

2023 MAGNET Roadshow

MAGNET®



YOUR WORK CONNECTED

- MAGNET Office Modules Update
- MAGNET How To & Quick Guides
- MAGNET Office v8.0 New Features
- MAGNET Office v8.0 Fixes
- 2022 MAGNET Office Conference Feedback
- MAGNET Office Ideas Site
- MAGNET Field How To & Quick Guides
- MAGNET Field v8.0 New Features
- 2022 MAGNET Field Conference Feedback
- MAGNET Field Ideas
- 2024 Magnet Conference Dates

Agenda





MAGNET Office Modules Update



MAGNET Office Module Changes

These are the new license options:

MAGNET Office

MAGNET Office + Survey

MAGNET Office + Survey + Site Prep

MAGNET Office + Site Prep

The Survey module includes improved road and site design options

The Site Prep module builds on the previous 'Site' Module and not includes more design and project management tools

Subscription or Perpetual license options

MAGNET Office Annual subscription

MAGNET Office functionality		
MAGNET Office	+Site Prep Module	+Survey Module
Prep job files for machine control and grade management Key uses	Add advanced road, site and resurfacing design tools Key uses	Add finished CAD deliverables and data processing for surveyors Key uses
✓	✓	✓
Sitelink3D and MAGNET Enterprise connectivity	Sitelink3D and MAGNET Enterprise connectivity	Sitelink3D and MAGNET Enterprise connectivity
✓	✓	✓
Machine control data prep	Machine control data prep	Machine control data prep
✓	✓	✓
Layout data prep	Layout data prep	Layout data prep
—	✓	✓
Road and site design	Road and site design	Road and site design
—	✓	—
Corridor design	Corridor design	Corridor design
—	✓	—
2D PDF to 3D job file	2D PDF to 3D job file	2D PDF to 3D job file
—	✓	—
Take off and material quantities	Take off and material quantities	Take off and material quantities
—	✓	—
Paving resurfacing design	Paving resurfacing design	Paving resurfacing design
—	—	✓
Finished Survey CAD deliverables	Finished Survey CAD deliverables	Finished Survey CAD deliverables
—	—	✓
MAGNET Tools GNSS/optical processing	MAGNET Tools GNSS/optical processing	MAGNET Tools GNSS/optical processing



MAGNET Office How To & Quick Guides



MAGNET Office How to & Quick Guide Videos

New Version 8 Videos

- Magnet Office V8 – New Layer Manager
- Magnet Office V8 – DTM Editor – Confirm Elevation
- Magnet Office V8 – Exporting Colour Fill to AutoCAD
- Magnet Office V8 – Point Cloud Import
- Magnet Office V8 – Exporting Design to 3DMC
- Magnet Office V8 – Compute Volumes
- Magnet Office V8 – Scaled Symbols to AutoCAD

Quick Guide Link -

<https://www.youtube.com/playlist?list=PLgkXrmwvl6NtpmbcHy0LTpTAFGN3fBFHe>

How To Link -

https://www.youtube.com/playlist?list=PLgkXrmwvl6Ntu742t0LwEYY_3qwFfNF8h

Position Partners will be periodically creating new videos for MAGNET Platform



Watch on
YouTube



MAGNET Office How to & Quick Guide Videos



Support & Downloads Page

The screenshot displays the Position Partners website's Support & Downloads page. The top navigation bar includes the company logo, a search bar, contact information (1300 867 266), and links for 'Find Us' and 'Email Us'. The main menu features 'Home', 'About Us', 'Services', 'Industries', 'Products', and 'News'. A secondary menu lists 'Hire & Rental', 'Calibrations & Repairs', 'Scale Calibration', and 'Support' (highlighted with a red box). Below this, there are links for 'Tokara', 'AllDayRTK', 'Campus', and 'Terms'. A 'Book A Service' section is visible on the right. The main content area features a large banner with the text 'Support' and a 'Submit Support ticket' button. A red arrow points to the 'MAGNET Quick Guide' link in the navigation menu, and another red arrow points to the 'Submit Support ticket' button. The page also includes a 'Need help? Submit' section and a 'HOME / SUPPORT' breadcrumb.



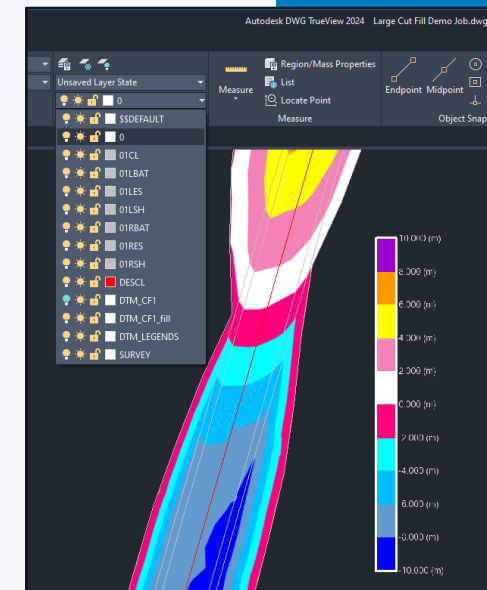
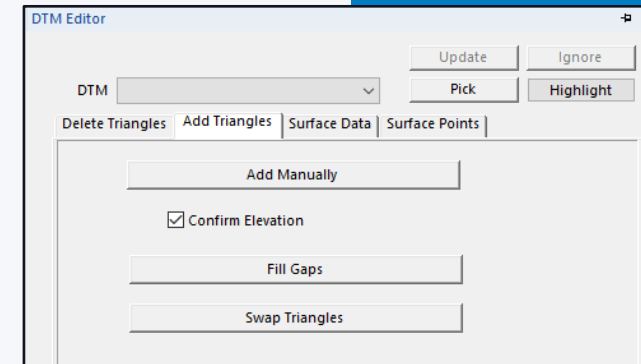
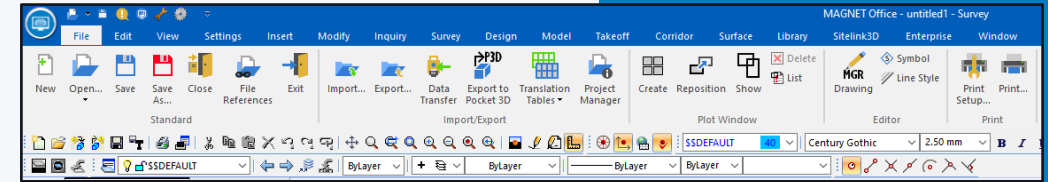
MAGNET Office v8.0 New Features



MAGNET Office v8.0 New Features

- New graphical layout – simpler & more Intuitive icon display
- DTM Editor – new Confirm Elevation option unticked will not display the Elevation Prompt. Included in Add Triangles & Surface Points
- Export to AutoCAD – Colour Fill with Legend Bar displayed and the DTM surface layer turned off
- Polygons with Pattern Fill will also export to AutoCAD.

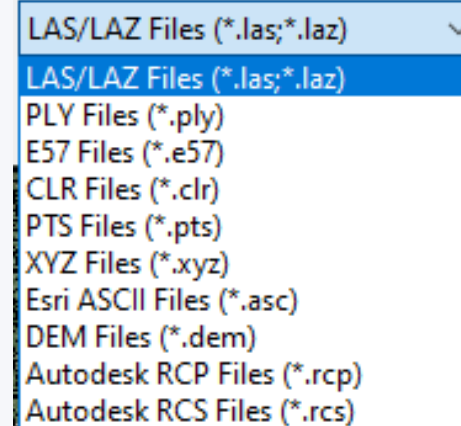
NOTE: Colour Fill Export to ACAD (re: the Legend Bar) currently only works with new projects created in V8.0. This will be looked at by the Magnet Team for existing C/F Projects in V8.1





MAGNET Office v8.0 New Features

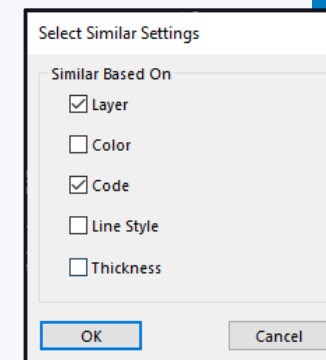
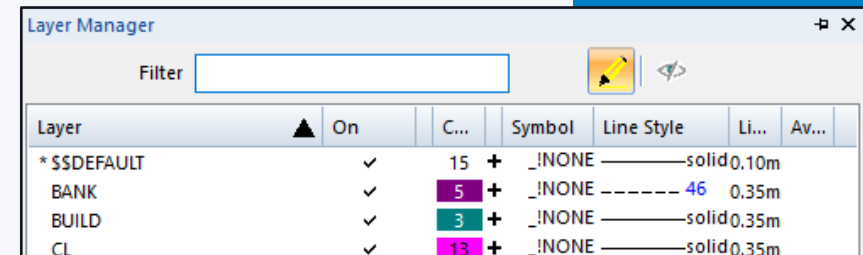
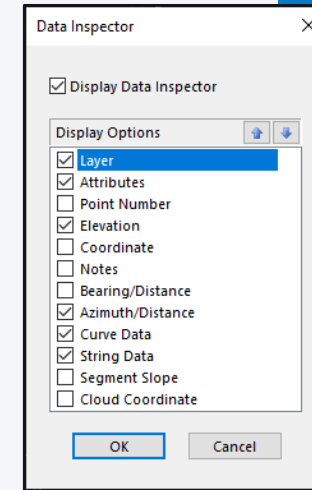
- Import Point Cloud Function – numerous Import file types listed
- Import Point Cloud Function – with options to Decimate; Export; Create Points from Point Cloud; Create DTM from Point Cloud; Ground Filter; Geo-reference and Merge Point Clouds





MAGNET Office v8.0 New Features

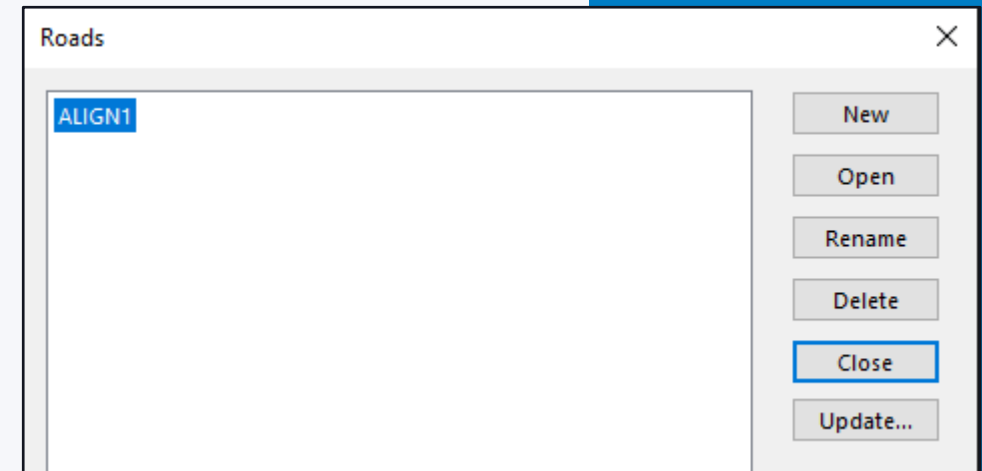
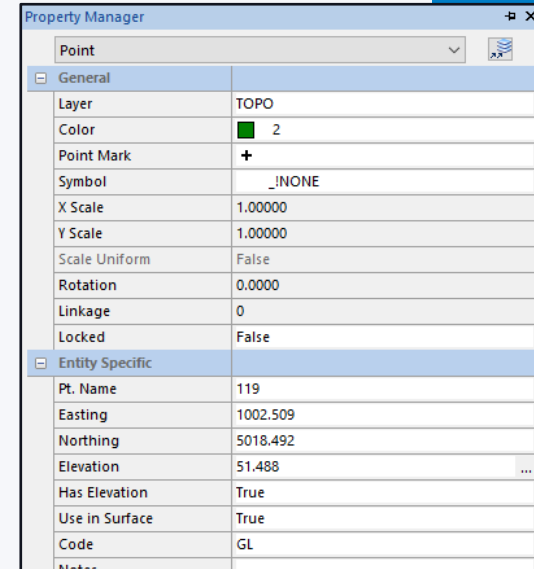
- Enhanced Data Inspector with more options available
- Layer Settings replaced by Layer Manager and is now modeless. With new Filter option; Layer Statistics; new Highlight Layer
- Edit > Select Similar > Settings added Code





MAGNET Office v8.0 New Features

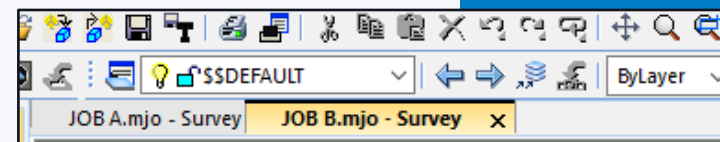
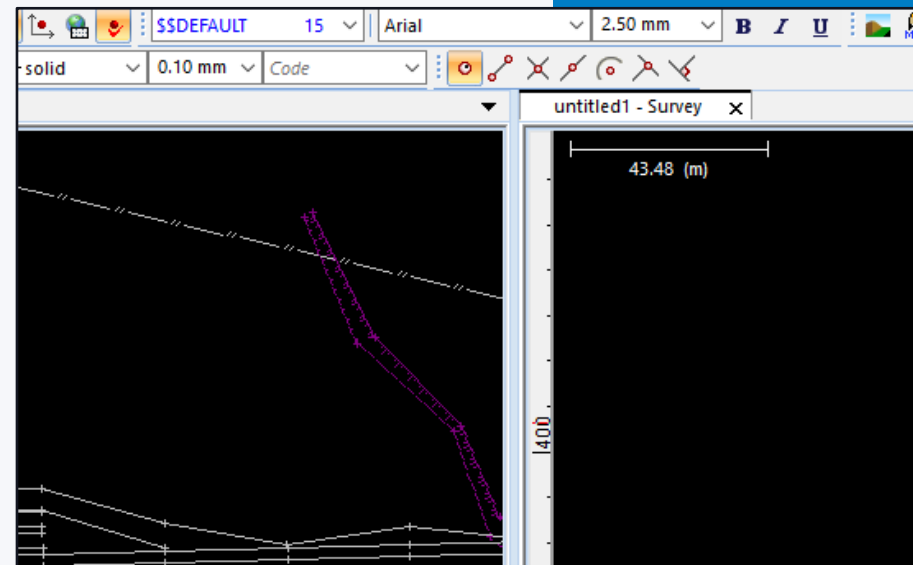
- Improved Property Manager – Single point elevation adjustment supported
- Update button added to Design > Roads Existing Roads can be selected and Update button is available to re-extract Cross Sections Without having the need to select XS from DTM option





MAGNET Office v8.0 New Features

- When you have an existing job open and create a new or open a project, the added job will be displayed in a split vertical window. To change the view to how previous versions showed multiple open projects.
- Select VIEW > TOOLBAR- pick Standard and then select "Customize" button. Set the Category to WINDOW and select TAB WINDOWS and >> icon to copy to the right pane. Moved it to the top and Save the Toolbar View in "Save Layout" – name it e.g. Survey View V8.0 and now shows the Window Tab icon on the Property Bar – create a new job, and only requires one click of that icon to set the new job on the top window area



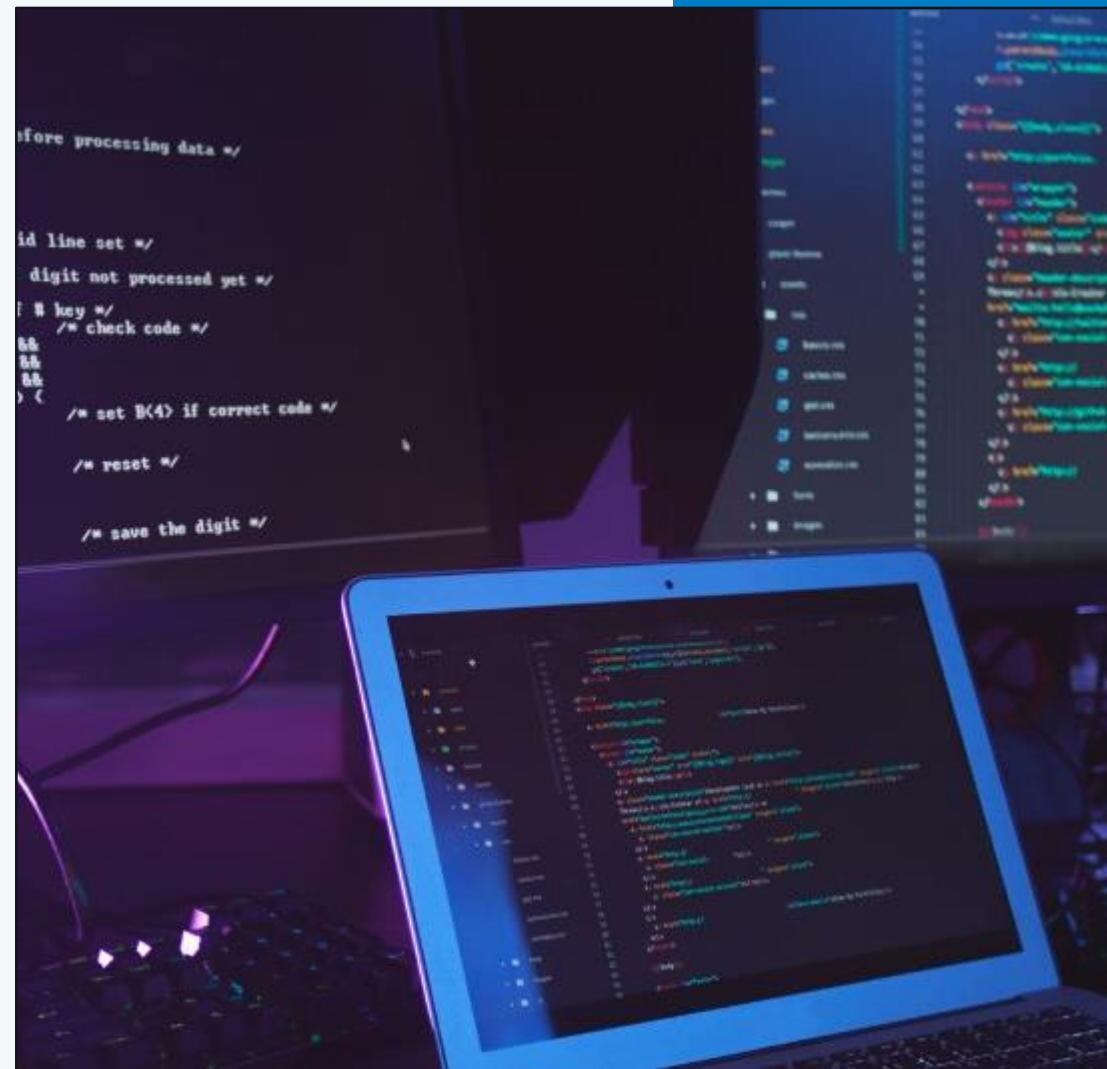


MAGNET Office v8.0 Fixes



MAGNET Office v8.0 Fixes

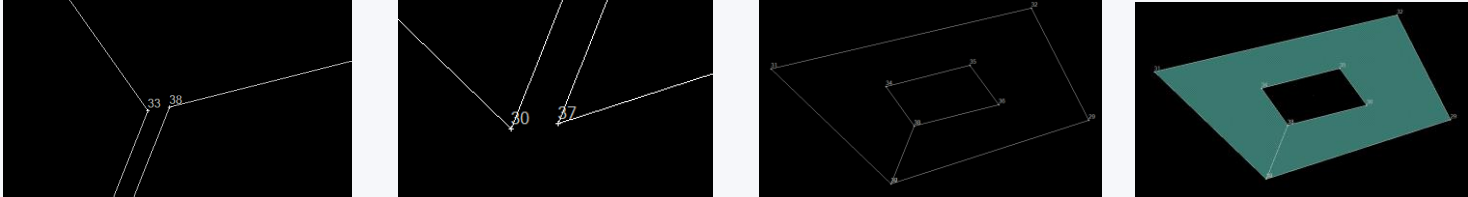
- Import Land XML geometry now imports lines and all attributes (not ePlan)
- Export a surface model (DTM) to 12D resolved, mesh displays in 12D
- Delete existing Super Elevation tables - click the top-left blank block to highlight all entries and the Delete button is now active
- Editing an existing Title Block – keyword insertion is now fixed and displays and retains the keywords after positioning
- Plus, many more resolved





2022 MAGNET Office Conference Feedback



Question	Answer Green completed; Red to be done
Exclude an internal hatch boundary	<p>The internal & external polygon areas must not be closed but leave a small gap on both polygons with individual lines joining the internal and the external shapes. Then when creating the polygons, the internal shape is not included.</p> 
When swapping triangles, have to exit out of option to show changes to Contours	<p>Actioned in Magnet Office v7.3, with triangles & contours displayed, swapping triangles or adding triangles will dynamically update the contours.</p>
Overlay Google Maps rather than Bing Maps	<p>Entered into Magnet Office "Ideas" web page</p>



2022 MAGNET Conference Feedback

Question	Answer Green completed; Red to be done
Move the Translate/Rotate function to Surface, Design or Modify tabs	This is a tool for specifically translating survey data (including DTM's) to another position. A more accurate method for moving survey data from false to correct coords, use LS Transformation.
Point Clouds auto layering/codes	By definition, layers & codes are not included in imported Cloud data
Convert LandXML files when imported correctly	In v8.0, LandXML now imports the linework and point attributes correctly (not ePlan)
Ability to print high resolution 3D models to PDF	With the free PDF writer "CutePDF" the graphics output can be set up to 4000dpi



2022 MAGNET Conference Feedback

Question	Answer Green completed; Red to be done
Adding MGA coordinates to Drawings	In Drawing View go to Display Settings > Survey Objects and tick GRIDS. Select the Grid tab and choose the Grid Marker you want.
Average Point function – selecting a group of points & create an average with ability to remove outliers & check residuals	Already in Magnet Office “Ideas” web page & planned
More extensive tutorials & video’s for all Magnet Office functions	39 How To and Quick Guide video’s now available, recommend in house Magnet Office training to gain more knowledge.
To be able to Polygon shade circles	By Definition, a Polygon is a flat two-dimensional shape with straight sides. Therefore, segment the circle and insert a string / lines joining the points then form a Polygon.



2022 MAGNET Conference Feedback

Question	Answer Green completed; Red to be done
Selection cycling improvements	Displays selection box adjacent to close proximity features to choose the correct entity.
Printing certain layers in Colour – not all colour or B/W	Define by setting in Survey the correct colours for layers. Set layers to colour 15 (black) that you don't want in colour and others in the colour you want. Print drawing in Colour.
Have symbol buttons in text editor for degrees, squared and cubed	Refer to Windows Character commands that Windows assigns for different fonts.
Geodetic Coordinate transformation	Use MAGNET Tools to transform coordinate systems



2022 MAGNET Conference Feedback

Question	Answer Green completed; Red to be done
Make application icons more distinct	Revised and more intuitive icons in v8.0
Scaled symbols like tree's change scaled size when exported to ACAD	We have a PDF document that explains how to achieve same scaled symbols in AutoCAD. Basically, the Symbol definition must be set as 1.00 units in the Symbol Library. Please contact your regional Support team for the document.
Insert multiple points into a line in one operation	Added to MAGNET Ideas web page



MAGNET Office Ideas Site



MAGNET Office Ideas Site

Where to submit your new ideas for MAGNET Office!

- For any wishes or enhancements to Magnet Office that you want to see in the program, the MAGNET Product Manager has a web page where you can register and add your enhancement.
- The entered enhancement works on a voting system, therefore the more votes for the entered enhancement – the better the chances of being planned for the next version.
- **NOTE: no issues, gripes or bugs – they are emailed to the Support person to review and if required, send through to Magnet Support in the US.**

- <https://magnet-office.ideas.aha.io/>

The screenshot shows the 'MAGNET Office Ideas' portal. It features a header with the MAGNET logo and 'Office' text. Below the header, there's a description of the portal and a list of categories: 'MAGNET Office Product for Survey, Site, Layout and Construction ideas' and 'MAGNET Project for Project ideas'. A search bar is present. The main content area is divided into 'FILTER BY STATUS' and 'FILTER BY CATEGORY'. The 'FILTER BY STATUS' section includes: 'Already exists' (5), 'Will not implement' (17), 'Planned' (43), and 'Shipped' (45). The 'FILTER BY CATEGORY' section includes: 'MAGNET Office' (150), 'General' (80), 'Resurfacing' (0), 'Survey' (27), 'Takeoff' (7), 'MAGNET Project' (5), and 'MAGNET Tools' (7). There are also 'Log in / Sign up' links. The main content area displays three ideas with their respective vote counts and descriptions. The first idea, 'Fit line at nominated bearing', has 1 vote and was created on 3 Aug 09:50pm. The second idea, 'Job displayed > Adding a new project with the vertical split screen mode - option to disable it', has 8 votes and was created on 20 Jul 12:46am. The third idea, 'Coordinate Table - Option to reset Point Numbers (Ascending, descending) and Expand Selection', has 4 votes. Each idea has a 'VOTE' button and a 'Will not implement' button.



MAGNET Field How To & Quick Guides



MAGNET Field How to & Quick Guide Videos

New Version 8 Videos

Auto Stake Surface

Line Gap Topo

Correct Base by Height

Multiple Raw Data Edit

Creating Contours

Quick Code Group

Digital Level Run Report

Reference Surface Topo

Elevate Points from Surface

Reflector-less Offset

Export 12D FLD Raw Data

Setout Point Lists

Export Photo Images

Setup by Grid Lines

Import DXF End and Intersection
Points

Shared Data Code Library

Filter Point Data

Shared Data Control Points



Watch on
YouTube

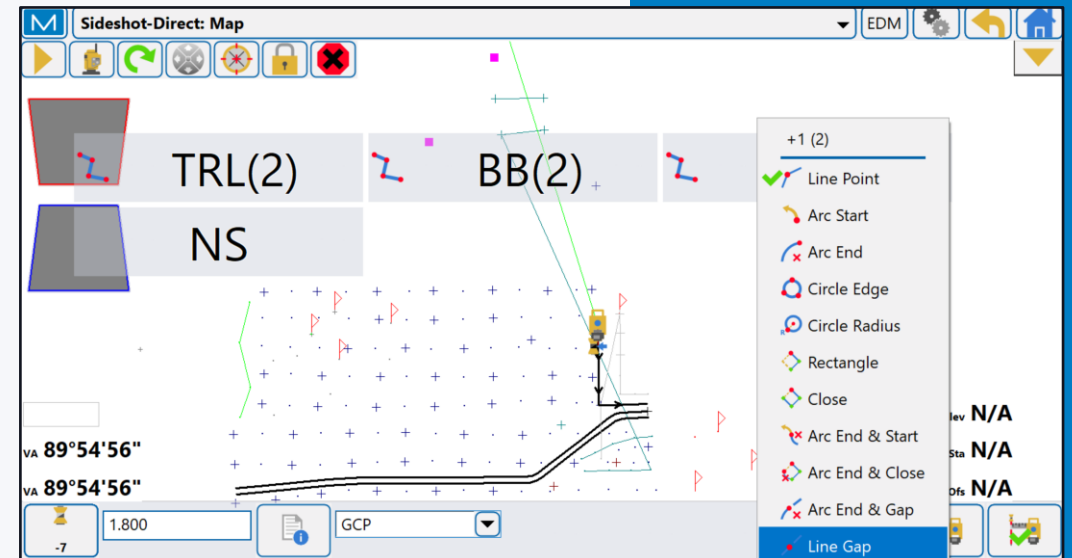
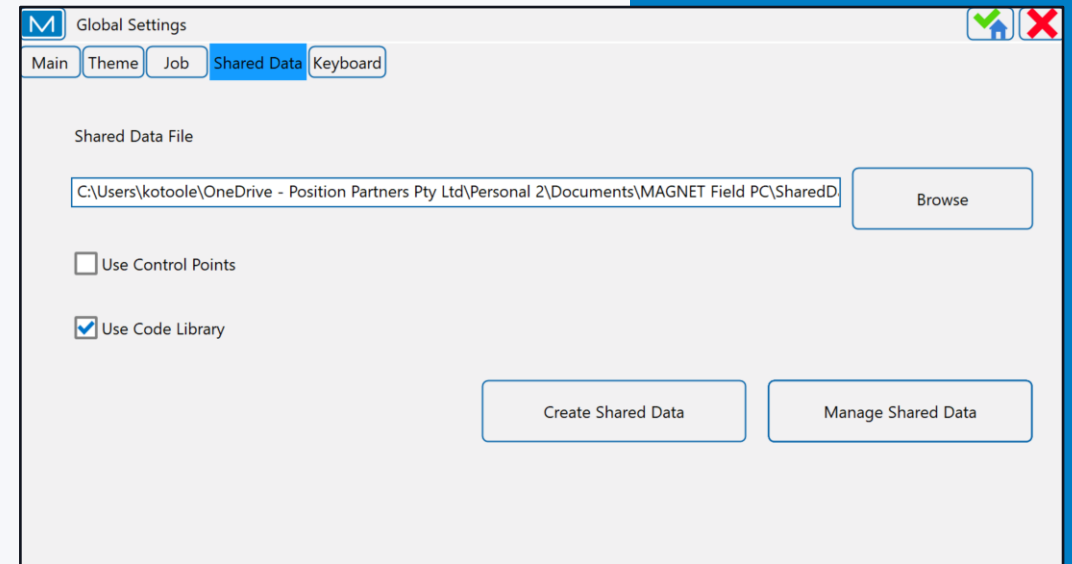


MAGNET Field v8.0 New Features



MAGNET Field v8.0 New Features

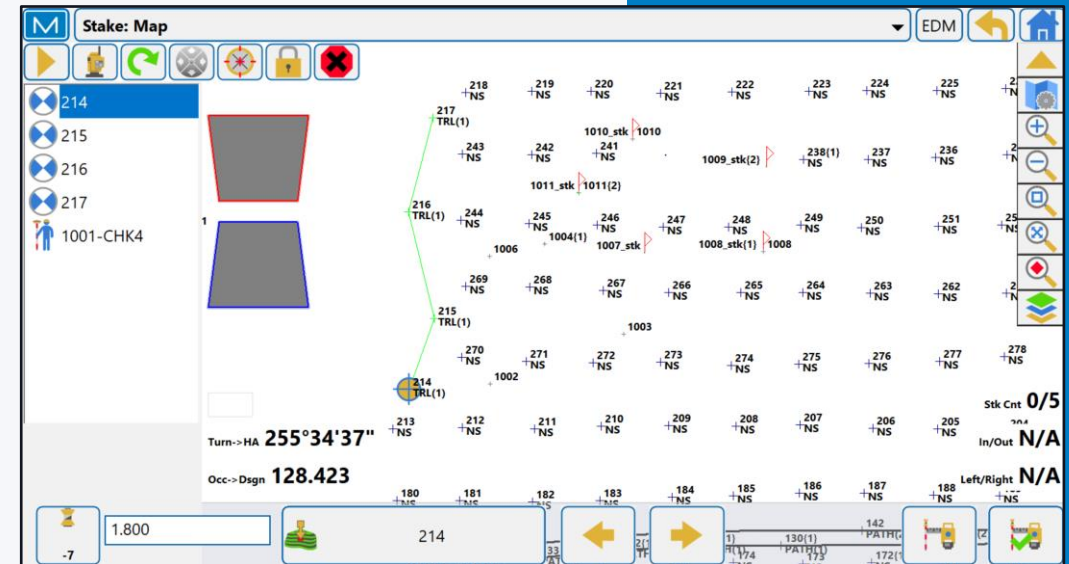
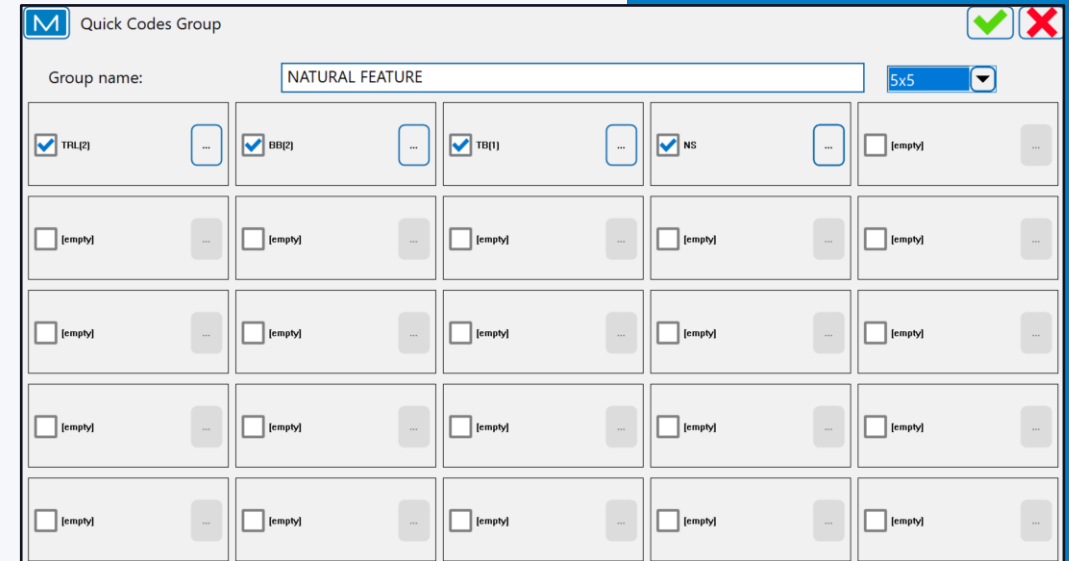
- Shared Data File
 - Control Points
 - Code Library
 - File stored locally on DC
- Point Filter
 - Type / Time / Layer / Name
 - Time / Radius / Range / Code
- Point Cloud Support
- Codes and Linework
 - New 'line gap' control code
 - String start/stop in topo
 - Continue line and allow gaps





MAGNET Field v8.0 New Features

- Quick Codes
 - Ability to set 3x3, 4x4, 5x5 quick codes
 - Multiple codes per quick code
- Point Lists
 - Create during import of points file
 - Running point list during stakeout
- Reference Surface Topo
- Auto Stake Surface
- Digital Level
 - Export PDF report of digital level run
 - Add code/notes to level run points





2022 MAGNET Field Conference Feedback



2022 MAGNET Field Conference Feedback

Question	Answer Green completed; Red to be done
View contours associated with surface	V8 now has a separate contour tab under the surface option which allows for better viewing and creation of contours. The contours are still required to be generated
EDM mode indicator for fine, rapid and tracking	This feature was submitted to product management to be included in future version
Search pattern change for total station	This feature was submitted to product management to be included in future version
Traverse closing angle error	When closing a traverse in MF and the user has two known points existing in the job to close on and to, the software will have the ability to do an angle balance via bowditch (compass rule) adjustment which will compare known close bearing to calculated and apply angular adjustments back through the traverse. There is a how to guide on this workflow on PP YouTube channel
Auto turn on third control point on resection	Feature is in software version 6 and above



Question	Answer Green completed; Red to be done
Angle and distance error reports	After completing a check shot or backsight/resection, the user can export a text report which includes angle and distance error reports. A check report can also be exported separately if required
Default point name function for cogo	This feature was submitted to product management to be included in future version
Locking imported design or control layers	V8 allows the user to set default layer as well as lock/hide/show layers
Codes populate when importing .tp3 file	During import into MF, the user can define the current descriptions in a .TP3 file to be imported as a note or a code. There is a tick box on the file format screen for this feature
Merge same layers on import	This feature was submitted to product management to be included in future version



MAGNET Field Ideas



How to submit Enhancement/Idea for Magnet Field

- For any wishes or enhancements to Magnet Field that you want to see in the program, please send an email to your local regional support team with the request and detailed description on the feature
- The regional support team will then escalate this request to internal and Topcon product management teams to look at getting the enhancement in a future version of the program
- Below are the local regional email addresses for reference.
 - New South Wales – nswsupport@positionpartners.com.au
 - Queensland – qldsupport@positionpartners.com.au
 - Victoria / Tasmania / South Australia / Northern Territory - vicsupport@positionpartners.com.au
 - Western Australia - wasupport@positionpartners.com.au

2024 Magnet Conference

MAGNET[®]



YOUR WORK CONNECTED

August 15th-16th 2024

- 1/2 Day Magnet Field workshops
- Networking drinks
- Full day Magnet Office seminars & workshops