



Release Notes
MAGNET Office
January 16, 2024

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Magnet Office V8.1 Release Notes

The following new additions/revisions have been made to Magnet Office v8.0.

Please take time to read the release notes. They contain information about the following:

- New Features
- Feature Enhancements
- Issue Resolutions

Information

System Requirements:

Operating System

Microsoft Windows 11 (64-bit version)

Microsoft Windows 10 (64-bit version)

Processor Speed

2GHz Core2 processor or higher

RAM

2GB RAM or more recommended

Memory

Local hard drive space of 2GB or higher recommended

Computer Resolution

1280x1024 display resolution

Internet Connectivity

Can be required by some functionality.

Unless otherwise noted, new features, improvements and resolutions are included in the Magnet Office base configuration. Items that are included in specific modules have a module designation at the end of the description. Module designations:

- **(Survey)** – Survey module
- **(Site Prep)** – Site Prep module

Key Features

Sitelink3D

Added the display of the Site Discovery ID in the Site Settings dialog.

Added the ability to create a Site in Sitelink3D directly from Magnet Office. The Select Site dialog has been updated to include a Create New option. Requires project to have a coordinate projection set or a project localization file.

Added support of Sitelink3D role permissions.

Linework Updates

The "Follow" option has been updated to an on/off toggle located in the right click context menu. With Follow ON, the selected linework can be followed point by point or between multiple points. Each point selected along the entity followed will prompt for the elevation of new points with prompt for elevation on. A new option on the prompt for elevation dialog, "by text", is also provided to quickly elevate the point by selecting a text label. The label must contain numeric data and can be multiline text or simple text.

DTM & 3D Model Updates

DTM Editor

Delete triangles by boundaries updated to support the selection of multiple boundaries. Boundaries can be selected one at a time from the survey view or from the boundary dropdown list in the Edit DTM panel. Pressing the ESC key completes the function.

Raise/Lower DTM

Updated to include new DTM name when creating a new DTM when raising or lowering existing surfaces.

Updated to support raise/lower within in multiple boundaries.

Compute Volume

Updated to support volume calculation between surfaces (DTMs) and planes.

DTM Manager

DTM descriptions now displayed when the cursor hovers over the DTM name.

IFC Panel

The IFC panel and 3D View has been updated to include new and improved functionality.

- Cut Plane tab added to the panel. Options to create cut planes by X-axis, Y-axis, Z-axis, by Job Plane and by Edge are provided.
- Each cut plane is automatically named and saved. Cut planes can be removed individually or all cleared simultaneously.
- Added new Select Layer/Group, Isolate Layer/Group options. These options work in conjunction with the Arrange by options, hierarchy, groups and layers.
- Added new Isolate and Restore options for layers and groups.
- Added selection of model data by window and crossing window selections.

Road & Corridor updates

Cross Section Plot Settings now includes a new tab, “Nominate Cross Sections” which allows for reducing or increasing the interval of the sections to be plotted between nominated stations. Note that this option does not create cross sections, so an appropriate interval is required when generating cross sections. For example, if cross section are generated at one meter intervals, the nominated sections for plotting can be any even interval such as every 1, 2, 3, 4 meter etc. If using a five-meter interval for creating sections the nominated section interval must be a factor of 5, for example 10,15,20 etc.

(Survey + Site Prep)

Reports

Takeoff Reports updated to new reporting mechanism. Direct export to Excel is now available when using Excel as the external report editor. **(Site Prep)**

Resurface Reports

Resurface Report has been updated to new reporting mechanism. Direct export to Excel is now available when using Excel as the external report editor. **(Site Prep)**

Natural and Design Cross Slope reports updated to report elevation for both the natural and design cross slopes. **(Site Prep)**

Configuration Updates

Reinstated Convert Contour to String in DTM Tools. **(Survey + Site Prep)**

Reinstated Create DTM by Depth Range in Site Prep. **(Survey + Site Prep)**

Reinstated Interpolate Elevation Along String. **(Survey + Site Prep)**

Reinstated Set String Point Elevation. **(Survey + Site Prep)**

Reinstated Raise/Lower Design in Road View, Profile ribbon. **(Survey + Site Prep)**

Added Break String. **(Office)**

Added Delete String Segment. **(Office)**

Updated DTM Editor to include Surface Data and Surface Points tabs. **(Office)**

General

Background Color

A quick toggle has been added to the Status bar in the Survey View, Drawing View and 3D View. Allows for one button click to change the color to black or white.

Prompt for Elevation

Updated to include “by text” option for selecting of elevation text labels to define the point elevation. The text label must contain numeric values and supports single and multiline text labels.

Layer Manager

Added option to create a New Group in the right mouse button context menu. With layers selected, the new group will be created and contain the selected layers.

Add to Group function updated to add selected layers to specified group. Previously selected layers were added using Layer Group settings.

Convert Text

Added new option in the Modify ribbon to convert multi-line text to simple text or simple text to multi-line text. **(Survey, Site Prep)**

Data Inspector

Added optional "Segment Length" display. Data prefixed with "Len".

Survey Codes

Global and Project codes now accessed from one icon, "Codes". Dialog will open with the Project Codes tab active.

Right Mouse Button Context Menu

Added Follow toggle.

Fillet Arc updated to remain active for quicker creation of multiple fillet arcs. **(Survey, Site Prep)**

Align function updated to include option to include images and background images in the realignment of data.

Drawing Manager updated to improve multiple drawing listing. **(Survey, Site Prep)**

Import/Export

Export to Autodesk *.dwg

Updated to include DTM color fill shading legend. Both the surface and legend color fill are exported as an image.

Export to KML (File ribbon>Export)

Updated to include DTM color fill shading, when on, in the resulting kml file. Note that the color fill shading for DTMs must be visible in the survey view to be exported.

TP3/RD3 Export

Updated export of road and corridor data to TP3/RD3 formats to detect and combine identical templates into one template greatly reducing the number of templates exported.

Coordinate Systems

Added geoid model GeodAz2014 (Portugal-Azores)

Updated Vietnam projection and datum parameters.

Notices/Issue Resolutions

Layer Manager updated to reinstate the highlighting of empty layers in the panel grid. If operation is canceled, the empty layers will remain highlighted in the grid until cleared.

Property Manager convert unclosed string to a polygon will no longer prompt to close the string. The string is automatically closed and the polygon created.

Resolved issue in the corridor alignment editor when using Spanish language file. When closing the alignment editor, the program unexpectedly shut down. **(Site Prep)**

Resolved issue when importing a Magnet Field file (*.mjf). The use in surface flag was not being held during import.

String Close option updated to rename Close Loop to Close. String properties updated to display the number of points instead of the number of nodes. Improved point and nodes listing in Edit String and Properties panel.

In the Activation dialog the links for Forgot Password and Register User have been updated.

Resolved issues in Takeoff subgrade highlighting. In some cases, with polygons close together small subgrade areas would not highlight. The areas were included in the material and volume calculations only the highlighting of the area in some cases would not display. **(Site Prep)**

Improved the Join String option arc recognition and mixed linework support. Some arcs and linework with points and linework without points (Plines) would not join.

Improved speed of opening Road Views. Corrected an issue with the Smooth settings opening sight tables multiple times. **(Site Prep)**

Resolved an issue with Title Blocks not saving when polylines and linework without points were included. The function now supports polylines and linework without points. **(Survey + Site Prep)**

Resolved issue with extending linework to arcs. The intersection point appeared not to be on the arc while distances matched.

DTM Manager/Settings updated to resolve issue with Plan and Surface Areas changing when the fields were clicked in repeatedly. Present in projects using Feet or US Feet units only.

Export PDF from Survey/Drawing Editor, updated to resolve issue with export of hatching for non-hatched polygons. **(Survey, Site Prep)**

Export DWG from DE updated to resolve issue with exporting hatching for non-hatched polygons. Opaque text boxes updated to export as solid hatch in the background color. **(Survey, Site Prep)**

Resolved issue with some symbols being hatched when exporting to Autodesk DWG format.

Resolved an issue in Drawing Manager. When working with many drawings, the alphabetical or numerical order was sometimes lost. **(Survey, Site Prep)**

Resolved an issue with Unlink Image from entities. Reference to image was not being removed. **(Survey, Site Prep)**

Resolved issue with Rotate Text and Align Text Parallel to Line not recognizing lines. **(Survey, Site Prep)**

Resolved issue with duplicate obstructions displaying in Road View cross section window. **(Survey, Site Prep)**

ADAC: New Feature option **(Survey)**

Resolved linking of copied component information when edited to existing features of same type.

Resolved issue with not displaying the new feature in the feature list until the dialog is closed and reopened or until the object ID is entered.

Web Map Service (WMS) updated to resolve issue with six.nsw-cadastre map not displaying. **(Survey, Site Prep)**

Batch Volume updated to resolve issue with not all specified boundaries reporting volume data. **(Survey, Site Prep)**

Create Entity updated to better organize the panel and fix issue with the direction toggle not activating properly. **(Survey, Site Prep)**

Resolved issue in Corridor Alignment Editor crash when language set to Spanish. **(Site Prep)**