ADVISOR™

ROUGH MAPPING AND ANALYSIS SYSTEM

ADMINISTRATOR GUIDE

by Sarin Technologies Ltd.

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Preface

About this Document

- ☐ This document provides the information necessary to operate the Advisor system.

Notes and Warnings

The following note is used in this document.

NOTE

This is an example of a note.

Related Documents

Document	Description
Advisor Administrator Guide	This document describes how to configure Advisor.

Important Safety Information

Laser Description and Class

The Advisor is a class 1 laser system and contains two laser assemblies for mapping and marking.

Marking Laser

DiaMark: wavelength 1064nm, max power 80mw, class 4

DiaMark-Z: wavelength 1064nm, max power 1w, class 4

Mapping Laser

Wavelength 600-700nm, max power <1mw, class 2

NOTE

Exposure to the beam of a Class 1 laser will not result in eye injury and may therefore be considered safe.

However because this class 1 system contains laser systems of a higher class it is vitally important that the machine is NOT operated with any of the protective doors, covers, hoods or windows open.

Laser Safety

We at Sarin recommend that you provide laser safety training to all employees who work on or around the laser system. It is important that they understand the bio-effects of lasers as well as the facts about laser-radiation.

System installation, disassembly, maintenance and repair must only be performed by authorized Sarin customer support engineers. Sarin trained engineers are trained to comply with all applicable safety requirements regarding the use of laser devices at the customer's premises.

NOTE

The Sarin warranty becomes null and void if servicing of the system is undertaken by a third party.

What is a Laser Class?

Laser products are classified to take account of the amount of laser beam you can get access to when the product is in normal use or during routine user maintenance. A laser product may contain a laser of a higher Class and this may be accessible during servicing.

A brief description of each laser Class can be found at:
http://www.hpa.org.uk/radiation/faq/laser/laser9.htm

Waste Electrical and Electronic Equipment (WEEE)

Disposal of Electrical and Electronic Waste

The symbol is now displayed on Sarin products to show our compliance with directive WEEE. The WEEE directive is about recycling parts and states that no electrical or electronic equipment can be discarded into the city's normal waste disposal system.

Obligatory Acceptance of Discarded Electrical and Electronic Equipment

The end user of this product now has the right to request the product supplier to dispose of the product. Therefore, if you require help in discarding this product please contact your local agent or Sarin directly.

How to Contact Us

Please contact your local Sarin representative with any questions or comments you may have regarding the site preparation procedure.

Headquarters:

Sarin Technologies Ltd.

4 Hahilazon Street

Ramat Gan 52522

ISRAEL

TEL: +972-(0) 3 7515490

FAX: +972-(0) 3 7515485

General Information:

Info@sarin.com

Support

TEL: +972-(0)-3 751 9271

TEL: +972-(0)-3 7515490 EXT 111

support@sarin.com

Website:

www.sarin.com

INTRODUCTION

Advisor is a unique system designed to calculate optimally proportioned shapes in rough diamonds, for maximum yield. By combining computerized machine vision and advanced 3-dimensional image processing, Advisor accurately forecasts the best proportions of a final stone for all commercial shapes. In effect, Advisor is a decision support tool which assists the diamond cutter in the most crucial step of diamond processing – cutting the rough diamond while achieving the maximum yield possible, calculating millions of cutting options in seconds. Advisor takes into consideration different shape possibilities, proportions and internal flaws and provides the optimal solutions. Advisor maps grooves, holes, and other concave areas on the rough surface, enabling users to analyze complicated stones in a way not possible before.

This manual describes the system settings required to configure Advisor.

You can contact us through your local dealer or simply visit our website at:

www.sarin.com

What's New in Release 2.0

Feature	Description	See
Best Value Feature Greatly Improved	Advanced algorithms will automatically decide which solution is more profitable while taking into account different shapes, cut grades and inclusions clarity and location. The solution is based on the price tables that can be customized according to your company pricing policy.	See User Guide.
Multiple stone planning	Now you can simply and quickly plan more than two stones out of the same rough. This feature enables you to simultaneously divide the stone into as many parts as you want and then plan each part separately.	See User Guide.
Remainder Advisor	Planning multiple remainder planes (tops) is simple with the new remainder function. The system can even suggest the best tops to be removed.	*Remainder Options* on page 9.
Advanced Inclusion mapping	This revolutionary function enables you to accurately plot inclusions. The software automatically calculates the position and clarity of the inclusion according to the position of the inclusion as viewed by the user.	See User Guide.
Bottom saddle mapping	Advisor can now map stones with a high precision that have bottom saddles.	See User Guide.
Marking improvements	Marking options have been expanded. ▪ Control the size of table and culet cross ▪ Marking of the center girdle line ▪ Separate control of width and velocity for each type of marking ▪ Table and culet marking parameters have been separated for more flexibility ▪ Multiple saw planes can be marked simultaneously	See User Guide.
Manufacturing Stages	Enables you to visualize the upcoming stages in the manufacturing process.	See User Guide.
Pricing Discount	use this feature to create your own discount table below the official list price.	See User Guide.
Default Saw Thickness	use this to automatically calculate the required thickness of the saw plane according to the rough part weight. The ranges can be customized according to your needs.	*Default Saw Thickness* on page 10.
Pricing Calculator	this small tool enables you to quickly calculate the price of different planning possibilities before even starting to plan the stone.	See User Guide.
Report improvements	now you can select from a wide range of available reports and labels (including designing your own). All angles for all shapes can now be used in views, labels and reports.	See User Guide.
Export all Results	All planned results can now be exported simultaneously and automatically.	See User Guide.
Cut grade order	Changing the display order of the cut grades is now possible.	*Cut Grade* on page 28.
Additional data display	A large number of new data fields have been added so that all angles for all shapes can now be displayed	

Feature	Description	See
Forced Allocation	You can control the restrictions on the forced allocations in all three axes enabling you to define both the direction and position of the final allocation.	
Laser Safety Export distance	Enables you to set the safety distance to the requirements of the external cutting equipment. For example the Quazer.	*Laser Safety Export Distance* on page 13.
Password protection	You can now safeguard your production line by prohibiting anyone from changing the Proportion information using a password. The password protects the proportions, pricing tables, planning and marking options.	*Password Protection* on page 8.
New File Types	Sarin have added a new file type (*.cap) that includes all the video images when saving your data.	*New File Types* below.
Stone Properties	The Stone Properties window now contains more information.	See User Guide.
Improved Mapping	The mapping is not only more accurate but you can now select the different levels of accuracies.	See User Guide.
Selectable Mark-up and Discounting	You can make a selectable discount or markup using the Discount option for a combination of grading system, cut grade and weight range.	See User Guide.
Select Report and Label Feature	Right-click the report or label buttons to select different types of reports and labels.	See User Guide.

New File Types

Before version 2.0 you could only save your stone information files in the ***.stn** format. Sarin have now added the new ***.cap** format that also includes all the video images. This means that when loading ***.cap** files the video viewer is now enabled even though you are not connected to the hardware.

Using the Help File

To display the built-in Help file do one of the following:

- ☐ Click the **?** button
- ☐ Press the **F1** key on the computer keyboard
- ☐ From the **Help** menu, choose **Sarin Advisor Help**

CONFIGURATION TAB OPTIONS

The Option configuration window is divided into multiple tabs for pre-defining the option parameters. These are global parameters affecting the whole system.

These options tabs pre-define the following:

- ☐ General system options
- ☐ Planes parameters
- ☐ Export parameters
- ☐ Parameters for configuring the different printers
- ☐ Planning options
- ☐ Price list parameters

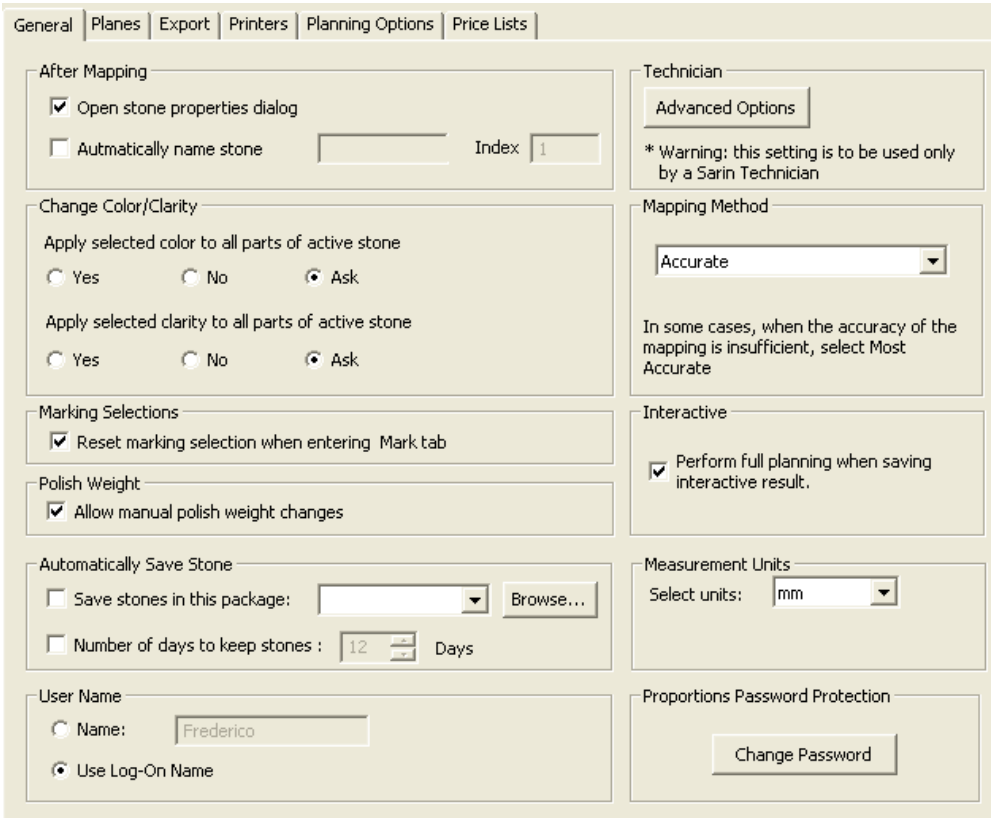
Your Advisor package has been shipped to you with pre-defined settings that can be changed to better serve your measuring and evaluation requirements.

General Tab

The **General** tab provides the parameters for configuring the general Advisor parameters.

◆ To open the General tab (default tab):

☐ Click the  button the **General** tab opens by default.



After Mapping

These configured values are activated as soon as the mapping is completed.

Open stone properties dialog

When checked, the stone properties dialog box is opened automatically as soon as the mapping is completed.

Automatically name stone

Stones are named automatically.

Type a batch name in the Name field (e.g. "MyStone") and enter a starting Index number (e.g. "1"). Each time an additional stone is measured the new name becomes the contents of the Name field plus the Index+1. This is especially useful when you want to automatically export the stone data without having to type a name for each stone you measure.

Change Color/Clarity

This pane controls whether or not any changes made to either the color or clarity inside a program results are reflected in all the other results or not.

Item	Description
Yes	Changing either the color or clarity values in any of the program results will reflect this change in all the other results.
No	Changing either the color or clarity values in any of the results dies **NOT** reflect this change in any of the other results.
Ask	Changing either the color or clarity values in any of the results opens a window to ask if you want to force either of the two parameters described above. The **Ask** window has a checkbox you can select to make your selection permanent.

Marking Selections

Select this check box if you want to reset the marking selection every time you open the **Mark** tab.

Polish Weight

Select this check box if you want to enable the ability to change the polish weight manually.

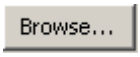
Automatically Saving Stone Data

If configured you can save the current stone file automatically when:

- ☐ Closing the software
- ☐ When starting to measuring a new stone

To use the automatic save feature:

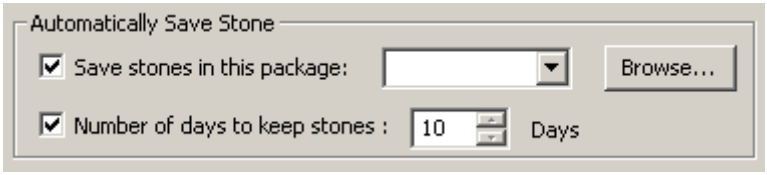
1. On the top right-hand side of the window, click the  button to open **Options** window.

2. In the Automatically **Save Stone** pane select the **Save Stones in this package** check box.
3. Click the  button to select the package where you want to automatically save the stones.
4. Click **OK**.

To use the automatic file deletion feature:

This feature automatically deletes all files in the displayed package after the selected number of days.

1. In the Automatically Save Stone pane select the Number of days to keep stones check box.



2. Either type a new number in the **Number of days to keep stones** box, or use the arrow buttons to change the value.

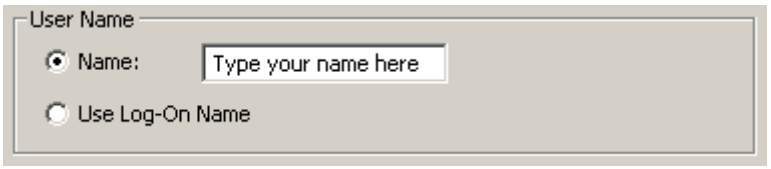
   In this example all files older than 10 days are automatically deleted from the displayed package.
3. Click **OK**.

User Name

You can choose either a default name or request a Log-on name every time the program is opened.

To create a default name:

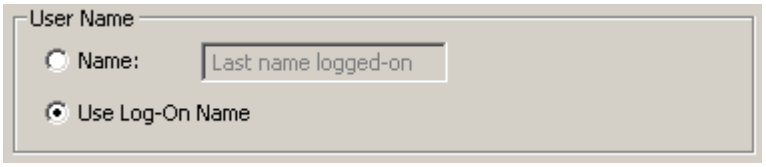
1. Select the **Name** check box.



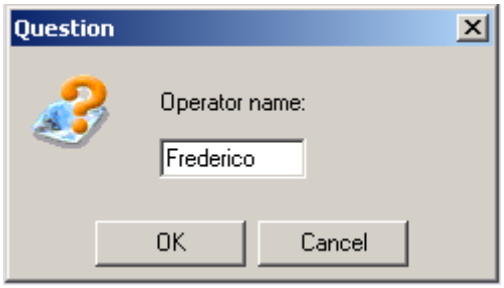
2. Type your name in the **Name** field.
3. Click **OK**.

◆ To create a log-on name:

1. Select the **Use Log-On Name** check box.



2. Click **OK**.
3. Close the Advisor program and then open it again.



The **Log-On** window opens displaying the name of the last person that Logged-On.

4. Update the name if required.
5. Click **OK**.

Mapping Method

The Mapping Section offers options for mapping rough stones. The default is **Accurate** as this is suitable for most stones. Before mapping complex stones, however, select the **Most Accurate** option and then perform the mapping. Under this option, the mapping is slower but captures small but maybe relevant details. After mapping a rough stone with the Most Accurate option, do not forget to restore the setting to Accurate or Regular.

Interactive

When selected a full allocation is performed each time the saw line is saved in interactive mode.

Measurement Units

Choose either **MOE** or **mm** (millimeter) as the measurement unit for the length, width and height of the stone.

The caliber tool also uses the unit selected here.

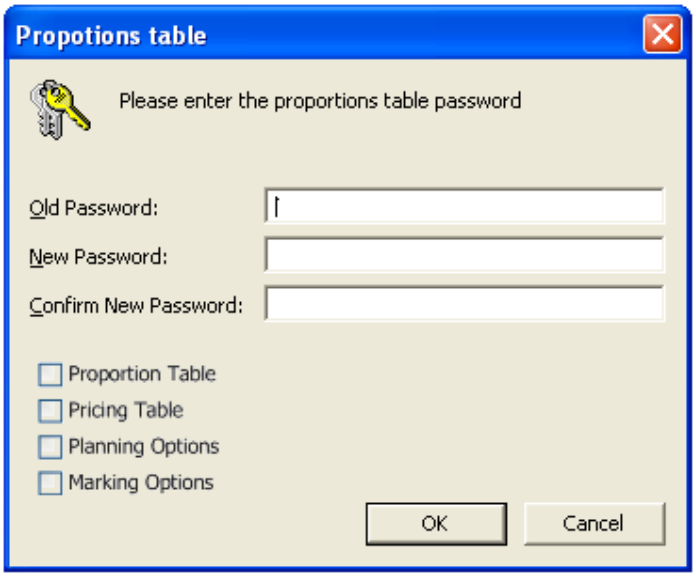
Password Protection

You can prevent unauthorized personnel from changing the data fields in the four tables and options listed below:

- ☐ Proportion tables
- ☐ Pricing tables
- ☐ Planning options
- ☐ Marking options

◆ To use a password:

1. Click the Change Password button.



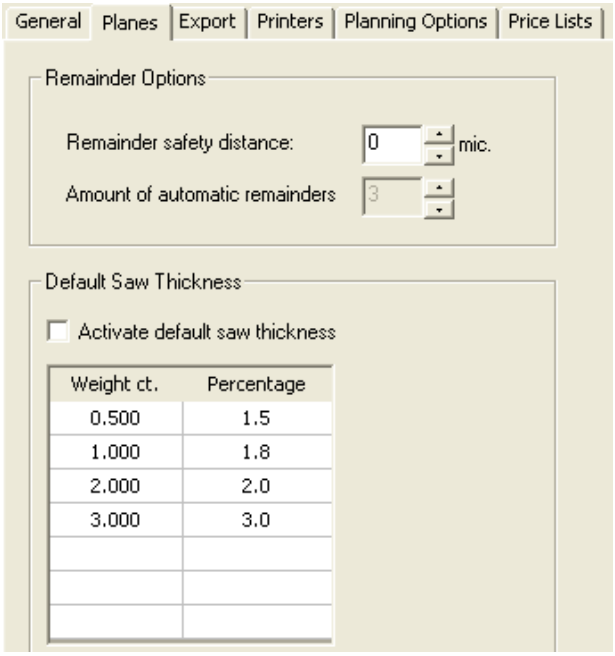
2. Enter the old password or leave the field blank if there is no password.
3. Enter a new password and then confirm it in the field below.
4. Select the checkbox corresponding the function you want to protect.

   You can protect the four specific functions independently.
5. Click the OK button to close the window.
6. Click the OK to save your data and exit the **Options** screen.

Planes Tab

◆ To open the planes tab

Click the **Options** button and then click the **Planes** tab.



Remainder Options

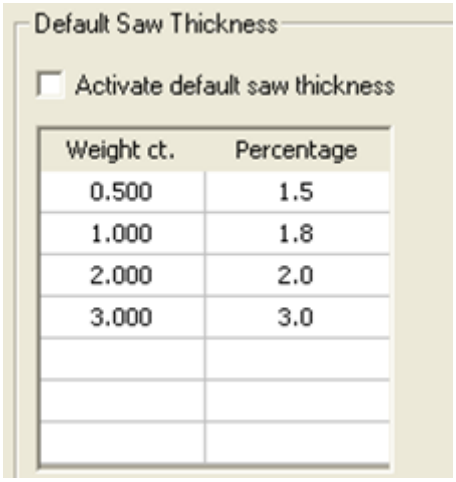
1. On the top right-hand side of the window, click the button to open **Options** window.
2. Click the **Planes** tab.
3. Enter a value for the **Remainder Safety Distance** or leave blank.
4. Enter a number for the **Amount of Automatic Remainders**.

   When planning and using the automatic option this number limits the number of remainders created.
5. Click the OK button to save your data and exit the **Options** screen.

Default Saw Thickness

This enables you to create saw thicknesses based on the rough weight of the stone.

1. In the **Planes** tab, **Default Saw Thickness** pane.



   The initial values are shown above (not a default). You can edit any of the rows but we recommend that you only edit the last three empty rows. If you edit the first four rows they do not revert back to the initial values when reopening the Advisor.

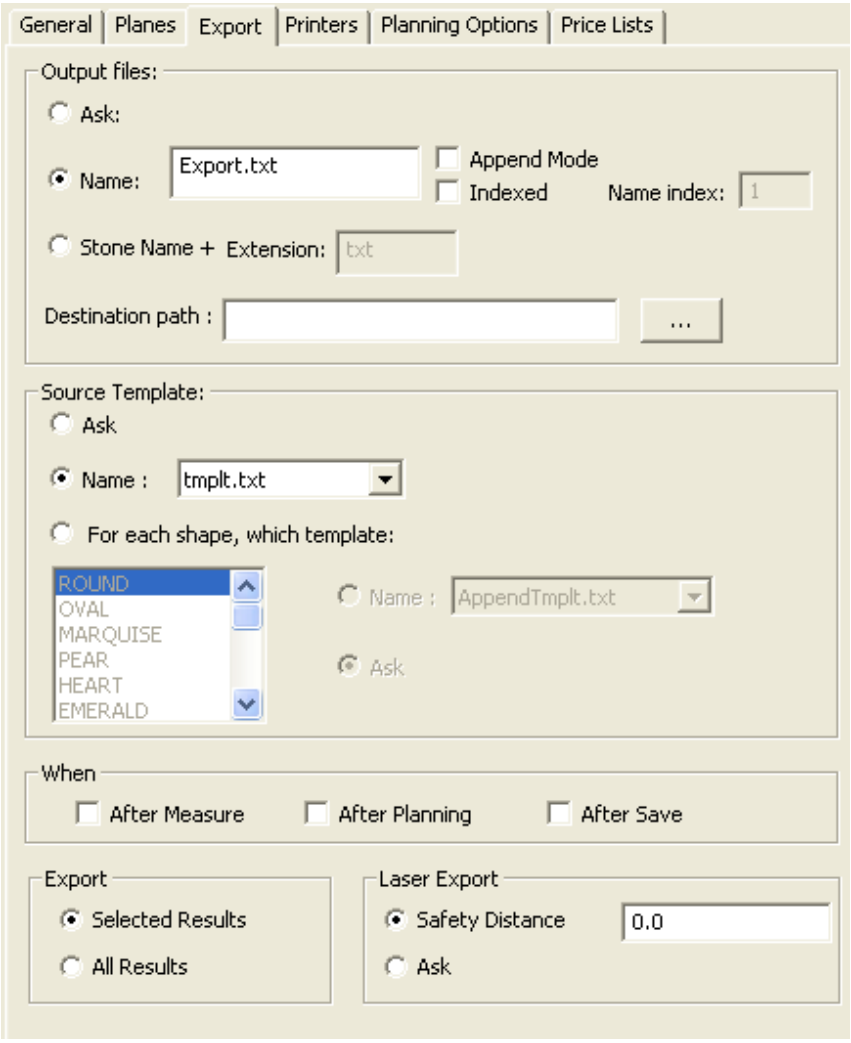
2. In the left-hand column, enter a weight (ct.).
3. In the right-hand column, enter a percentage (accepts single digits).
4. Select the **Activate default saw thickness** check box to enable it.
5. Click the OK button to save your data and exit the **Options** screen.

Export Tab

The Export tab provides the parameters for automating the results export procedure.

◆ **To open the export tab:**

☐ Click the **Options** button and then click the **Export** tab.



Output Files Pane

Ask

If you select this parameter, Advisor always asks you to specify the name of the export file.

Name

Select this parameter to pre-define the names of export files. After providing an initial name, Advisor generates names automatically each time you export results (or appends results to the same file). In the Name box, type an initial name, such as export.txt.

There are three Parameters:

Parameter	Description
Append Mode	If checked, Advisor creates one file and adds results to that file every time you export data.
Indexed	If checked, Advisor creates a new file every time you perform an export operation. It generates a file name consisting of the string you entered in Name and a sequential number. For example: export1.txt, export2.txt.
Name Index	Used with the Index parameter. Type the starting number of the filename index. For example, if you enter 10, the first export operation creates a file that carries a name such as export10.txt, the second is named export11.txt, and so on.

Stone Name + Extension

Takes the name from the Stone Properties box and adds the file extension that is displayed here. The default is txt.

Destination Path

Type the disk directory where you want Advisor to store export files, or click the browsing button to select the directory.

Source Template

Ask

If you select this parameter, Advisor always asks you to select an export template.

For details on templates, see *Planning Options Tab* on page 14.

Name

If you select this parameter, Advisor always uses the same export template. Select the name in the list.

For Each Shape Which Template

This option allows you to instruct Advisor to create a separate export file for each shape. Follow these steps:

1. From the list, click a shape.
2. Select **Ask**, if you want Advisor to ask you to select a template every time you perform an export operation.

   If you want to instruct Advisor to select a template automatically, select **Name** and then select a template.
3. Repeat this step for each shape.

When

After Measure

If you check this option, Advisor performs the export operation automatically (as if you clicked the Export icon) after completing a measurement.

After Planning

If you check this option, Advisor performs the export operation automatically (as if you clicked the Export icon) after planning.

Export Options

You can decide to export either only selected results or ALL the results.

Laser Safety Export Distance

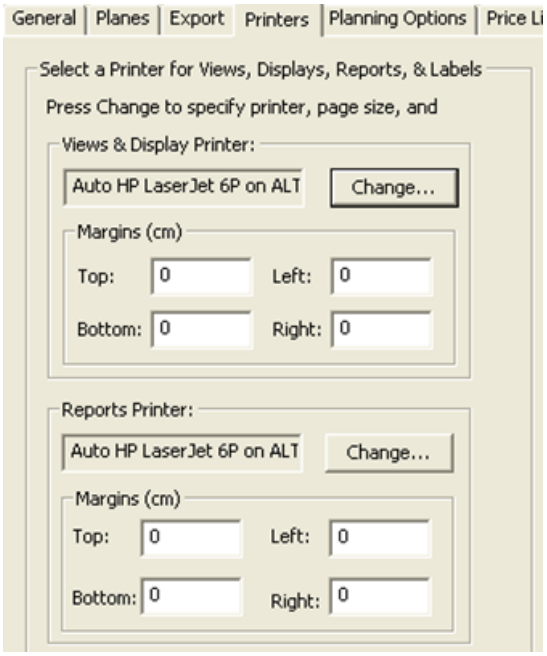
If you are working with laser cutters like the Sarin Quazer you can incorporate into the planning a safety distance. This enables you to tailor the value to suit the laser you intend to use to cut the stones.

Printers Tab

You can assign a different printer and change orientation, size, and margins locally for each of the following groups: **Current view and Display**, **Reports** and **Labels**. These settings do not affect other programs and are saved automatically.

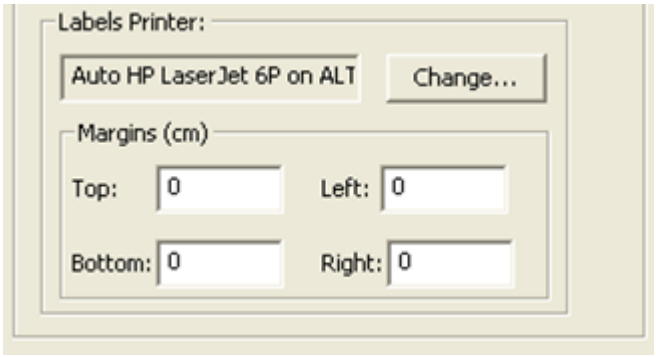
◆ **To open the printers tab:**

☐ Click the **Options** button and then click the **Printers** tab.



This shows the **Views** and **Report** printers.

☐ This shows the **Label** printers.



NOTE

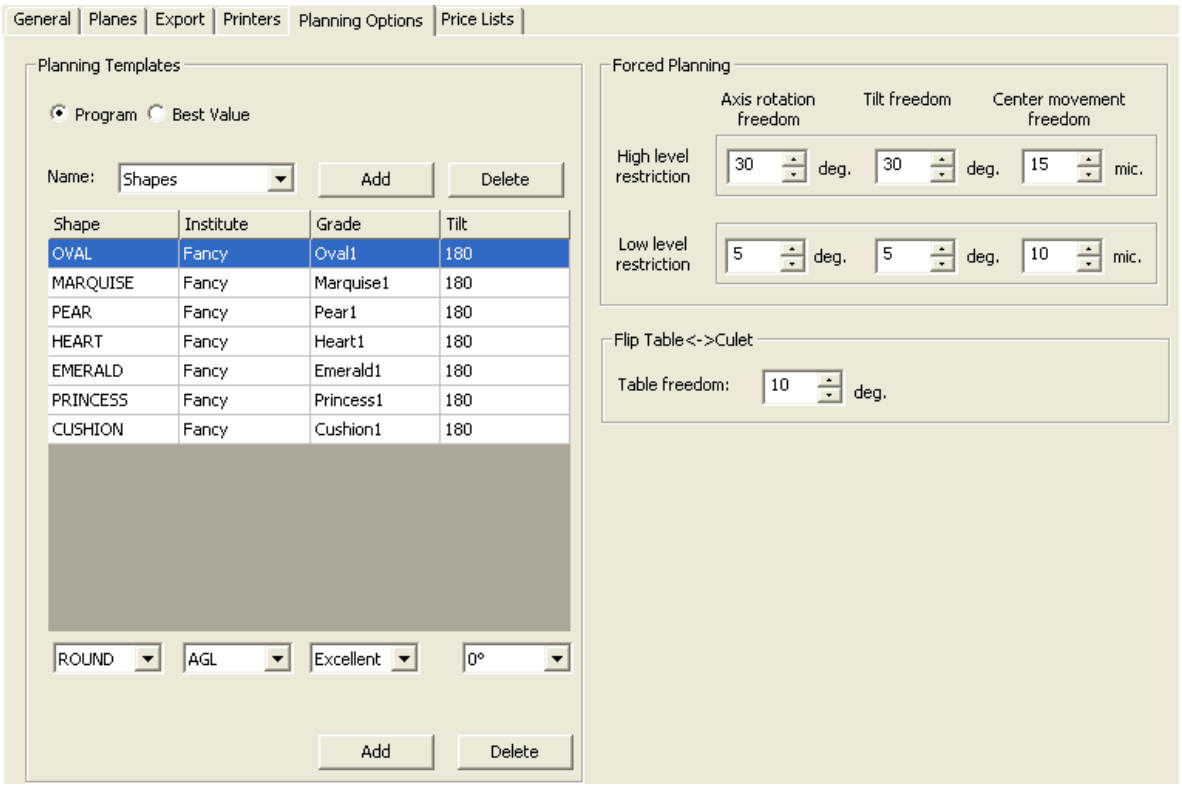
When clicking the Results print icon in Advisor, the print dialog box is automatically opened for you to change the parameters if required. You cannot predefine these parameters in this tab.

Planning Options Tab

The **Planning Options** tab provides the parameters for creating program templates and parameters for configuring forced planning.

◆ **To open the printers tab:**

☐ Click the **Options** button and then click the **Planning Options** tab.



Planning Templates

Planning programs perform one or more plans automatically. Advisor allocates a stone (calculates the best possible final cut) according to an institute, a shape, a cut grade, and a tilt value. Therefore, you will define planning programs by setting these four parameters for each plan.

A program may perform more than one plan. For example, you can build a program that plans a stone under the same institute, shape, and tilt angle but for different cut grades. This program would perform automatically and successively as many plans as the number of cut grades defined for the institute, shape combination, and would create just as many entries in the results table. Usually, you will build programs to perform a series of plans automatically, instead of selecting tilt, institute, shape, and grade parameters (in the Plan window) for each plan separately.

Creating a New Program Template

To create a new program template:

1. Click the **Options** button and then click the **planning options** tab.
2. Select the **Program** radio button.
3. Click the **Add** button next to the **Name** field, and then enter a unique **Program** template name.
4. At the bottom of the **Plan** display window, choose a parameter from each of the following dialog boxes:
   - Shape
   - Institute
   - Grade
   - Tilt
5. At the bottom of the **Planning Templates** pane, click the **Add** button.

   A new plan is now displayed in the **Plan** display window.
6. Repeat steps 4 and 5 to add more plans to the current program.
7. Click **OK** to save the planning template and close the window.

Deleting a Program Template

To delete a program template:

1. Click the **Options** button and then click the **planning options** tab.
2. Select the **Program** radio button.
3. Select the program you want to delete.
4. Click the **Delete** button next to the **Name** field.

Deleting a Plan from a Program Template

To delete a plan from a program template:

1. Click the **Options** button and then click the **planning options** tab.
1. Select the **Program** radio button.
2. In the **Name** field select the program name that contains the plan you want to delete.

   The plans for this program are displayed in the **Plan** window.
3. Select the plan you want to delete.
4. At the bottom of the **Planning Templates** pane, click the **Delete** button.

   The selected plan is now deleted.
5. Click **OK** to save the changes and close the window.

Creating a New Best Value Template

To create a new best value template:

1. Click the **Options** icon to open the **Options** window.
2. Click the **planning options** tab.
3. Select the **Best Value** radio button.
4. Click the **Add** button next to the **Name** field, and then enter a unique **Best Value** template name.
5. At the bottom of the **Plan** display window, choose a parameter from each of the following dialog boxes:
   - Shape
   - Institute
   - Grade
   - Price
6. At the bottom of the **Planning Templates** pane, click the **Add** button.

   A new **Best Plan** is now displayed in the **Plan** display window.
7. Repeat steps 4 and 5 to add 2 plans to the current program.
8. Click **OK** to save the planning template and close the window.

Deleting a Program Template

To delete a program template:

1. Click the **Options** icon to open the **Options** window.
2. Click the planning options tab.
3. Select the Best Value radio button.
4. Select the **Best Plan** you want to delete.
5. Click the **Delete** button next to the **Name** field.

Deleting a Plan from a Program Template

To delete a plan from a program template:

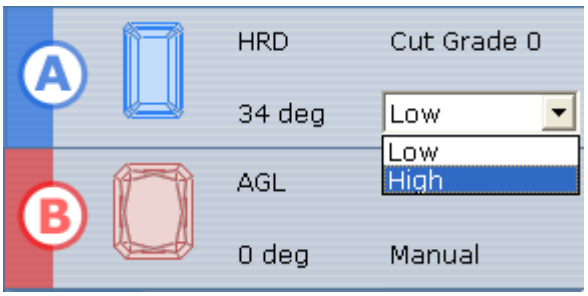
1. Click the **Options** icon to open the **Options** window.
2. Click the planning options tab.
3. Select the **Best Value** radio button.
4. In the **Name** field select the **Best Value** program that contains the plan you want to delete.

   The plans for this program are displayed in the **Plan** window.
5. Select the plan you want to delete.
6. At the bottom of the **Planning Templates** pane, click the **Delete** button.

   The selected plan is now deleted.
7. Click **OK** to save the changes and close the window.

Forced Planning

There are two levels of forced planning, namely High and Low. When Advisor is put into Forced Planning mode the Manual/Program menu becomes the High/Low selector. The forced planning parameters are shown below.



Once you have selected a new value it will remain the default each time you open Advisor.

The **Forced Planning** pane is for setting the restriction parameter values to be used for both Part A and Part B planning.

Flip Table <-> Culet Tolerance

This feature is only available when using one plan.

Flipping generates a new plan with Advisor seeking an optimal flip of approximately 180 degrees plus or minus a few degrees. The actual value depending on the tolerance value defined here. When flipping the planning, Advisor explores the possibilities within the tolerance range.

◆ To specify a flipping tolerance:

1. Click the **Options** icon to open the **Options** window.
2. Click the **Planning Options** tab.
3. In the **Flip Table <-> Culet** pane enter a value (0-18).

   The value is in degrees and set the flip tolerance. For example, enter 10 to allow Advisor to seek an optimal allocation between 170 and 190 degrees.

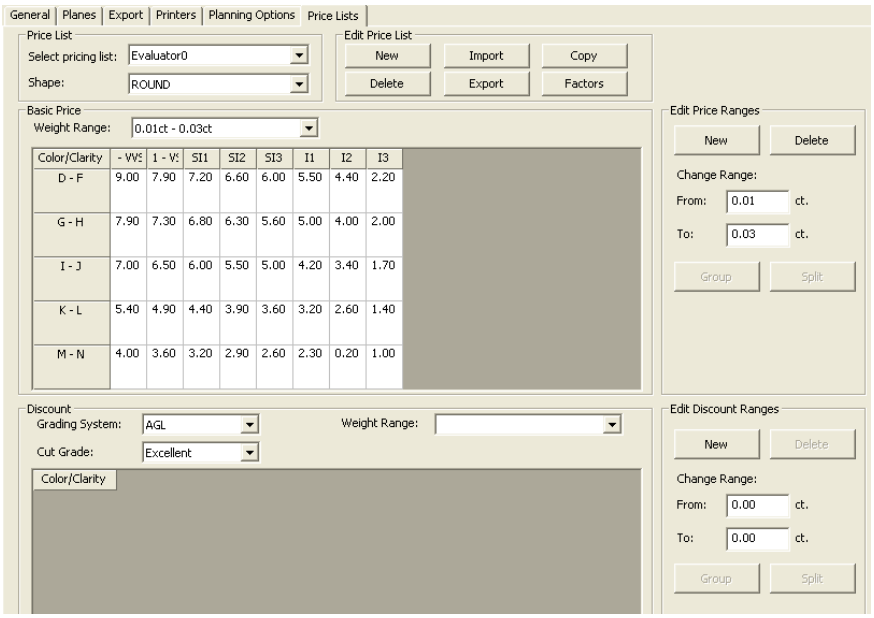
Price Lists Tab

A price list sets the price of polished diamonds of different weights according to their color and clarity levels.

Price lists are used in the results list where Advisor enables you to calculate the price of the stone.

◆ To open the price lists tab:

☐ Click the **Options** button and then click the **Price Lists** tab.

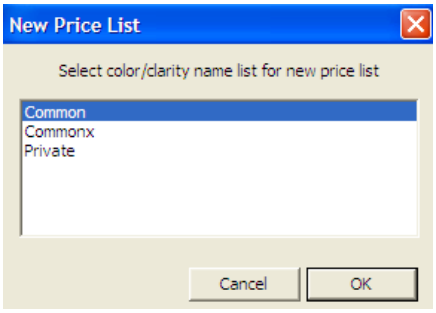


Creating a New Price List

To create a new price list, you must define the weight ranges and set the price for each range according to the different colors and clarity levels.

To create a new price list:

1. From the **Price Lists** tab, click the **New Price List** button.



   The **Color/Clarity** name list window opens.

2. Choose a **Color/Clarity** naming standard from the list.

   Advisor assigns a default name to the price list.
   The new price list uses the color/clarity names of the selected evaluator.

3. In **Shape**, select the shape for which you want to define prices.

4. Next, you need to define the weight ranges so you can record prices for different ranges. Click the **New Weight Range** button.

   Advisor automatically defines the first range of carat weights. If you want to change the range, you can type a different one in the **From** and **To** boxes. Also Advisor builds a new **Pricing** table in the lower pane.

   You can repeat this step for all the ranges you want to define.

5. After defining all the ranges, open the **Weight Range** list and select the first range.

   The **Color/Clarity** table now lists the relevant color and clarity units.

6. In **Prices**, in the lower half of the dialog box, click a cell and type a price for each color/clarity combination.

   If you defined your own proportion tables and entered a price factor for different cut grades, Advisor automatically multiplies this price with Price Factor, according to the stone's cut grade.

7. Open the **Weight Range** list, select the next range, and type in the price for each color/clarity.

   Repeat this step for all the weight ranges.

8. After entering the prices for all ranges, select another shape, create the ranges, and record the prices for all the ranges of that shape. Repeat this step for all the different shapes.

NOTE

It is strongly recommended that you copy a price list and then correct the values to better suit your needs.

Exporting a Price List

Advisor enables you to export a price list to a special file that can be imported into another Advisor system. The file can also be opened in Microsoft Excel (the file contains comma-separated values and carries the extension .csv. List .csv files after activating the File-Open command in Excel). This function is especially useful for sending price lists to Advisor users in other sites.

◆ To export a price list:

1. From the **Price Lists** tab, select the price list you want to export from the **Select pricing list** box.
2. Click the **Export Price List** button.
3. Select the location where you want to save the exported file and enter a name.
4. Click **Save**.

   Advisor adds the extension (.csv) automatically to the exported file.

Importing a Price List

You can import into your Advisor system a:

- ☐ Standard price list such as the Rapaport price list
- ☐ Price list exported from another Advisor installation
- ☐ Price list created in Excel and saved as a .cvs file

When using an Excel file, you must be very careful to record the data correctly. The best way to learn the structure of a file is to examine, in Excel, a price list exported from Advisor.

◆ To import a price list:

1. From the **Price Lists** tab, click the **Import Price List** button.
2. Double-click the file you want to import.
3. Select the **Color/Clarity** naming standard from the list, and then click **OK**.

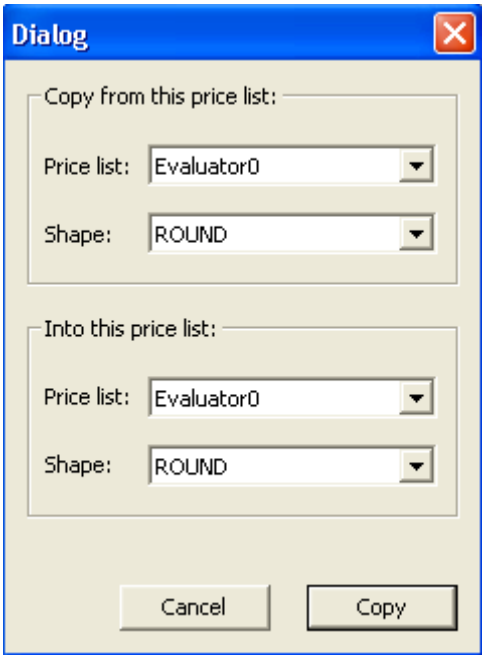
   The new price list is added and named automatically.

Copying a Price List

You can copy a price list from any shape in any institute to another shape in another institute:

To copy a price list:

1. From the **Price Lists** tab, click the **Copy Price List** button.



2. Choose a source **Price List** and **Shape**.
3. Choose a destination **Price List** and **Shape**.
4. Click **Copy** to complete the operation.

Setting the Discount Prices

It is important to remember that each discount list is specific to a combination of grading system, cut grade and weight range.

You can set discount price lists by combining or splitting colors and clarity levels. For example, if the price list uses the D-Z color standard, you can combine the color grades D, E, and F to a single color range, D-F, and set the price for that range (the same price would apply to all of the tree colors). The same applies to combining clarity levels.

You can also split a combined definition into its components. For example, if you combined colors to D-F, splitting re-creates the separate D, E and F entries.

To group column data:

1. Select the first column (clarity levels) to be included in the group and drag the mouse to the last column you want included in the group. The following figures illustrate selected rows and columns.

Color/Clarity	IF	VVS1	VVS2	VS1	VS2	SI1	SI2	SI3	I1	I2	I3
D	5.00	5.00	5.00	3.00	7.00	8.00	8.00	8.00	9.00	9.00	9.00
E	0.00	0.00	0.00	4.00	4.00	6.00	8.00	8.00	8.00	8.00	5.00
F	8.00	44.00	44.00	12.00	12.00	12.00	8.00	12.00	12.00	12.00	12.00
G	5.00	5.00	23.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
H											
I											
J											
K											
L											
M											
N											

The VVS1 and VVS2 and the VS1 columns have been selected.

2. In the Edit Discount Ranges pane, click the Group button.

If prices have been recorded, the group takes the price from the first column.

Color/Clarity	IF	'VS1 - VS1	VS2	SI1
D	5.00	5.00	7.00	8.00
E	0.00	0.00	4.00	6.00
F	8.00	44.00	12.00	12.00
G	5.00	5.00	21.00	21.00
H				
I				

The three columns are now grouped together as shown above.

To group row data:

This is similar to the previous examples only now we are grouping the rows.

To split grouped colors or clarity levels:

1. Click the grouped row or column.
2. Click the Split button.

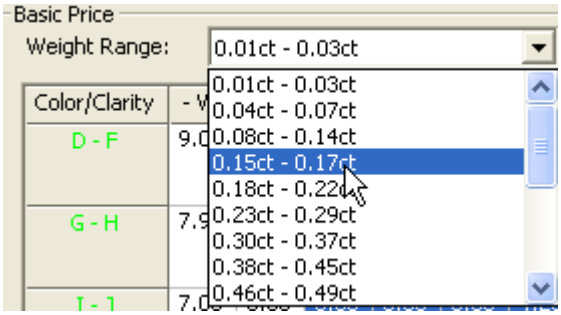
If prices have been recorded, all individual rows and columns take the price of the group.

Updating Prices

You can always select a price list in Pricing Table, and change the prices manually for different shapes, weight ranges, and color/clarity pairs. In addition, Advisor provides a special tool designed to update prices globally, for each range, or for each shape (all of its weight ranges) or for each price list (all shapes and all of their ranges).

◆ To update prices globally:

1. Open the **Price Lists** tab.
2. Open the Weight Range selection box.

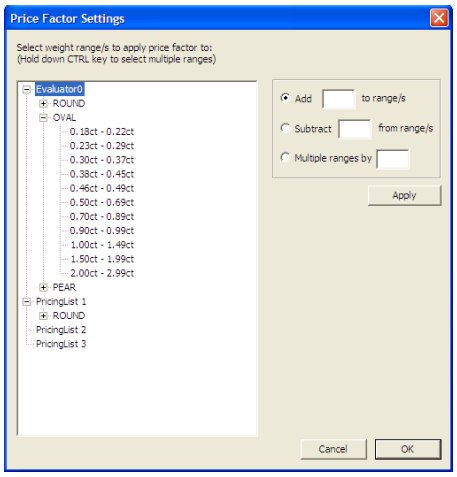


3. Select a weight range.
4. In the Basic Price pane Color/Clarity table, select either a group of rows (Color) or columns (Clarity) as shown below.

Color/Clarity	- VVS	1 - VS	SI1	SI2	SI3	I1	I2	I3
D - F	9.00	7.90	7.20	6.60	6.00	5.50	4.40	2.20
G - H	7.90	7.30	6.80	6.30	5.60	5.00	4.00	2.00
I - J	7.00	6.50	6.00	5.50	5.00	4.20	3.40	1.70
K - L	5.40	4.90	4.40	3.90	3.60	3.20	2.60	1.40
M - N	4.00	3.60	3.20	2.90	2.60	2.30	0.20	1.00

5. Do one of the following:
   a) To update all the prices included in a price list, click the name of the list.
   b) To update all the prices for a specific shape, click the ⊞ button located to the left of the name of the price list. This expands the tree to show the shapes of the price list. Then, click the shape you want to update.

c) To update all the prices for a certain range, expand the price list tree to display the shapes and then expand (click ⊞) the shape to show its ranges. Then, click a range. The following figure illustrates a fully expanded shape branch and a selected weight range:



You can click ⊟ to collapse a branch.

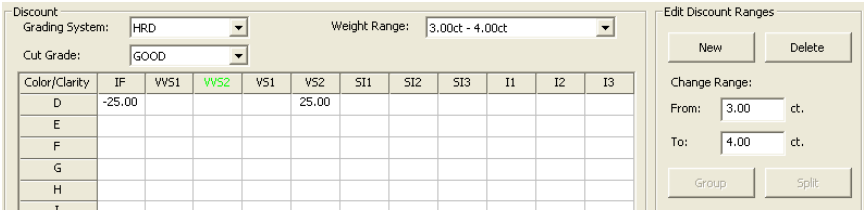
6. In the boxes on the right, type the amount (money) by which you want to update the prices.
7. Select the option that defines the update operation. For example, if you click **Add**, Advisor adds the amount to all of the selected prices.
8. Press the **Apply** button to complete the operation.
9. Click OK to close the window.

Advisor now displays the updated prices.

Setting Markup and Discounts for selected Stones

◆ To make a selected discount or markup:

1. Click the  button to open the Options screen.
2. Click the **Price Lists** tab.
3. Make a discount setting as shown below.

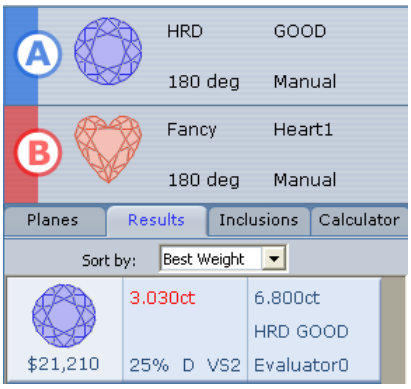


In the example above we have two examples.

a) Stones using the HRD grading system, a color of D, clarity of **VS2** and within the 3.00 to 4.00 ct. weight range have a 25% price mark-up (+25.00).

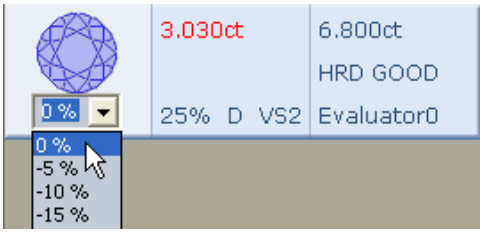
b) Stones using the HRD grading system, a color of D, clarity of **IF** and within the 3.00 to 4.00 ct. weight range have a 25% price discount (-25.00).

4. Open the **Results** tab.



As you can see the stone we planned meets these requirements exactly and therefore shows a mark-up of 25%.

5. To remove the mark-up, click on the price ($21,210).



6. Click the 0% entry.

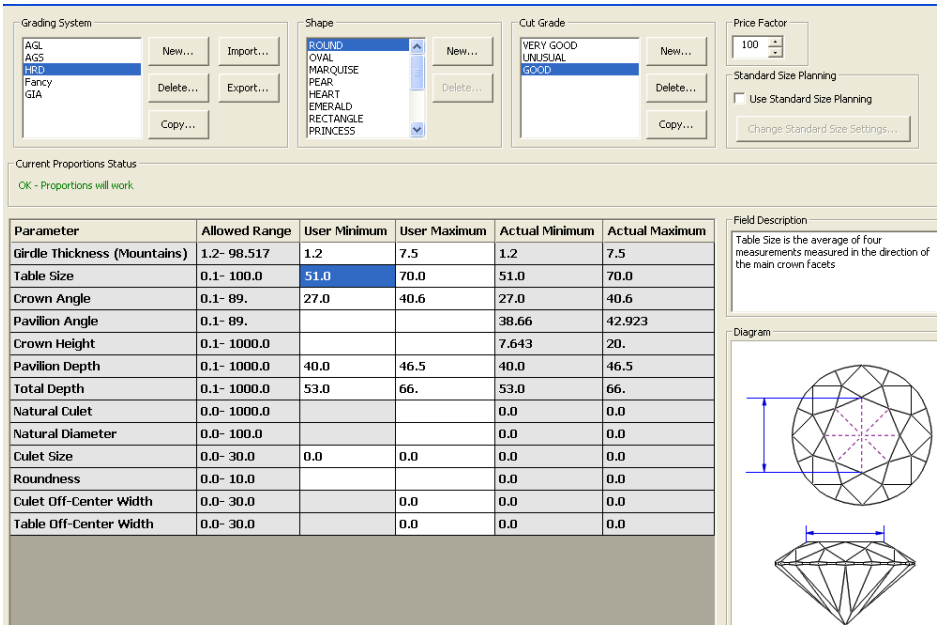
The true price is now shown as $16,968, without any mark-up (0%).

DEFINING THE STANDARD PROPORTIONS

This section describes how to define the standard proportions for Advisor using the Standard Proportions Editor. Advisor uses a pre-defined set of standard diamond proportions when it plans the final stone.

◆ To open the proportions editor:

1. Click anywhere in the **Planning** parameters pane.
2. Choose **Edit Proportions**.



Parameter	Allowed Range	User Minimum	User Maximum	Actual Minimum	Actual Maximum
Girdle Thickness (Mountains)	1.2- 98.517	1.2	7.5	1.2	7.5
Table Size	0.1- 100.0	51.0	70.0	51.0	70.0
Crown Angle	0.1- 89.	27.0	40.6	27.0	40.6
Pavilion Angle	0.1- 89.			38.66	42.923
Crown Height	0.1- 1000.0			7.643	20.
Pavilion Depth	0.1- 1000.0	40.0	46.5	40.0	46.5
Total Depth	0.1- 1000.0	53.0	66.	53.0	66.
Natural Culet	0.0- 1000.0			0.0	0.0
Natural Diameter	0.0- 100.0			0.0	0.0
Culet Size	0.0- 30.0	0.0	0.0	0.0	0.0
Roundness	0.0- 10.0			0.0	0.0
Culet Off-Center Width	0.0- 30.0		0.0	0.0	0.0
Table Off-Center Width	0.0- 30.0		0.0	0.0	0.0

Grading System

Name your set of values here. The set can be named after an actual grading system (Institute) or you can make your own set any name you want. The names of the grading systems defined here are displayed in the **Grading System** pane. After defining a new grading system, its name becomes available for selection in the planning process.

Button	Description
New	The **New** button creates a new grading system without any parameters
Delete	The **Delete** button deletes the selected user defined grading system.
Copy	The **Copy** button copies the selected grading system together with all the parameters (enabling you to change them) under a new unique name.
Import	Proportion tables can be imported from a file. The file must have an extension of **.ins**.
Export	Proportion tables can be exported to a file and loaded into another Export system. The file has an extension of **.ins**.

To export a grading system as a file:

The proportions you have defined can be exported to back up your data and also transfer the exported grading system to another Advisor system.

1. In the Grading System pane, select the grading system whose data you want to export.
2. Click the **Export**.
3. Select the folder where you want to save the file and enter a name. For the exported file, Advisor adds the extension automatically.

To import Advisor proportions as an external file:

You can import a previously exported grading system file.

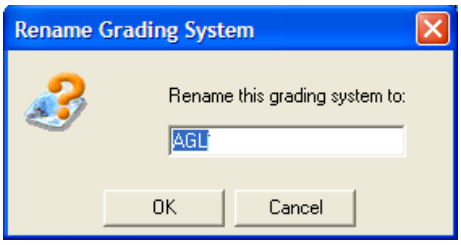
1. In the **Grading System** pane, click **Import**.
2. Change to the folder where the file is located and double-click it.
3. Advisor imports the values under a new institute name.

   Right-click the imported grading system and choose **Rename** from the popup menu to rename it.

To rename a grading system:

1. Click anywhere in the **Grading System** pane.

   The menu is displayed.
2. Choose **Rename**.



   The **Rename Grading System** window opens.
3. Change the name.
4. Click **OK**.

Shape

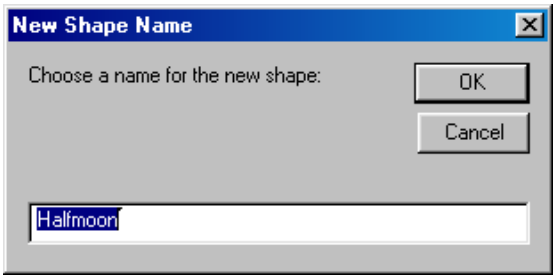
Advisor is installed with built-in shapes and enables you to import additional shapes from www.gemcad.com the GemCad site. Once imported, the shape becomes available for selection in different drop-down lists as any other shape (for example, when planning) throughout Advisor.

To import a user-defined shape:

1. Click the **New** button.

   The standard Open dialog box opens.

2. Find and select the GemCad file (.asc file) and click the **Open** button.



The **New Shape Name** dialog box opens. It contains the name of the file you have just selected (without the extension).

3. You can type a different name.

Use a name that is intuitive and that you would like to see as a shape name on the selection lists throughout Advisor.

4. Click **OK**.

The new name is displayed on the list in the **Shape** pane and in all other selection lists throughout the system.

◆ To delete a shape:

1. Select the shape you want to delete.
2. Click the **Delete** button.

NOTE

You can only delete user created shapes.

Cut Grade

Although grades (Excellent, Good, etc.) are standardized, you can give any name to any grade. The names you define here appear in the cut grade drop-down list in the Planning window, when you select the institute to which they belong. You can drag the entries into a new position in the list. This means that you can have the list display the cut grade entries in any order you desire.

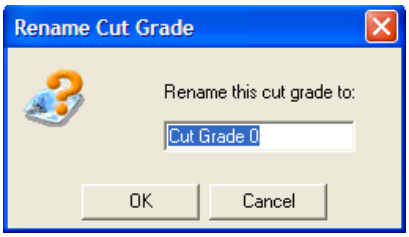
Item	Description
New	Creates a Cut Grade without any parameters.
Delete	Deletes the selected Cut Grade.
Copy	Copies the selected Cut Grade together with all the parameters (enabling you to change them) under a new unique name.

◆ To rename a cut grade:

1. Click anywhere in the **Cut Grade** pane.

   The menu is displayed.

2. Choose **Rename**.



   The **Rename Cut Grade** window opens.

3. Change the name.
4. Click **OK**.

Price Factor

When pricing a stone, Advisor multiples the calculated price with this factor. To increase the price, type a percentage above 100. For example, if the price of an Excellent stone is to be automatically increased by 10%, type 110.

Standard Size Planning

For each grading system, shape, cut grade combination you can define standard sizes in order to produce planned stones of a pre-defined length and width. For each combination you can define multiple standard sizes: Advisor allocates the biggest among them.

When Standard Size Planning is enabled Advisor generates two plans: the regular (best possible) and the biggest among the pre-defined standard sizes. The Results tab then displays the results.

The standard sizes are measured in terms of width and length and the unit of measure is millimeters. For each width and length you can specify either an accurate value or a range of possible values. Advisor always performs the most economic allocation possible within the constraints of the standard sizes, as you have defined them.

◆ To define standard sizes:

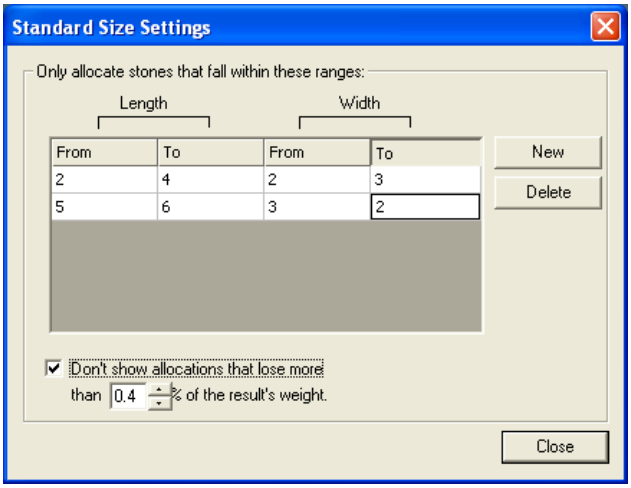
1. Select a grading system, shape and a cut grade.
2. Select the **Use Standard Size Planning** check box.

   This enables the **Change Standard Size Planning** button.

NOTE

It is important to remember that these standard size settings will only apply to the specific combination of the currently selected grading system, shape and cut grade.

3. Click the **Change Standard Size Planning** button.



The **Standard Size Settings** window opens. This window enables you to define the range for each measurement parameter that will ensure standard size stones.

4. Click the **New** button to open a new row.
5. To set a standard length, enter a range of millimeter values in **From** and **To** under Length.

   If you want to plan a stone of a specific length, enter the same value in **From** and **To**. For example, enter **From** = 3 and **To** = 3 to perform a plan that yields a length of 3. If an exact length is not necessary and some flexibility is allowed, enter a range in **From** and **To** and let Advisor find the best length within the range. For example, specifying Length **From** = 2 and **To** = 3 amounts to instructing Advisor to allocate the best possible length between 2 and 3 mm.
6. Do the same for the **Width** columns.

   To ensure greater flexibility, you can define multiple standard sizes.
7. Click the **New** button again, enter values, and repeat this step as many times as the number of sizes you want to define.

   In each plan, Advisor will try to allocate the biggest possible standard length and width.
8. To perform plans as economical as possible, in the check box **Don't show allocations that lose more than** enter a percentage.

   if the difference between the maximum standard size and the maximum plan is more than the specified percentage, Advisor does no perform the standard size planning and performs only the regular plan.
9. Click **Close**.

◆ **To change the settings:**

☐ Click the **Use standard size settings** button enabling you to change the values.

To remove a standard size definition:

☐ Click anywhere on the row you want to delete and then click the **Delete** button.

To disable standard size planning:

You can disable this function without deleting the standard sizes.

☐ Clear the **Use standard size settings** checkbox.

Selecting it again reactivates the standard size planning.

Current Proportions Status

Advisor checks the parameters and displays **OK** if the current proportions are workable.

Column	Description
Parameter	Stone parameter
Allowed Range	Minimum and Maximum parameter limits
User Minimum and maximum	These are your values for creating your own range of proportions. You specify a range to instruct Advisor to set a certain property to any value within the range, when planning a stone. The values you record here must fall within the ranges indicated in the Allowed Range column. For example, entering a range of 10-50 for Crown Height means that the crown of a stone allocated under this "institute" will never be lower than 10 and higher than 50. This applies to automatic planning; you can always use the Calculate module to fine-tune the planning.
Actual Minimum and Maximum	These are the derived values that Advisor suggests is the best range for different parameters, based on the values you record in User Values. For example, after recording the Girdle range, Advisor automatically suggests the best range for Total Depth. You do not have to accept the suggested ranges.

Field Description

This a textual description of the selected parameter

Graphic Description

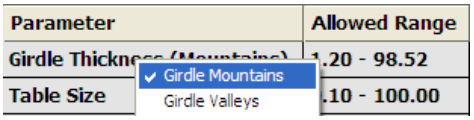
A graphical display of the selected parameters.

Girdle Thickness Parameter

This feature is used for toggling the girdle thickness definition between Mountain (final polished stone) and Valley (8-cut).

◆ To toggle the girdle thickness definition:

1. When available, right-click the **Girdle Thickness** parameter.



   The popup menu opens.

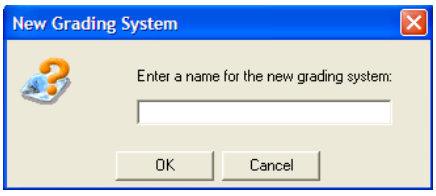
2. Choose the unchecked value to toggle the girdle thickness definition.

   This is not available on all shapes.

Building a Set of Proportions

◆ To build a new set of proportions:

1. In the **Grading** System pane, click the **New** button.



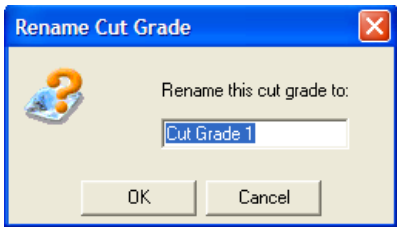
   The **New Grading System** window opens.

2. Enter a name for the new grading system.
3. In the **Shape** pane, select the shape for which you want to define the proportions.
4. In the **Cut Grades** pane, click the **Add** button to add a new grade.

   Advisor initially assigns the default name Cut Grade 0, and when you add a new cut grade Advisor automatically adds a new cut grade with a value of Cut Grade 1.

5. If you want to change the default name do the following:

   a) Right-click the name you want to change and choose **Rename**.



   The **Rename Cut Grade** window opens.

   b) Enter a new name and then click **OK**.

   You can repeat the **Add** operation in order to add all grades, before you move to the next step. Before you proceed to **User Values**, **make sure a grade is selected** (the values apply to the selected grade). Advisor saves all data as you enter it.

6. In **Price Factor** type a percentage for the selected grade.
7. Click the **Min**. and **Max**. (Minimum and Maximum) boxes in the User Values table, and type your ranges. The values you enter refer to the shape and cut grade that are currently selected in the upper panes.

   Before you enter your values, make sure that the correct shape and grade are selected.
8. After filling the table, add another cut grade (or select one if you have defined them), make sure it is selected, and type in its ranges in User Values. Repeat this step for all cut grades.
9. After filling in the proportion ranges for all cut grades, select another shape, add its cut grades, and then repeat steps 4 to 9 for all cut grades.
10. Repeat this step for all shapes.

◆ **To build a set of proportions by copying an existing one:**

1. Select a combination of a grading system, shape and a cut grade.
2. Click the **Copy** button (in the Grading System Pane).

   The **Name New Cut Grade** window opens.
3. Enter a name for the new cut grade
4. Click **OK**.

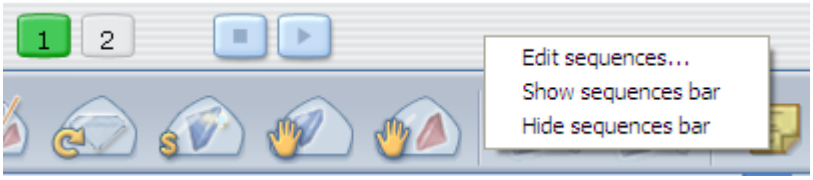
   A new set is created with the copied values.
5. Change the values as needed.

Auto Sequences

An auto-sequence is a series of Advisor actions that you can execute in a given sequence with a single mouse click or using the special Advisor keypad.

◆ **To open the Sequence Editor:**

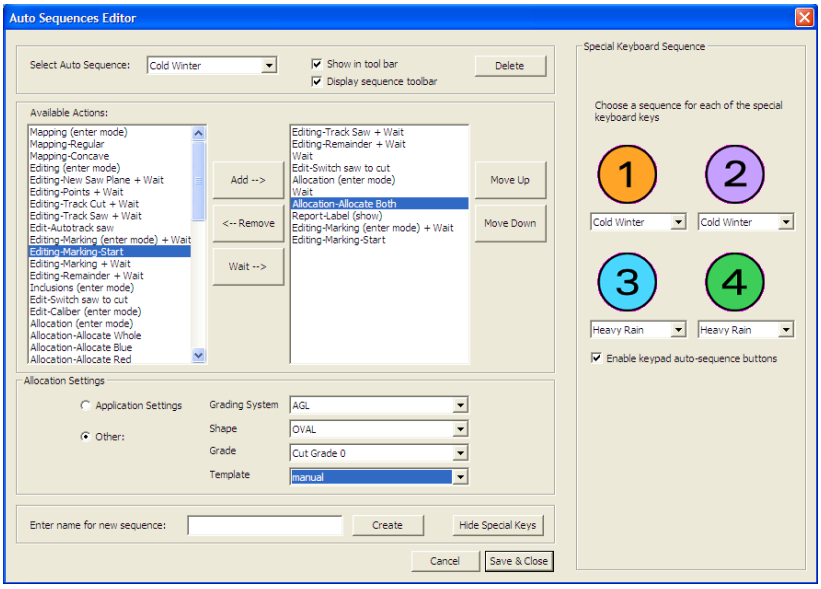
1. Right-click the **Plan** tab toolbar (the cursor is pointing to the toolbar).



The popup menu opens.

The **Show/Hide** sequences bar option shows or hides the **Sequence** controls on the toolbar.

2. Choose **Edit sequences**.



The **Sequence Editor** window opens showing the **Special Keyboard** sequence and **Allocation Settings** panes.

The table below describes the **Sequence Editor** fields:

Field or Button	Description
Select Auto Sequence	Enter the name of the Auto Sequence you want to display.
Show in Toolbar	When checked the Sequence numbers are displayed in the toolbar
Display Sequence Toolbar	When checked the Auto Sequence toolbar is displayed on the Plan tab
Delete	Deletes the selected Auto Sequence
Available Actions	Lists the available sequences (Macros)
Add	Adds an action to the sequence
Remove	Deletes the selected action from the sequence list
Wait	Adds a wait action to force operator intervention
Move Up/Down Keys	Used for changing the position of an action in the sequence list
Planning Settings	Enables you to choose an institute, shape, grade and a template.
Enter Name for new sequence	Enter the name when creating a new sequence
Create	When a new sequence name is entered this button creates a new sequence
Show Special Keys	Opens the **Special Keyboard Sequence** window

A list of all the possible actions is listed in the **Available Actions box**. Each action corresponds to selecting one or more elements on the Advisor windows:

Actions that have a "+ Wait" suffix mean that user intervention is needed to complete the action and perform the next action in the sequence. For example, to create and position a saw plane you will use the action Editing New Saw Plane + Wait. This is equivalent to clicking the **Plan** tab and clicking the **New Saw Plane** icon. When you execute this action, Advisor creates the saw plane and waits for the user to position it on the rough stone.

◆ To create an auto-sequence:

1. In the **Enter Name for New Sequence** field, enter a name for the sequence you want to build.
2. Click the **Create** button.

   The **Sequence** pane is reset and any actions listed there are deleted.
3. In **Available Actions**, click an action and then click the **Add** button.

   The action moves to the right-hand **Sequence** pane. When you run an auto-sequence the commands listed in the right-hand pane are executed in sequence, one after the other in the exact order they appear in the list.

   You can remove an action from the **Sequence** pane by selecting it on the right and clicking the **Remove** button.

   Use the **Move Up** and **Move Down** buttons to change the position of individual **Action Sequences** as this is the order in which they will be executed.
4. Some actions, when selected, enable additional parameters in the **Allocation Settings** pane.

   Application Settings – when selected perform the planning using the grading system, shape and cut grade (or program) settings currently selected in the **Planning Part A** and **B** pane.

   Other – when selected enables you to use different settings to those displayed in the **Planning Part A** and **B** pane. Selecting **Other** enables the **Grading System**, **Shape**, **Grade** and **Template** drop-down selection boxes for you to change the settings.
5. Check the **Show in toolbar** button if you want the sequence controls displayed on the toolbar.

   The Sequence Controls displayed on the toolbar are in the form of numbered buttons, one for each sequence, when the **Show in toolbar** button checkbox has been selected. If you have a large number of sequences, and you do not use all of them frequently, you may choose to make only some of them available on the toolbar, by selecting their **Show in toolbar button** box. Clearing the box, removes the current sequence from the toolbar.
6. Click the **Save & Close** button.

To assign an auto-sequence to the Advisor keypad:

1. Click the **Show Special Keys** button.

   The window expands to show a representation of the auto-sequence buttons of the special keypad.

2. Ensure that the **Enable keypad auto-sequence buttons** box is selected.

   If this box is cleared, the auto-sequence buttons on the keypad will not work even if they have auto-sequences assigned to them.

3. For each button, select an auto-sequence from the list below the button number.

   You can use the **Hide Special Keys** button to close the extended section.

To run an auto-sequence from the Advisor screen:

1. The sequences are displayed as sequence numbers in the **Plan** tab toolbar.

   The buttons show the sequence number. When the mouse hovers over a sequence button the sequence name is displayed as a tool tip.

2. Click a sequence button to execute the corresponding sequence.

   While running the sequence, click the **Stop** button to stop execution. Advisor finishes executing the current action and does not execute the subsequent ones.

   After the sequence stops as a result of a "+ Wait" action, use the Resume button to resume execution of the sequence.

To run an auto-sequence from the Advisor keypad:

☐ Press the required button.

To modify an auto-sequence:

1. In the **Auto Sequences Editor** dialog box, open the **Select Auto Sequence** drop-down list, and select the sequence you want to modify.
2. Add or remove actions and use the other functions, as necessary.
3. Click **Save & Close**.

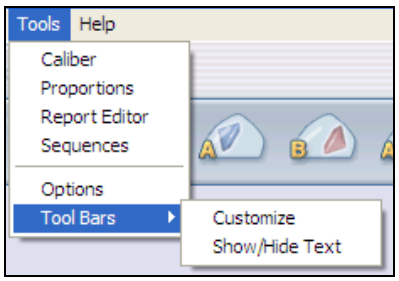
Customizing the Toolbar

The toolbar displays the buttons depending on the selected tab. You can customize the toolbar using the toolbar customization window and remove a button from the toolbar by pressing the **Shift** key on the keyboard and dragging the button off the toolbar.

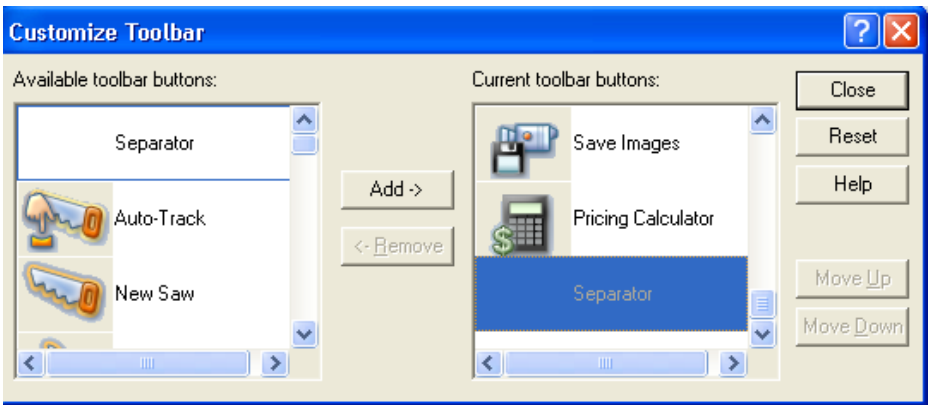
Advisor enables you to customize the toolbar to display only the required functions.

To customize the toolbar:

1. Click the **Tools** menu.



2. Choose **Customize** from the menu.



3. Select a button from the **Available toolbar button**s pane and then click **Add** (or double-click the button's name) to add it to the **Current toolbar buttons pane**.
   OR

   Select a button in the **Current toolbar buttons pane** and the click **Remove** (or double-click the button's name) to delete it.

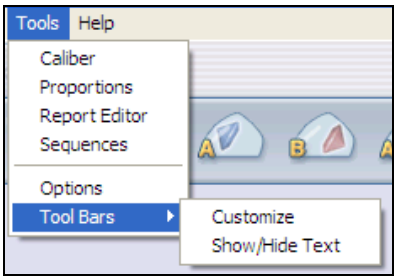
   The **Reset** button returns the toolbar to the factory default.

Show/Hide Toolbar Text

Advisor can add a text description underneath each toolbar button. This is very helpful when you start using this version of Advisor. As soon as you are familiar with the different buttons you can hide the text descriptions to reduce toolbar clutter.

◆ To Show/Hide the toolbar text descriptions:

1. Click the **Tools** menu.



2. Choose **Show/Hide Text** from the menu.

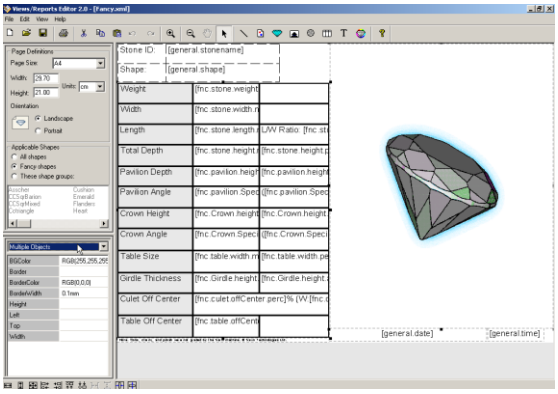
CREATING AND EDITING VIEWS, REPORTS AND LABELS

Advisor enables you to create views, report and label structures of your own. You can create a view that displays, side-by-side, a 3D picture of the stone together with its dimensions table. Before you start creating your own new views and reports, we suggest that you would find it a lot easier to load a built-in view from the Advisor library and then customize it to your needs. You should then save your new customized file under a different name in the correct display, report or label library, so that you can find it again at a later date.

Opening the Views/Reports Editor

◆ To open the editor:

☐ On the **Tools** menu, click Views/**Reports Editor**.



The **Reports Editor** opens displaying last display viewed in Advisor.

Objects Table

Object	Description
T	Use the **Text** object to display static and dynamic text. To enter static text, type it directly into the frame. To enter data field text, double-click the frame and select grading system fields. You can do the same in the **Text** property as well.
	Use the **Line** object to draw a straight line at any angle.
	Enables you to insert pictures (**Graphic Image**) in the structure.
	Use the **3D/Video Dual viewer** object to display a 3D view of the gemstone OR to the captured video of the gemstone.
	Use the **Photorealistic View** object to display a photo-realistic view of the gemstone.
	Use the **Table** object to create tables and report structures. As soon as you release the mouse button, after creating the object in the work area, the **Select No. of Rows and Columns** dialog box opens automatically.

Creating a New Structure

To create a new structure:

1. Click the **New** button to start a new structure.
2. In the **Page Size** list box, select one of the following:

Page Definition	Description
Page Size	Select a Page size
ADDRESS	For labels
A4	For views

3. Select the page orientation.

Page orientation	Description
Landscape	For views and labels
Portrait	For reports

This option spreads the structure across the entire work area.

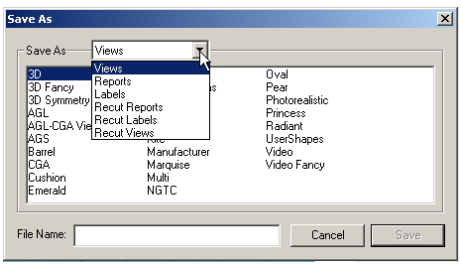
4. First select an object on the toolbar.
5. Point anywhere in the work area of the screen and drag the mouse to draw the object or container.
6. Use the object **Properties** listed in the lower left-hand pane to configure the object.

NOTE

If you need help in understanding how to use the Properties pane see *How to Create and Edit the Structures* on page 41.

7. Repeat the steps to draw and configure the objects you want to include in this structure.
8. Click the **Save** button to save.

   This opens the **Save** dialog box.
9. Click the button to open the **File Type** list box.



Select a file type.

1. In the **File Name** field box, enter a name for the structure.
2. Click **Save**.

Opening a Saved Structure File to Edit

Before you can customize a structure you must first load it into the **View/Reports Editor**.

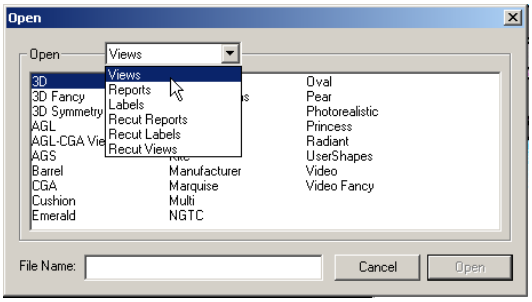
◆ To open a specific structure file:

1. On the **Tools** menu, click Views/**Reports Editor**.

   The **Reports Editor** opens displaying the last structure created.

2. Click the **Open** button.

3. Click the button to open the **File Type** list box.



4. Select a file name to insert it into the **File Name** field box.

5. Click **Open**.

How to Create and Edit the Structures

This section describes in **DETAIL** how to use each object to create and edit your own customized structures.

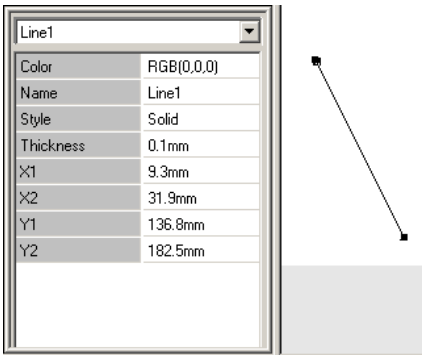
Object	Go to Section	Page
	Creating or Editing Line Objects	42
	Creating or Editing Image Objects	43
	Creating or Editing 3D Diagram Objects	45
	Creating or Editing Photorealistic View Objects	47
	Creating or Editing Table Objects	48
	Creating or Editing Cell Objects	53
T	Creating or Editing Text Objects	51
	Creating or Editing Multiple or Grouped Objects	56

Creating or Editing Line Objects

The line is a graphic element that can also be used as a divider between objects

◆ To create or edit a line object:

1. Either ensure that the line you want to edit is displayed in the **Views/Reports Editor**.
   OR
   Click the **Line**  button located on the toolbar.
2. Left-click and hold anywhere in the work area to start the line, and then drag the mouse to create the line.
3. Release the mouse when the line is the required length.



It should now look something like this.
Using the mouse, the line can be shortened, lengthened and moved anywhere in the work area. You can also change the angle of the line.

Line Properties Table

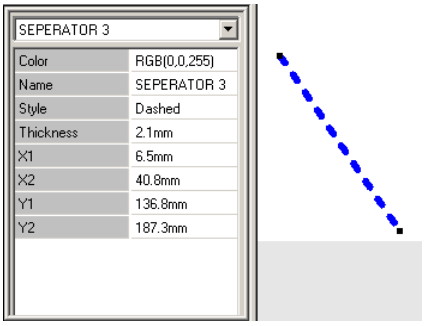
Properties	Description
Color	Changes the object color. See *Changing the Color* below.
Name	Changes the name in the properties table.
Style	Dashed or Solid.
Thickness	Determines the thickness of the line.
X1	Start of line on the X-axis.
X2	End of line on the X-axis.
Y1	Start of line on the Y-axis.
Y2	End of line on the Y-axis.

4. Click the Name field, and type a name for the line object, or leave the default name.
5. If you have changed the name of the line object, click the line object.

   The new name is now displayed in the **Properties** list box.
6. Click the Style field, and then click the  button to open the list box.

7. Select **Solid** or **Dashed**.
8. Click the Color field

   See **Changing the Color** on page 59 for detailed instructions.



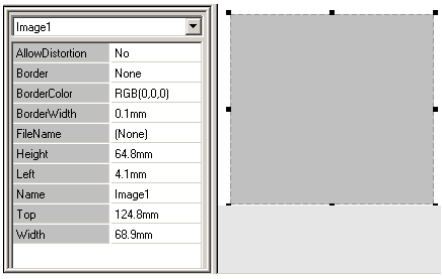
   In this example we have created a dashed blue line.

9. Apply the properties of **Thickness** or change the **X** and **Y** values manually if required, as described in the *Line Properties Table*.
10. Go to *Saving the Reports, Views and Labels* on page 60.

Creating or Editing Image Objects

◆ To create or edit image objects:

1. Ensure that the image you want to edit is displayed in the **Views/Reports Editor**.
   OR
   Click the **Image** button located on the toolbar.
2. Left-click and hold anywhere in the work area to start the image container, and then drag the mouse to resize it.
3. Release the mouse when the image container is the required size.



   The image container is now displayed in the work area. Using the mouse, the container can be shortened, lengthened and moved anywhere in the work area.

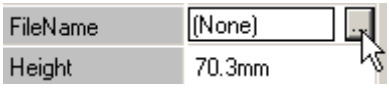
4. Click the Name field, and type a new name for the image object, or leave the default name.
5. If you have changed the name of the image object, click the image object.

   The new name is now displayed in the **Properties** list box.

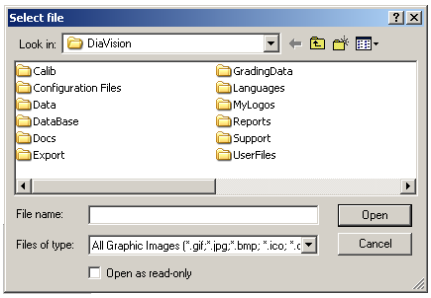
Image Properties Table

Properties	Description
AllowDistortion	Permits you to change the image aspect ratio when inserting an image into a container of a different size. Logos' aspect ratio should **NOT** be changed.
Border	Determines if there is to be a border or not.
BorderColor	Changes the border color. See *Changing the Color* below.
BorderWidth	Determines the width of the border.
FileName	Click this field to select the image file you want to insert inside the container.
Height	The actual height of the container.
Left	Distance from the left side of the work area to the left-hand side of the container.
Name	Enter a name for this image.
Top	Distance from the top of the work area to the top of the container.
Width	The actual width of the container.

6. Click the FileName field.



7. Click the **Browse** button.



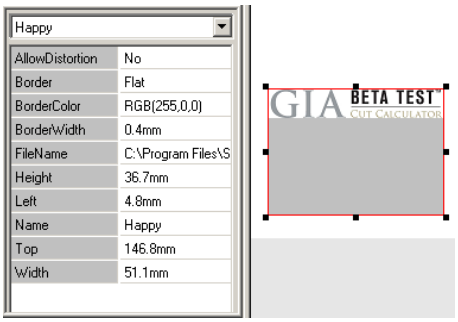
The **Select file** dialog box opens.

8. Navigate to the required folder and select an image file for insertion.
9. If you want a border, click the Border field, and then click the button to open the list box.
10. Select **Flat**.
11. If you have decided to have a border, click the BorderColor field

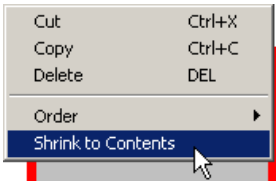
See *Changing the Color* on page 59 for detailed instructions.

12. Ensure that the AllowDistortion property is **NO**.

    You do not normally want the image or logo to lose its aspect ratio and look distorted.



13. Right-click the image.



14. Click **Shrink to Contents**.

    The container has now shrunk to the size of the image.

15. Apply the properties of **Height**, **Top**, **Width and Left** manually if required, as described in the **Image Properties Table**.

16. Go to *Saving the Reports, Views and Labels* on page 60.

Creating or Editing 3D Diagram Objects

This object is for displaying a 3D view in the **Data** tab work area.

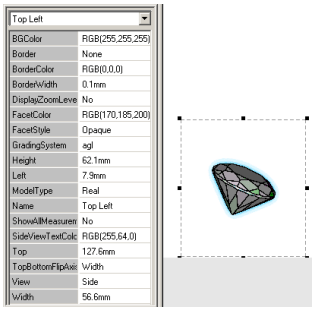
◆ To create or edit 3D/Video dual objects:

1. Ensure that the **3D/Video** object you want to edit is displayed in the **Views/Reports Editor**.
   OR

   Click the **3D Diagram**  button located on the toolbar.

2. Left-click and hold anywhere in the work area to start the **3D/Video** object, and then drag the mouse to resize it.

3. Release the mouse when the 3D object is the required size.



The **3D/Video** object is now displayed in the work area.

4. Click the Name field, and type a new name for the **3D/Video** object, or leave the default name.
5. If you have changed the name of the **3D/Video** object, click the **3D/Video** object.

   The new name is now displayed in the **Properties** list box.

3D Diagram Properties Table

Properties	Description
BGColor	The 3d Diagram can be given a background color. See *Changing the Color* below.
BorderColor	Changes the border color. See *Changing the Color* below.
BorderWidth	Determines the width of the border.
Height	The actual height of the container.
Left	Distance from the left side of the work area to the left-hand side of the container.
Name	Enter a name for this **3D/video object**.
Top	Distance from the top of the work area to the top of the container.
View	The choices are **3D, Video** and **Both. Determines which object is displayed**.
Width	The actual width of the container.

6. If you want a border, click the Border field, and then click the button to open the list box.
7. Select **Flat**.
8. If you have decided to have a border, click the BorderColor field

   See *Changing the Color* on page 59 for detailed instructions.
9. Apply any of the other properties manually if required, as described in the *3D Diagram Properties Table*.

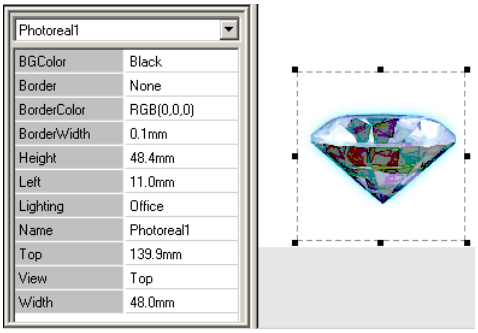
   It is recommended to leave the other default values as is and only change them if necessary at a later time.
10. Go to *Saving the Reports, Views and Labels* on page 60.

Creating or Editing Photorealistic View Objects

This object is for displaying a **Photorealistic** object in the **Data** tab work area.

◆ To create or edit Photorealistic objects:

1. Ensure that the Photorealistic object you want to edit is displayed in the **Views/Reports Editor**.
   OR
   Click the **Photorealistic** button located on the toolbar.
2. Left-click and hold anywhere in the work area to start the photorealistic object, and then drag the mouse to resize it.
3. Release the mouse when the photorealistic object is the required size.



The **Photorealistic** viewer is now displayed in the work area.

Photorealistic Properties Table

Properties	Description
BGColor	The 3d Diagram can be given a background color. See *Changing the Color* below.
Border	Determines if there is to be a border or not.
BorderColor	Changes the border color. See *Changing the Color* below.
BorderWidth	Determines the width of the border.
Height	The actual height of the container.
Left	Distance from the left side of the work area to the left-hand side of the container.
Lighting	This feature enables you to choose from a long list of different lighting schemes to give the special photorealistic affect of the stone.
Name	Enter a name for this photorealistic viewer.
Top	Distance from the top of the work area to the top of the container.
View	The choices are **Top, Bottom Side Table Up,** and **Side Table Down**.
Width	The actual width of the container.

4. Click the Name field, and type a name for the photorealistic viewer, or leave the default name.

5. If you have changed the name of the photorealistic viewer, click the photorealistic viewer.

   The new name is now displayed in the **Properties** list box.

6. Click the Lighting field, and then click the button to open the lighting scheme list box.
7. Select a lighting scheme.
8. If you want a border, click the Border field, and then click the button to open the list box
9. Select **Flat**.
10. If you have decided to have a border, click the BorderColor field

    See *Changing the Color* on page 59 for detailed instructions.

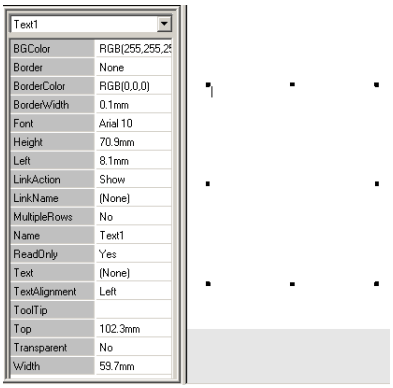
11. Apply any of the other properties manually if required, as described in the *Photorealistic Properties Table*.
12. Go to *Saving the Reports, Views and Labels* on page 60.

Creating or Editing Text Objects

This object is for displaying a **Text** object in the **Data** tab work area.

◆ To create or edit Text objects:

1. Ensure that the Text object you want to edit is displayed in the **Views/Reports Editor**.
   OR
   Click the **Text** T button located on the toolbar.
2. Left-click and hold anywhere in the work area to start the text object, and then drag the mouse to resize it.
3. Release the mouse when the **Text** object is the required size.



   The **Text** object is now displayed in the work area.

4. Click the Name field, and type a name for the text object, or leave the default name.
5. If you have changed the name of the text object, click the **text** object.

   The new name is now displayed in the **Properties** list box.

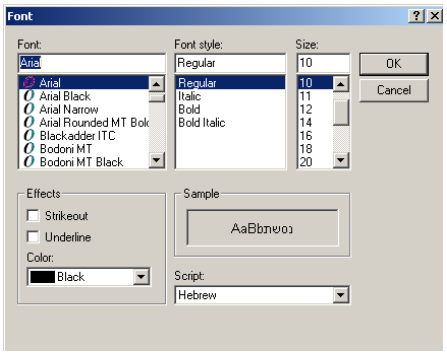
6. If you want a border, click the Border field, and then click the button to open the list box.
7. Select **Flat**.
8. If you have decided to have a border, click the BorderColor field

See *Changing the Color* on page 59 for detailed instructions.

Text Properties Table

Properties	Description
BGColor	The Table object can be given a background color. See *Changing the Color* below.
Border	Determines if there is to be a border or not.
BorderColor	Changes the border color.
BorderWidth	Determines the width of the border.
Font	You can choose any font that is installed on your computer. This font will apply to all table cells.
Height	The actual height of the table. It can only be changed when the whole table is selected.
Left	Distance from the left side of the work area to the left-hand side of the table. Only when the whole table is selected, can this field be seen or changed.
LinkAction	This link can either be Viewed or Printed.
LinkName	Shows the path of the link for the text box.
MultipleRows	When Yes the text will wrap around the text box. When No, part of the text may not be visible.
Name	Enter a name for this table to be displayed in the properties table.
ReadOnly	If **Yes** you cannot change the information displayed. If No you can change the value in the Advisor display.
Text	This field is for inserting free text into the text box, or selecting a substitution field. These are dynamic fields that are automatically inserted depending on what is currently being viewed in the **Data** tab.
TextAlignment	You can align the text **Left**, **Right** or **center**.
ToolTip	Enter here a Tool Tip for each text box.
Top	Distance from the top of the work area to the top of the table. Only when the whole table is selected, can this field be seen or changed.
Transparent	The options are **Yes** and **No**.
Width	The actual width of the container.

9. If you want the table to be transparent (no background), click the Transparent field and select **Yes**.
10. Click the Font field and click the ... button.



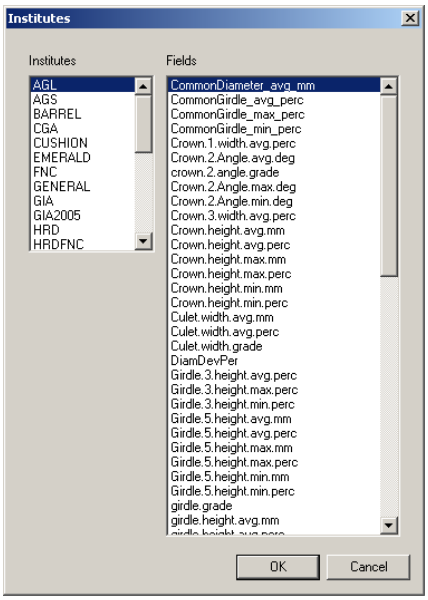
The **Font** dialog box opens. These are the fonts installed on your computer.

11. Select a **Font**, a **Font style** and font **Size**.

    This selection is only for the selected cell unless the whole table is selected.

12. Double-click the text box.
    OR

    Click the Text field and then click the **Browse** ... button.



13. Select a **Field** (Text Substitution Field).
14. Click **OK**.
15. Click the ToolTip field and type a ToolTip for the text box.
16. Apply any of the other properties manually if required, as described in the *Text Properties Table* above.
17. Go to *Saving the Reports, Views and Labels* on page 60.

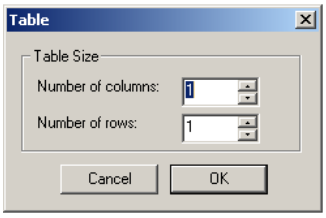
Creating or Editing Table Objects

This object is used for displaying a **Table** object in the **Data** tab work area. See also *Creating or Editing Cell Objects* on page 53 for editing the table cells.

There are dynamic right-click menus created to assist you.

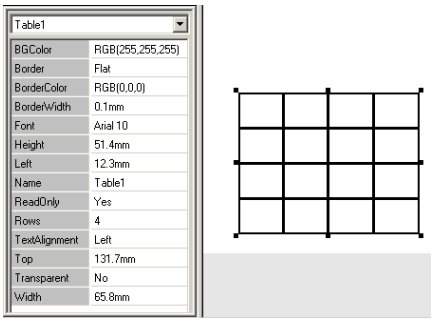
◆ To create or edit Table objects:

1. Ensure that the table object you want to edit is displayed in the **Views/Reports Editor**.
   OR
   Click the **Table** button located on the toolbar.
2. Left-click and hold anywhere in the work area to start the table object, and then drag the mouse to size it.
3. Release the mouse when the **Table** is the required size.



   The **Table Creator dialog box** is now displayed in the work area.
4. Select a value for the **Number of columns** and the **Number of Rows**.

   Click the buttons to increase the value or overwrite the value displayed.
5. Click **OK**.

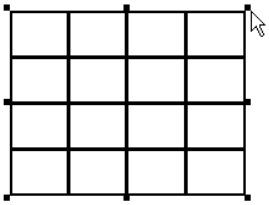


6. If you inadvertently select a table cell and want to re-select the whole table, do the following.
   a) Drag a container around the table to select the whole table.
      OR
      Select the table by its name from the properties' list-box.
   b) From the pop-up menu, click **Select All**.

Table Properties Table

Properties	Description
BGColor	The table can be given a background color. See *Changing the Color* below.
Border	Determines if there is to be a border or not.
BorderColor	Changes the border color. See *Changing the Color* below.
BorderWidth	Determines the width of the border.
Font	You can choose any font that is installed on your computer.
Height	The actual height of the table. It can only be changed when the whole table is selected.
Left	Distance from the left side of the work area to the left-hand side of the table. Only when the whole table is selected, can this field be seen or changed.
Name	Enter a name for this table to be displayed in the properties table.
ReadOnly	If **Yes** you cannot change the information displayed. If **No** you may type your own text while viewing this table in Advisor.
Rows	Displays the number of rows only when the whole table is selected.
TextAlignment	You can align the text **Left**, **Right** or **Center**.
Top	Distance from the top of the work area to the top of the container. Only when the whole table is selected, can this field be seen or changed.
Transparent	The options are **Yes** and **No**.
Width	The actual width of the container.

7. You can size the table by dragging on one of the eight handles as shown below.

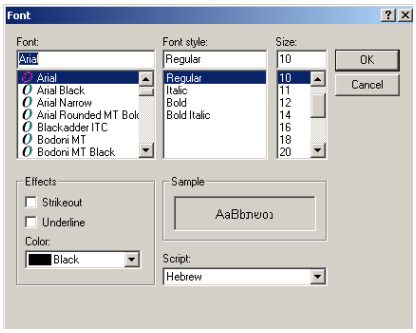


8. Click the Name field, and type a name for the table, or leave the default name.
9. If you have changed the name of the table, click the **Table** object.

   The new name is now displayed in the **Properties** list box.

10. If you want a border, click the Border field, and then click the button to open the list box
11. Select **Flat**.
12. If you have decided to have a border, click the BorderColor field

    See *Changing the Color* on page 59 for detailed instructions.
13. Click the Font field and click the button.



The **Font** dialog box opens. These are the fonts installed on your computer.

14. Select a **Font**, a **Font style** and font **Size** for the whole table.
15. If you want the table to be transparent (no background), click the Transparent field and select **Yes**.
16. Apply any of the other properties manually if required, as described in the *Table Properties Table*.
17. Go to *Saving the Reports, Views and Labels* on page 60.

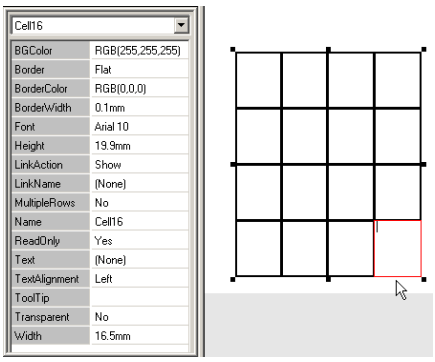
Creating or Editing Cell Objects

This object is for displaying a **cell** object in the **Data** tab work area.

There are dynamic right-click menus created to assist you.

◆ To create or edit cell objects:

1. Ensure that the table object you want to edit is displayed in the **Views/Reports Editor**. See *Creating or Editing Table Objects* above for creating a table.
2. Select a cell by clicking on it.



Cells Properties Table

Properties	Description
BGColor	The cell can be given a background color. See *Changing the Color* below.
Border	Determines if there is to be a border or not.
BorderColor	Changes the border color.
BorderWidth	Determines the width of the border.
Font	You can choose any font that is installed on your computer.
Height	The actual height of the table. It can only be changed when the whole table is selected.
Left	Distance from the left side of the work area to the left-hand side of the table. Only when the whole table is selected, can this field be seen or changed.
LinkAction	This link can either be Viewed or Printed.
LinkName	Shows the path of the link for the cell.
MultipleRows	When **Yes** the text will wrap around the text box. When **No**, part of the text may not be visible.
Name	Enter a name for this table to be displayed in the properties table.
ReadOnly	If **Yes** you cannot change the information displayed. If **No** you may type your own text while viewing this cell in Advisor.
Text	This field is for inserting free text into the cell, or selecting a data field. These are dynamic values that are automatically inserted depending on what is currently being viewed in the **Data** tab.
TextAlignment	You can align the text **Left**, **Right** or **Center**.
ToolTip	Enter here a Tool Tip for each individual cell. This Tool Tip will be displayed for a few seconds when placing the mouse cursor over the cell.
Transparent	The options are **Yes** and **No**.
Width	The actual width of the cell. You can drag the sides of the cell to make it wider or narrower.

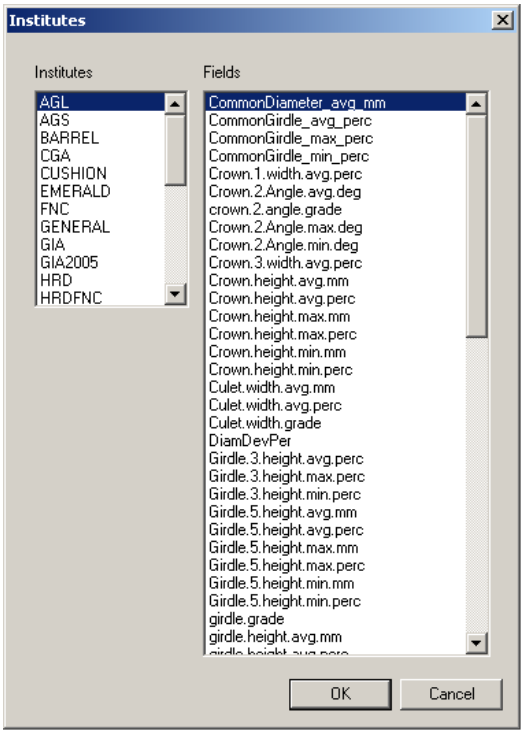
3. Click the Name field, and type a name for the cell, or leave the default name.
4. If you have changed the name of the cell, click the **Cell** object.

   The new name is now displayed in the **Properties** list box.

5. You can enter text data directly into a single cell or into multiple cells by typing the data into the **Text** field located in the properties table.

   To select multiple cells use the **Ctrl** key and click one cell after another, or use the **Shift** key to select a range of contiguous cells. To do this first click the first cell, press the **Shift** key continuously, and then click the last cell in the range.

6. Double-click a cell to enter a data field.
   OR
   Click the Text field and then click the **Browse** button.



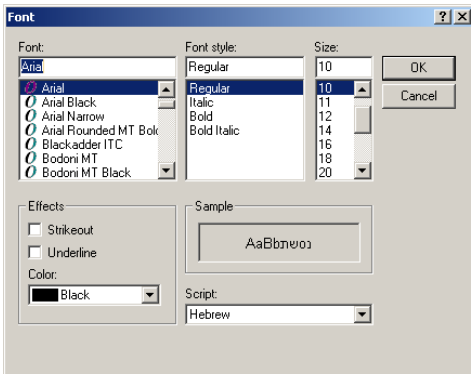
7. Select a **Field** (Text Substitution Field).
8. Click **OK**.
9. If you want a border, click the Border field, and then click the button to open the list box.
10. Select **Flat**.
11. If you have decided to have a border, click the BorderColor field

    See Changing the Color on page 59 for detailed instructions.

12. If you want the cell to be transparent (no background), click the Transparent field and select **Yes**.
13. Click the ToolTip field and type a ToolTip.

    This **ToolTip** is only for the selected cell.

14. Click the Font field and click the ... button.



The **Font** dialog box opens.

15. Select a **Font**, a **Font style** and font **Size**.

    This selection is only for the selected cell unless the whole table is selected.

16. Apply any of the other properties manually if required, as described in the *Cells Properties Table*.

17. Go to *Saving the Reports, Views and Labels* on page 60.

Creating or Editing Multiple or Grouped Objects

This section describes in detail on how to manage grouped or multiple objects.

◆ To create or edit multiple objects:

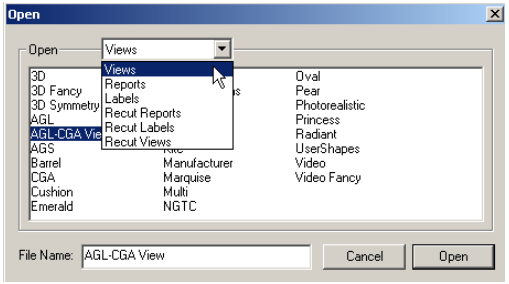
1. Ensure that the objects you want to edit are displayed in the **Views/Reports Editor**.
   OR

   Click any of the object buttons located on the toolbar and create multiple new objects.
   See the above sections for creating the individual objects.

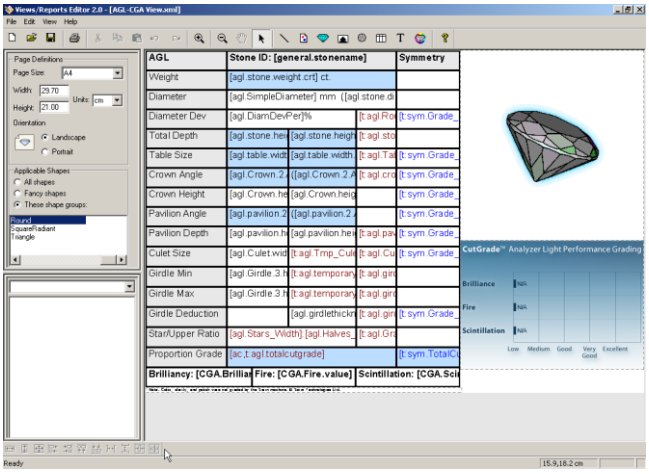
NOTE

We strongly recommend that you follow our example step-by-step as described below, before rushing off to create your own multiple group objects from scratch.

2. On the **Toolbar**, click the button to load the group object.



3. Open a display from the list.



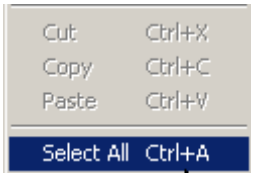
NOTE

Please note that the Properties table is empty and the arrow cursor at the bottom of the window shows that the Group Object toolbar is disabled. This is because a group (more than one object) is not yet selected.

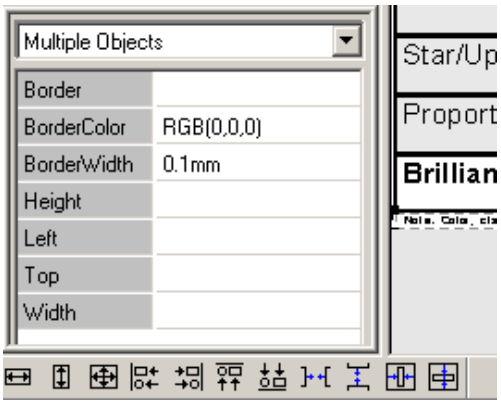
Multiple or Grouped Objects' Properties

Multiple objects display their shared properties in the properties list. Those properties which are set to identical values will display their values. Others will display only the property name. You can type a value for these properties which will be set for all the multiple selected objects.

4. From the **Edit** menu, click **Select All**.
OR



Press the **Ctrl**+ **A** keyboard keys to select all the objects displayed in the work area.



The **Multiple Objects** properties are now displayed and the **Multiple Objects** toolbar is now enabled. When the value for a specific property is not displayed, it means that all the selected objects do not have the same value.

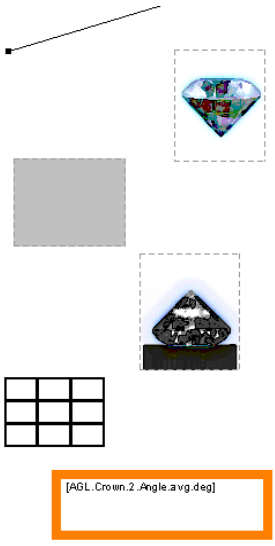
5. You can manipulate the objects as a group using the **Group Objects Toolbar** buttons. The individual buttons are described in the table below.

Group Object Toolbar Table

Button	Description
	Make same width
	Make same height
	Make same size
	Align left
	Align right
	Align top
	Align bottom
	Evenly space the controls horizontally
	Evenly space the controls vertically
	Align center
	Align middle

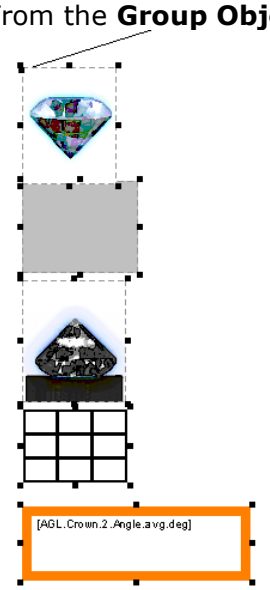
Example of Align Left

Before:



6. Select all the objects using the mouse, **Select All** from the **Edit** menu or using the keyboard keys **Ctrl**+**A,** or click the individual objects you wish to select holding down the **Shift** or **Ctrl** keys.

7. From the **Group Objects** toolbar, click the **Align Left** .button.



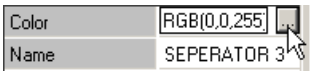
The result should look something like this.

8. Go to *Saving the Reports, Views and Labels* on page 60.

Changing the Color

To change the color:

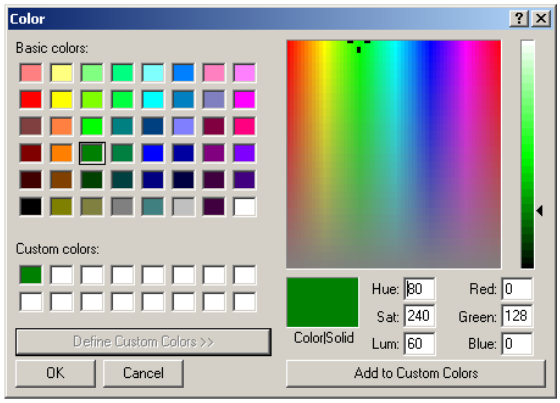
1. Click the object to select it.
2. In the **Properties** pane, click the **Color** field. This field can have other names, namely, **BorderColo**r.



The **Color** field change button is now displayed.

3. Click the **Change Color** button to open the **Color Palette** dialog.

4. Select a color or click the Define Custom Colors >> button.



Define a custom color using the slider arrows at the top and right-hand side of the dialog box, or by typing the values into the boxes.

5. When you have selected a custom color, click the Add to Custom Colors button.

   The selected custom color is now saved for future use. You can see then in the **Custom Color** frame.

6. Click **OK**.

   The information is transferred to the object and the dialog box closes.

Saving the Reports, Views and Labels

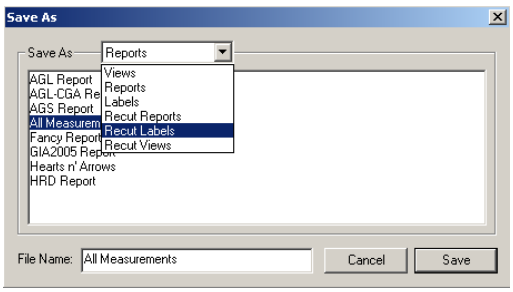
This section describes how to save the files you have just created.

NOTE

It is extremely important to regularly make a backup copy of your library.

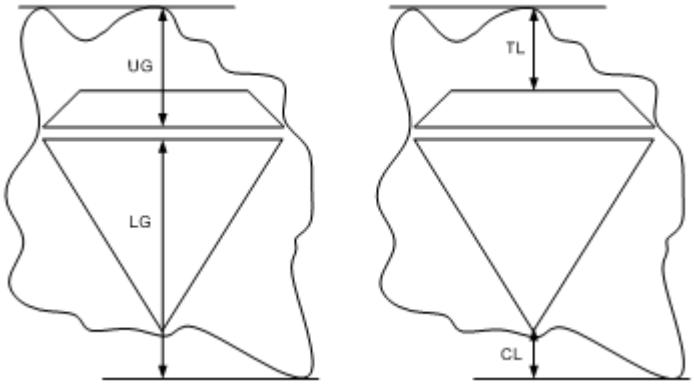
◆ To save reports, views and labels:

1. On the **File** menu, click **Save As...**



2. Choose the correct file library.
3. Enter a unique file name, or overwrite an old one.
4. Click **Save**.

Appendix A Dimensions in the Rough Stone



Dimensions	Description
UG	Distance between the center of the polished result upper girdle and the highest point of the rough stone surface.
LG	Distance between the center of the polished result lower girdle and the lowest point of the rough stone surface.
TL	Distance between the center of the polished result table and the highest point of the rough stone surface.
CL	Distance between the center of the polished result culet and the lowest point of the rough stone surface.