

A Tailored Solution for Geology and Exploration Professionals

STUDIO EM



**Release
Notes**

Studio EM 3.1

© Copyright 2024 Datamine Software

All Rights Reserved Confidential and Proprietary

Published: 07 June 2024

Legal Disclaimer

The product described in this documentation may be connected to, and/or communicate information and data via, a network interface, which should be connected to a secure network. It is your sole responsibility to ensure a secure connection to the network and to establish and maintain appropriate measures (such as but not limited to the installation of firewalls, application of authentication measures, encryption of data, installation of antivirus programs, etc.) to protect the product, the network, your systems, and the interface against any kind of security breach, unauthorised access, interference, intrusion, leakage, damage, or corruption or theft of data. We are not liable for damages or losses related to any such security breach, unauthorised access, interference, intrusion, leakage, damage, or corruption or theft of data.

Contents









Overview	4
Further Information	4
Studio EM 3.1 Release Notes	5
Key Improvements	5
Drillhole Importer	5
Boolean Tools	5
Generate a 2D Grid	6
Legends Manager Overhaul	7
New and improved commands	7
Plotting Enhancements	8
All Improvements	9
Commands & Processes	9
User Experience	11
Utilities & Supporting Services	11
Documentation and Product Support	11
Defect Fixes	12

Overview



A tailored solution for geology and exploration professionals, **Studio EM** leverages the technology of Datamine's hugely successful Studio software series, making it highly compatible with many other software packages. Studio EM is the perfect geological analysis solution for increasing productivity and on-site efficiencies.

Studio EM is one of several products in the Studio product family, which includes:

-  **Studio EM** for exploration data analysis and modeling.
-  **Studio Geo** for structural modeling.
-  **Studio Mapper** for geological face mapping and reporting.
-  **Studio NPVS** for strategic open pit optimization, design and scheduling.
-  **Studio OP** for open pit design and operational scheduling.
-  **Studio RM** for mine geology, reserve modeling and resource estimation.
-  **Studio Survey** for open pit and underground mine surveying and reporting.
-  **Studio UG** for underground mine design and scheduling.

Further Information

Release notes for other versions of Studio EM are available via the Datamine Customer Support website. For more details, see

<https://www.dataminesoftware.com/support/>.

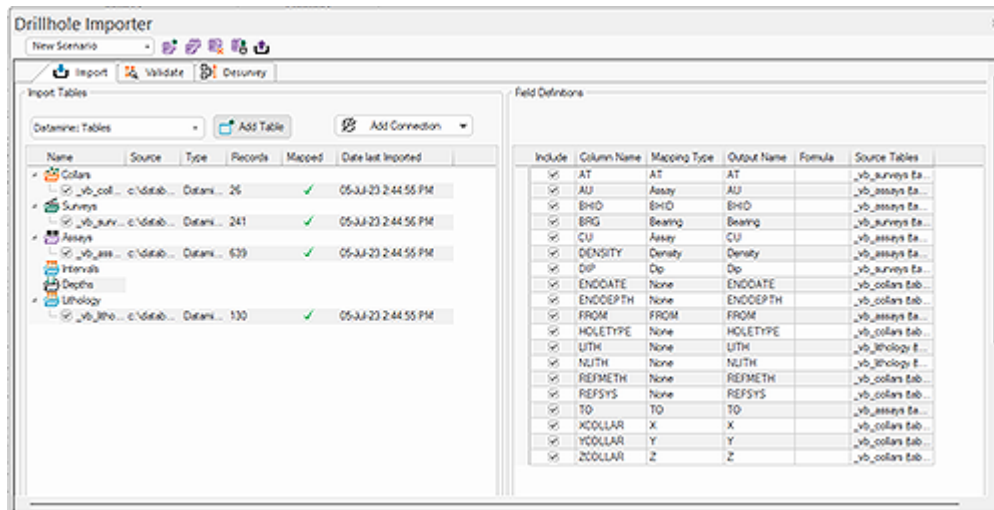
For the complete Studio EM documentation, see

<https://docs.dataminesoftware.com/StudioEM>.

Studio EM 3.1 Release Notes

Key Improvements

Drillhole Importer



Drillhole Importer simplifies the import of downhole data (collars, assays, surveys, depths, and intervals) from various sources. It validates the imported data for errors and converts it into a static drillhole file. For example, you can easily import drillholes with the latest assay data from the grade control database for short-term planning and blast modelling.

Drillhole Importer also connects to a brand new Datamine Fusion connection facility - **Fusion Importer**. See below for more information.

Another common use case is updating geological wireframes by obtaining current drillholes from a Datashed grade control database after each bi-monthly RC drilling campaign.

Configure your data connections to access and store a wide range of database formats, ensuring quick and easy reconnection for data updates.

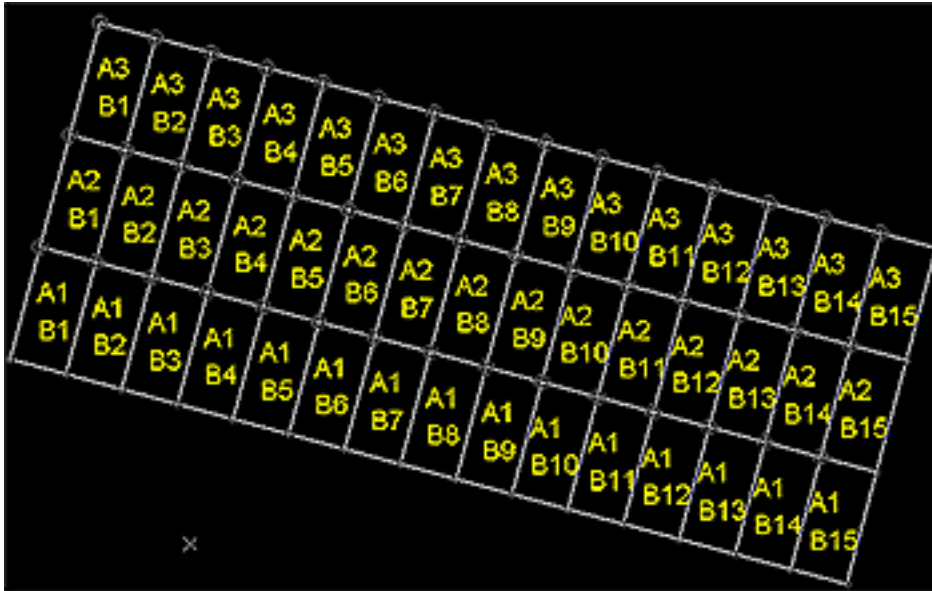
Boolean Tools

In our most generous-ever update we're now opening up the full range of boolean wireframing tools to Studio EM users.

Previously, these were only available in products such as Studio RM, for example, but are now presented to you in their entirety.

This means you can now carve and manipulate wireframe volumes and surfaces using useful tools such as Difference, Union, Extract Separate and lots of other commands.

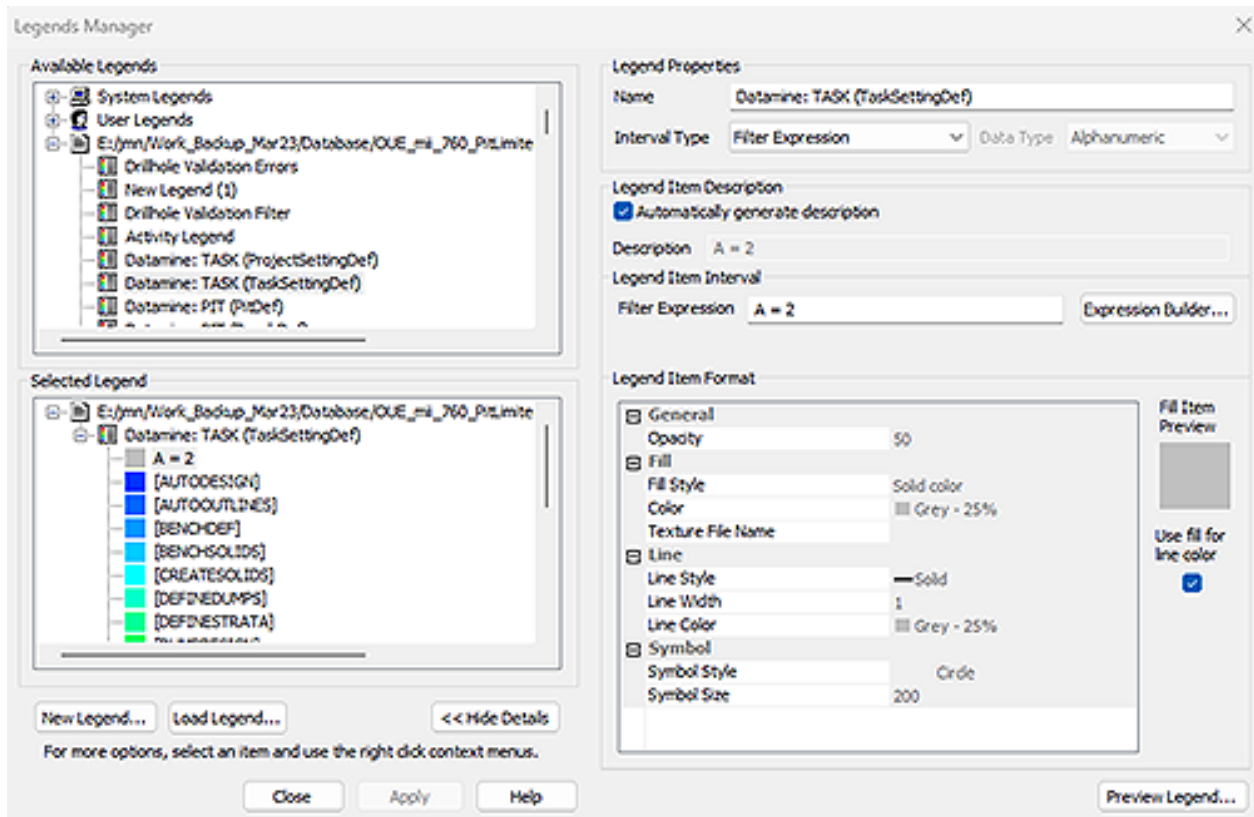
Generate a 2D Grid



Use **create-grid-perimeter** to generate a 2D grid anywhere in 3D space, with optional grid reference attribution.

Define any origin and azimuth, and design a grid on a 2D plane of any orientation. Each grid cell can be attributed automatically to quickly set up grid reference attributes.

Legends Manager Overhaul



The **Legends Manager** has been overhauled to make it easier to use; Legends and intervals are now in separate lists. This also allows larger legends to be created.

New and improved commands

- A new command - **add-zintersect-to-string** - lets you inject string points at a specified elevation.
- A new command - **clip-strings-to-perimeters** - lets you clip any string data with one or more selected perimeters.
- **extend-string-to-string** can now be used to extend any string segment.
- **extend-segment-virtual-intersect**: Extend a string segment to virtually intersect a second segment of another selected string (new command).
- **fillet-single-string-point** can now be performed on strings not in the XY plane.
- **filter-point-off**: Prevent the display of point data without removing it from memory (new command).

- **hide-non-selected-points:** Disable the display of all non-selected point data (new command).
- **Macro path lengths** can now be up to 256 characters (the previous limit was 72 characters).
- **move-string-to-view** projects string data without retaining the original data.
- You can now **restore** previously used **retrieval criteria**.
- **switch-wireframe-edge:** Interactively swap the arrangement of internal edges in a two-triangle pair (new command).
- The maximum number of unique values for the ZONE field in **TRIVAL** has increased from 40 to 2000. The amount of text being written to the command text output window has been significantly reduced and a better progress indicator added to the status bar.
- **write-selected-points:** Save selected points to an external file.

Plotting Enhancements

- You can now use **Quick Filter** and Format ribbon filtering options whilst using the **Plots** window.
- Use the "za" quick key combination to automatically zoom the contents of a target projection to fit the available space.
- Navigate active projections or plot sheets by zooming in or out using the mouse wheel, similar to the 3D window behaviour.
- Use the "zx" quick key combination in a Plots projection to activate zoom-by-area mode.
- Deselect any active projection using <CTRL> and a left click.

All Improvements

Commands & Processes

- **Case: STEX-215** The **Drillhole Importer** console is now available to Studio EM customers.
- **Case: STEX-206** The full range of **Boolean** wireframing tools is now available to Studio EM users.
- **Case: CORE-7917** A new **SELWF** parameter - **FIXNORM** - can be used to detect and rectify common wireframe problems before processing.
- **Case: CORE-7855** The performance of commands that involve moving points has been improved when a lot of visual data is loaded and displayed in a 3D window.
- **Case: CORE-7844** **DAELLIPS** can now input rotated models, and **ANISOANG** has been updated to provide expected angular **POINTS** output (plus an optional **REJECTED** output points file). See your process documentation for more details.
- **Case: CORE-7804** The command **link-multiple-strings** ("**lms**") now uses the 'Maximum Segment Length' value (if greater than 0) to limit the segment length of wireframes triangles.
- **Case: CORE-7803** The command **link-selected-strings-attrib** ("**lma**") now uses the 'Maximum Segment Length' value (if greater than 0) to limit the segment length of wireframes triangles.
- **Case: CORE-7802** The command **link-selected-strings-plane** ("**lmp**") now uses the 'Maximum Segment Length' value (if greater than 0) to limit the segment length of wireframes triangles.
- **Case: CORE-7800** The command **end-link-boundary** (**elb**) now uses the 'Maximum Segment Length' value (if greater than 0) to limit the segment length of wireframes triangles.
- **Case: CORE-7799** The command **end-link** (**eli**) now uses the 'Maximum Segment Length' value (if greater than 0) to limit the segment length of wireframes triangles.
- **Case: CORE-7792** **Link-strings** now honours the Maximum Segment Length wireframe linking setting.
- **Case: CORE-7778** A new command - **write-selected-points** - lets you save selected points to an external file.
- **Case: CORE-7670** **Macro path lengths** can now be up to 256 characters (the previous limit was 72 characters).

- **Case: CORE-7644** Use the "za" quick key combination to automatically zoom the contents of a target projection to fit the available space.
- **Case: CORE-7641** You can now use **Quick Filter** and Format ribbon filtering options whilst using the **Plots** window.
- **Case: CORE-7643** Use the "zx" quick key combination in a Plots projection to activate zoom-by-area mode.
- **Case: CORE-7592** Deselect any active projection using <CTRL> and a left click.
- **Case: CORE-7397** **extend-string-to-string** can now be used to extend any string segment.
- **Case: CORE-7395** A new command - **add-zintersect-to-string** - lets you inject string points at a specified elevation.
- **Case: CORE-7398** **move-string-to-view** projects string data without retaining the original data.
- **Case: CORE-7396** **extend-segment-virtual-intersect**: Extend a string segment to virtually intersect a second segment of another selected string
- **Case: CORE-7310** The **Legends Manager** has been overhauled to make it easier to use
- **Case: CORE-7152** A new command - **clip-strings-to-perimeters** - lets you clip any string data with one or more selected perimeters.
- **Case: CORE-6934** You can now **restore** previously used **retrieval criteria**.
- **Case: CORE-6705** When clipping perimeters to other perimeters, interacting with the Quick Filter bar now persists the previous selection.
- **Case: CORE-6388** Use **create-grid-perimeter** to generate a 2D grid anywhere in 3D space, with optional grid reference attribution.
- **Case: CORE-5284** **filter-point-off** and **show-non-selected-points** commands have been created.
- **Case: CORE-4438** **fillet-single-string-point** can now be performed on strings not in the XY plane.
- **Case: CORE-3957** A new command - **switch-wireframe-edge**, lets you quickly adjust the internal organization of wireframe triangles in a quadrilateral.

User Experience

- **Case: STEX-211** Your Start page will update to reflect the colours of the current Look and Feel mode.
- **Case: STEX-209** You can now set **secondary clipping** from the 3D View ribbon.
- **Case: STUDIO-6930** You can now access the **dtm-new-point-separation** command on the Explicit ribbon.
- **Case: CORE-8060** **write-selected-points** has been added to the 3D window context menu (Save >> Selected Points).
- **Case: CORE-7702** An issue causing the degrees symbol to be displayed incorrectly in various parts of the application has been resolved.
- **Case: CORE-7658** The **Find Command** dialog now reacts to visual theme changes.
- **Case: CORE-7534** The **Wireframe Smooth** dialog is now supported by extended visual themes.

Utilities & Supporting Services

- **Case: CORE-8051** Datamine License Services is now supported in networks utilizing the TLS (Transport Layer Security) protocol versions 1.2 and 1.3.
- **Case: CORE-7662** Swapping from online to offline mode (or vice versa) now automatically reloads the current Start page content.

Documentation and Product Support

- **Case: CORE-7840** Documentation on macro limits has been updated.

Defect Fixes

- **Case: CORE-8153** The User License Logging template spreadsheet has been updated to meeting Windows 11 requirements.
- **Case: CORE-7998** An issue causing system shutdown when creating a legend for a recently modified drillhole has been resolved.
- **Case: CORE-7839 SWATHPLT** now processes data where a ZONEFLD contains more than 40 records.
- **Case: CORE-7788** An issue causing potential system instability when sorting by Date Modified in the Project Browser has been resolved.
- **Case: CORE-7780** You can now pan plot views using the cursor as expected.
- **Case: CORE-7723** You can now update the License Services product name registration database more than once.
- **Case: CORE-7722** In some circumstances in models with a large number of fields including alphanumeric fields, **PROMOD** volume calculations were incorrect. This is now resolved.
- **Case: CORE-7618** Selecting and deselecting individual drillholes or segments is now significantly faster.
- **Case: CORE-7530** An issue causing an unexpected system restart after a product installation has been resolved.
- **Case: CORE-7435** DXF wireframes can now be saved via script as expected.
- **Case: CORE-7361** An issue causing incorrect icons to be displayed for Data options in the Loaded Data/Sheets context menu has been resolved.
- **Case: CORE-6872** When using **SELPER**, If the perimeter file contains DPLUS and DMINUS fields and the values are zero a small tolerance is applied internally to avoid numerical comparison errors. This is now consistent with the methodology used for the DPLUS and DMINUS parameter values when either of them is zero.
- **Case: CORE-6787** An error in **SWATHPLT** when ALLZONES was set to 1 has been resolved.

Datamine enables efficient and sustainable mining through the application of world-leading technology and services.

Read the Docs

docs.dataminesoftware.com

Get in Touch

sales@dataminesoftware.com

www.dataminesoftware.com/support



Find Us

**AUSTRALIA | BRAZIL | CANADA | CHILE | CHINA |
ECUADOR | GHANA | INDIA | INDONESIA | KAZAKHSTAN
| MALAYSIA | MEXICO | MONGOLIA | PERU | PHILIPPINES
| SOUTH AFRICA | TURKEY | UNITED KINGDOM | USA |
UZBEKISTAN**



www.dataminesoftware.com



STUDIO EM



DATAMINE