

GEOVIA SURPAC™ 2025 REFRESH 1 RELEASE NOTES

ENHANCEMENTS

Tools

Layer Manager properties are retained when using the TRIANGULATIONS ASPOLYLINES function

When you use the TRIANGULATIONS AS POLYLINES function and switch between sections in Layer Manager, the DTM face and edge visibility property is now retained.

Engineering

Use label map options in specific caving forms

On the Caving advanced profile form for the Best height of draw, Marker mixing, Evaluate marker mixing, Production scheduler, Slusher module, Marker mixing 3D, and Tactical sequencing tools, you can now use the label maps and specify label map advanced profile options.

Use Caving Display: Markers to display coloured markers over display points

When you use the CAVING DISPLAY function, in the Caving display pane, you can click the new Marker button to display the Caving Display: Marker form. You can use the form to display coloured markers over display points. Markers can be in various shapes, and either a solid colour or according to a colour profile.

Use the footprint finder Result consolidation section to generate a single file across multiple runs

When you use the FOOTPRINT FINDER function, you can use the new Result consolidation section to consolidate the spreadsheet report output to a single file across multiple runs.

Plot draw circles of a given radius for the selected block caving draw points

You can use the PLOT DRAW POINT CIRCLES function to plot draw circles of a given radius for visualizing draw circles of the selected block caving draw points.

Block caving bucket utilities

You can use the HOD FROM TONS and TONS FROM HOD functions to generate a draw point attribute or a bucket attribute.

Caving data buckets support date-time fields

You can now create, edit, modify, delete, import, or export caving data bucket with date time field.

Caving display labels supports date-time fields

You can now view date time fields with labels.

Improved handling of slice files with more than 100 grades and managing grade lists

You can use the new Grade list button in block caving functions that use a slice file, to specify the grade list to use. The grade list form has the option to load the grade list from any xml caving project file or a slice file that has less than 100 grades.

The last used grade list for a caving function is saved in last_gradelist.xml in the current folder (the file is automatically overwritten if it exists). When present, the grade list in the last_gradelist.xml is used as the default grades for caving functions.

When loading a project file for a function with a slice file, the grade list from the slice file or last_gradelist.xml is used if it matches the partial data stored in the slice file. When validating the data inputs of caving functions, the validation fails when the grade list contains duplicates, the grade list does not match the partial data in the slice file (when the function uses a slice file), or when the grade does not match the block model (when the function uses the grades names as block model attributes).

Surpac supports adding the date-time stamp as an attribute for .sdm files

The following list of functions supports adding date-time stamp as an attribute for .sdm files using an expression or a check box:

- CREATE POINT
- POINT EDIT
- POINT INSERT
- GRAPHICS PT MATHS
- GRAPHICS STR MATHS
- GRAPHICS SEG MATHS
- GRAPHICS LAYER MATHS
- STR MATHS
- DIGITISER
- IMPORT FROM TEXT
- POINT COPY DESCRIPTIONS
- SEGMENT COPY
- SEGMENT COPY BY BEARING AND DIP
- SEGMENT COPY ROTATE
- SEGMENT COPY TRANSFORM
- SEGMENT COPY X
- SEGMENT COPY XY
- SEGMENT COPY XZ
- SEGMENT COPY Y

- SEGMENT COPY YZ
- SEGMENT COPY Z
- STRING COPY
- STRING COPY BY BEARING AND DIP
- STRING COPY ROTATE
- STRING COPY TRANSFORM
- STRING COPY X
- STRING COPY XY
- STRING COPY XZ
- STRING COPY YZ
- STRING COPY Z

Export caving column and ring visualisations supports .sdm format and contains ring IDs

When exporting caving draw point columns and ring displays, you can choose .sdm format which supports individual columns or ring selection and tagging with associated draw point or ring IDs.

Enter Range near, Range bell, and Cave density field values in caving forms

You can define Cave density in:

- Cave foot print finder tool
- Build slice file
- Block caving production scheduler
- Template mixing 3D

You can define Caving attributes such as Range near and Range bell in:

- Best height of draw
- Marker Mixing
- Block caving production scheduler

In Tactical Sequencing, you can define Range bell.

Geology

Improvements in the solids or surfaces intersection operations

The following functions have been enhanced to optionally use the DS library for performing solids or surfaces intersection operations:

- TRISOLATION 3DM/3DM INTERSECT
- TRISOLATION 3DM/3DM UNION
- TRISOLATION 3DM/3DM OUTERSECT
- TRISOLATION 3DM/DTM ABOVE
- TRISOLATION 3DM/DTM BELOW
- TRISOLATION FILE 3DM/3DM INTERSECT
- TRISOLATION FILE 3DM/3DM UNION
- TRISOLATION FILE 3DM/3DM OUTERSECT
- TRISOLATION FILE 3DM/DTM ABOVE
- TRISOLATION FILE 3DM/DTM BELOW

You can select the Quick repair check box to perform minor repairs, optionally, if the intersection operation produces invalid solids.

Default preferences (in the Applications tab) now includes an option to select the library (legacy or DS) that controls how solids or surfaces are intersected. The default Legacy option results in unchanged behaviour for finding the intersections. If the DS option is used then it uses a newer method that

is likely to result in improved results but requires additional testing before making it the default behaviour.

ISSUES FIXED

Configuration

Layer properties are retained when using the TRIANGULATIONS AS POLYLINES function

When you use the TRIANGULATIONS AS POLYLINES function, the layer properties are now retained when switching between sections.

Digitising shortcut menu displays Snap to Plane instead of Project selection to plane

When you use the snap mode options to choose the effect on digitise operations, the shortcut menu now displays Snap to Plane instead of Project selections to plane.

Errors do not appear during Java installation

When you now install Surpac, errors no longer appear during Java installation.

Surpac does not release license for long-running macros

Now, Surpac does not release the current license if a macro playback is running.

Geology

Renumbering strings no longer causes deletion of the existing string

When you use the STRING RENUMBER function, the renumbered string is no longer deleted. You can now renumber the string without losing the existing string.

A warning message appears for an invalid solid when using the DTM TREND OUTLINES function

When you use the DTM TREND OUTLINES function, in case of an invalid solid a warning message now appears.

Extra blocks do not appear when using the BM GRAPHICS CONSTRAIN ADD function

When you use the BM GRAPHICS CONSTRAIN ADD function with a 3DM constraint type applied to the block model, extra blocks do not appear in Graphics and is constrained correctly.

FIELD MATHS function works with a 32-bit Microsoft Access driver

The FIELD MATHS function currently works with a 32-bit Microsoft Access driver.

The functions for extrude and triangulate give accurate results

When you use the EXTRUDE AND TRIANGULATE SEGMENT, EXTRUDE AND TRIANGULATE STRING, and EXTRUDE AND TRIANGULATE STRING RANGE functions and extrude by horizontal or vertical offset, now the horizontal or vertical distance remains the same, respectively. The functions for extrude and triangulate for segment, string, or string range, now give accurate results.

Surpac no longer exits unexpectedly when entering cell-size and cell-count along X and Y on the Cloud density reduction tab

When you use the CLOUD 2D MESH (2PCM) function and enter cell-size and cell-count along X and Y on the Cloud density reduction tab, Surpac no longer exits unexpectedly. The Point cloud 2D mesher form appears again if the specified input file name, does not exist in your computer.

Work with multiple databases and block models while using SAVE SECTION TO STRING FILES (PS2STR) and WORKSPACE SAVE (SW) functions

When you now use the SAVE SECTION TO STRING FILES (PS2STR) and WORKSPACE SAVE (SW) functions, you can now work with multiple databases and block models. Previously, the functions were only working with multiple solids, single database, and a single block model.

Constraints are correctly applied while exporting constraint files (.xdbc) using the UNLOAD SURVEY DATABASE function

When you use the UNLOAD SURVEY DATABASE function to export constraint files (.xdbc), for tables like collar, survey, geology, zone, and so on, text files are successfully generated for each table and the constraints are correctly applied.

Assign multiple domains works accurately without saving to database

When you now use the ASSIGN MULTIPLE DOMAINS function and clear the Save domains to database check box, an error message no longer appears and assign multiple domains works accurately without saving to database.

Validation does not fail when there is a leading white space while typing in Dfield

When you use the GRAPHICS LAYER MATHS function, if there is a leading whitespace in the Dfield while manually entering description field value, the validation does not fail.

Create dtm files in a read-only directory

You can now create .dtm files in a read-only directory which overwrites existing .str files. Surpac Surpac 2025 Refresh 1

Tools

Surpac no longer exits unexpectedly when Microsoft Access database-32 bit office mapped to co-ordinate fields that are not x, y, z

When you now map a 32-bit Microsoft Access database to co-ordinate fields that are not x, y, z, the mapped .ddb file name is different from the actual access database file, and then use the DISPLAY DRILLHOLES function, Surpac now no longer exits unexpectedly.

Rotated Datamine models no longer losing rotation

You can now open the Datamine models with the following characteristics:

- without rotation axis data and non-zero rotation angles
- positive and negative rotation angles

Surpac displays drillholes with missing survey, correctly

Previously, drillholes with missing survey, appeared incorrectly in Surpac. The issue is now resolved and drillholes with missing survey appear correctly.

Extract constraint forms shows correct table options

On the Select the assay table to process form, when you select a table, the Define query constraints form shows the selected table in the Select table field by default.

Surpac no longer exits unexpectedly when using the CONVERT FILES function

When you now use the CONVERT FILES function and select a .gpr file as an input, Surpac no longer exits unexpectedly.

Displaying a database containing tables with Chinese characters

You can now view the database containing tables with Chinese characters.

List displayed for Composite field

You can view a list for Composite field, available on the Compositing options form.

Engineering

Select points in .dtm and string files when using POLYGON SELECTION TOOL and SELECT BY POLYGON functions

When you use the POLYGON SELECTION TOOL and SELECT BY POLYGON functions, you can

now select points in .dtm and string files.

Keep invalid trisolations

When you use the STOPE SLICER function, you can select the new Retain Invalid Trisolation

check box to keep invalid trisolations. The default selection of layer is the selected layer from Surpac.

When renumbering holes in Surpac, a suitable warning message now appears

When you use the NEW LAYER (NL) function to create a blast layer, then the DRAW DESC (DRDSC) function to display the hole_id order, and then the BLAST ASSIGN HOST ID function to renumber drillholes, if the drill and blast version does not exist in D1 position, a suitable warning message now appears which displays the position where hole_id has been updated.

Labels displayed after deleting drawpoints or rings

When you use the CAVING DISPLAY function to display labels, then delete all the drawpoints or the rings, Surpac no longer exits unexpectedly and you can redisplay labels.

Graphical feedback for Caving functions

When you use block caving slusher module for caving operations, you can view feedback in the Graphics window.

Improved consistency in caving operations with slice file data

Caving production scheduler, best height of draw, LSQ, playback, pre-vertical mixing, short interval control, slusher modules, and slice file visualisation and reports now all have consistent operations when copying slice file data.

All caving form buttons work correctly for non-English language settings

Previously, an issue prevented some caving forms from operating correctly with non-English language settings.

When you use non-English language settings and click Cancel on the Cave advanced profile form, the form is closed and the previous Cave footprint finder tool form appears.

Tooltips now operate correctly with Chinese language settings

You can view tooltips, while using Chinese language settings.

Caving data buckets

You can use the Edit selected draw points form to edit draw points and ring fields. You can also create or select a scenario bucket, using the Edit selected draw points form, import, or export from a spreadsheet.

Footprint finder advanced profile values are loaded from the control sheet

The Caving advanced profile form displays information according to the selected Control sheet and Run name on the Cave footprint finder tool form.

The FOOTPRINT FINDER function excludes obsolete options from the advanced sheet of the output spreadsheet file

When you use the FOOTPRINT FINDER function and generate a report, the obsolete data does not exist in the advanced sheet of the output spreadsheet file.

Caving Evaluate Marker Mixing update residual blockmodel checkbox state restored correctly

On the Evaluate marker mixing form, the Update residual block model check box restores the previous value after accessing the Advanced profile form.

Caving best height of draw

You can run the Best height of draw with variable maximum HOD LOADLIMIT or LOADHMIN.

Risk analysis in Surpac

You can view risk analysis using the Best height of draw form for Surpac.

Point insert and editing commands permit combined description field length greater than 512 characters

When you use POINT INSERT and POINT EDIT function for a Surpac string file (.str), and the length of the combined description fields exceeds the maximum permissible limit of characters, some description data is lost while saving.

Surpac Editions

Attributes are displayed as values when plotting one or more lock model attributes

When you plot more than one block model attribute in a plan view, the attributes are displayed as values in the Autoplot window without overlap.

Import and display AutoCAD .dxf and .dwg files in Surpac

When you import AutoCAD .dxf or .dwg files in Surpac, and then display the files in Graphics, the files now appear correctly (like the original AutoCAD files).

Miscellaneous

Selection of points on the ring layer after creating new solid or geometry object

You can select points on the ring layer, using the Select by description tool when you create a new solid or geometry object and switch back to the ring layer.

Define and edit date time in .sdm file

You can now define and edit date time for a .sdm file in the Properties pane. The date time can be interpreted according to the Datetime stamp settings (Epoch and Format). You can access the

Datetime stamp settings on the System Options tab on the Customise > Default preferences menu.

Simplified input on the Caving advanced profile form when using the FOOTPRINT FINDER function

When you use the FOOTPRINT FINDER function, on the Caving advanced profile form, when you clear the Hide infrequent options check box, the rarely used advanced profile options are now visible which simplifies the workflow.

Caving Playback tool View Info and Contours features function correctly

On the Playback tool form, when you select the View info on selection check box, the contour lines with text values, and the selected options from the View info options data grid are displayed in the Message window.

After running the production scheduler, calculation is enabled in the spreadsheet

When using PRODUCTION SCHEDULER, the spreadsheet now accurately calculates and displays the main schedule input per period.

Calculation of total tonnage and grades in the tableau and schedule sheet

The PRODUCTION SCHEDULER displays the same total tonnage and grades in the tableau and schedule sheet.

Update Draw point field values according to elevation and sequence values

On the Make elevation from surface and Make sequence from surface forms, you can enter the elevation and sequence values above or below points and update the Draw point field values, accordingly.

Dynamic Shells window no longer exists in Surpac

A key component of the Dynamic Shells user interface (UI) has some potential security concerns and has been removed. Telerik UI for WPF version 2012.2.607.40, released in June 2012 is outdated, and lacks certain enhancements and features of newer releases. Dynamic Shells will be re-introduced in a coming release or hot-fix.

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