alastri

INTEGRATED. INTELLIGENT. INTUITIVE.

Alastri User Interface Elements

Common User Interface Elements, found in all Alastri applications

VERSION 01, NOVEMBER 2021

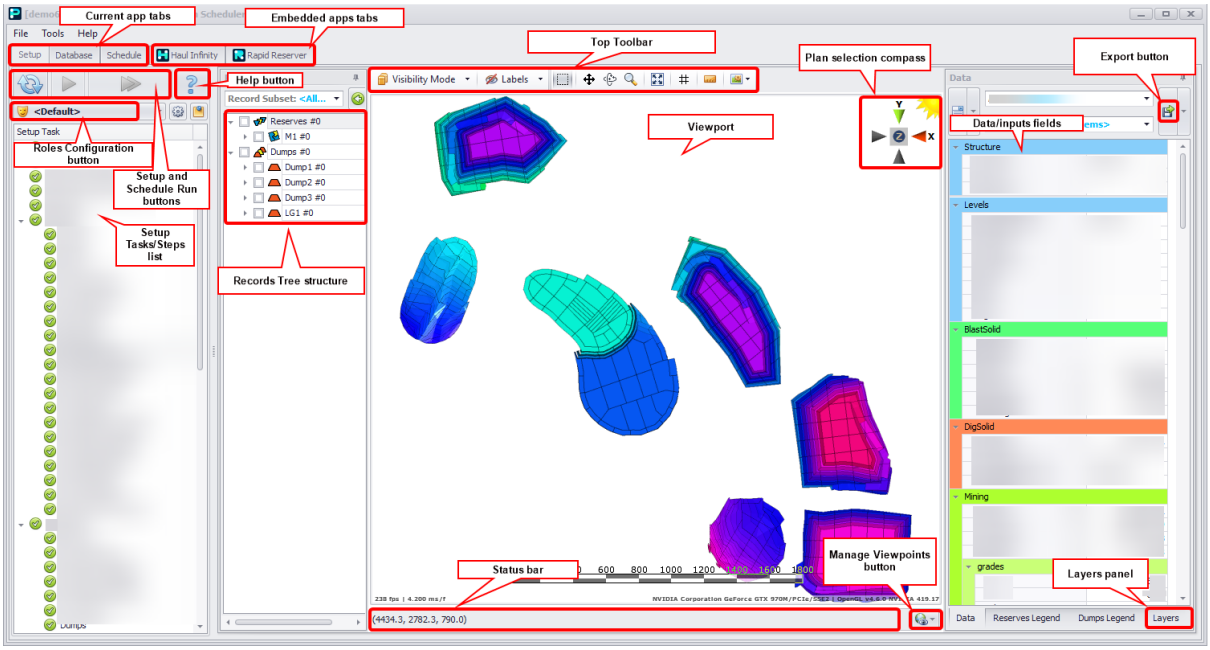
Contents

General

Although the content and layout of all Alastri applications vary considerably, there are a number of common elements that are present in all programs, or are repeated in most of them. These elements are called "Common User Interface Elements" and can range from individual buttons and tabs to the entire panels and views.

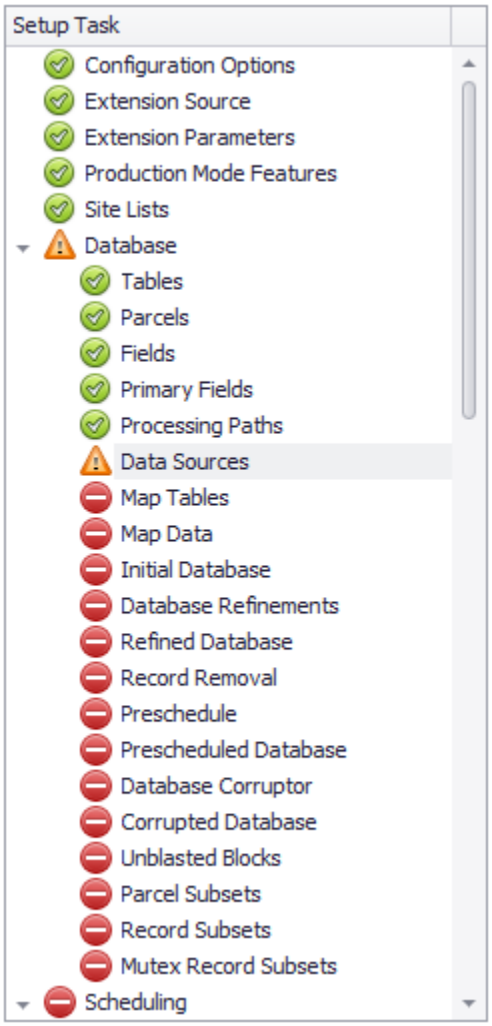
The main reoccurring in all of Alastri's applications items are shown in the figure below, but these are not all common UI elements. For a complete list, see the sections below.

Before starting work with the applications, it is recommended to familiarize yourself with the content of the current document.



Setup Tasks panel

On the left side of all Alastri's applications is the **Setup Task** panel, which represents a list of all the project setup steps that need to be completed before switching to the scheduling, network and reserves calculation tabs.



When setting up a project for the first time, all setup tasks need to be performed in the specified sequence. You cannot proceed to the red marked step without confirming the previous one. During the subsequent work with the configured project, you can return to any of the steps, but after making changes you will need to rerun all the tasks below in the list. This is because changes you make in a single step can affect settings in related tasks and need to be reviewed or adjusted.

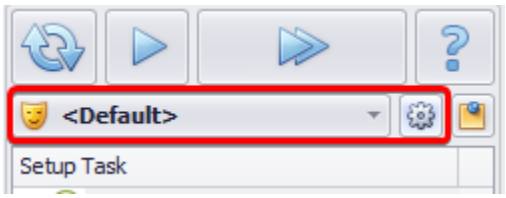
- Completed and confirmed setup steps are marked with a **green** check mark. You can return to such steps at any time and in any sequence.
- Steps in the course of which an error has been made are marked with a **yellow** triangle. Read its description at the bottom of the screen and solve it to proceed to the next steps.
- Outstanding steps that need to be completed in order to continue with the project setup and enable the remaining steps and tabs are marked with a **red** circle.

- Steps that are currently being worked on are marked with an empty gray circle.

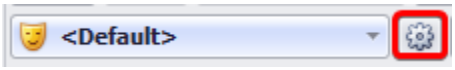
You cannot change the order in which setup steps are listed in the **Setup Task** tab, but you can customize their visual presentation by changing the color and font of the text of the step name, or by disabling some (or all) steps from being changed. This feature is called "Configure Roles" and is described below.

Configure Roles

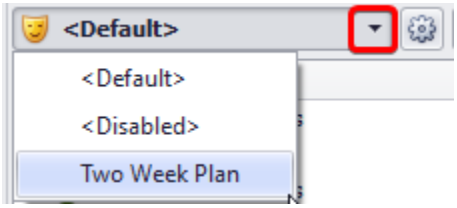
Configure Roles function allows users to customize the **Setup Task** list. It is used to facilitate the view of the Setup sequence by highlighting priority steps in color and font, or disabling uneditable ones. This can be useful to help guide newer users to the important steps that need to be reviewed and updated each planning cycle.



- To create a new Role click on the gear icon. **Configure Roles** dialog will open, where you can create new roles and view existing.

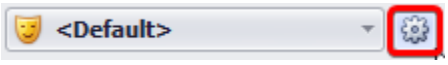


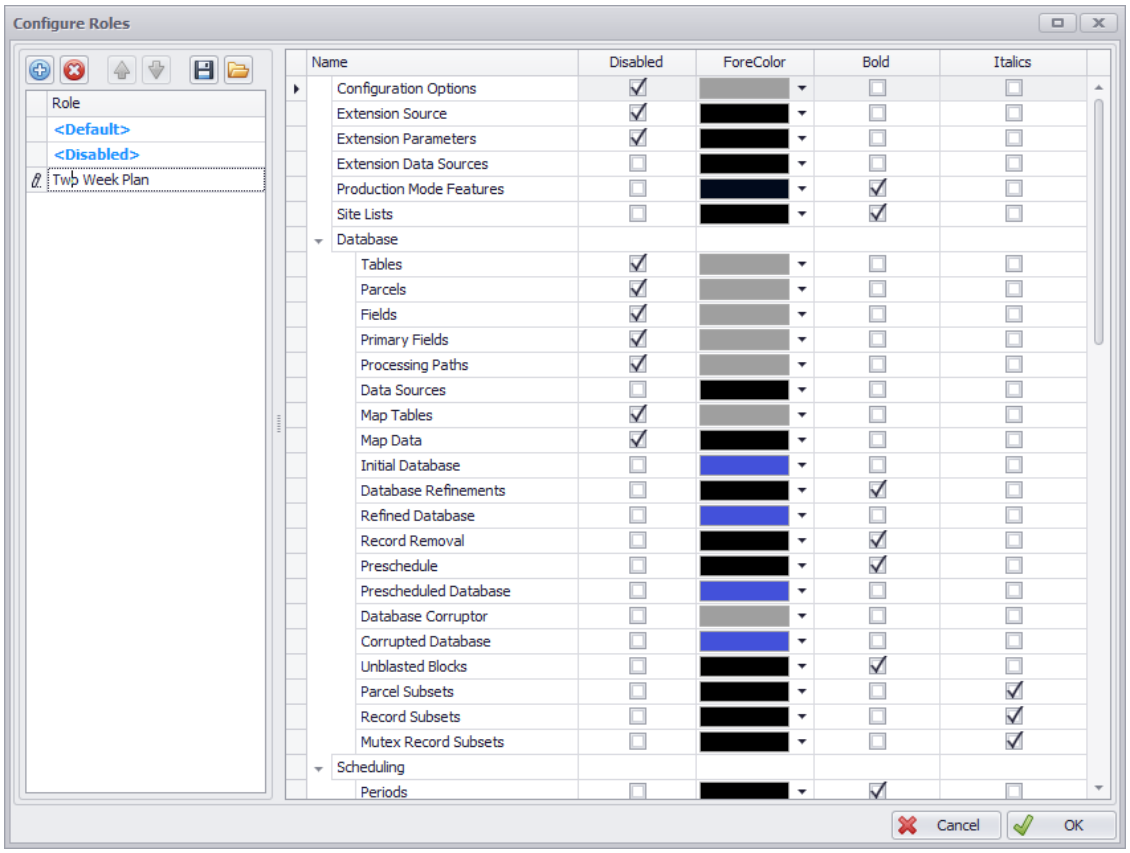
- Use dropdown menu to swap between Roles.



Configure New Role

To facilitate working with your project several options are available for configuring Role layouts.

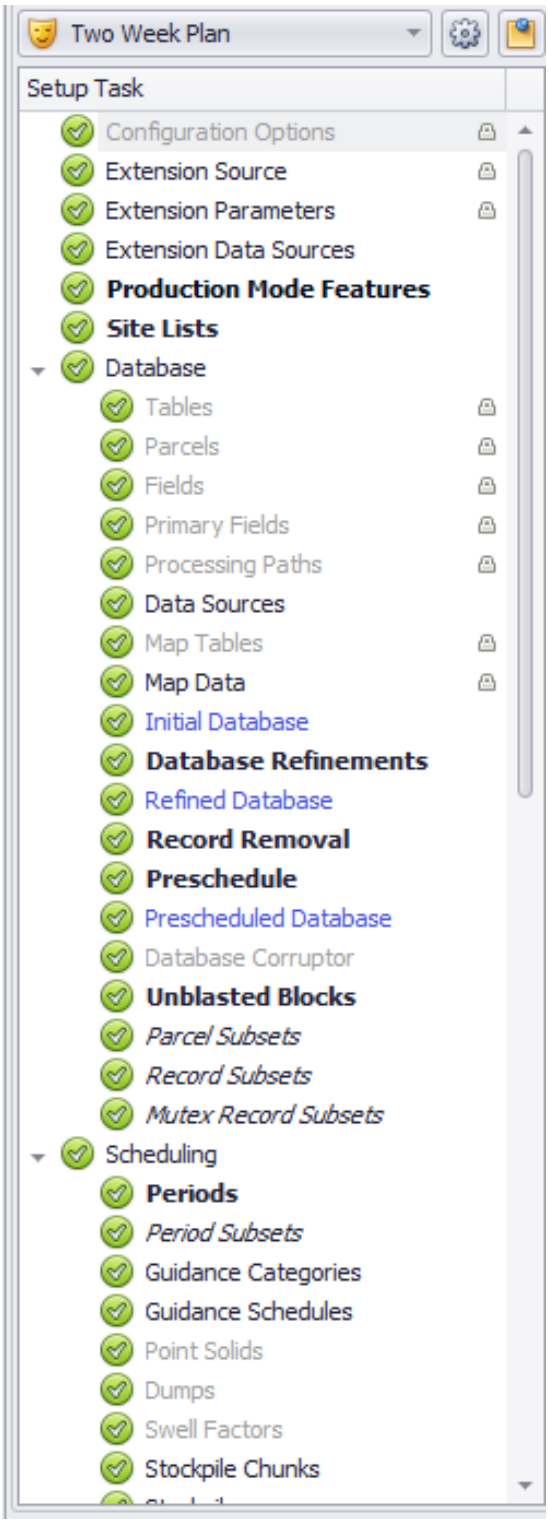
Press the gear button to open **Configure Roles** dialog. 



Configure Roles dialog items and their usage

Option Name	Purpose
Name	Name of the step being edited
Disabled	Locks step from being altered
ForeColor	Changes text color
Bold	Changes test to **bold**
Italics	Changes test to *italics*

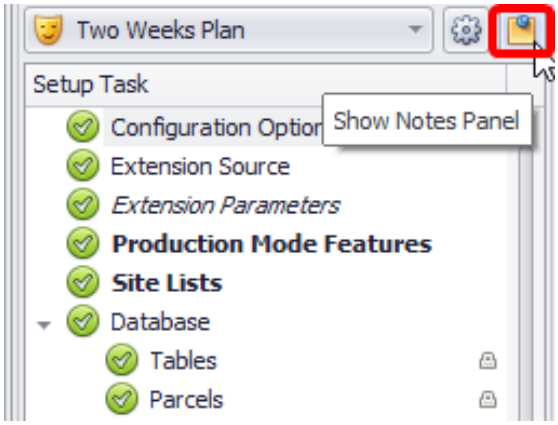
Press OK and view the applied changes in the Setup Task list, as shown below.



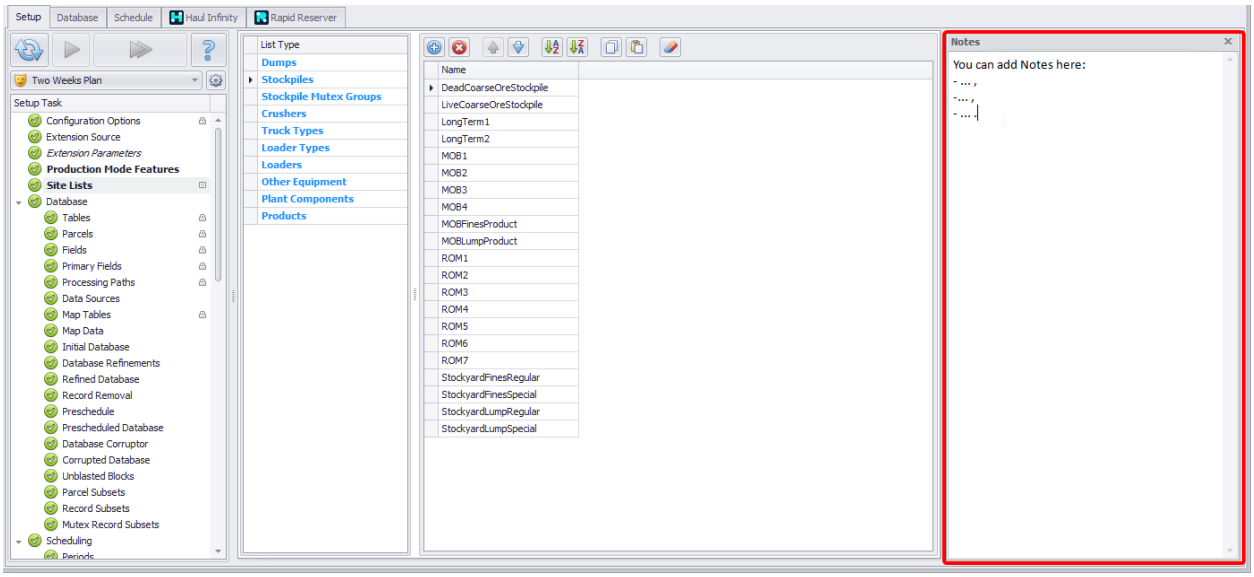
Steps can only be Locked for editing. They cannot be removed from the list.

Notes Panel

To the right of Roles selection and configuration buttons one more button, **Show Notes Panel**, provided.

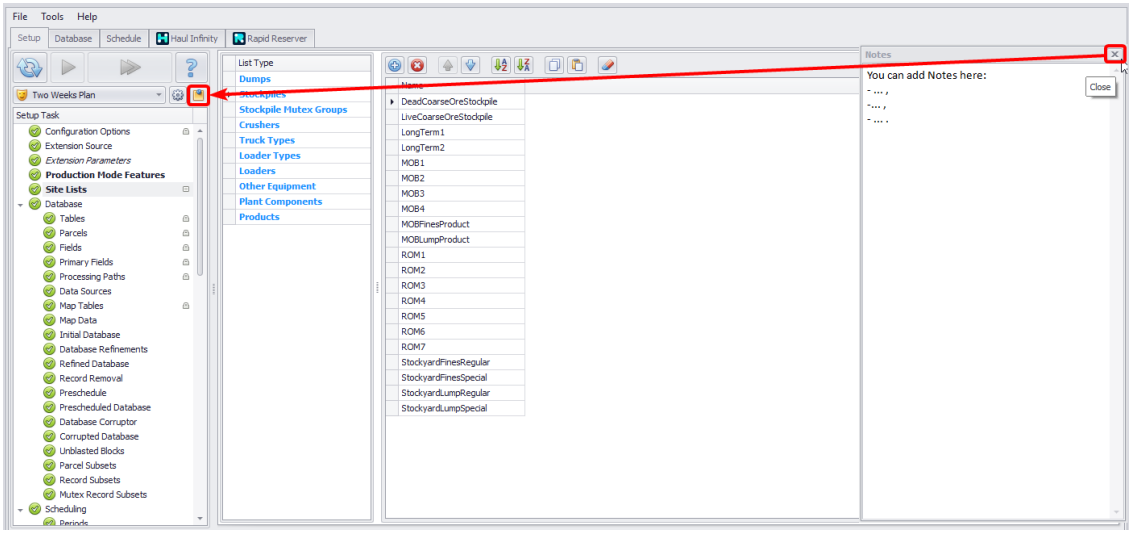


When you click this button, the **Notes** panel appears on the right side of the screen, where you can write notes for each setup step, whether locked or available for editing.

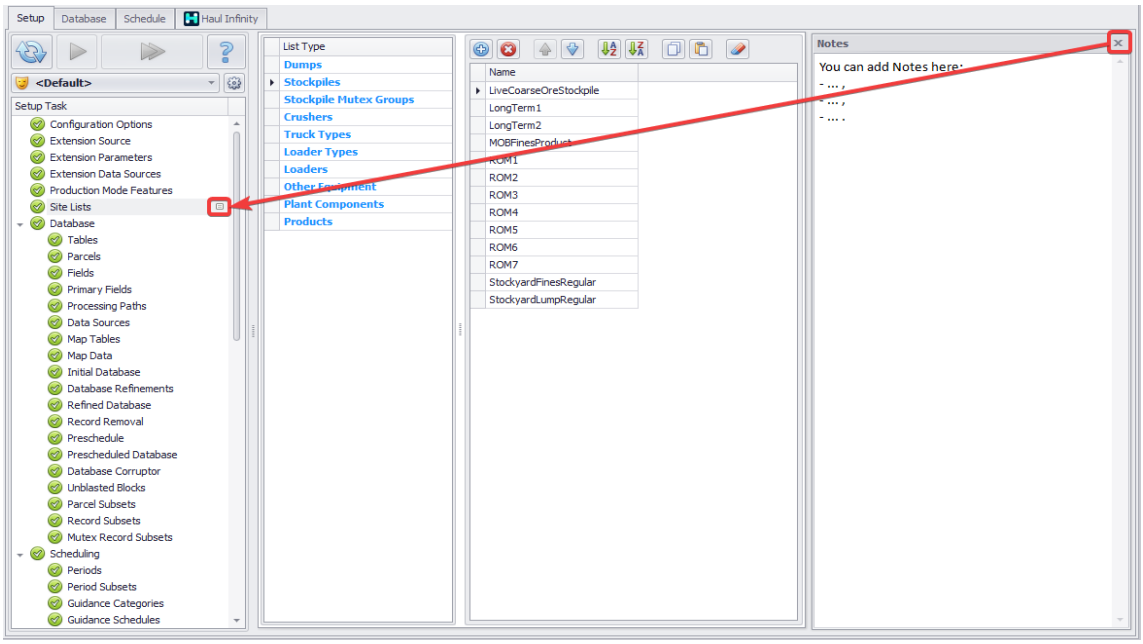


You can also add pictures (screenshots) to your Notes.

To hide the **Notes** panel, click the cross in the upper right corner. This will not delete the entered notes, but will close the panel and move it back to the left side of the screen as a folder sign.

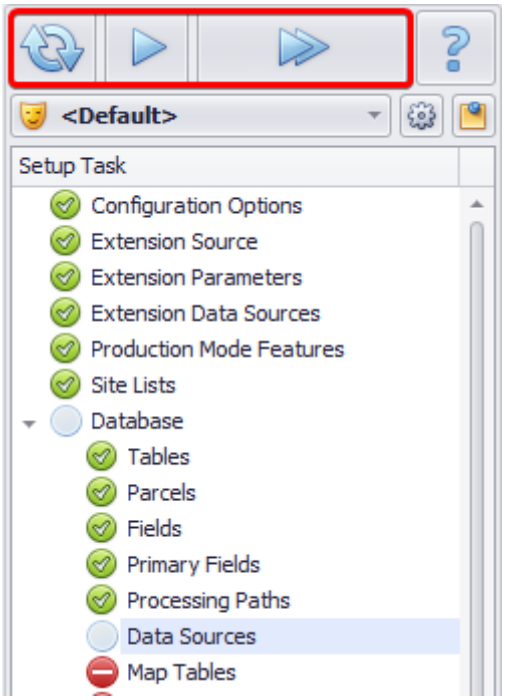


A mini Note icon will be shown beside the setup task step if the setup task includes a note.



Setup Tasks Run buttons

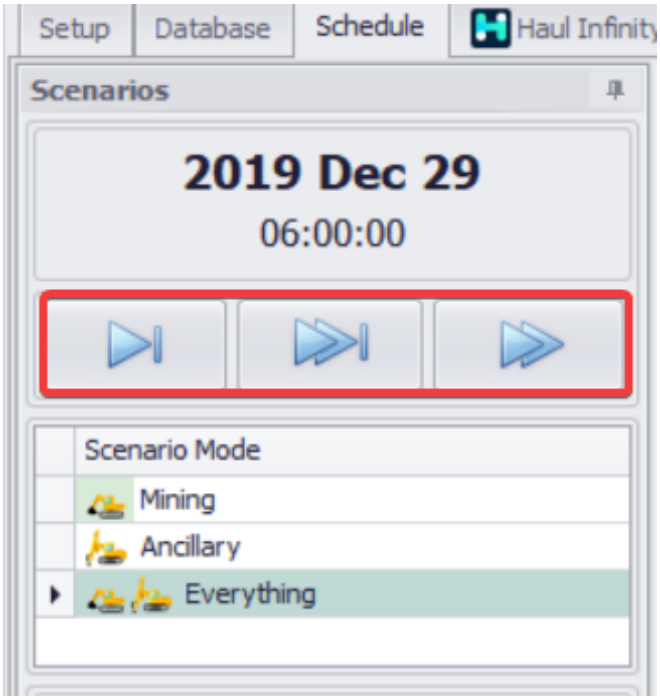
The blue play/run buttons at the top left of all Alastri applications, above the **Setup Task** list, are used to confirm that the project setup steps have been completed correctly and to run them to proceed to the next task or Scheduling/Database tabs.



Button	Usage
	**Re-Run Current** button. Used to re-run the current step, for example, after making changes. If the data in the step is populated correctly, it will be confirmed - marked with a **green** ticks, but you will stay on that step.
	**Run Next** button. Used to confirm the current step and proceed to the next one. If the data in the step is populated correctly, it will be confirmed - marked with a **green** ticks and you will automatically move on to the next setup step. If you have filled in the step incorrectly, it will be marked with a **yellow** triangle and you will not be able to proceed to the next step until you have corrected the errors.
	**Run All** button. Used to confirm and run all the setup tasks. If all steps are completed correctly, they will be marked with **green** ticks and you will be able to move to other tabs of the project.

Periods and Scenarios Run buttons

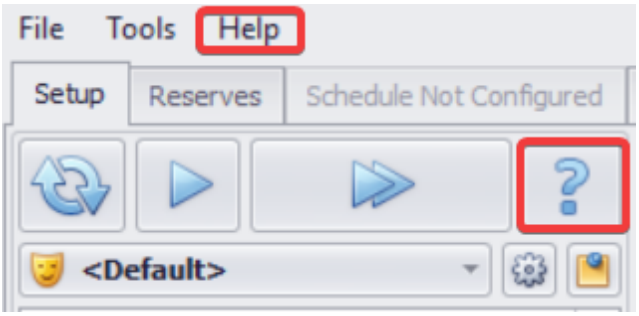
Scheduling software (Production Scheduler and Tactical Scheduler) that have a **Schedule** tab also have a panel of buttons for confirming and running individual periods and scenarios.



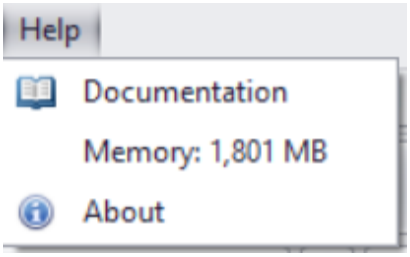
Button	Usage
	**Run Period** button. Used to run a single period within a selected scenario. Periods are run in order. You can also use the F9 key to run periods. When running the periods, the bar of the corresponding scenario will be proportionally colored **green**, and when changes are made to one of the periods, the scenario will be displayed in **yellow** until it is run again.
	**Run Current Scenario** button. Used to run the currently selected scenario. All periods will run and the scenario bar will turn **green**. If you make changes to any of the periods - the scenario will be displayed in **yellow** until it is run again. You can also use the F10 key to run current scenario.
	**Run All** button. Used to run all scenarios. All periods will run and the scenario bar will turn **green**. If changes are made to any of the periods - the scenario will be displayed in **yellow** until it is run again.

Help button

All Alastri applications have two help buttons, shown in the image below.



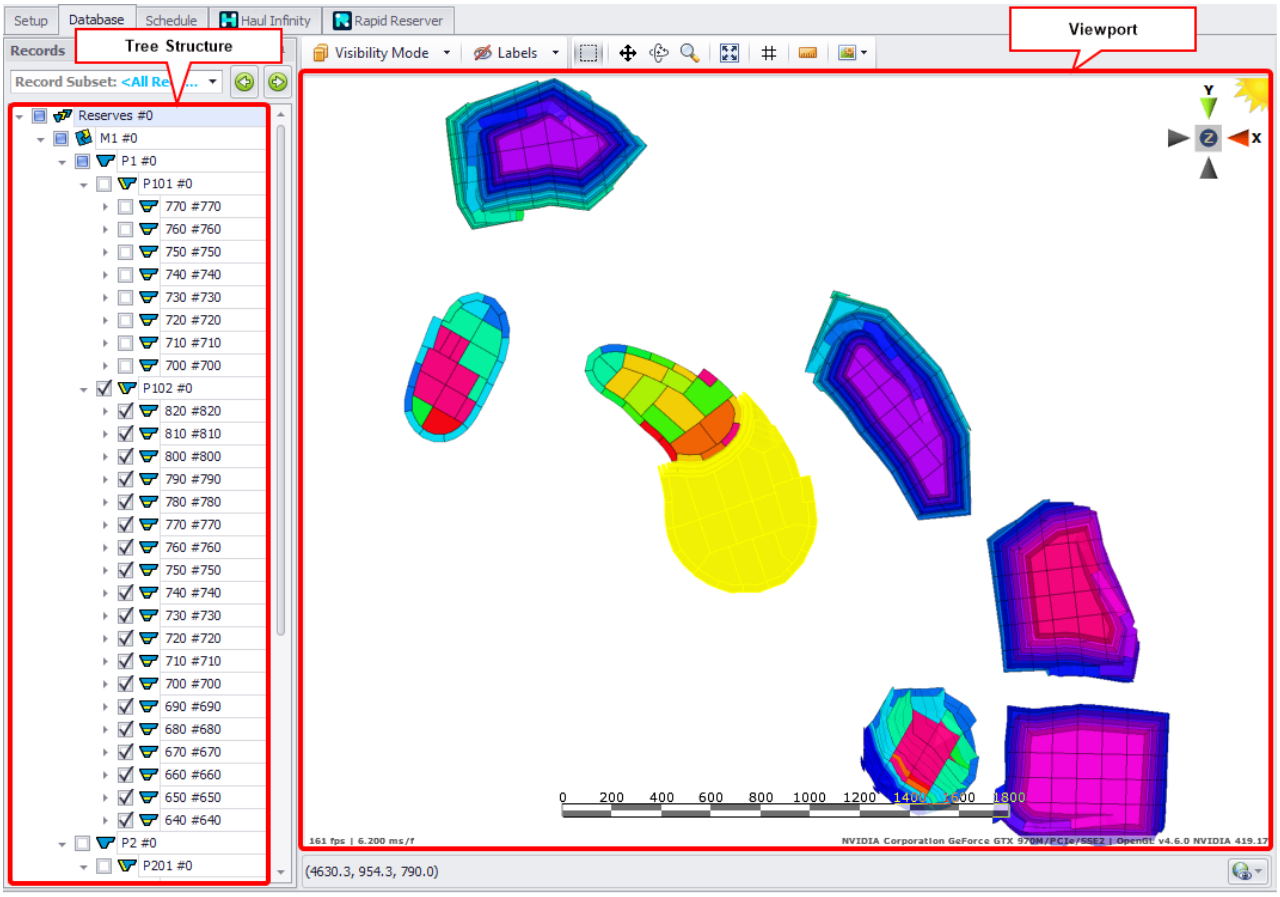
Click the **Help** button in the top bar to access the documentation section for the application used ("Documentation" option), see the amount of RAM it's using, and read version and copyright information ("About" option).



Click the **Help** button (blue question mark) to get detailed information on the current setup task - you will be automatically redirected to the relevant documentation page.

Tree Structure and Viewport

The Alastri software uses a tree-structured hierarchy of level records (on the left) to display an organized list of items. Interaction with records from this list is done in the 3D viewport area (the main area in the middle of the screen).



Levels Tree Structure

A tree structure (or hierarchy) of levels/records is a list of all levels, arranged by parent and child records. In applications from Alastri, such a structure displays a hierarchy of mine parts, as following:

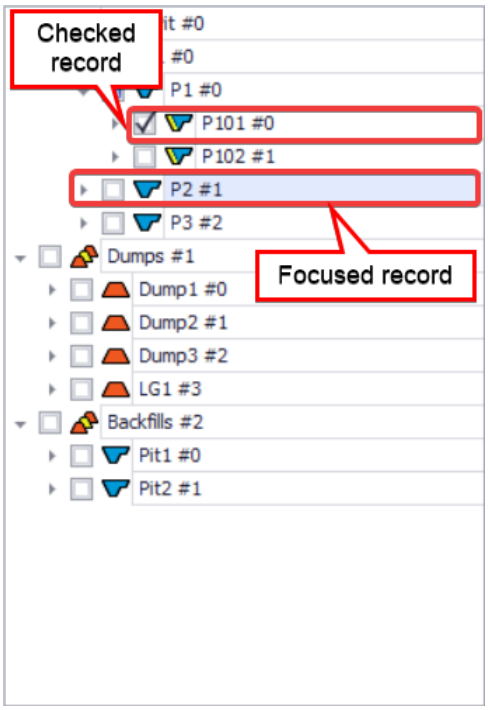
- Reserves - Mine - Pit - Phase - Bench - Blast - Flitch - Solid, and
- Dumps - Dump - Lift - Solid.

The levels/solids selected in the tree structure will be displayed in yellow in the viewport.

Terminology

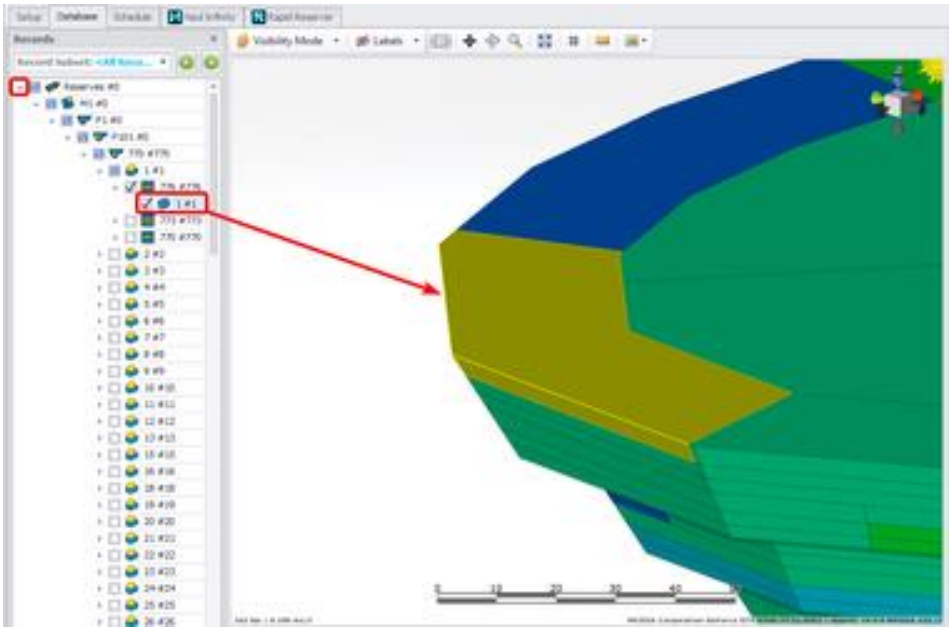
- A “checked” record is ticked in the record tree, and glows yellow in the viewport.
- A “focused” record is highlighted in the record tree, and displays normally in the viewport.

- A “selected” record has been left-clicked with the mouse. Depending on context, this may refer to either checked or focused records.



Interacting with the tree structure

1. Expand the hierarchy to the desired level by clicking on the arrows/triangles.



2. To select a record, tick its box by left-clicking on it. Similarly, to deselect it.

3. Double click a record to center it in the viewport.

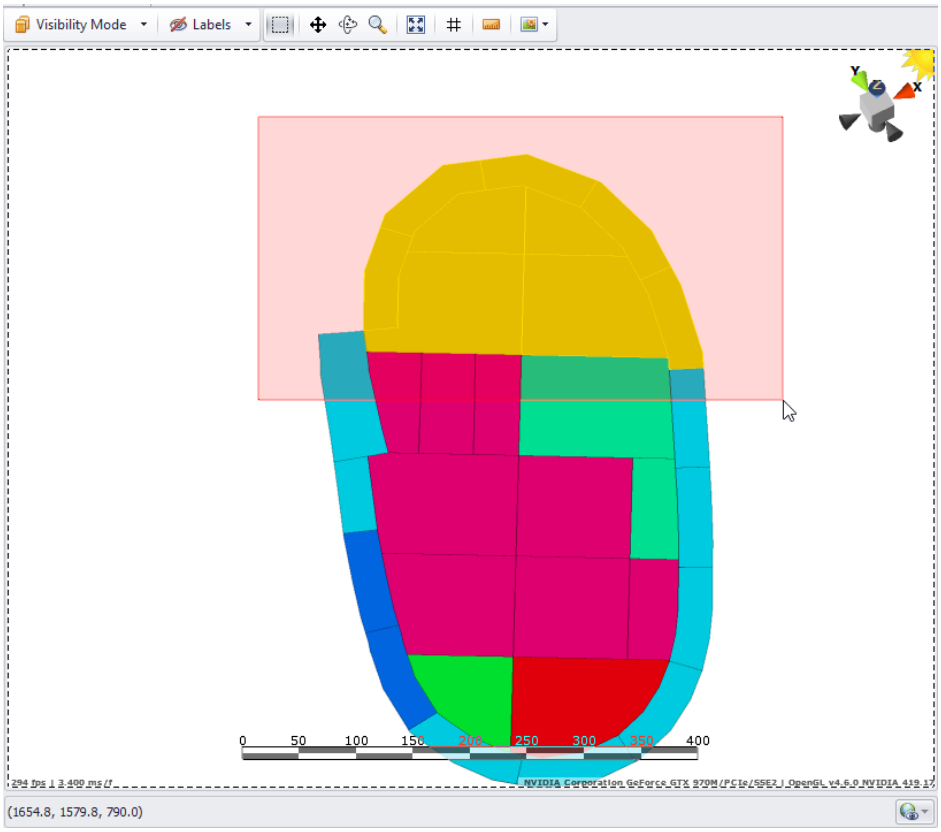
4. You can select an entire level, such as a Pit or Stage, by clicking on it - all its items will be checked. Similarly, to uncheck.

5. You can select individual solids as well as multiple. To do that use the <CTRL> and <SHIFT> keys.

Viewport

The levels/solids selected in the tree structure will be displayed in **yellow** in the viewport.

You can also select the solids manually in the viewport. For that left-click on the necessary block. Use <CTRL> to select multiple, or box select the group of solids or entire object.



You can interact with the objects displayed in the viewport using the tools on the top toolbar and change their angle view through the compass icon or the mouse control buttons. More information on navigating and control see in the *Toolbar* section below.

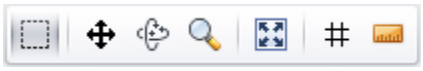
When you hover your mouse over any element in the viewport, the status bar in the bottom panel displays information about it, namely the coordinates of the mouse cursor and the full name of the entry (if applicable).

Toolbar

In the setup steps and scheduling tabs, where you work with 3D blocks of Reserves and Dumps, haulage network and animated Calendar, above the viewport there is a toolbar. Depending on the functionality, it can be either small, containing mainly only navigation buttons, or extended with additional more complex planning tools.

Navigation Elements

See below a description of the main navigation elements found in all of Alastri's applications. Use these tools to see and interact with the 3D design area.



Mouse Controls

Select		Left click and drag
Pan		Middle click and drag
Rotate		Right click and drag
Zoom		Scroll wheel
Zoom to All		Left click to Zoom to all
Vertical Exaggeration	-	<CTRL> + Scroll wheel

Compass

Plan View		Click on the axis cones to snap to orthogonal views
Zoom Extents		Click on the grey cube icon to zoom to extents
Night Mode		Click on the sun icon to toggle night mode, and back

In Haul Infinity, the compass icon is different than used in other apps but performs the same functions.

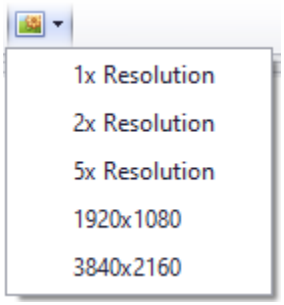
- Click on the sides of the compass cube to quickly change to Right, Left, Front, Back, and Bottom views.
- You can also use the N (north), S (south), W (west), and E (east) symbols to change the view.

Measurement

		Display a grid in the viewport.
Grid		Note that the grid is only displayed in the top view. If the grid is not displayed, then you are working in a different plane. Press the "Z" icon on the compass to return to the top view.
Ruler		Draw a measurable distance in the viewport
Scale		Scaling shown at a bottom of a viewport

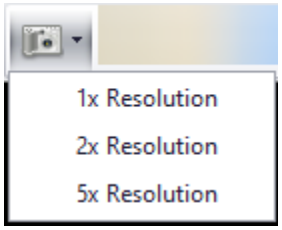
Screenshots

Most control panels also include a screenshot button used to save the viewport capture in a suitable resolution for later reference in reports or presentations.



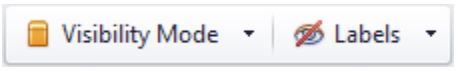
1. Open the resolutions options list by clicking on the screenshot button dropdown in the top toolbar.
2. Select an appropriate resolution (this action copies the image to the clipboard).
3. Paste the image in another document.

Note that in Haul Infinity, the screenshot feature is also present and serves the same purpose, but represented by a different icon, as shown below.



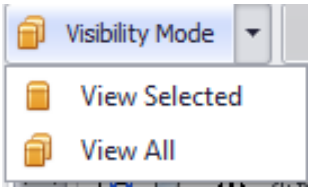
Visibility Mode and Labels buttons

Some toolbars (in Production Scheduler and Tactical Scheduler) also have **Visibility Mode** and **Labels** buttons.



The **Visibility Mode** button is used to select the components to be displayed in the viewport. From its dropdown list you can choose:

- “View Selected” - only selected components will be shown in the viewport. It is used to facilitate viewing..
- "View All" - all objects will be displayed in the viewport. Used for overall view of all mine components.



The **Label Display** button (may be named **Labels** or **Label Display** in different applications, or be represented simply by an eye icon) is used to show or hide labels. In most applications, this button is accompanied by a custom label setting function (the gear icon). For more details, see *Shadings and Tags* section below.

Layers/Overlays panel

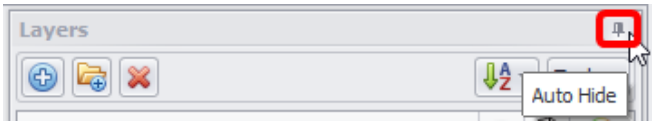
The **Layers**/**Overlays** panel is common to all Alastri software. Panel name **Overlays** is used only in Haul Infinity, in other programs it’s named **Layers**.

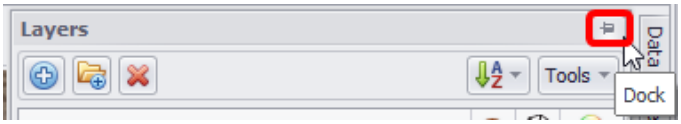
Overview and location

The **Layers**/**Overlays** panel is present in the sections of all Alastri applications where you work with solids, surfaces, haul networks, animations, reserves and dumps databases.

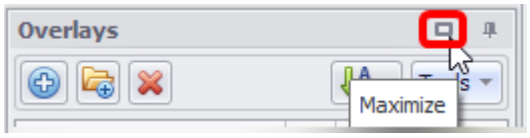
To use this panel, open the **Layers** or **Overlays** tab (in Haul Infinity only), which can be docked in the viewing area, or minimized and hidden in the sidebar.

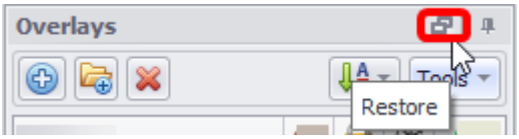
- Use the pin icon to dock and auto hide the panel.



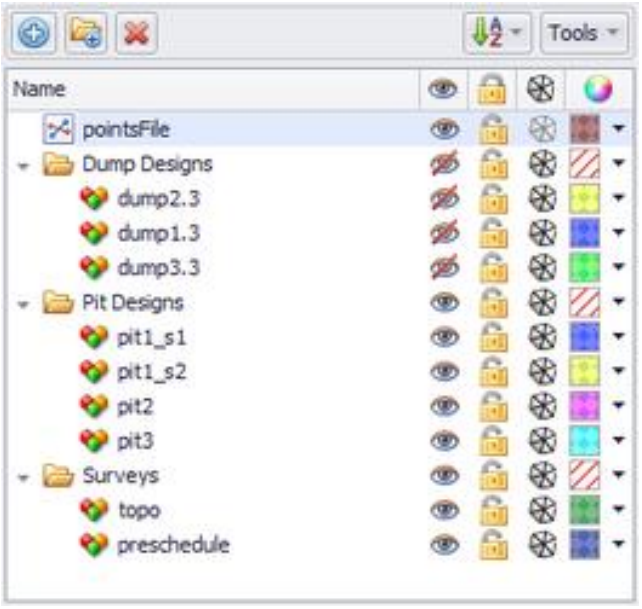


- Use the rectangle icon to maximize the panel area, or restore to the default/previous view.





- Surfaces and solid triangulations can be imported into the software for display through this panel. Points files may also be imported and triangulated.



Layers/Overlays panel items description

Icon	Description
	Blue Plus icon to import files into the software.
	Create folder to organise files in the panel.
	Delete file/folder. Highlight files to be deleted and select delete button. Using the <CTRL> or <SHIFT> keys multiple files may be selected. Only one folder can be deleted at one time to prevent deleting lots of data at one time.
	Show/Hide.
	Lock or unlocked for editing.
	Show triangle edges.
	Triangulated file (Surface/Solid).

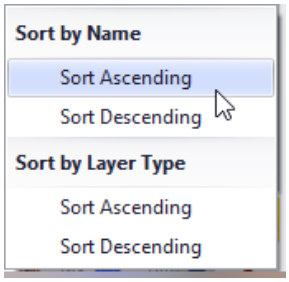
Points file.

Click on color dropdown to select triangulation colour and level of transparency, as well as drape images over triangulations. More details see in the section *Color and Drape Image* below.

Select options for sorting layers

By name:
- Sort Ascending
- Sort Descending

By Layer Type:
- Sort Ascending
- Sort Descending



Supported Layers

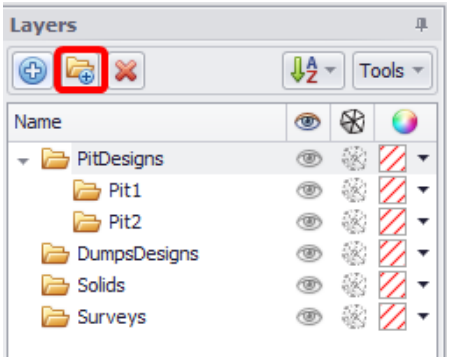
The following file types are supported:

- Vulcan v7-v10 (".00t")
- Vulcan Arch_d File (".arch_d")
- Surpac STR File (".str")
- Surpac DTM File (".dtm")
- AutoCAD 2010-2013 DXF (".dxf"): Modern AutoCAD 2013 DXF and Legacy AutoCAD 2010 DXF.
- CSV Points File (".csv")
- MineSight MSR (".msr")
- Wavefront OBJ (".obj")
- It is also possible to import and export Shapefiles (".shp", ".shx", ".dbf") across all the **Layers/Overlays** panels.

Creating Layers and Folders

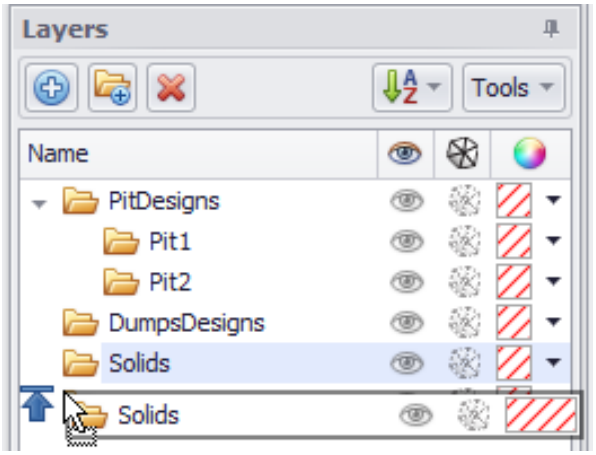
In the **Layers** panel, you can import layers into a project and organize them into folders.

You can create several custom folders with subfolders (if desired) and rename them as needed to make working with layers easier.



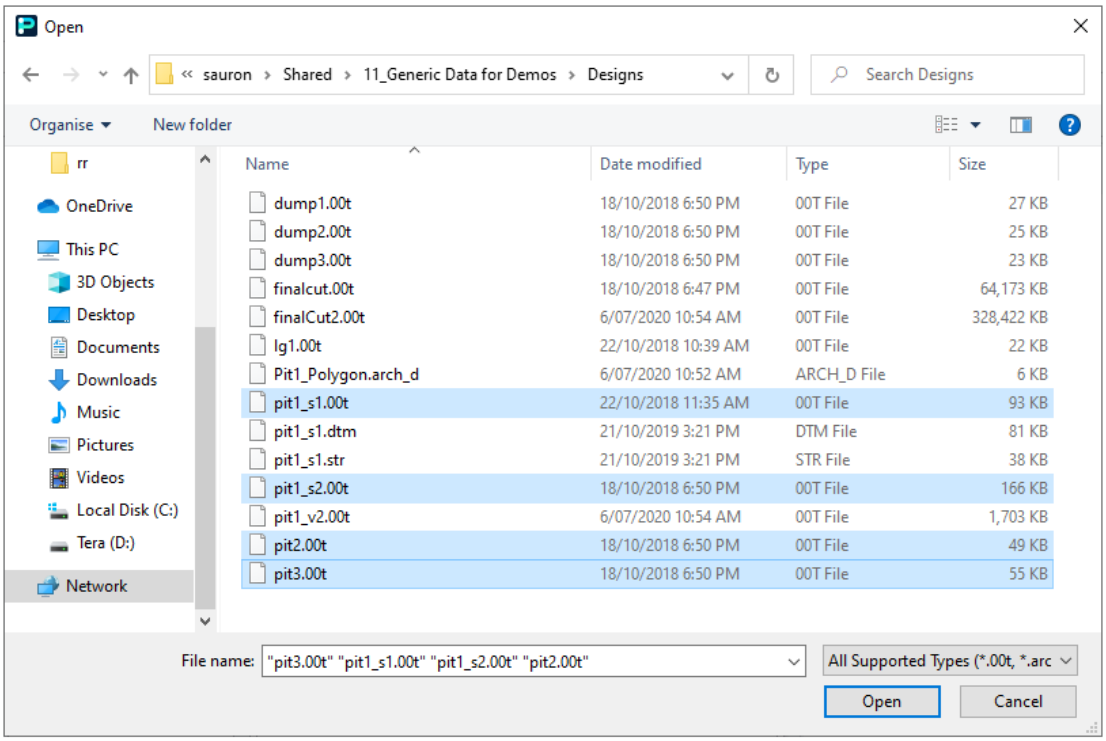
Moving Items

You can change the order in which folders and their items are displayed by dragging and dropping them. The place of insertion is pointed by blue arrows.

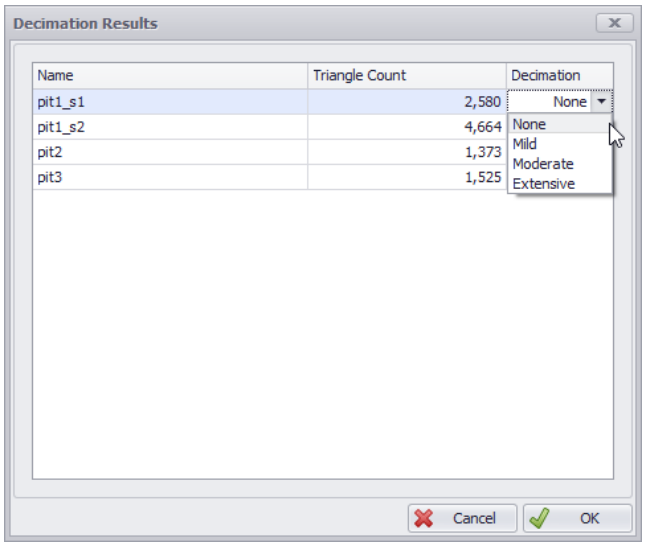


Import Files

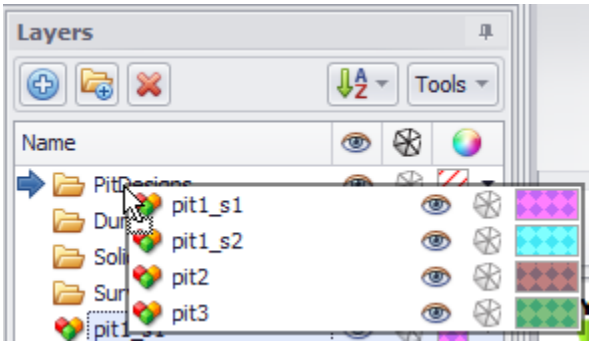
To add layers to the created folders or separately in the **Layers** panel use the blue plus icon. In the import window that opens select the applicable files in supported formats.



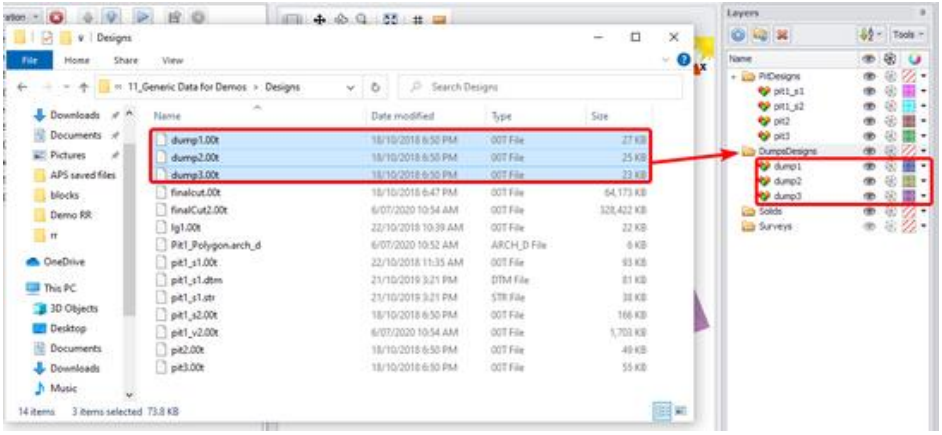
After you have confirmed the files to be imported, a dialog box will appear asking you to specify the triangle count (**Triangle Count** column) and the decimation method (**Decimation** column).



The loaded layers will be now listed in the **Layers** panel, select them holding <SHIFT> or <CTRL> keys and move them to the appropriate folder.

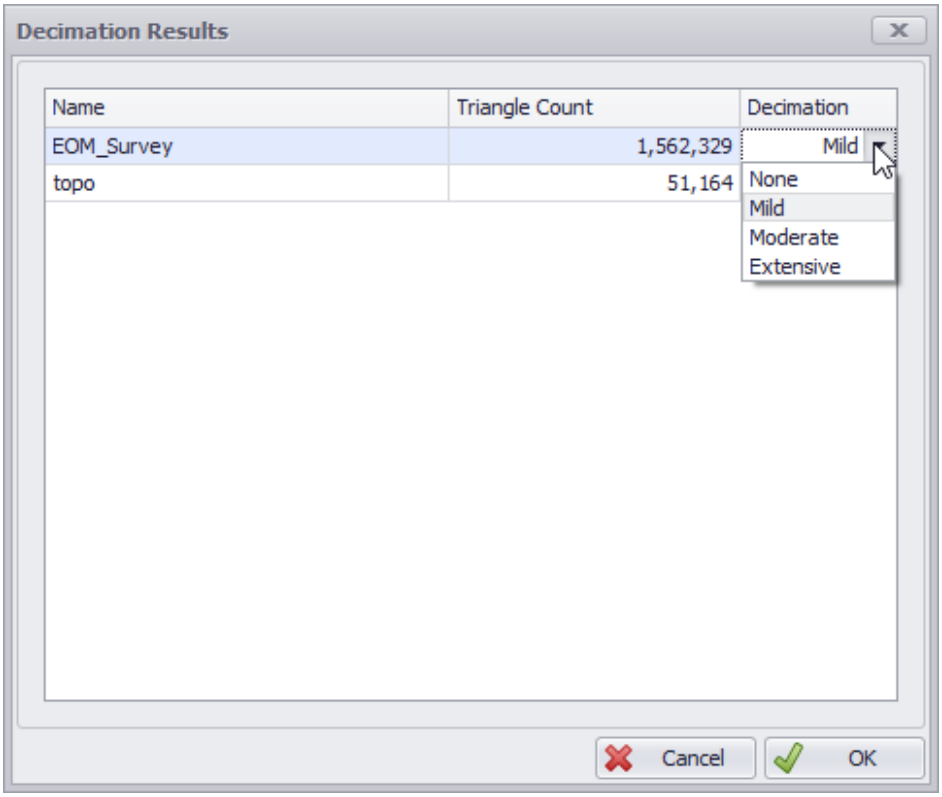


To add layers, you can also select files in the source folder and drag them directly to the **Layers** panel.



Decimation

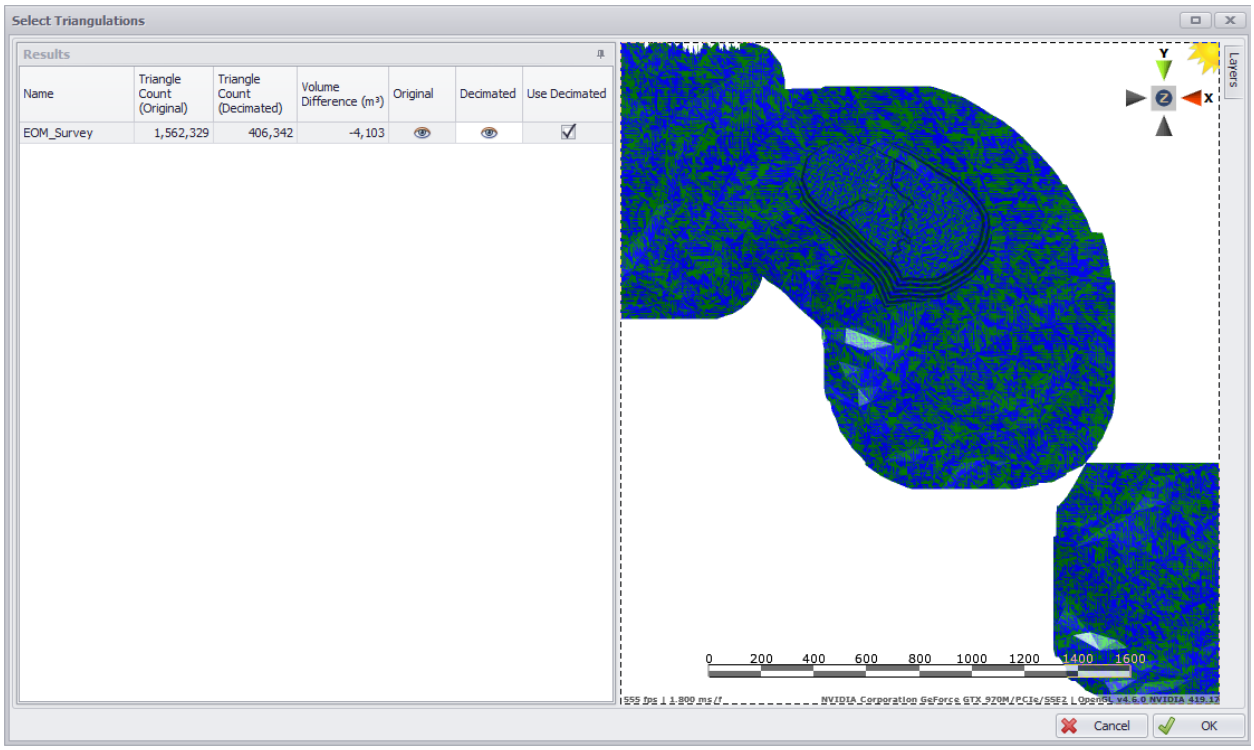
Some files, such as topographic survey files, are much larger files and may take longer to import. That is why it is recommended to "downsample" the number of triangles in such files using the decimation feature.



Decimation is a reduction of image size by decimal subsampling, which is used to minimize the image quality and loading time. When the triangle count is low, the default setting is zero decimation (<None>). When loading larger layers with more triangles, you may need to select another option of low (“Mild”), medium (“Moderate”) or strong (“Extensive”) decimation to reduce the uploading and scheduling time. Depending on the choice of the decimation level, the time of importing layers may increase.

Working with import results

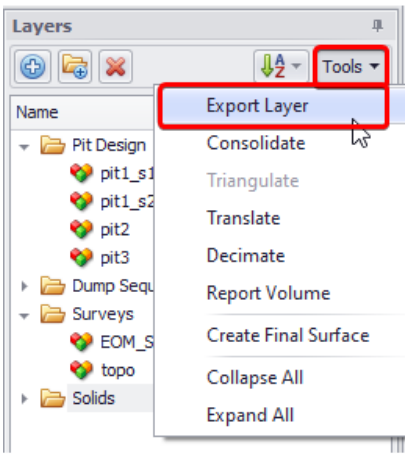
After the function has been run you will be shown the results.



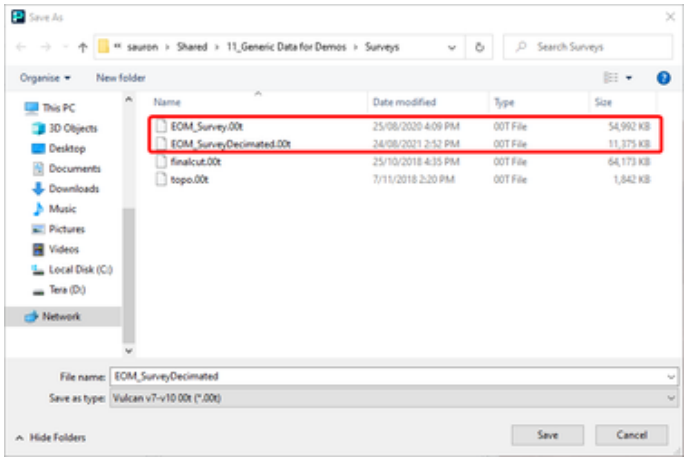
In this example you see:

- Name of the imported layer (the **Name** column) - here “End of Month Survey”.
- Triangle count: original (**Triangle Count (Original)** column) and reduced (**Triangle Count (Decimated)** column).
- Volumetric difference between these two surfaces in cubic meters (which is, in this example, relatively speaking is very small) in the **Volume Difference** column.
- You can also display both surfaces or only toggle **Original** or **Decimated**.
- Enable or disable **Use Decimation** flag to determine which file you wish to use (Original or Decimated).

It’s recommended to rename a decimated file to make it easier identifiable. This decimated file size will be much smaller so when performing solid operations the speed with which the functions perform should be much improved due to the reduced number of triangles in this surface. This can be demonstrated by exporting the decimated layer and comparing its size with original file size. To do this, press the **Tools** button and select “Export Layer” option.

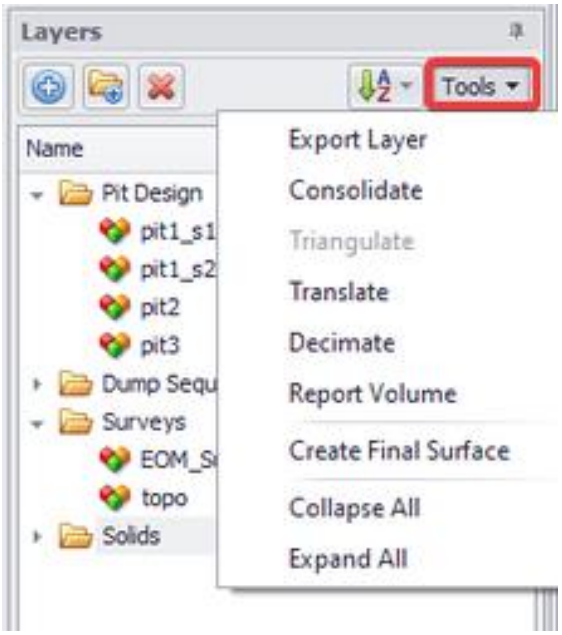


You will see that the exported file will be five times smaller than the original one, which significantly improves processing time, reduces the size of the final file, and makes the planning process more efficient.



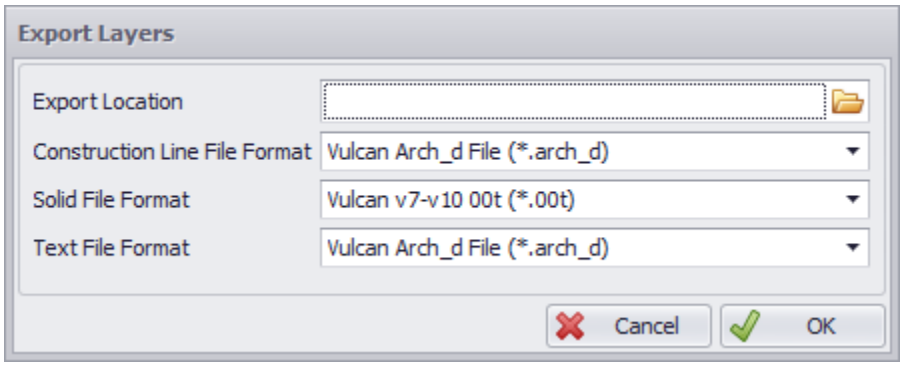
Tools available in Layers panel

Locate the **Tools** button in the top right corner of the **Layers** panel. It is used to perform various actions with the imported layers. The options, available from its dropdown are described below.



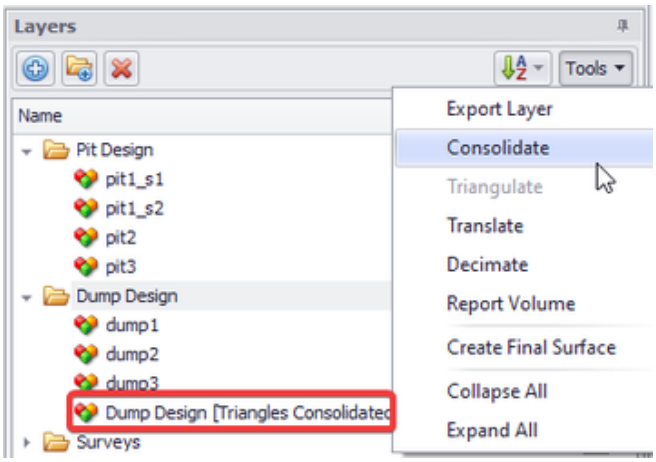
Export Layer

1. Export Single Layer. Select one layer you wish to export and in **Save As** window specify its name and saving path.
2. Export Multiple layers. Use <CTRL> and <SHIFT> keys to select multiple layers you wish to export. When exporting multiple, the program allows you to place them into zip file (folder icon in the **Export Location** field). Specify applicable format for Construction Line, Solid and any Text what you may have loaded as well. Available formats include ".arch_d", ".str", ".dxt", ".obj", ".shp", "00t".



Consolidate

Allows to consolidate multiple layers into one. Choose layers required and select "Consolidate" option from the **Tools** button dropdown. Selected files will be merged into one new generated layer, which contains these consolidated items.

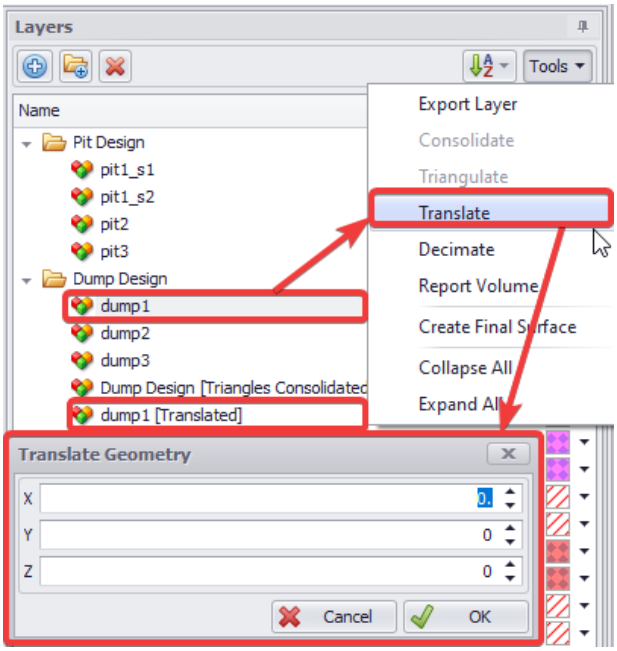


Triangulate

Triangulation function is used to triangulate lines, available only when polylines file is imported, otherwise greyed out.

Translate

Translation function is used to shift information in X, Y and Z-directions if you need a slight change or if you wish to change grids. Translated files will be automatically added to the same folder where original layer is stored.



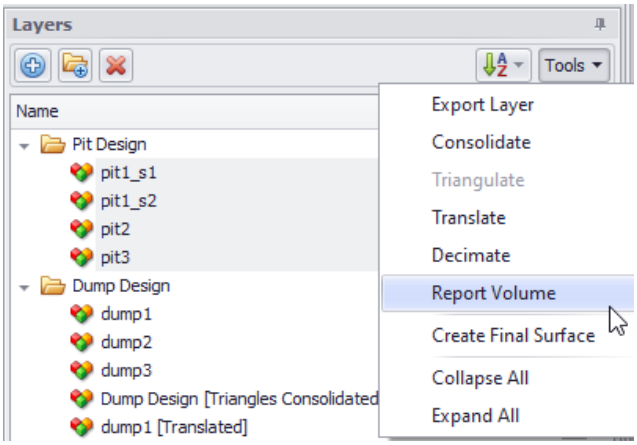
Decimate

The Decimation function automatically runs when a triangulated file is imported into the software.

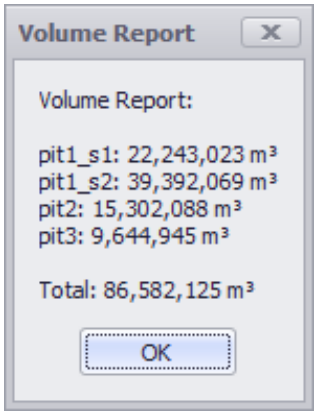
If you didn't decimate a larger surface when importing it, you still can decimate it using "Decimate" dropdown option. Select a file, choose the level of decimation required (including <None>) and this function will retriangulate the given layer at a lower resolution. On completion the results will be displayed, and the user has the option whether to use the original data or the decimated.

Report Volume

Report Volume is an option to display total volumes of closed solids from layers in the **Layers** panel.

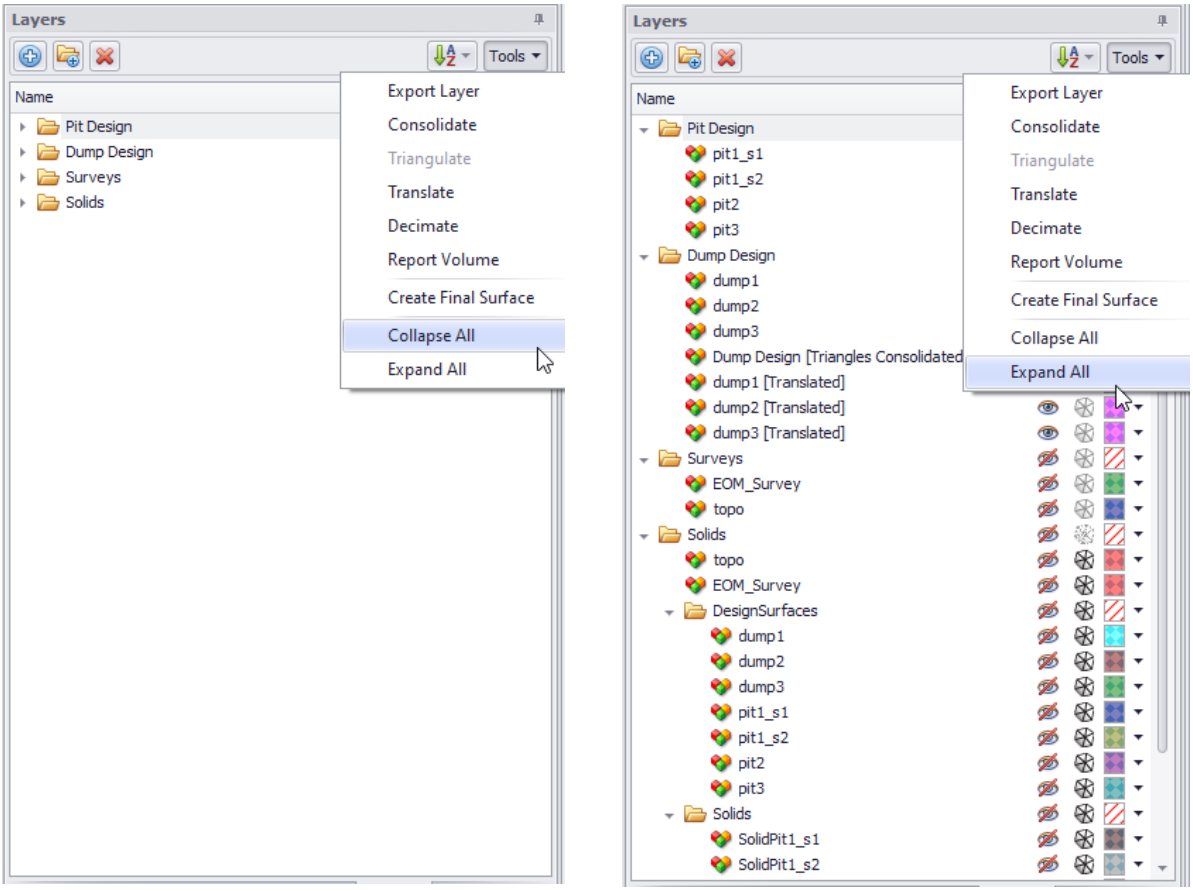


1. Select layers you wish to report volumes of.
2. Press **Tools** button and select "Report Volume" option.
3. Review **Volume Report** that opens, where you'll see volumes of selected closed solids and their Total.



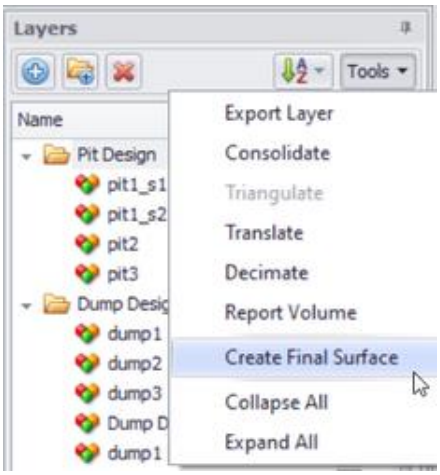
Collapse All and Expand All

The last two dropdown options are used to collapse and to extend all folders. It is particularly useful when working with larger projects with multiple layers, organised in many folders and subfolders.



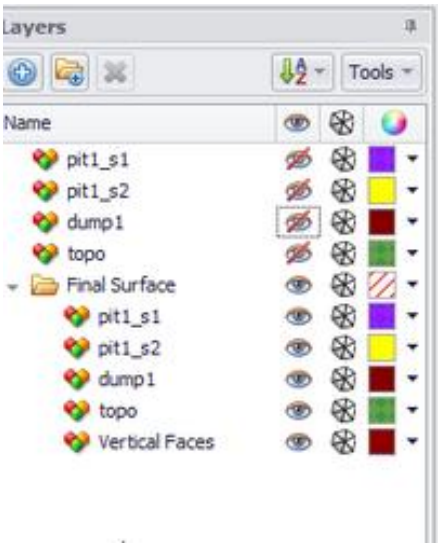
Final Surface Tool

The **Create Final Surface** tool allows users to extract the lowest surface from any combination of solids and surfaces. The result is coloured according to which solid or surface each part of the lowest surface comes from. The tool can be accessed from the **Layers** panel, through **Tools** button dropdown > “Create Final Surface” option, with at least one surface or solid selected.



A set of surfaces is generated and placed in a folder at the end of the process. One surface is generated for each input that has anything in the end result, plus one more for vertical faces that are automatically created to join any surfaces that touch when viewed from above.

Created surfaces will share the color settings and the names of their sources, allowing users to quickly identify the input surface source for each part of the resultant surface.



Result layers share the source surface's colors and name, for quick identification.

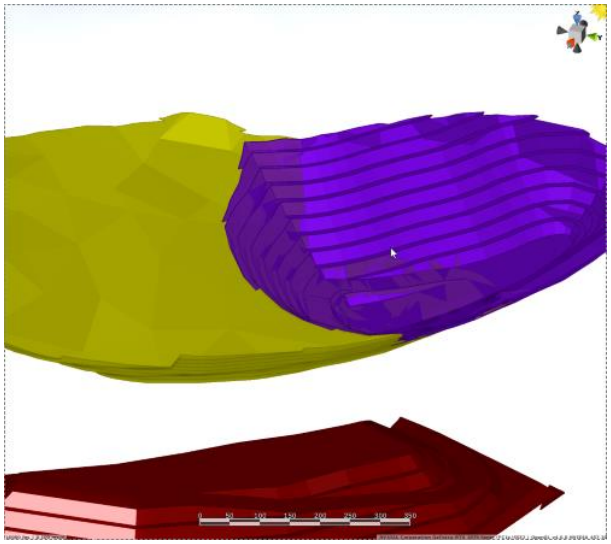
From here, the user may use the results in one of several ways. With all the surfaces on, it is possible to see a lowest surface created from all the inputs. An example of what this might represent is the visualisation of end-of-period compliance, where one might see a combination of surveyed and designed lowest surfaces. In this example, toggling off the surface generated by the topography might show any regions which was planned to be extracted, but had not actually been reached in that period. Contributions of individual dig blocks or pit solids can also be seen by enabling specific output surfaces and the topography at the same time.

Note that if two surfaces are very close to each other, the result may appear somewhat disjointed. An example can be seen in the image below to the right, where the bottom surface of a dump solid is virtually the same as the topography in the region where the dump solid exists. In the case of a pit solid's bottom surface, this result indicates that the extraction of material from the pit in reality is very close to the designed pit.

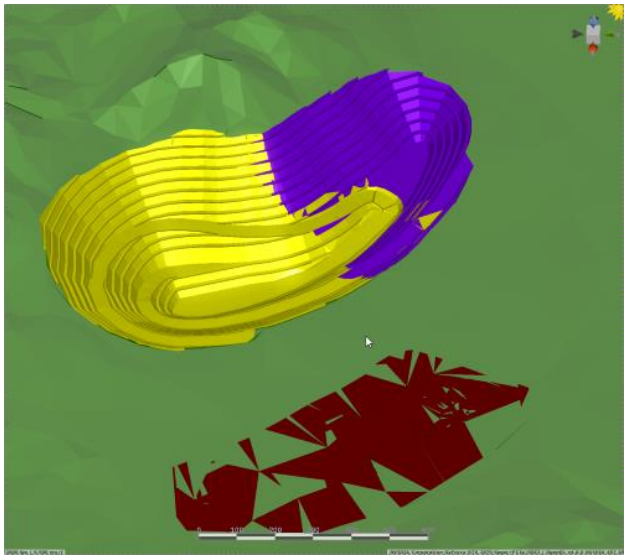
Changing the colour and visibility for all the results can be done by changing the respective value on the final surface folder. Combining the surfaces together into a single surface can also be done using *Tools > Consolidate*.

The tool will handle intersections between any input surfaces and solids. If there are multiple surfaces that would intersect at a given space, the lowest of all inputs is given in the result. An example is provided below to illustrate this:

Input surfaces. Two pit solids intersecting in the middle, and a dump solid below. Topography not shown



End result. Note the yellow pit surface extending below the bottom of the purple, and the red/green surface formed by the intersection of the topography and bottom of the dump solid



"Create Final Surface" function is more orientated towards Spatial Conformetrics app.

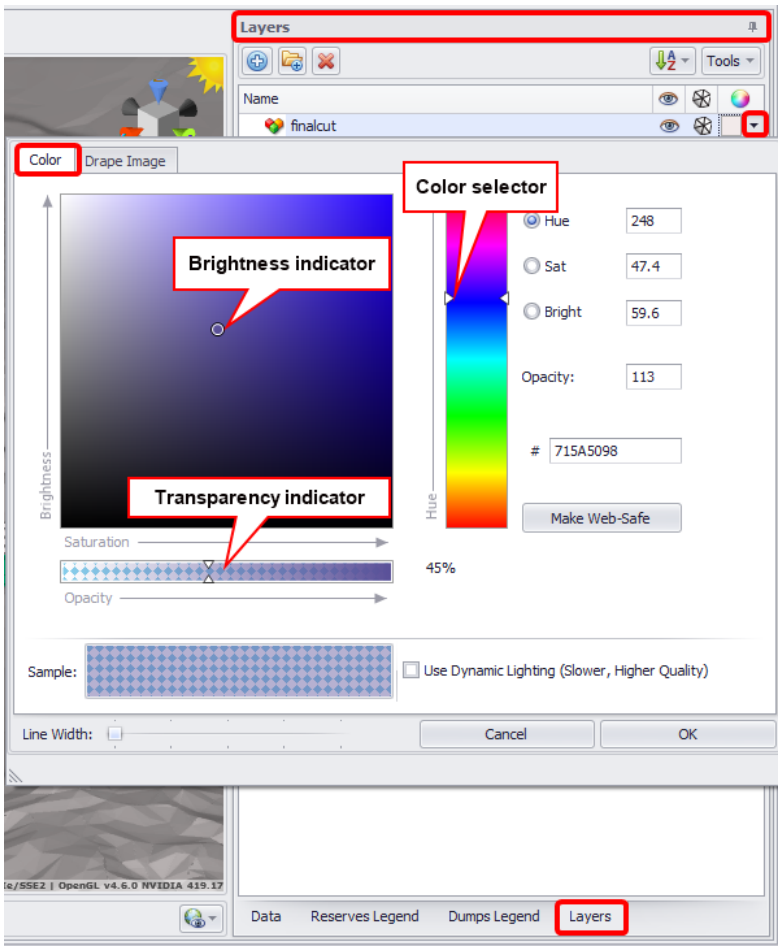
Colors and Drape Image

Images may be set to a specific color, or draped to a triangulation by importing both the image and associated georeference file.

Setting an image color

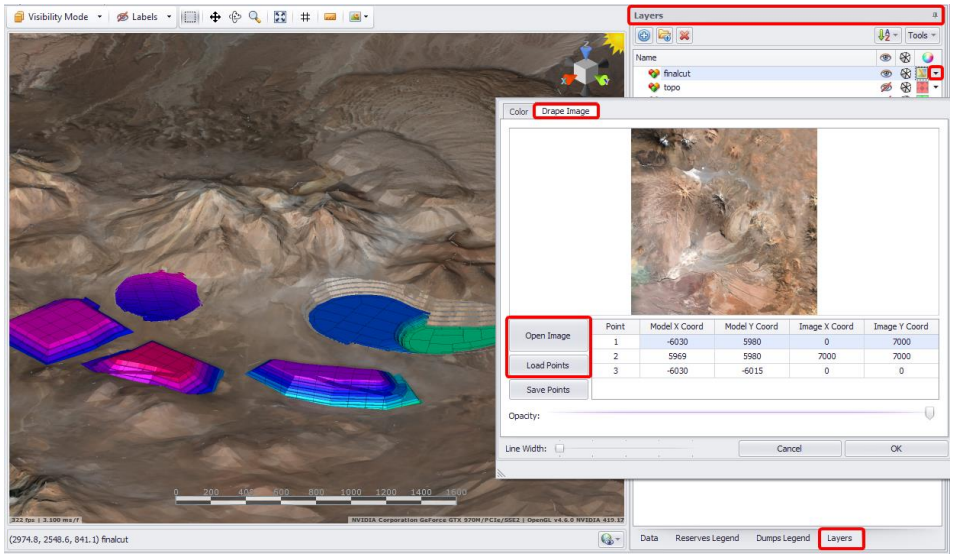
1. Select a layer in the **Layers** panel.
2. Click on the color selection dropdown to the right of the layer name  .
3. Click the **Color** tab.

4. Click the color selection button to display the color palette and opacity level.
    1. Select the desired color and adjust its settings to your preference.
    2. View the resulting color in the **Sample** field.
    3. You can also enter numerical values for color hue (**Hue**), Saturation (**Sat**), Brightness (**Bright**), Transparency (**Opacity**) or specify a color number in the palette (**#**).
    4. Use the **Make Web-Safe** button to assign a web-safe color to the image.
    5. Tick the **Use Dynamic Lighting** checkbox if you want to use dynamic lighting. But note that this flag will cause the image to be of higher quality, which will slow down the planning process.
    6. Use the **Line Width** slider to adjust the thickness of the lines.
5. Press OK to finish.

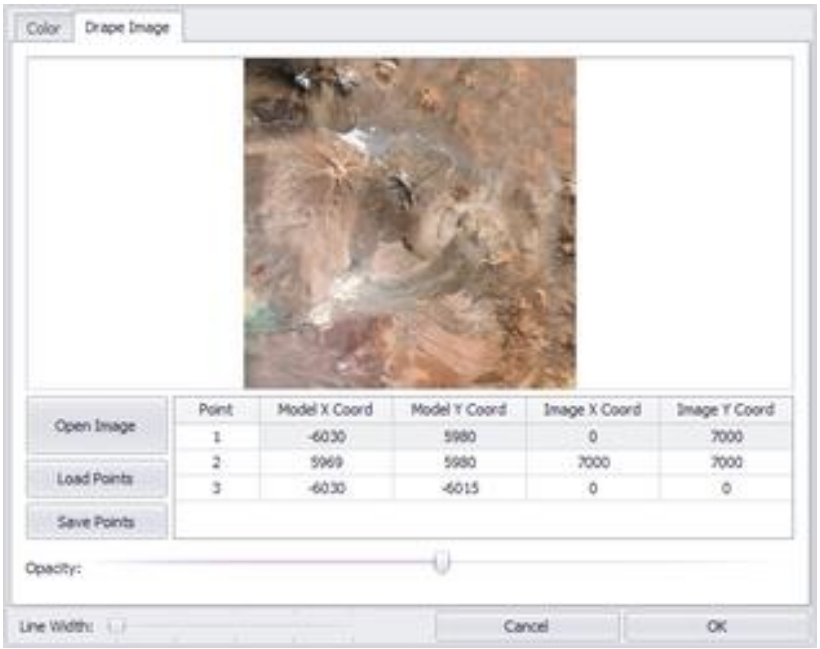


Draping an image

1. Select a layer in the **Layers** panel.
2. Click on the color selection dropdown to the right of the layer name.
3. Switch to the **Drape Image** tab.
4. Select **Open Image** and import the image file.
5. Select **Load Points** and import the georeference file.



6. If required, adjust the image file draping settings over the triangulation in the coordinate table and adjust the opacity with the **Opacity** slider.
a. Use the **Line Width** slider to adjust the thickness of the lines.



7. You can also save the image points by clicking the **Save Points** button. In the dialog that opens, specify the path to save the points file and its name. The exported file will be saved in the ".alsdrp" format.

A downsampled copy of the original image is saved in the working folder as “projectName.drapeImages”. If this file is deleted, then all draped images are removed from the project.

Supported Image File Types

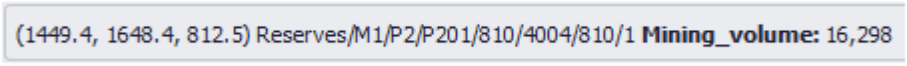
You can import layers and surfaces files in the following formats:

- JPG Files (.jpg)
- JPEG Files (.jpeg)
- BMP Files (.bmp)
- TIF Files (.tif)
- GIF Files (.gif)
- PNG Files (.png)

Supported registration formats include the Vulcan IREG and the Surpac RGF.

Status Bar

The status bar display information for the current mouse location. It includes coordinates and the full name of the level record. The information displayed changes as you move the mouse cursor.

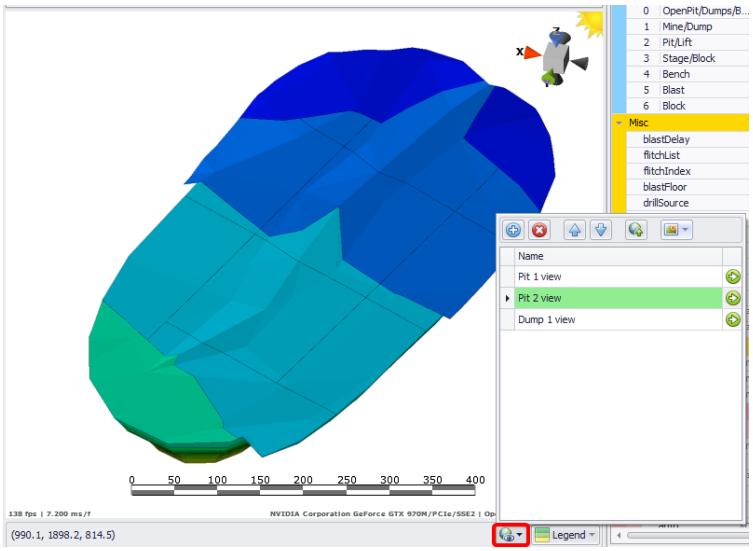


In the shown status bar you see:

1. Mouse coordinates - (1449.4, 1648.4, 812.5);
2. Record name - Reserves/M1/P2/P201/810/4004/810/1.
3. Label text - Mining Volume:16,298.

Manage Viewpoints button

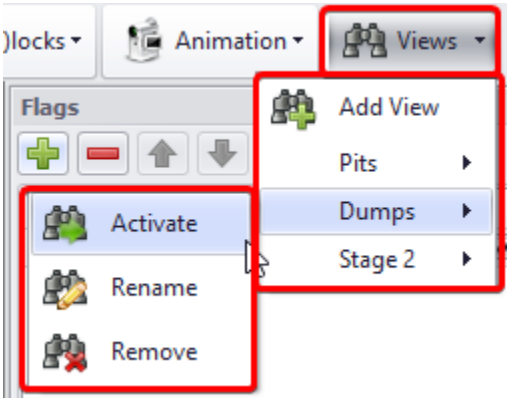
Click **Manage Viewpoints** button  to open the **Viewpoints** dialog, where you can add a new viewpoint, delete one or few of them, move viewpoints up and down in the list, update, or take a screenshot with the selected resolution.



Saved viewpoints can be useful for navigation and reporting.

1. Click the **Manage Viewpoints** button at the bottom right of the viewport.
2. Create a new view by clicking the blue plus icon and rename it according to the object displayed in the viewport.
3. If you have more than one view, you can move them up and down in the list using the blue arrow buttons.
4. To activate the selected view, click the green arrow icon. The active view will be highlighted in green.
5. You can return to the viewport at any time and change the view/location of the object, and then save the changes you made to the viewpoint by clicking the **Update Viewpoint** button (the up arrowed sphere icon).
6. The **Viewpoint** window also includes a screenshot button with the selection of resolutions available.

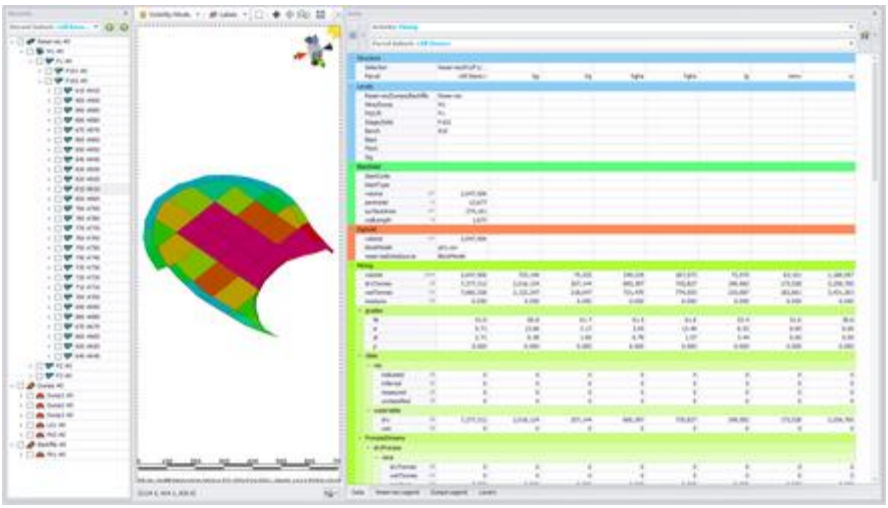
Note. In Haul Infinity, to manage viewpoints use the **Views** button.



Data Panel

The **Data** panel is an area where data on the selected records are displayed and managed. It displays the reserves information available at the current step.

- Reserves are shown for all checked records.
- If no records are checked, then reserves are shown for the focused record.

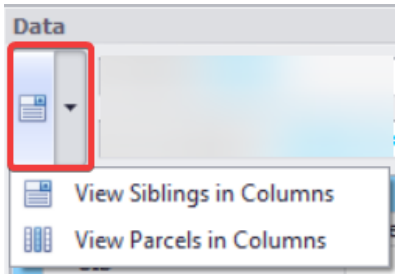


You will find such a **Data** panel view in:

- Production Scheduler: **Setup** tab > **Initial Database** step,
- Production Scheduler: **Setup tab** > **Refined Database** step,
- Production Scheduler: **Setup tab** > **Prescheduled Database** step,
- Production Scheduler: **Database** tab,
- Production Scheduler: **Database** tab > **Animation** tab,
- Tactical Scheduler > **Setup tab** > **Preschedule** step,
- Tactical Scheduler > **Setup tab** > **Reserves** step,
- Tactical Scheduler > **Reserves** tab,
- Tactical Scheduler > **Schedule** tab> **Animation** tab,

View Mode

In the top left corner of the **Data** panel is the **Data View Mode** button. It is used to change the current data view mode, which affects the way the data is presented in the table below.

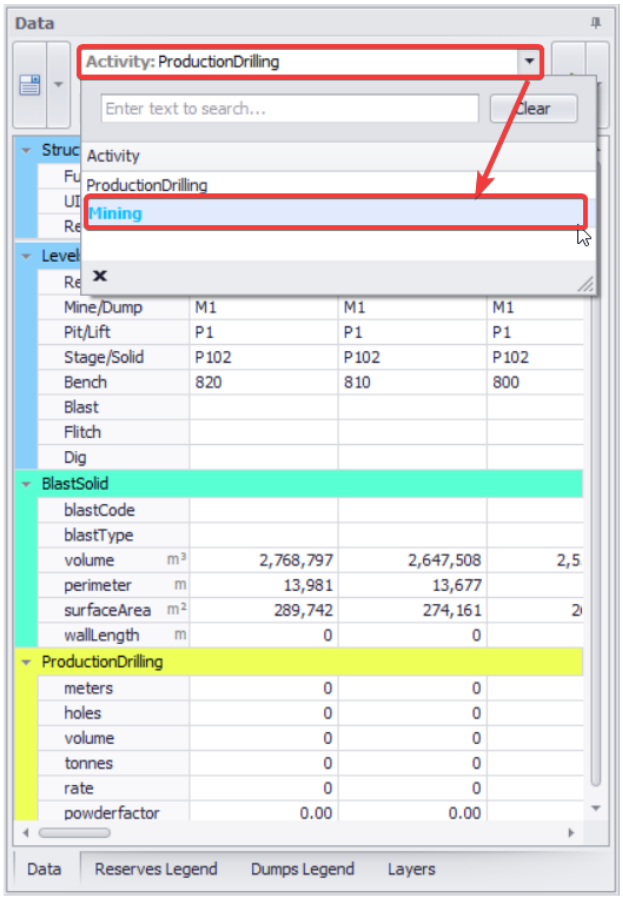


If a record is focused, the **View Mode** switches columns to show siblings or parcels.

- “View Siblings in Columns” option - view shows multiple records at once.
- “View Parcels in Columns” option - view shows the activity breakdown within a record.

Activities

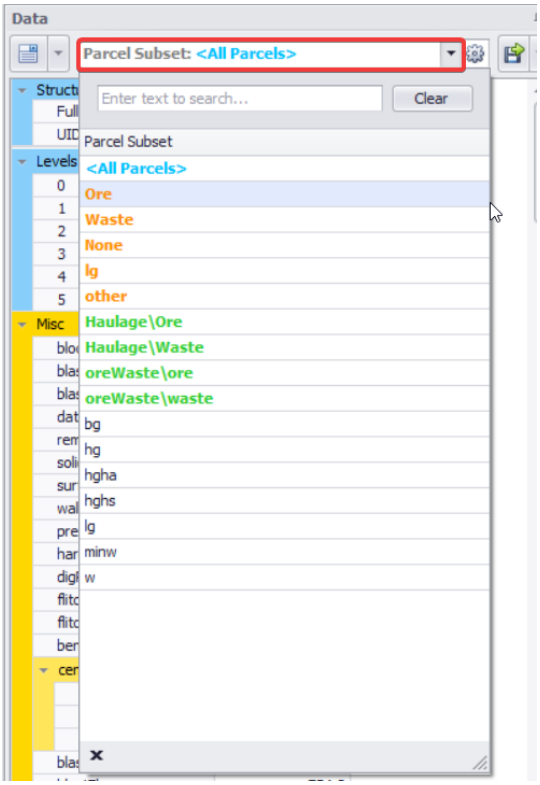
Switch between activities to see the quantities of work in each parcel. The database layout changes to show fields that relate to the selected activity.



Activity types are configured in *Setup > Production Mode Features* (in Production Scheduler).

Parcel Subsets

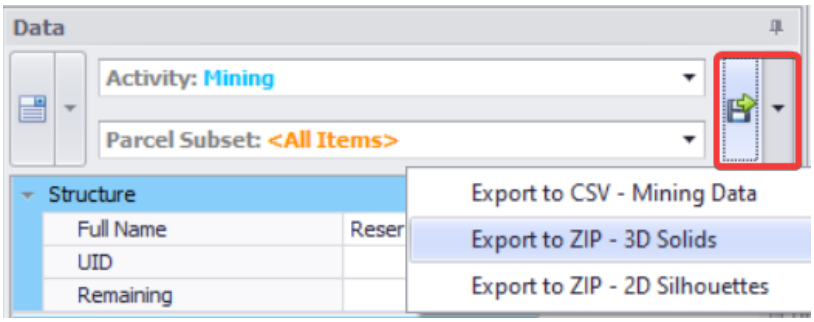
In the **Parcel Subset** field dropdown choose which parcels are shown for the current activity.



Parcels are configured through the imported file in *Rapid Reserver > Block Model* and through *Setup > Parcels* (in Production Scheduler).

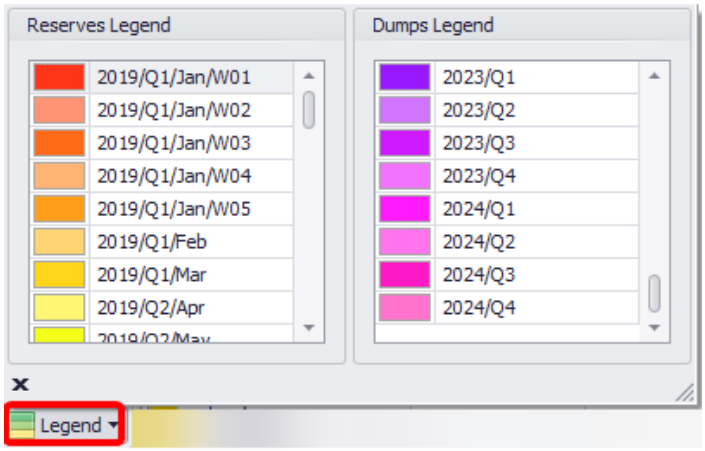
Exports

Option to export the database to external archive files.



Legend

The **Legend** button, which is displayed in the bottom Control Panel (in ATS in this example), is used solely to display the specified Reserves and Dumps shadings or Blast shadings and hatchings, and has no editing function.



In other tabs and applications, the color legend can be featured by separate tabs with the function to edit and create new shadings for individual elements. More details on custom shadings see in the section *Shadings and Tags* below.

Shadings and Tags

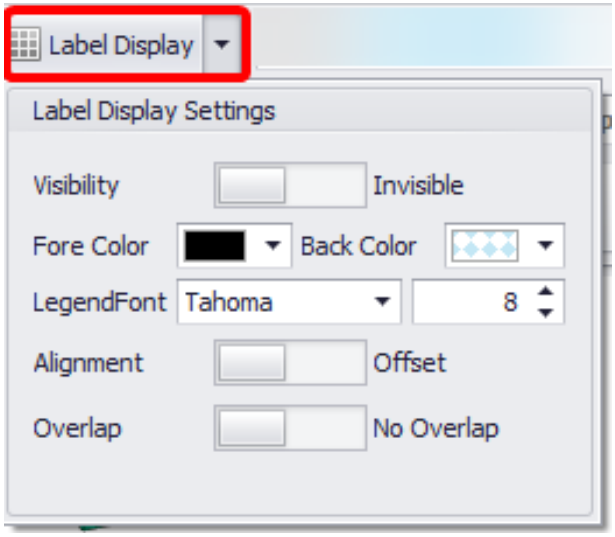
In all of the Alastri applications, the user has a power to assign the desired colors and labels to project elements. For some items, advanced custom labelling or color shading options are available.

Labels

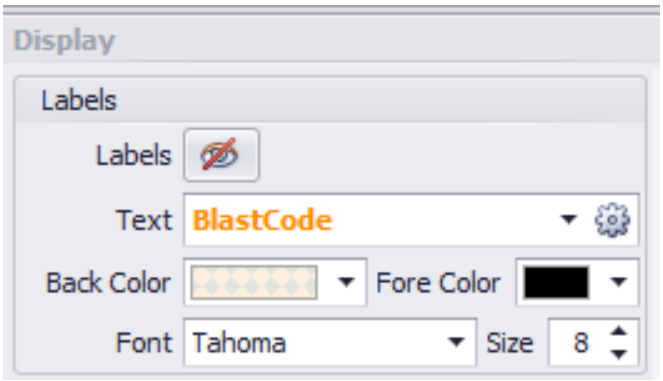
Labels are symbolic names of project elements (dig and blast solids or entire levels of pits and dumps, as well as routes and nodes for haulage, or agents, transactions, and activities), used as an identifier for more convenient indication of data and properties.

In some parts of applications, the user has a choice to not only display or hide the labels of various project components, but also to create custom labels. Such functions are usually accompanied by a dropdown and/or a gear icon.

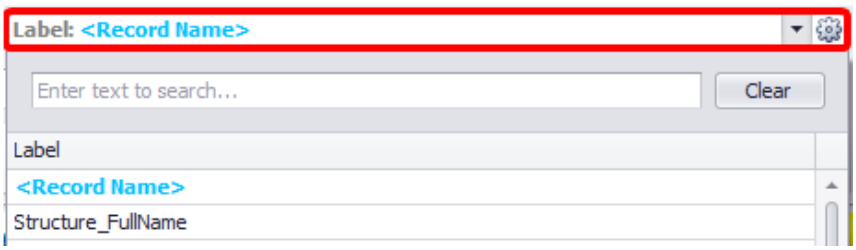
For example, in the **Reserves** tab of the Tactical Scheduler there is a **Label Display** button located in the top toolbar, which you can use to display or hide labels, select the color and font of text and background, adjust the offset and overlap of labels used.



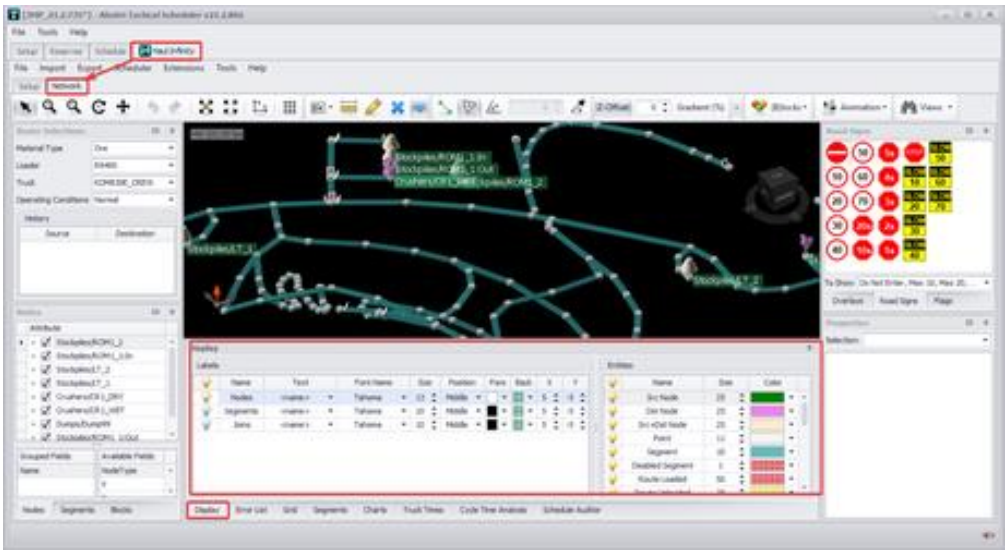
There is no such button in Rapid Reserver, but labels configuration is made similarly through the **Display** panel of **Designer** tab.



Depending on user preferences and to make the project easier to work with, different information applicable to a given view or scheduling task can be displayed in the custom labels. In some applications, the available labels can be selected from a dropdown list of preconfigured tags, or you can create personalized custom names through formulas in the **Configure Labels** window.



In Haul Infinity, custom labels are configured through *Network > Display > Labels,* where user can specify the label text and its properties such as color, size and position.

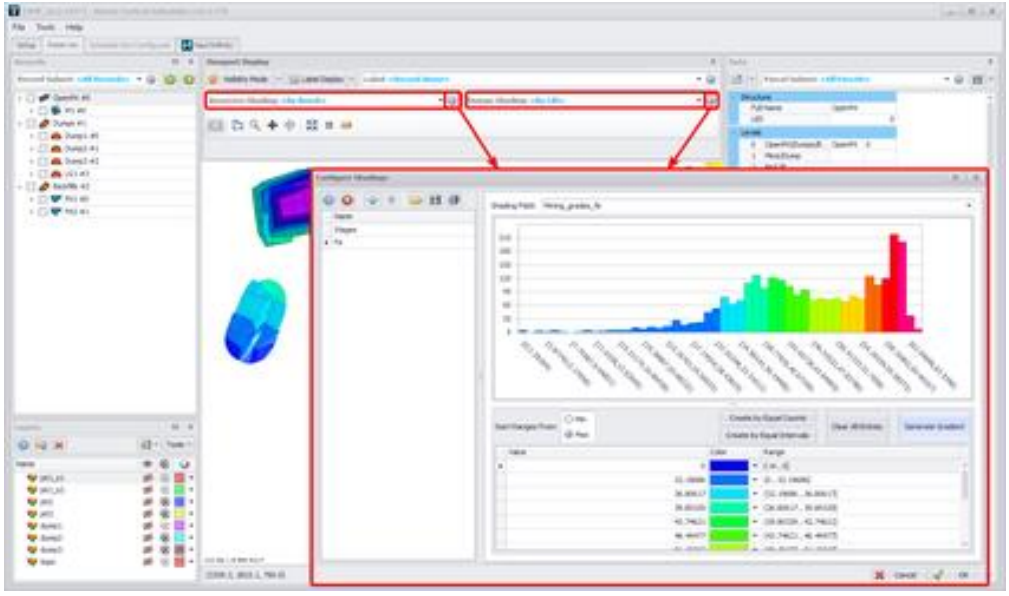


Use the bulb icon to show or hide labels in the viewport.

Shadings

Shadings are an important part of the user interface and can be used to simplify viewing of the different elements in your project. It is also easily configurable in all Alastri applications. The Production Scheduler and Tactical Scheduler applications have separate tabs and fields with a gear icon that opens a window for configuring colors and their gradients.

Let's look at an example of custom shading configuration in Alastri's Tactical Scheduler, where these fields are placed in the top toolbar of the **Reserves** tab.

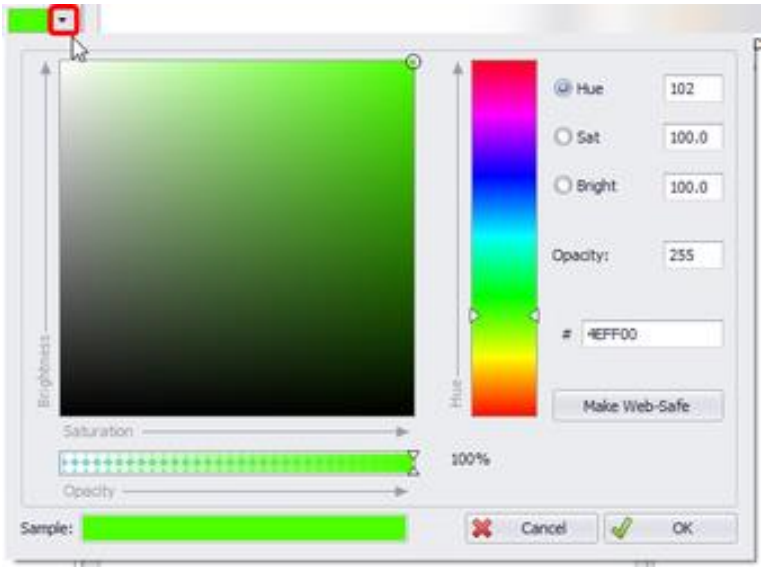


1. Click on the gear icon in the Reserves or Dumps Shadings field. The **Configure Shadings** dialog will appear.
2. Press the blue plus icon to add a new shading and name it adequately.
3. From the **Shading Field** dropdown select a parameter you wish to configure shading for.
4. Specify the relevant colors, values and ranges.

    a. Optionally click the **Generate Gradient** button to create color gradient.
    b. Press the **Create by Equal Counts** button and set the applicable number of intervals - ranges will contain an equal number of items.
    c. Press the **Create by Equal Intervals** button and set the applicable number of intervals - ranges will be equally divided by based on the highest and lowest values.
    d. Press OK to confirm and return to the viewport to see the results.

Shadings configuration in Production Scheduler and Rapid Reserver is done similarly (via the Reserves and Dumps Legends tabs in Production Scheduler and the **Display** panel in Rapid Reserver).

In the other applications (Haul Infinity and Spatial Conformetrics), these advanced shadings are not available, but you can still assign the desired colors to items through the **Color** button dropdown, as shown below.



1. Click the color selection button to display the color palette and opacity level.

    a. Select the desired color and adjust its settings to your preference.
    b. View the resulting color in the **Sample** field.
    c. You can also enter numerical values for color hue (**Hue**), Saturation (**Sat**), Brightness (**Bright**), Transparency (**Opacity**) or specify a color number in the palette (**#**).
    d. Use the **Make Web-Safe** button to assign a web-safe color to the image.

2. Press OK to finish.

Import and Export

Most of the steps and tabs in Alastri software have buttons for importing data from external files and exporting to the appropriate formats and folders.

Import

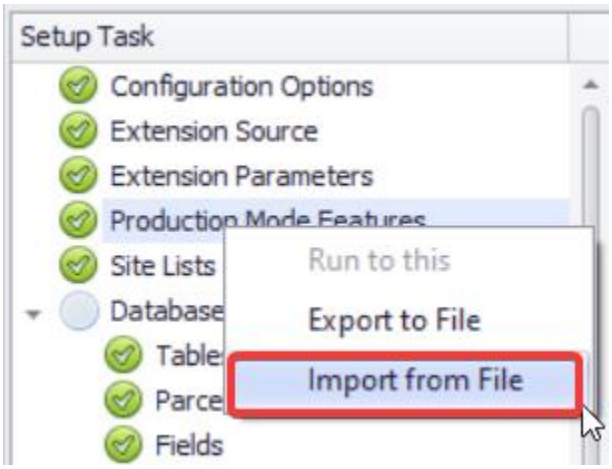
To import files or layers (in the **Layers** panel), click the folder icon and in the **Open** window that appears, specify the path to the file you want to add to the project in the appropriate format.

The import icons used in Alastri software:

Used for importing files

Used to add layers and surfaces in the **Layers/Overlays** panel

Also, for all setup steps in the **Setup** tab, you can right-click on any task and select the "Import from File" option, to import settings for an entire setup task.



Export

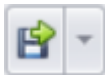
Project setup tasks, reserves and dumps data, graphs, animations and reports can be exported and saved in the desired folder in the applicable format.

The export icons used in Alastri software:

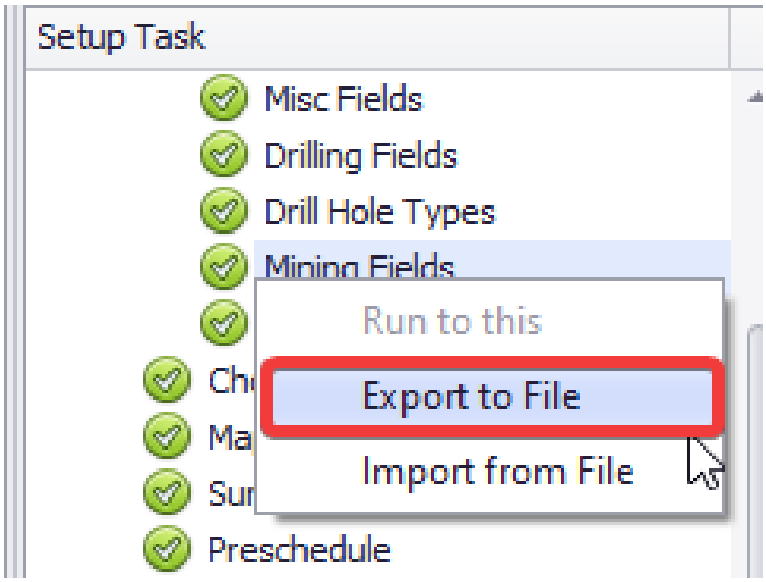
 Export button

 Export Single Item/record

 Export All Items/records

 Export button with a dropdown list of available options

Also, for all setup steps in the **Setup** tab, you can right-click on any task and select the "Export to File" option, to export settings for an entire setup task.



The applicable options and export formats are covered in more details in the relevant Export sections for each application.

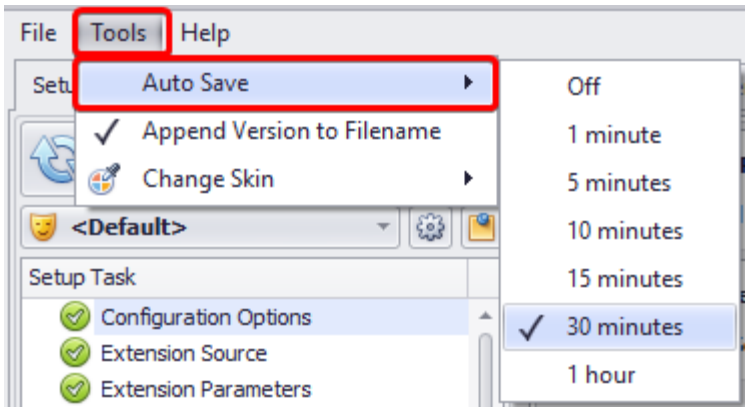
Exporting an image/screenshot

Some setup steps and tabs have a button to save a screenshot, which you can also use for exporting.

In addition, the entire project can be imported and exported through the **File** button located in the upper left corner of any of the applications.

Auto Save

By default, users are prompted to save their project every thirty minutes. The timeout duration can be changed in *Tools > Auto Save*.



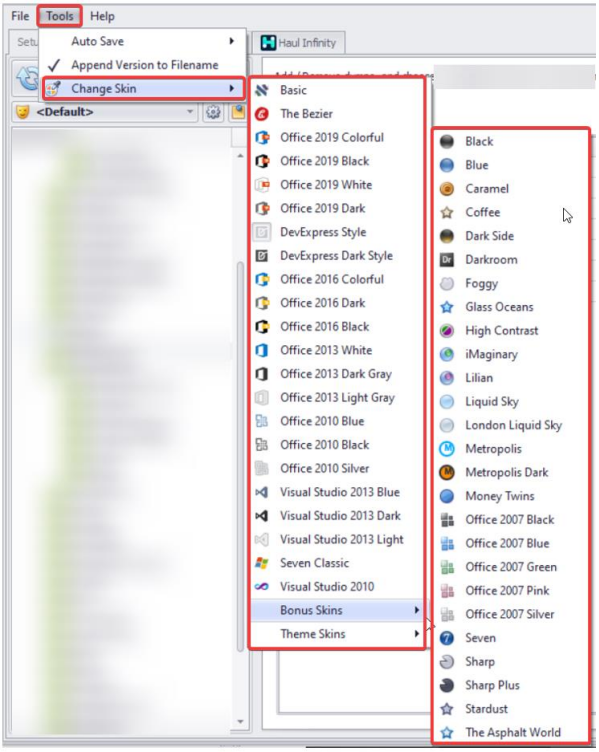
If you get a crash, Auto Save means you only lost ~15 minutes work, instead of the last ~4 hours.

Skin Themes

To suit your visual preferences, all the applications from Alastri are available in a variety of colors and designs.

To change the design theme:

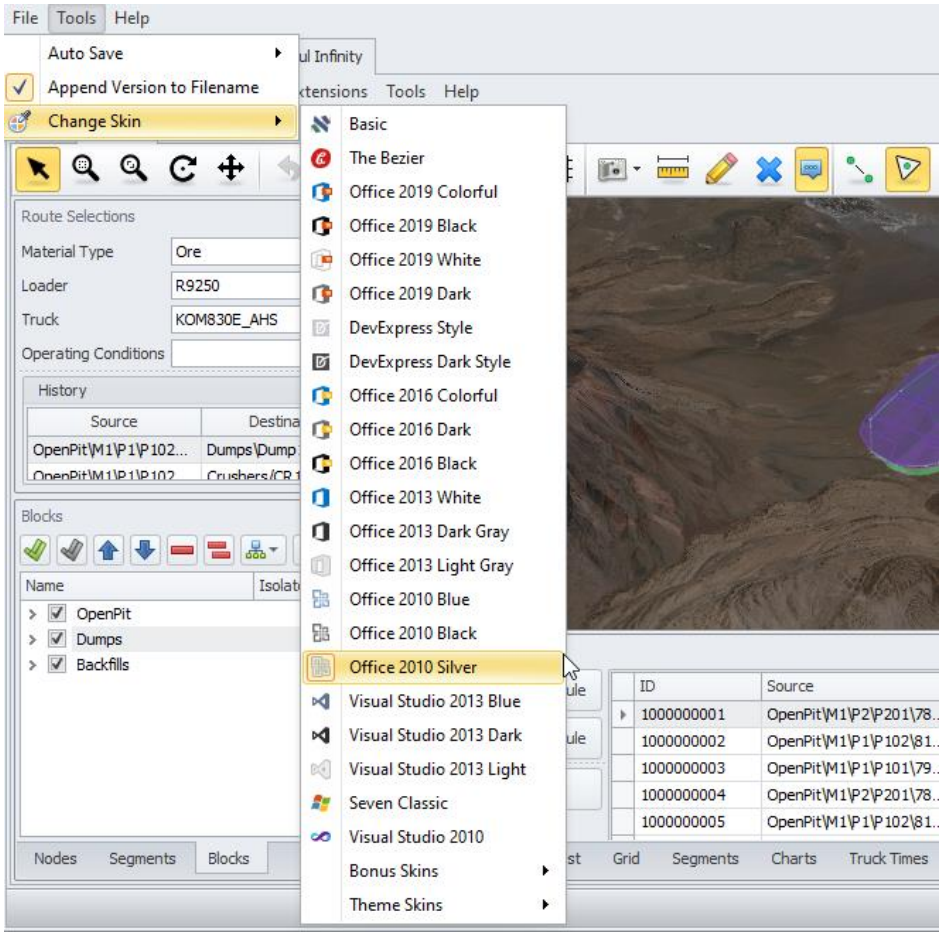
1. Click the **Tools** button located in the top bar of each app.
2. From its dropdown, select the "Change Skin" option.
3. An extensive list of available themes opens, including two tabs for bonus and special themes.
4. Select any theme you like depending on your preferences and wait for its downloading.



For better clarity of the buttons pressed and options selected, we recommend using skin themes such as Office 2010 Silver.

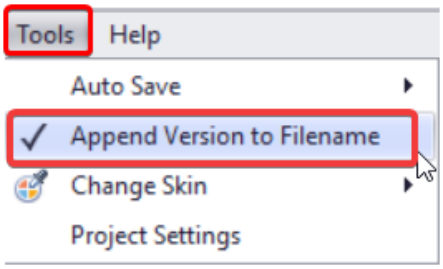
In the example below, we can see that:

1. “Append Versions to Filename” option has been chosen for saving projects.
2. Office 2010 Silver theme is currently highlighted and selected.
3. **Select** arrow is activated.
4. **Show Mouse Text** and **Snap to Surface/Model** buttons are pressed.



Append Version to Filename

When ticked version number will be appended to the filename.



Press *File > Save As* to save your project to the desired folder. Name of the project file will be automatically followed by the number of the currently used version.