Trimble RealWorks

Version 12.4 Release Notes

Introduction

These release notes describe the features and enhancements that are new in version 12.4 of the Trimble® RealWorks® software. For further information, visit www.trimble.com/support/.

System Requirements

- Operating system: Microsoft® Windows® 8.1, 10, 11 - 64 bit
- Processor: minimum 2.8 GHz (Quad-Core) or higher, (additional cores with Hyper-Threading support strongly recommended)
- RAM: minimum 16GB (32GB and higher recommended)
- Graphics card: OpenGL 3.3 compatible with minimum 1GB VRAM (3GB or higher and OpenGL4.4 recommended)
- NVidia graphics cards based on the Ampere architecture (RTX Axxx series) are currently not supported in commands 'Auto-Segment Steel Beams' and 'Auto-Segment Moving Objects'
- 3-button mouse

Other requirements

Solid State Drive (SSD) for maximum performance (pref. 500GB) - strongly recommended.

Upgrade Procedure

Install the software from this location **(Internet connection required during installation and license or subscription verifications):** Support and Downloads

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New Features and Enhancements

Modeling

Description	New or Enhanced	Feature Overview	Benefit/Comments
Create Cable Tray	New	Create models of cable trays using the new Create Cable Tray tool. With the same workflow as the Create Pipe tool, you can quickly create model objects for straight segments, elbows, concentric reducers, eccentric reducers, tees and crosses.	Create cable tray models via single-click operations. New objects compatible for Revit export.
Pipe modeling improvement: small diameter piping	Enh	The functionality of the Create Pipe tool is improved to model small diameter pipes effectively.	Usability of an existing tool for smaller diameter piping objects.
Pipe modeling improvement: forced elbow creation	Enh	Hold CTRL when picking a point to force the creation of an elbow that corresponds to the geometry of the point cloud. Hold ALT for elbow creation that does not correspond to the point cloud.	Additional user control for model creation.
Pipe modeling improvement: fitting	Enh	The Create Pipe model creation algorithm is more accurate, limiting the need for manual adjustment.	Accuracy of model creation.
Pipe/Cable Tray modeling improvement: user tips	Enh	User tips have been added within the Create Pipe and Create Cable Tray tools. Tips can be activated with the new Show All Tips button.	Ease of use, productivity.

Imaging

Description	New or Enhanced	Feature Overview	Benefit/Comments
Create keyplan from ortho-image	Enh	Use ortho imagery - either imported or generated within the software - to create key plans with additional context when using Trimble Scan Explorer. Ortho-images can be plans, blue prints, maps, aerial imagery, etc.	Improved visibility of the project site within Trimble Scan Explorer.
PNG support	Enh	RealWorks now imports PNG format images.	Expanded file format compatibility.

Data Management

Description	New or Enhanced	Feature Overview	Benefit/Comments
Direct link to *Revit*® for cable trays	New	Directly send the cable tray objects created in the software to *Autodesk*® *Revit*® for an intuitive and productive combined workflow. All you need to do is to start Revit® from the software (go to 'Revit® > Open Revit®' in the Home or Model tab in Production), select the desired cable tray runs, and press 'Send to Revit®'. This creates new native Revit objects directly in the open session of Revit®. Compatible objects include straight segments, elbows, tees, crosses and reducers. Autodesk Revit® needs to be installed, with a proper license, to be able to use this feature.	Productivity. Efficient workflow by simultaneous use of Trimble RealWorks and Autodesk® Revit®.
Improved display performance with large datasets	Enh	Performance is improved when displaying / hiding numerous clouds or geometries. Showing / Hiding the whole project is now faster. Higher frame rates can now be achieved when viewing targets.	Usability is improved with faster point cloud navigation and viewing.
Improved performance in Registration tools	Enh	The performance of the Station setup, target-analyzer and geo-refencing tools has been improved when applying changes.	Productivity.

User Interface

Description	New or Enhanced	Feature Overview	Benefit/Comments
Pivot navigation	New	While in the Examiner view, use the right mouse button to rotate the viewing direction around the current camera position. This is similar to the station-based view but from any location in the project.	Improved navigation, usability
Reposition Toolbars	New	Use the new Reposition Toolbars command to move all open toolbars to the top left corner of the 3D view. This is especially useful for multi-screen setups. CTRL+ALT+T shortcut.	Usability of floating toolbars.
Hide station markers outside of limit box	Enh	When a limit box is created, all station markers outside of the visible area will be hidden.	Usability, improved visualization

Support

Description	New or Enhanced	Feature Overview	Benefit/Comments
Microsoft Windows® 11 support	Enh	RealWorks can now be run on the latest operating system *Microsoft Windows*® 11.	Updated operating system compatibility.

Resolved Issues

- **3D Display:** improved performance issues with new generation Intel graphics cards
- **TDX Import:** fixed issue with file names containing non-ASCII characters
- **TZF Import:** scans from the same station imported at different times are now grouped
- **TZF Import:** corrected color inversion when displaying annotations in the 3D view
- **RCP Export:** the speed is increased, especially for area scans
- **RCP Export:** fixed issue with missing panorama images
- **Revit Export:** RealWorks Import Options within the Revit project are now saved
- **PTX Export:** when converting TZF to PTX range filter now applies
- **PTX Export:** for leveled scans, tilt compensation now applies to points instead of the frame
- **KMZ Export:** resolved issue introduced in version 12.0
- **Ortho Projection:** altering view settings changed ortho image orientation
- **3D Inspection Analyzer:** histogram values now updates when changing the length unit
- **3D Selection:** pipe objects selected in the 3D area are now available for export
- **Annotations:** fixed display issue when opening and closing annotation
- **Contour Labels:** resolved crash when closing contour tool with station labels disabled
- **Target-Based Registration Check:** corrected registration details where last line was cut off
- **Shading Display:** removed visible artifacts when using ambient shading
- **Station Setup:** improved stability after manually deleting the current station within the tool
- **License Error:** removed invalid license message with remote access and dongle license
- **Video Creator:** fixed issue where polyline would not display until the toolbar was shifted
- **Export Log:** fixed error where export log was not generated from the Support tab
- **Check for Updates:** fixed broken URL link

Legal Notices

Trimble Inc.

Geospatial

10368 Westmoor Drive

Westminster, Colorado 800021

USA

800-361-1249 (toll free in USA)

+1-937-245-5154 Phone

+1-937-233-9441 Fax

www.trimble.com

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Release Notice

This is the April 2023 release of the Release Notes. It applies to version 12.4 of the Trimble® RealWorks® software.