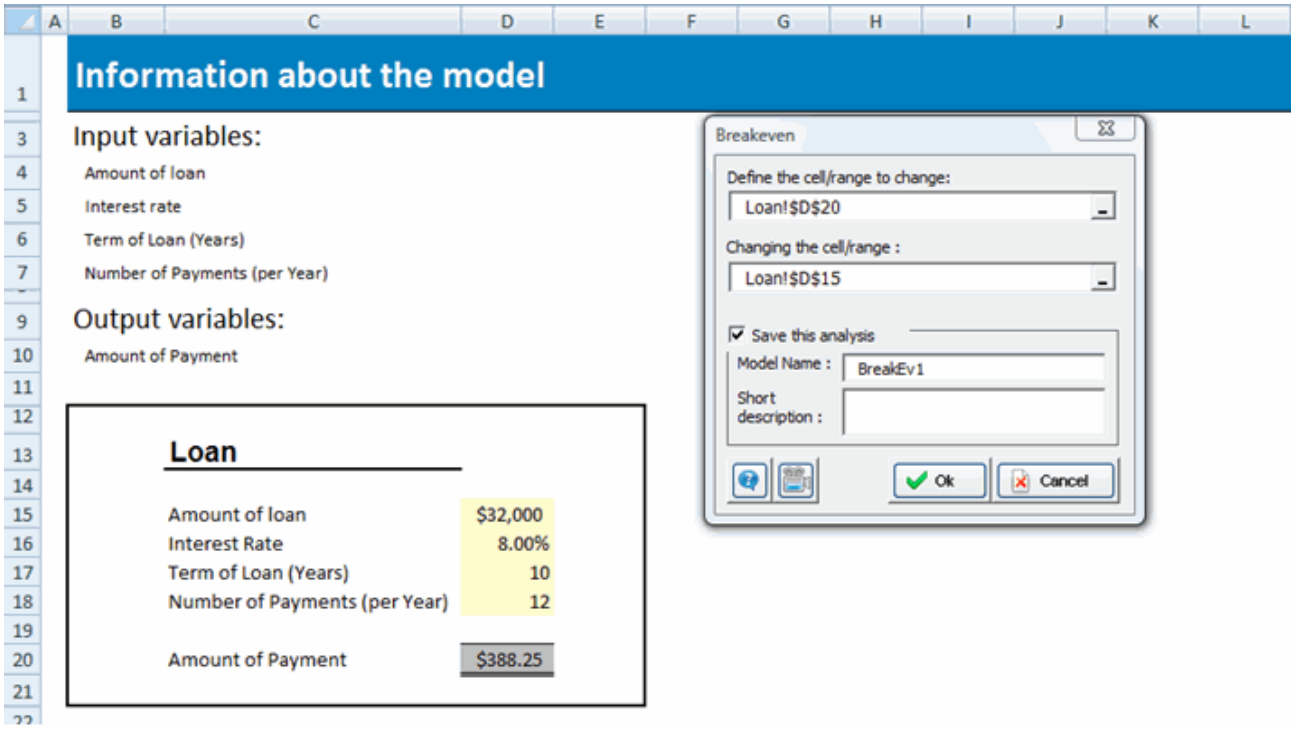
Alternatively, you can save this data analysis and rerun it from Run Multi Goal Seeker Analysis .

Create Breakeven Analysis

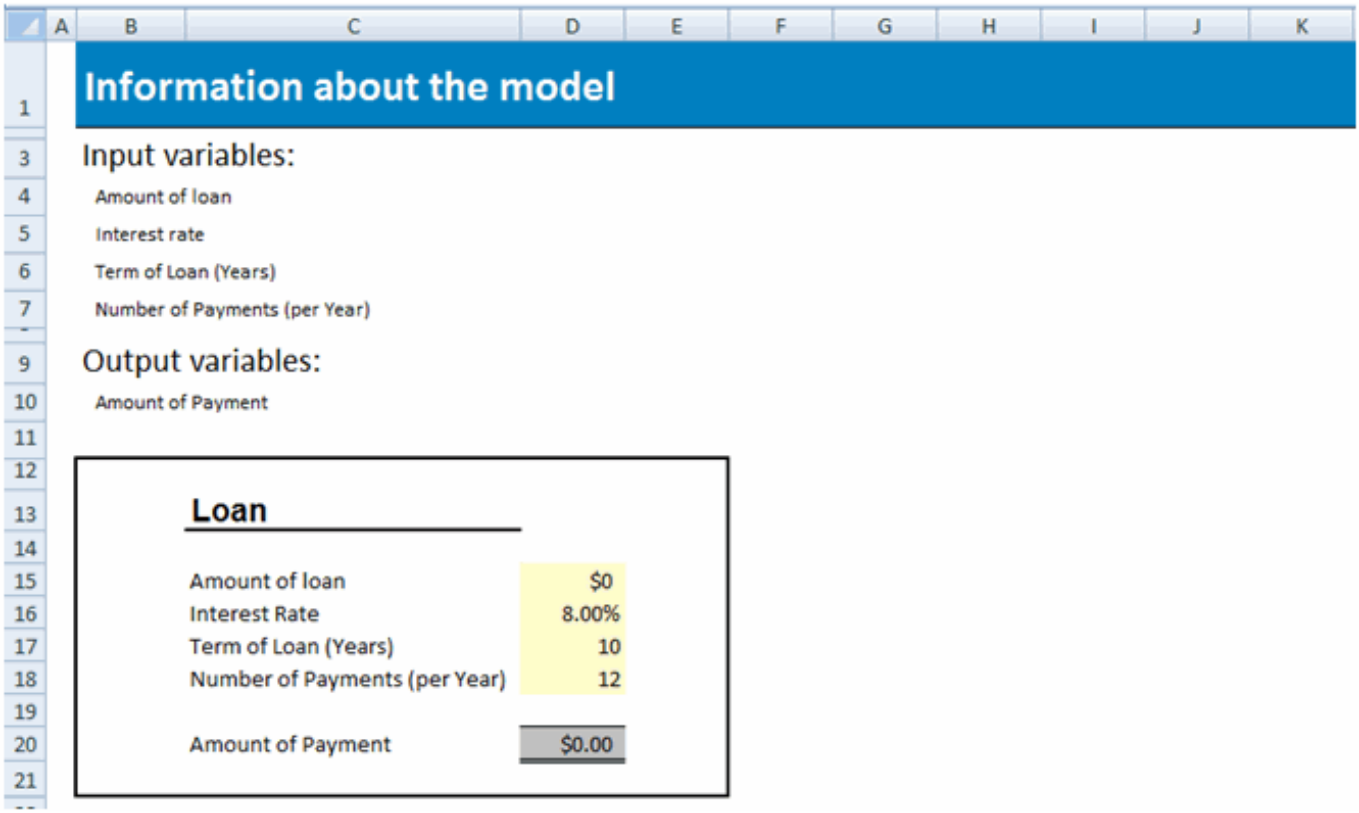




Use this function to find the breakeven point, where outputs reach "zero". Evidently, this depends on the input involved.



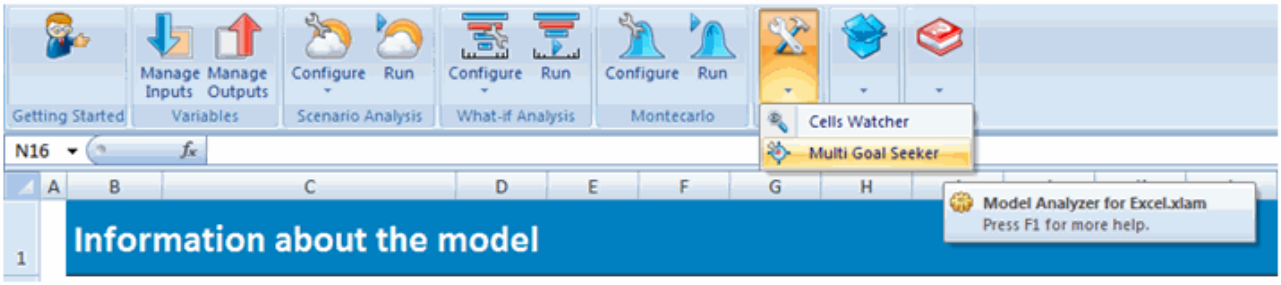
The following image shows the results obtained after applying the tool.
In this case, you can see what the Price per Unit should be for the Gross Profit to reach the breakeven point.



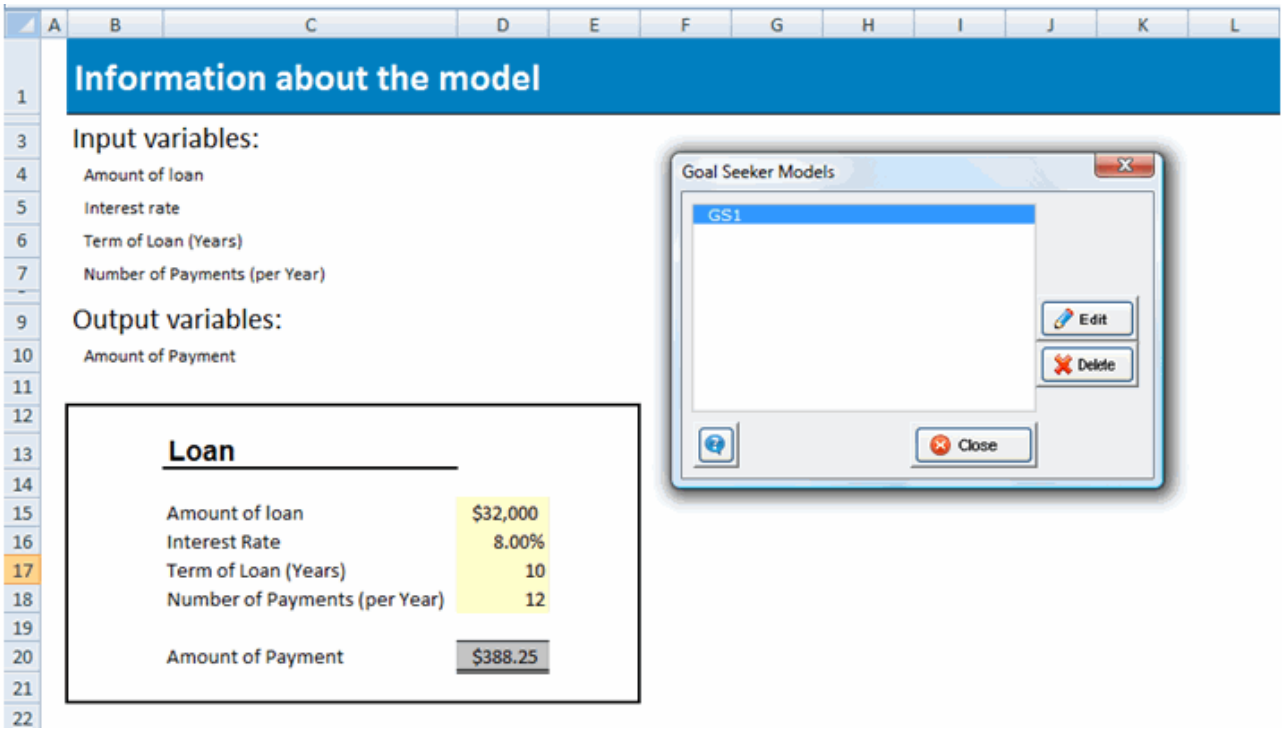
Alternatively, you can save this data analysis and rerun it from Run Multi Goal Seeker Analysis .

Model analyzer For Excel

Manage Goal Seeker Analysis

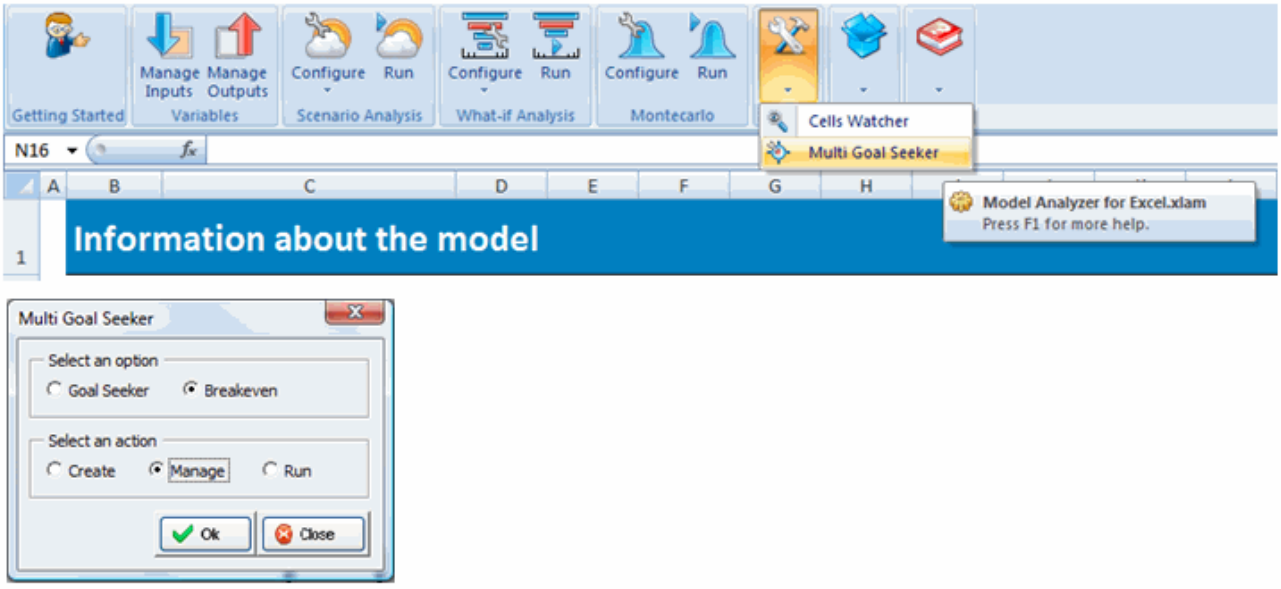


With this tool you can edit any saved data analysis created with Create Goal Seeker Analysis .
The following dialog will pop up; select the data analysis to edit from the list.

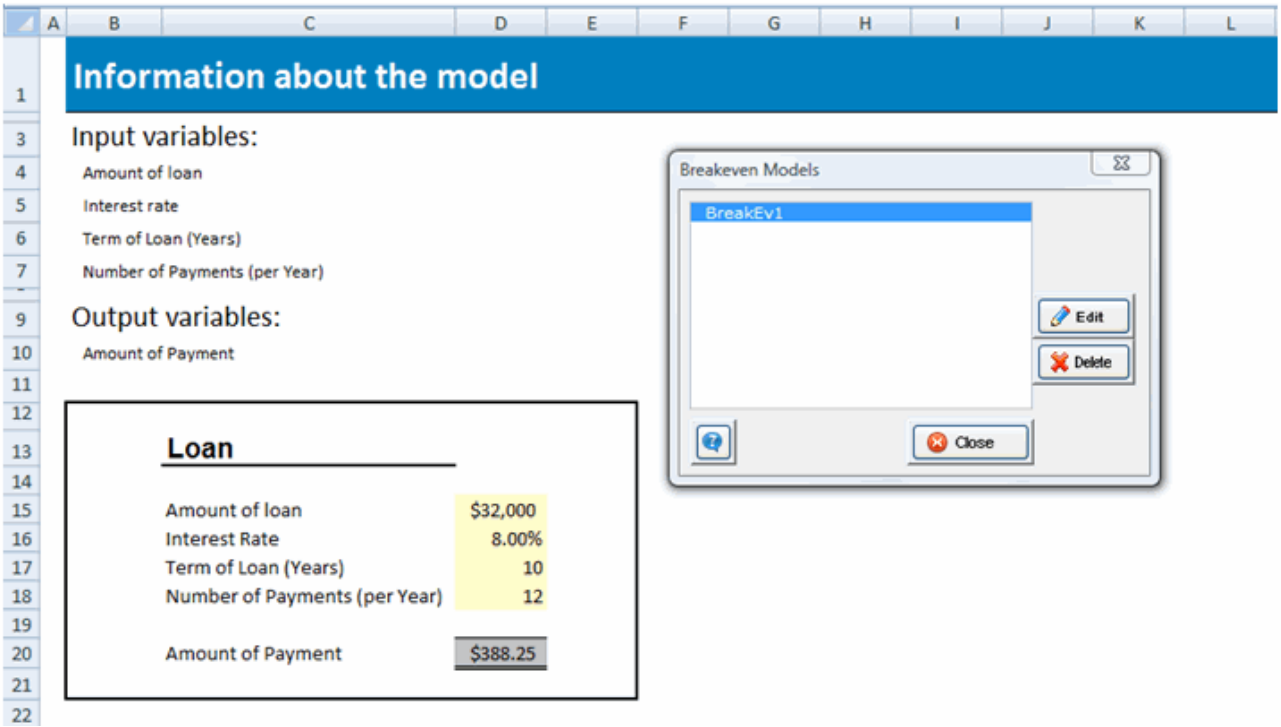


Model analyzer For Excel

Manage Breakeven Analysis

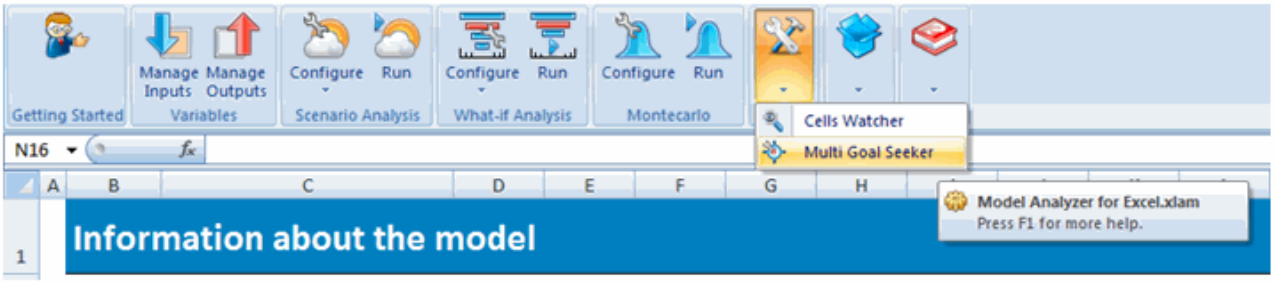


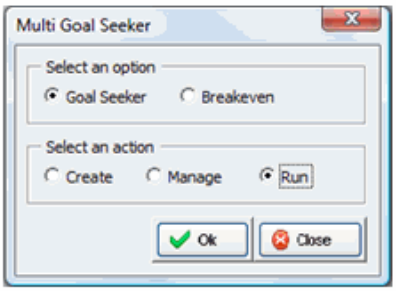
With this tool you can edit any saved data analysis created with Create Breakeven Analysis .
The following dialog will pop up; select the data analysis to edit from the list.



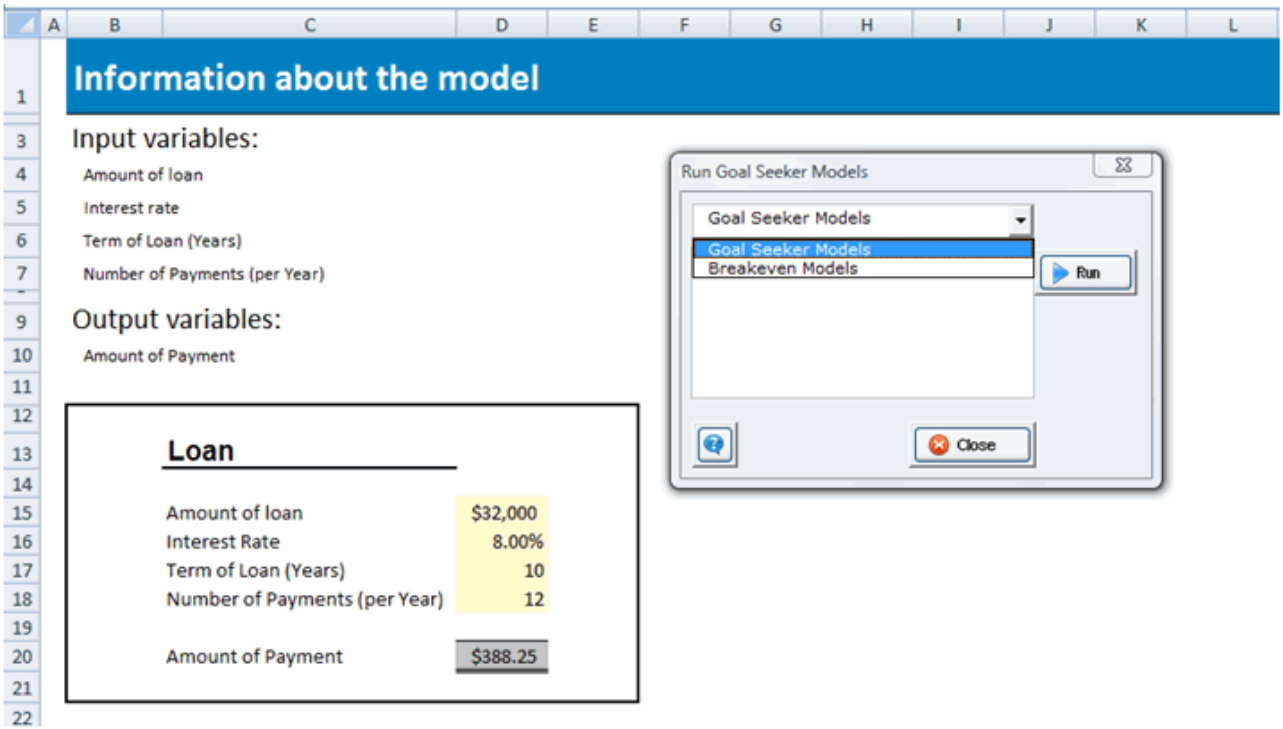
Model analyzer For Excel

Run Multi Goal Seeker Analysis





Any data analysis created and saved with Create Goal Seeker Analysis and Create Breakeven Analysis may be run directly from this dialog. Select the type of data analysis and all items of that type will be listed so you can run any of them.

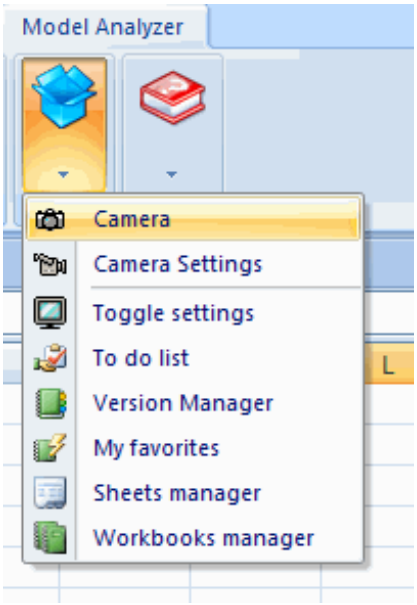


Model analyzer For Excel

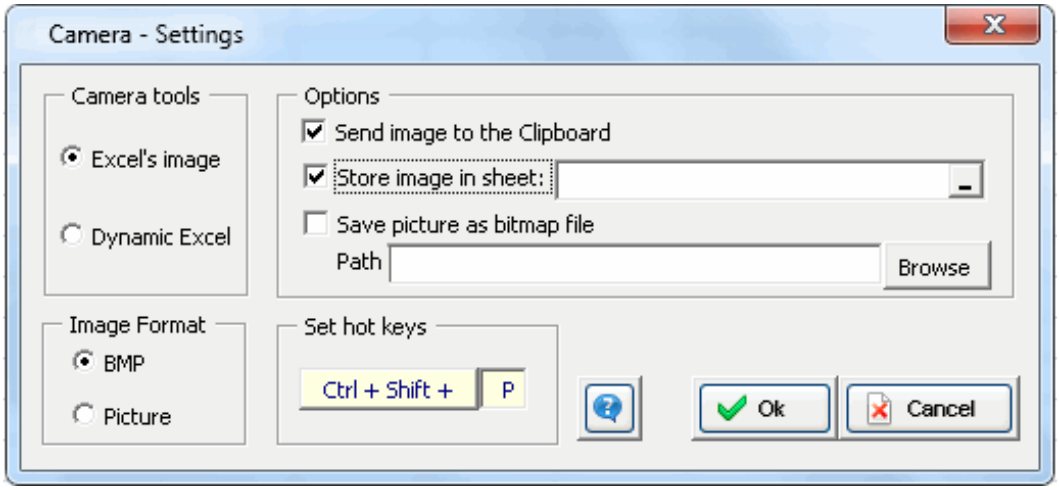
Camera -

Accessing in Excel 2007

From the **Model Analizer ribbon** select Extras/ Camera settings.



This settings dialog will appear:



There are two option buttons in the **Camera Tools** frame: **Excel's image** and **Dynamic**. Choose any.
Then, in the **Options** frame select:
Send image to the Clipboard to send an image to the Clipboard **Store image in sheet** to paste an image in the cell of your choice **Save picture in file** to save an image in a file, to select the folder the image will be saved in.
Click **Browse** to open a dialog showing folders and name your file.

Under **Image Format**, select the image format: **BMP** or **Picture**.

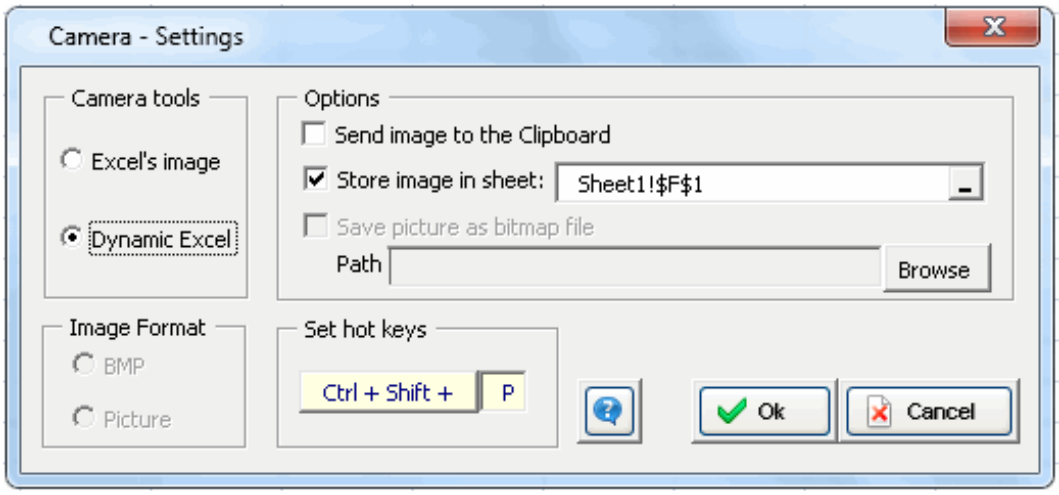
Then click **Apply** to save the settings. You may also set a keyboard shortcut with **Set hot keys**. Set the combination of keystrokes by entering a letter in the text box (**P** is the default) and then click **Close**.
Once the settings are completed and saved, you can use this tool by clicking the Camera icon and selecting a range.

Example
For example, if you have an Excel spreadsheet range with this data:

	A	B	C	D	E	F
1						
2						
3			Product A	Product B		
4		2000	200	300		
5		2001	150	200		
6		2002	100	150		
7		2003	50	75		
8		**Total**	**500**	**725**		
9						

	Product A	Product B	
2000	200	300	
2001	150	200	
2002	100	150	
2003	50	75	
Total	**500**	**725**	

Choose these settings: **Dynamic Excel**, **Store image in sheet** and **H88** as the target cell Save the settings and close the dialog.



Select a range as shown in the example and click the Camera icon
The range is copied as a dynamic image in the target cell selected, F2 in this example.
Any changes in the source range wil be reflected in the target image.

Model analyzer For Excel

Toggle

We often lose valuable time doing repetitive tasks -if, for example, we want to hide the headings in several sheets of the Workbook, we will have to do it one at a time.
This powerful tool has been crated to do away with such loss of time.
Adventajes include:

Same upper -left cell in all

Let's say you are working in a workbook with 50 sheets and you wish to view the value in the R200 cell of each. It would be a dreary task having to navigate through all worksheets and locate that specific cell in them all, wouldn't it?
With this tool, this would be as simple as:
1. Locate yourself in any worksheet and select the cell to be checked.
2. Press the Same upper -left cells in all button.

That's it. You will view that cell in all worksheets; the selected cell will be viewed the left upper corner.
As simple as 1-2!

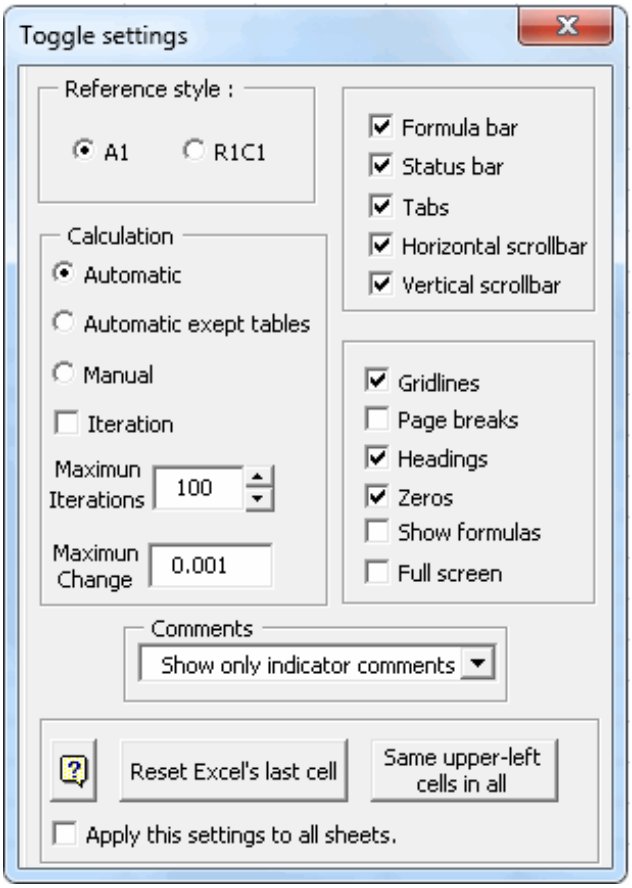
Reset Excel's last cells

This utility allows you to save only the part of each worksheet in use, meaning the section containing actual data or formatting.

It may happen that the last cell of a worksheet is beyond the range of your actual used data. This issue may cause you to have a larger file size than necessary, you may experience other unusual behavior.

Clear the excess rows and columns with Reset Excel's last cell and solve these issues.

And many configuration options more. Use this tool as best suits your convenience it's super-intuitive.


Toggle settings
Reference style :
A1
R1C1
Calculation
Automatic
Automatic exept tables
Manual
Iteration
Maximun Iterations
100
Maximun Change
0.001
Formula bar
Status bar
Tabs
Horizontal scrollbar
Vertical scrollbar
Gridlines
Page breaks
Headings
Zeros
Show formulas
Full screen
Comments
Show only indicator comments
Reset Excel's last cell
Same upper-left cells in all
Apply this settings to all sheets.

To do

To do list is a simple but useful tool, which allows you to manage any pending tasks related to a given workbook that may be key to your projects, in an ordered manner.

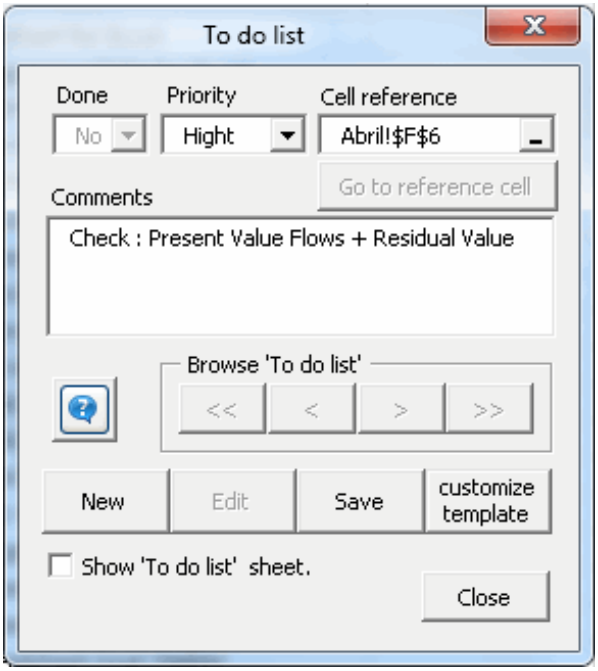
To do list allows you to add a task, edit it and control its progress.

It's very easy to use:
1. Click the **To do list** button in the Model Navigator toolbar. A dialog will be displayed.
2. Enter the corresponding information and save the model.

Once a long list of tasks has been built, you may navigate through them.

In addition, you may customize the template to suit your needs.

This **To do list** is saved in a very hidden worksheet of your workbook.



Version

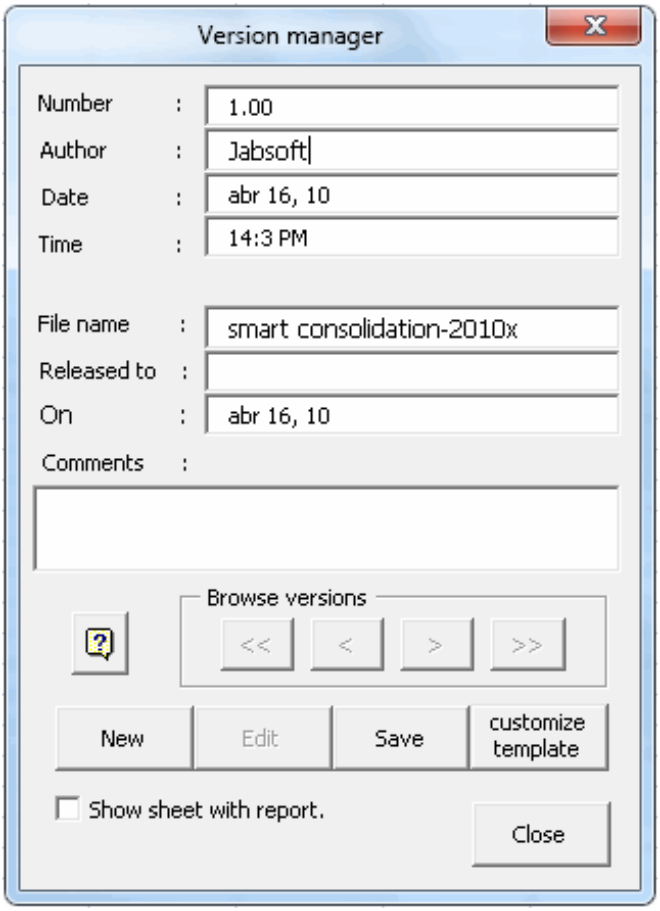
With this tool you will be able to check the progress of your projects.

The accomplishment of a project usually means to work with the same workbook(s) for several days.

It would be ideal to add (hidden) commentaries of significant occurrences, drawbacks, and/or pending tasks as your project makes progress.

This tool do this –and more. You may save and edit in a very hidden sheet the information corresponding to the progress of your projects. An you may review all that saved information.

In addition, you have the option to customize the template to suit your needs.



Model analyzer For Excel

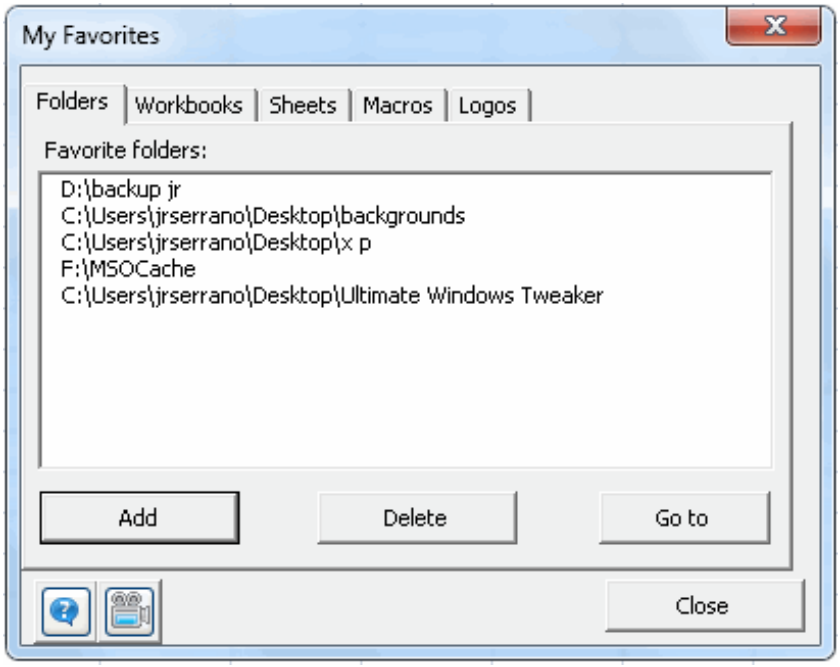
My

Do you need to manage many folders, workbooks and worksheets in one place? Use this powerful tool to select and manage them all.

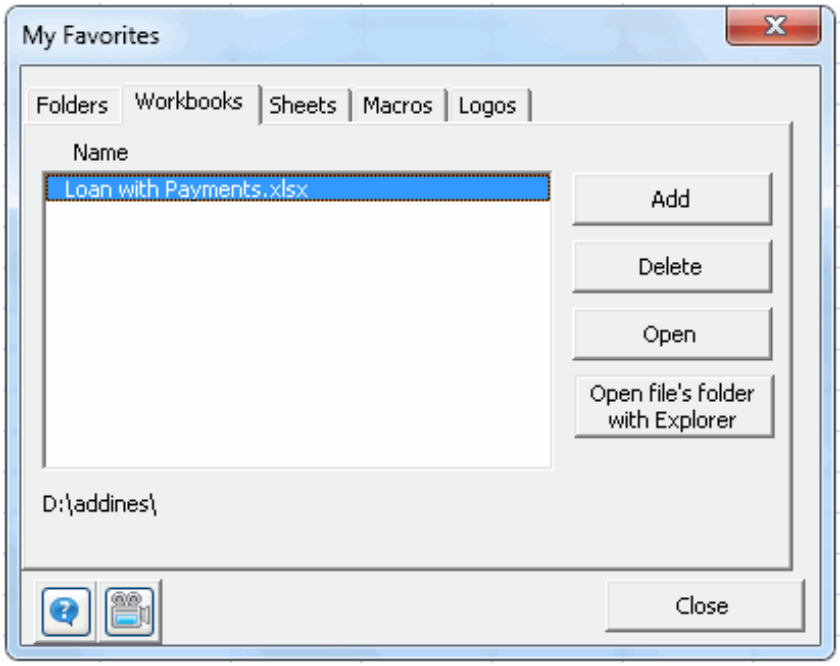
Observation:
If you use **Windows Vista**, it will be necessary to activate some permissions.
This video will teach you how to configure some permission to make this tool work out correctly.
http://www.jabsoft.com/spreadsheet_presenter/sp_videos/security_demo_sp/security_demo.htm

Folders

This utility will allow create a list with our directories most visited, to access quick and easily.
It works so:
1.- Press the '**Add**' button to add a directory to the favorite directories list.
2.- Press the '**Delete**' button to erase a directory of the favorite directories list.
3.- Press the '**Go to**' button to open the selected directory with the Window's Explorer.



Workbooks

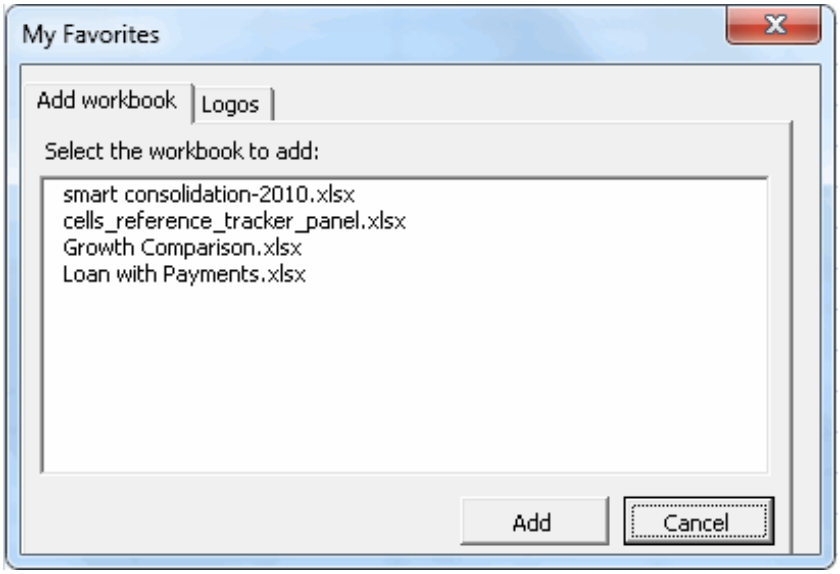


This tool allows you to store a list of most frequently used workbooks. It's a kind of direct access.

Think of the following situation:
You have to check, say, three workbooks (or more, for that matter) on a daily basis. This means you have to first go to the folders containing them to access each. With My Favorites you no longer will have to do that. Just do as follows:

1. With all opened relevant books, click **My Favorites** > **Workbooks**.

2. Click the **Add** button.



3. Select the workbooks you want to include in your list of favorites. Click **Add**.

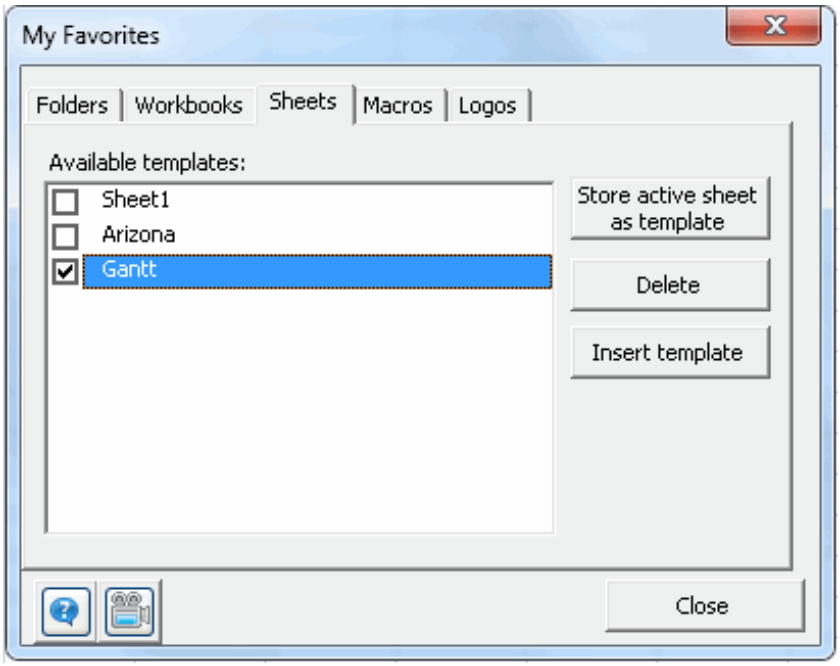
That would be it.
The next time you want to open that workbook, just click the **My Favorites** button and you we will be able to access your most frequently used workbooks from this dialog.
In addition, you can delete any workbook from the list and open the folder the selected workbook is in.

Sheets

If you constantly use certain templates and need to open several books to copy the templates onto several workbooks, this is the tool you need.

Favorite templates saves the templates you wish in one single place and allows you to easily access them. Options include:

- **Store active sheet as template**: First select the desired template by checking the corresponding checkbox, then click this button.
- **Delete**: Clears the selected template from your list of favorites.
- **Insert template**: To copy a template (already stored) onto the active workbook



Macros

In certain occassions we see ourselves in the necessity to have a macro to realize same repeated and automatic tasks. Sometimes we use the "grabadora de macros" to generate them and then we modify to our convenience.

Finally we finish to lose those macros or we just dont know in what book we saved it the last time.

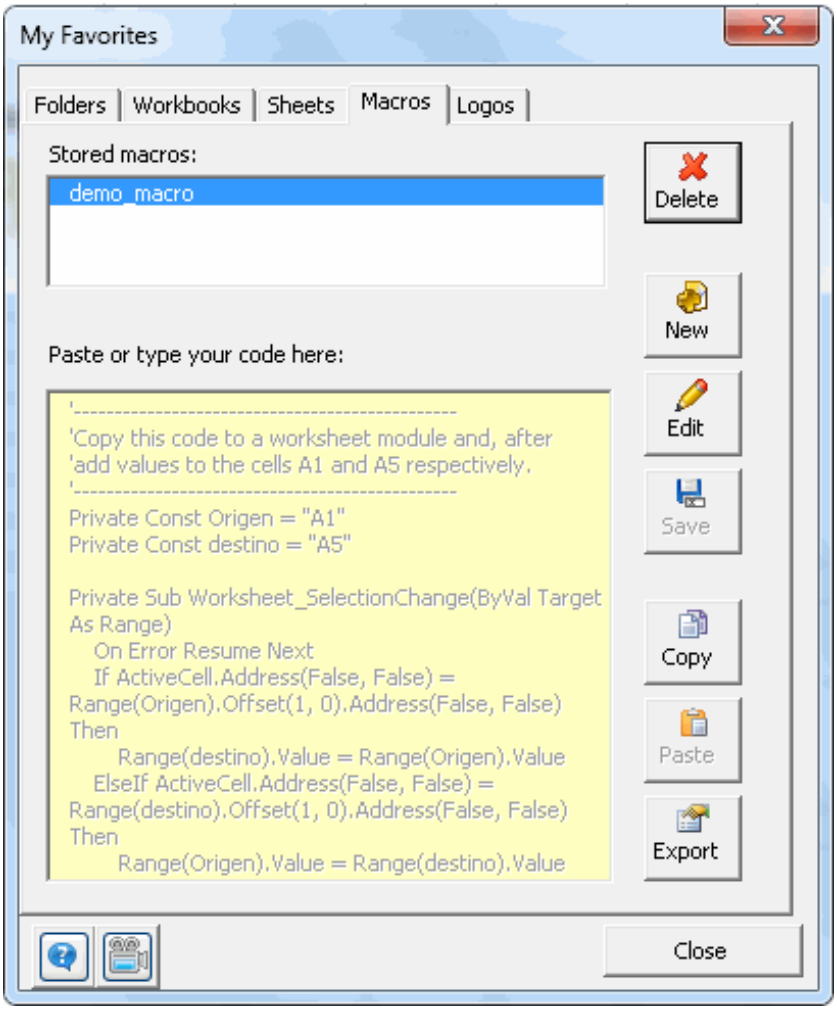
The Favorite Macros tool was made to keep and to arrange our most used macros when we want.
We keep it in the "bloc de notas" in an organized way to facilitate the use.

This tool has a complete panel control to edit, to copy and to export macros.

Click on Edit Button... To edit an existing macro.
Click on New Button... To add a macro to a macro list.
Click on Save Button... to save a new macro or save the changes of a modified macro.
Click on Delete button... to eliminate a macro from the list.
Click on Copy button to copy a macro to memory (then you can paste in any place)
Click on the Export Button... to save the selected macro in a "bloc de notas"

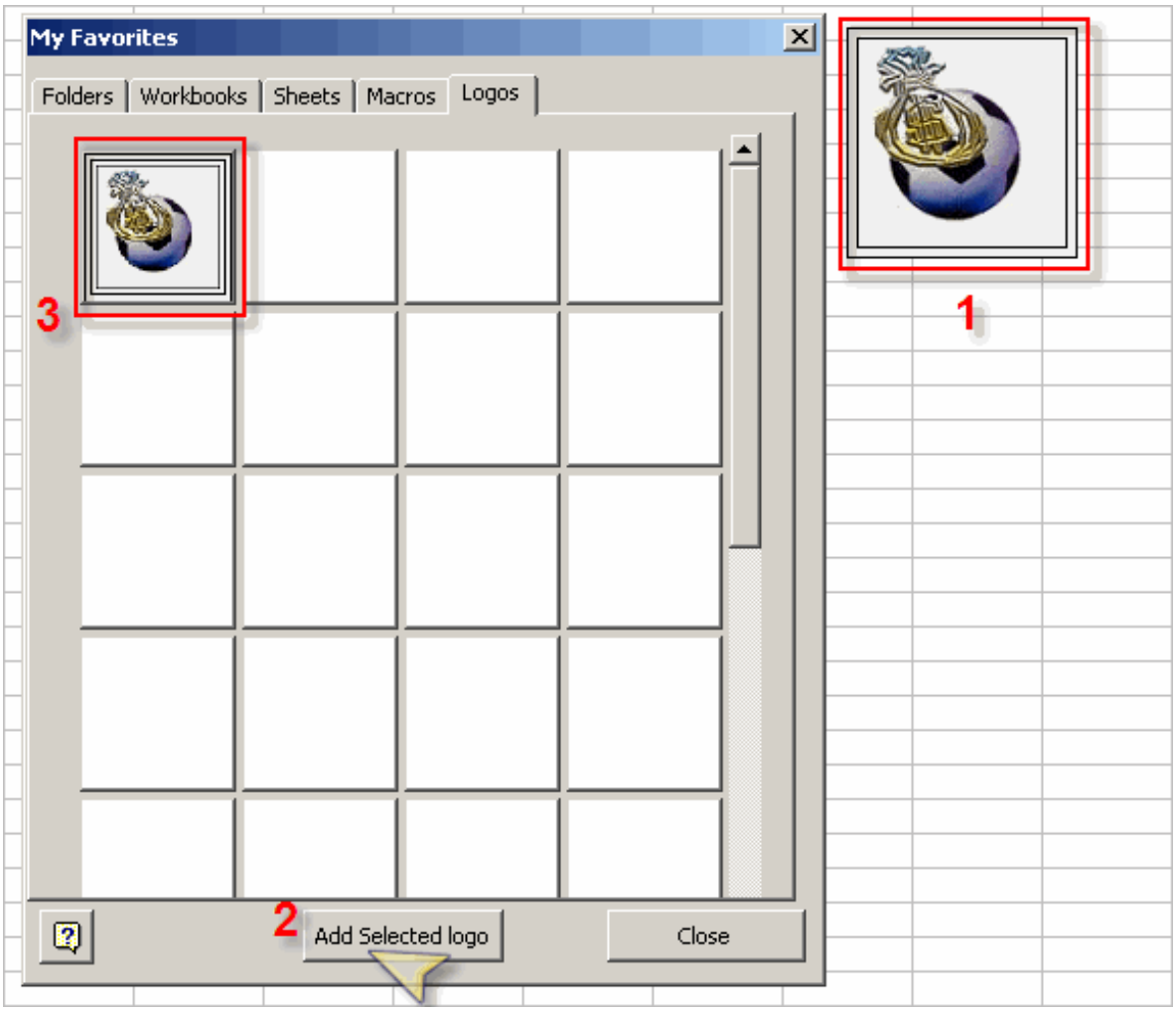
Suppose that you have saved many macros with this tool and then you want to use the macros in another PC,
Simply use the path you used to install Excel Model Builder and then copy "My Macros" file in the other PC.

My Macros file is where the macros is saved.



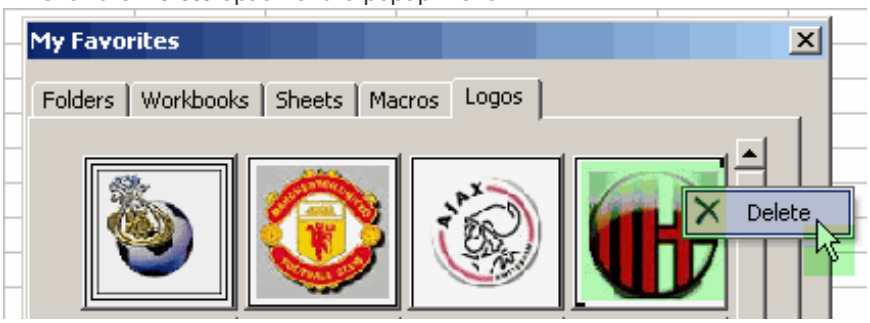
Logos

1.- Select an image of your worksheet.
2.- Press the **Add** button.
3.- The image will be saved in My Favorite **Logos**.



To delete an image:

1.- Do right click on the image.
2.- Click the **Delete** option of the popup menu.



Note: You can insert max. 64 images.

Model analyzer For Excel

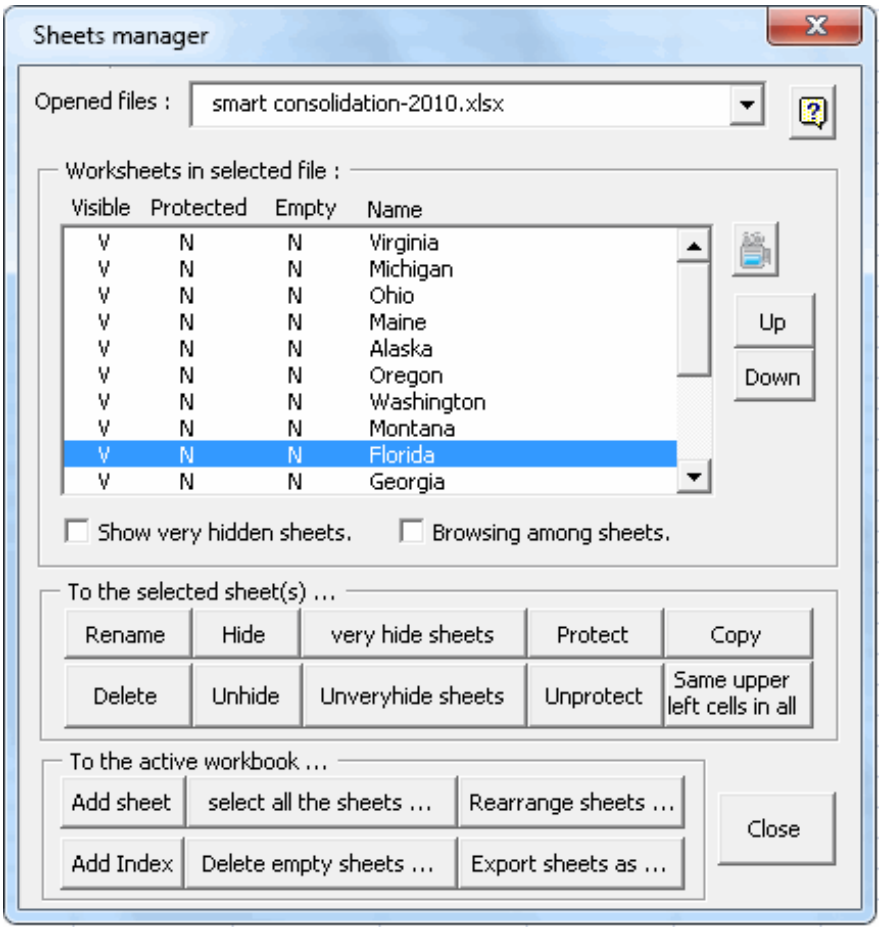
Sheets

Your workbooks have so many sheets you find it hard to manage them?
Use **Sheet Manager** –a comprehensive tool that will make any worksheet management task easier to you.

Sheets manager show a relation of all the sheets of your workbook, including hidden and the very hidden sheets, too describes the other properties to each one of them. Thus you can quickly note which are protected with password or which are hidden.

Sheets manager helps you, of simple way, with the following actions:

- Export the selected sheets...
- Hide sheets.
- Unhide sheets
- To make the sheets very hidden
- To show to the very hidden sheets
- To protect sheets
- Unprotect sheets
- Rearrange sheets
- Delete all the empty sheets
- Generate a Index of all the existing sheets.
- Navigation between the sheets
- Add sheets
- Rename sheets
- Delete sheets.

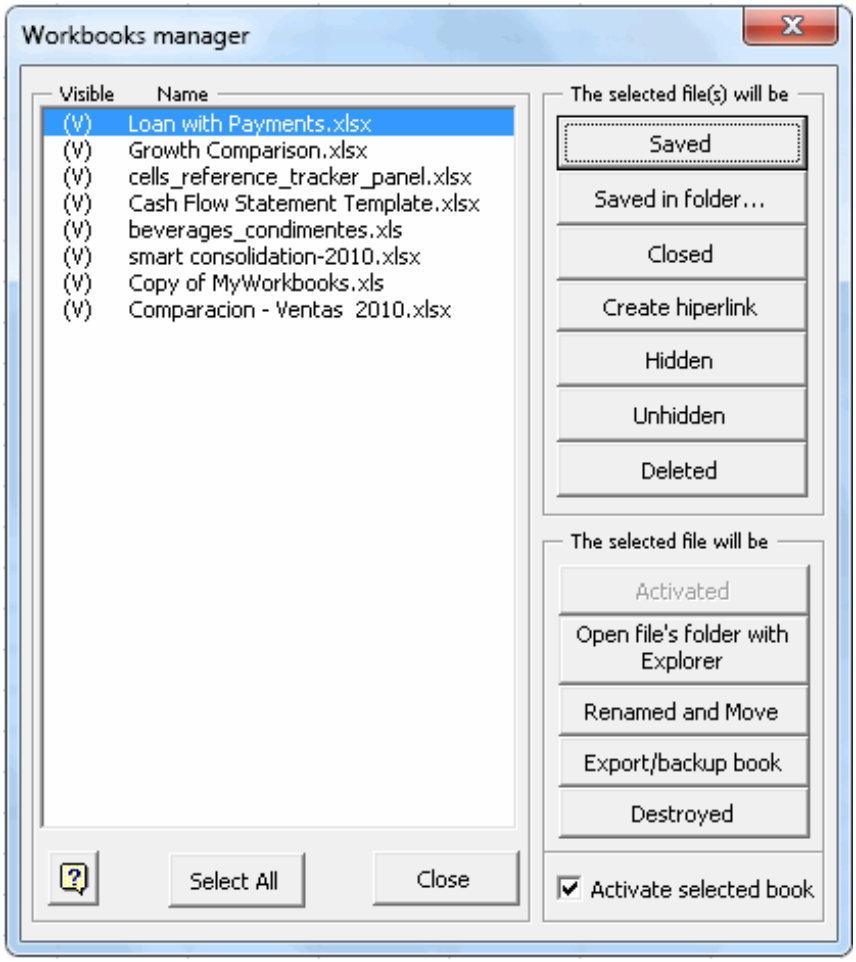

Sheets manager
Opened files :
smart consolidation-2010.xlsx
Worksheets in selected file :
Visible Protected Empty Name
V N N Virginia
V N N Michigan
V N N Ohio
V N N Maine
V N N Alaska
V N N Oregon
V N N Washington
V N N Montana
V N N Florida
V N N Georgia
Up
Down
Show very hidden sheets.
Browsing among sheets.
To the selected sheet(s) ...
Rename
Hide
very hide sheets
Protect
Copy
Delete
Unhide
Unveryhide sheets
Unprotect
Same upper left cells in all
To the active workbook ...
Add sheet
select all the sheets ...
Rearrange sheets ...
Add Index
Delete empty sheets ...
Export sheets as ...
Close

Workbooks

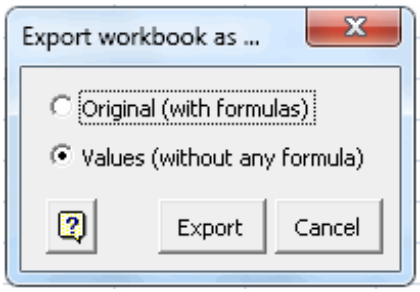
Managing your open workbooks is made easy with the **Workbook manager** tool.

With this tool you can:

- List all open workbooks, even the hidden ones.
- Save workbooks.
- Save workbooks in other folders.
- Close workbooks.
- Create a hyperlink to another workbook.
- Hide workbooks.
- Show (unhide) workbooks.
- Delete workbooks.
- Activate workbooks.
- Open the folder a workbook is in.
- Rename workbooks and move them to another folder.
- Export workbooks as backups.
- Destroy workbooks (without the possibility to restore - assets and damage control may be required)
- Navigate through workbooks.



Export / backup workbook
With this tool you can backup your workbooks either by making an exact copy of the original or by converting all formulas in your workbook into values.



Model analyzer For Excel

Requirements

- MS Windows XP or more
- MS Excel 2007 or more

In case you are using Windows Vista, it is necessary to give permission to the installation file of the product as it is in this video of example.
http://www.jabsoft.com/model_builder_for_excel/videos_emb/security_demo_xmb/security_demo.htm

In your case probably the path would be similar to this C:\Archivos de programa\JABSOFT\Model Analizer for Excel

Uninstallation

Before uninstalling the product, do:

- Open Microsoft Excel.
- Uncheck Model Analizer for Excel in Tools > Add-ins.. option.
- Close Excel.

Automatic
Start - Programs - JABSOFT - Model Analizer for Excel > Uninstall Model Analizer for Excel.

Or

Manual

- Open the Windows Explorer.
- Go to the folder, the path should be: C:\Program Files\JABSOFT\Model Analizer for Excel and delete it.

That is all.

Model analyzer For Excel

Do you need more help?

- If you need help address to our HelpDesk (http://www.jabsoft.net/helpdesk)
- If you have comments or suggestions about Model Analizer for Excel add-in, please contact us at: support@jabsoft.com

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Lima 18
Perú

- Developer website: Jabsoft (http://www.jabsoft.com)
- Sales website: Model Advisor (http://www.modeladvisor.com)