

Open Pit & Underground Geological & Geotechnical Analysis Solution

SIROVISION

Release Notes

Sirovision 7.6



© Copyright 2024 Datamine Software

All Rights Reserved Confidential and Proprietary

Published: Wednesday, 7 August 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
Sirovision 7.6 Hot Fix Release Notes	5
Sirovision 7.6 Hot Fix 2 (August 2024)	5
Sirovision 7.6 Hot Fix 1 (July 2024)	5
Sirovision 7.6 Release Notes (July 2024)	6
New Features	6
SQLite Data Storage	6
User Interface Improvements	6
Retirement of Sirovision Photogrammetry	6
Enhancements	7
Defect Fixes	8
Sirovision 7.5 Release Notes (August 2023)	9
Sirovision 7.4 Release Notes (July 2023)	10

Overview

Sirovision has been developed in collaboration between Datamine and the Commonwealth Scientific and Industrial Research Organisation (CSIRO). Sirovision is an integrated hardware and software system designed to provide safe and cost-effective mapping and analysis of rock structure and underground topography.

Further Information

This document includes cumulative release notes since Sirovision 7.4.

Release notes for other versions of Sirovision are available via the Support Portal <https://www.dataminesoftware.com/support/>.

For the latest Sirovision documentation, see docs.dataminesoftware.com/Sirovision.

Sirovision 7.6 Hot Fix Release Notes

Sirovision 7.6 Hot Fix 2 (August 2024)

Defect Fix

- An issue has been fixed that caused an error indicating a null reference when loading certain multi-model systems.

Sirovision 7.6 Hot Fix 1 (July 2024)

Defect Fixes

- An issue has been fixed that caused one model to have incorrect georeferencing when two georeferenced models (OBJ) were imported into a project.
- An issue has been fixed where models in multi-model projects were being positioned using their own origin data, instead of the document origin.

Sirovision 7.6 Release Notes (July 2024)

Sirovision 7.6 brings a host of improvements and significant technological upgrades.

Several legacy features have been removed or streamlined, and the user interface (UI) has been upgraded to simplify mapping tasks. Sirovision now utilises a new SQLite data storage format. When opening existing projects from previous versions, the files are copied and converted to this updated format. This version also includes various bug fixes and minor enhancements.

New Features

SQLite Data Storage

Sirovision has moved to a new SQLite data storage format, which is now independent of regional format variations. Existing projects from previous versions of Sirovision are copied and converted to the new SQLite data format upon opening them in Sirovision 7.6.

User Interface Improvements

Sirovision's user interface (UI) has undergone several improvements to make mapping and analysis easier. Instructions on how to use the selected tool now display on the Bottom Image View Toolbar, and new options to adjust the view angle of the model have been added to the Top Image View Toolbar.

Retirement of Sirovision Photogrammetry

In Sirovision 7.4, Pixpro was integrated and made to be the default option for importing and processing images. As of version 7.6, all legacy methods of photogrammetry in Sirovision have been removed and completely replaced with Pixpro to provide you with a more efficient and streamlined photogrammetry experience. A Pixpro license is included as part of your Sirovision package and does not require a separate subscription.

Legacy SJT (.sjt) and SJTX (.sjtx) files can no longer be opened as projects in Sirovision. However, they can be imported as models in container projects.

Enhancements

- The New Project Wizard has been streamlined.
- The Export Wizard now allows exported models to be named.
- After a model is removed/deleted in the Project Tree the top project node is selected.
- An Export Model option was added to the right-click context menu of the Model node in the Project Tree of loaded Sirovision projects.
- Multiple selection of files on Import Mine Plans now imports all of the selected DXF files.
- Comma and semi-colon separated CSV data can be loaded into Sirovision if the Windows regional settings of the machine being used supports this.
- Pixpro PXG files can now be selected when browsing for a ground control points survey data file in the New Project Wizard.
- Mine Plans that are ticked/selected before an opened project is loaded now load and appear in the 3D view when the project is loaded.
- Mineral Classification has been removed from Sirovision.
- Surface Quality Heat Maps have been removed from Sirovision.
- Planes/Find Planes options have been removed from Sirovision.
- Field Work Planning tools have been removed from Sirovision.
- The Stereo Image Manager has been removed from Sirovision.
- The Photogrammetry menu has been removed from the Application menu. All photogrammetry is now done with Pixpro.
- The Calibration Wizard has been removed from the Application menu.
- Project Mine Plans can now be toggled for load using checkboxes in the Project Tree.
- The Import Mine Plan option has been added to the right-click menu on the MinePlans node in the Project Tree.

Defect Fixes

- Fixed issues that would prevent multi-model projects from loading if all of the models were unticked in the Project Tree.
- Sirovision no longer crashes after cancelling the Edits not saved pop-up and attempting to reopen the active model.
- Print results a now higher resolution and no longer show parts of the Sirovision user interface.
- Tooltips that occur when hovering the mouse over elements on the screen no longer appear over the top of unrelated pop-up windows.
- Menu buttons no longer remain selected when the project is closed or unloaded.
- The Add Planar Traverse button no longer allows other buttons to be activated at the same time and deactivates when another button is activated.

Sirovision 7.5 Release Notes (August 2023)

Enhancement

Survey data import options show all available data types

When importing data through the **File Open** window in the **New Project Wizard**, all supported file types (txt and csv) display by default.

Defect Fix

EXIF data not displaying GPS data in Image Selection screen of the New Project Wizard

A correction was made to enable reading of EXIF data on images imported into Sirovision through the **New Project Wizard**. GPS data is now set correctly on images containing EXIF data.

Sirovision 7.4 Release Notes (July 2023)

New Features

Pixpro Integration

Sirovision 7.6 includes full integration with Pixpro: an advanced photogrammetry software that uses data captured from drones and other camera sources. With this integration, importing and processing images via Pixpro is now the default photogrammetry method. New model-based projects can be created using Pixpro in the **New Project Wizard**. Pixpro streamlines the photogrammetry process, reducing the manual effort and time required to create new projects. Moreover, Pixpro allows for drone data imports using a photo system with drone photography and GPS-based data.

This integration marks the first phase in updating Sirovision's photogrammetry functionality. As of version 8.0, all legacy photogrammetry processes will be discontinued and replaced with the Pixpro integration, giving you a more efficient and streamlined photogrammetry experience.

Note: Sirovision 7.6 requires a minimum of Pixpro 1.6.11.

Launch Pixpro Projects from Sirovision

Models built using Pixpro integration can be launched and edited in Pixpro, directly from Sirovision. Right-click a model in the **Project Tree** and select **Open Model Project in Pixpro** from the menu. Sirovision cannot be used while Pixpro is open. After editing the model and closing the Pixpro window, Sirovision will ask if you would like to re-import your new model into your Sirovision project.

Batch Processing of Images

Sirovision now supports Batch Processing of images. When creating new projects, you can choose to process and build models at a later time. Multiple models can then be processed at once from the **Batch Processing List** in the **Application menu**.

Redo Failed Georeferencing when Creating New Models

When you create a new project, georeferencing can now be redone if part of the project is set up incorrectly, without having to restart the entire **New Project Wizard**. On failure, Sirovision asks the user if they want to edit the **Ground Control Points** or **Scaling** that was assigned to the images. Sirovision goes back to that step and allows the user to adjust parameters before they click next and continue building the project.

Enhancements

Command instruction display

After selecting an option from the **Mapping** or **Analysis** ribbon menus, instructions on how to use the selected tool display on a green background at the bottom of the **Image Viewer**.

Select Region tool

The **Select Region** tool has been moved from the **Menus** to the **Top Image View Toolbar** and has been renamed to **Zoom Region**.

Add Quick Access toolbar

The **Undo**, **Redo** and **Delete** functions have been moved to the **Quick Access** toolbar, next to the **Application** menu.

Remove Find Planes and Add Assisted Planes tools

The **Find Planes** and **Add Assisted Planes** tools have been removed.

Relocate Photogrammetry ribbon tab options

The **Photogrammetry** ribbon tab has been removed. Photogrammetry options now occur as a sub-menu of the **Application** menu.

Relocate Help ribbon tab options

The **Help** ribbon tab options have been moved to a sub-menu of the **Application** menu.

Add camera positioning buttons to Top Image Viewer toolbar

Buttons to quickly adjust the camera position to north, south, east, west, top and bottom have been added to the **Top Image Viewer** toolbar.

Dip and dip direction measurements now work for irregular grids

Dip and dip directions previously only worked for regular meshes (model projects). Now dip and dip direction measurements are supported on regular meshes and irregular meshes.

Image Viewer is always open when Sirovision launches

If the **Image Viewer** window was closed, it would have to be manually reopened, even if Sirovision was restarted. Now the **Image Viewer** always displays when Sirovision is launched.

Allow multiple instances of Sirovision to run simultaneously

Only one instance of Sirovision could previously run for each user on a single machine. Multiple instances of Sirovision are now allowed on a single machine; however, a warning displays.

Notes:

Only one licence is required to run multiple instances of Sirovision for one user. Running multiple instances of Sirovision will consume extra resources. Image processing should not be carried out simultaneously on multiple Sirovision instances.

Add new models into existing projects

New models can be imported into container projects using the **New Project Wizard**.

Drone camera type

The **Drone** sensor type has been added to the sensor list in the **New Project Wizard**. The **Drone** sensor works in a similar way to the **Single Camera** sensor, but also works with GPS data for georeferencing the images.

The **Drone** sensor will use the camera GPS if GPS data is found in images, or ground control points if no GPS data is found in images.

Pop up window resizing

All wizard and other pop up windows in Sirovision can be resized by clicking and dragging any of the edges or corners of the window.

Support for LIDAR LAS file RGB format

Support was added for mesh textures based on the LAS RGB colour format, at model import.

Allow models to be renamed within Sirovision

You can now right-click a model or mine plan item in the **Project Tree** and rename it.

Allow drone files to be deleted from projects

If there is more than one model in a project, you can delete extra models by right-clicking the model and selecting **Remove** from the menu.

EDL shader resets for each new project

The EDL filter/shader is automatically turned off each time a new project is opened.

Ground control point summary tab

A ground control point summary tab was added to display all ground control points that are assigned to images, along with their corresponding images and ground control point placed on the image.

New Project Wizard image pairing refinements

The image pairing and stereo prefixes has been rewritten to be more versatile and robust. The lists do not need to be sorted and there can be matches from data using differing prefixes.

Drag and drop PLY, OBJ and LAS files into model projects

LAS Lidar, PLY and OBJ files can now be imported into a model project by drag and drop from File Explorer. Drag and Drop import now supports dropping of multiple files.

Mouse cursor reflects modifier key state in 2D and 3D views

The mouse cursor now changes to moving the model in 2D and 3D views, as well as when panning and rotating the model.

Show Mine Plans, Survey Points and other items on the Underground Cross Hair Laser Referencing Model display

When doing underground referencing via cross hair laser, Sirovision now shows any added **Mine Plans, Survey Points, Survey lines** and other features on the model displayed when selecting the points and after it is georeferenced.

Defect Fixes

Imported OBJ projects do not show texture when Sirovision is set to certain languages

If Sirovision was set to a language that used commas instead of decimal places (such as Portuguese), imported OBJ files would only display in monochrome with no texture. OBJ files can now be imported and displayed correctly for any language setting.

Decimal input not working when Windows regional settings are set to Portuguese (Brazil).

Decimal numeric input was not possible in some cases when the Windows regional settings were set to Portuguese (Brazil). Now decimal inputs should work for all languages and settings.

Select Region (now Zoom Region) tool causing display issues

Zooming in and out of a region in the **Image Viewer** using the **Select Region** (now **Zoom Region**) tool sometimes resulted in display issues involving the reference axis. Now the reference axis scales appropriately when zooming in and out.

Metric and imperial unit reversal

Metric and imperial measurement units were reversed in the **New Project Wizard** when loading survey files. The correct units now display.

Selected discontinuities not highlighting

Selected discontinuity planes were not displaying differently when selected in the **Table View Panel**. Selected discontinuities are now highlighted and display with an increased line thickness in the **Image Viewer**.

Warning when importing model with the same name as current model

When importing a model project with the same name as the model already in the project, the import process would be performed, but no model would be imported and no feedback would be given. Now a notification displays that the project already contains a model with that name.

Image Viewer display mode button not highlighting for selected mode

Sometimes the display mode in the **Bottom Image View Toolbar** would not be highlighted when selected. Now the appropriate display mode is highlighted when selected.

Reduce Resolution panel displaying on model project export

When exporting model projects, the **Reduce Resolution** panel on the **Export Wizard** was available, even though it did not apply to model projects. The **Reduce Resolution** panel is now hidden for all model projects.

EDL Shader not restoring text colours

When turning on the **EDL Shader** in the **Bottom Image View Toolbar**, the axis text colour in the **Image Viewer** was changed, but was not reset when the **EDL Shader** was turned off. Now the axis text colour resets when the **EDL Shader** is turned off.

Image folder validation reporting a Path Not Found error when dealing with lower case file extensions

When loading images with lower case file extension names with a Datamine MK III camera, Sirovision would not convert the file extension to compare with upper case file extension names, which resulted in a **Path Not Found** error. Sirovision now converts all file extensions to find image pairs.

Splash Screen resizes during launch on multi monitor setup

When launching on a PC with multiple screens of different resolutions, Sirovision's splash screen would resize itself incorrectly. Automatic resizing no longer occurs.

Temporary image file creation fails if the folder does not exist

During **New Project Wizard Image Pre-processing**, temporary image file creation fails if the temp/Datamine/Sirovision folder does not exist. The folder is now automatically created before the process runs, if it is found to not exist already.

Failure to load files with multiple textures

Sirovision failed to load PLY or OBJ files that had multiple textures. This was updated so that the first texture is imported and a warning displays to notify the user that the file has multiple textures, but only one will be imported.

Custom Form Region painting causes Sirovision to crash on Windows 11

When using the region painting tool to create a small region, Sirovision sometimes crashed if it was running on a machine with Windows 11. Crashing no longer occurs, regardless of the region size.

Exporting DM files fails on new installations of Sirovision

If no other registered Datamine products are installed when exporting to a DM file in a new installation of Sirovision, the export process will fail. Exporting no longer fails if no other Datamine programs are installed.

Models with the same name as currently open model cannot be imported into Sirovision

Sirovision was unable to import models with the same name as a model that is currently open, and the user would have to rename the model outside of Sirovision. Now if you try to import a model that is already in the project or in a batch process to be made for the project, Sirovision will ask you to rename it before importing it.

Dragging and dropping a model into a project will also ask you to rename it if a model with the same name is already in use.

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