Trimble Business Center

Release Notes

TBC Version 2026.10

www.trimble.com

Welcome to Trimble Business Center

Trimble Business Center (TBC) provides a complete office software solution for survey and construction professionals. Having the ability to work in a single software environment streamlines operational efficiency while minimizing the costs of data management, software maintenance, and training.

Important Note! This version of Trimble Business Center is available to:

- Perpetual license users whose current warranty expiration date is **June 1, 2026** or later. (If your perpetual license warranty expires prior to this date and you proceed with the installation, licensed features will not be available.)
- Subscription license users whose subscription is currently active.

  If necessary, you can contact your distributor to purchase a warranty extension or renew your subscription. In the TBC ribbon, select Support > License Manager to view your warranty or subscription expiration date.

New features

Following are the new features and enhancements included in this version of Trimble Business Center. To view context-sensitive help in TBC while using any of the commands mentioned here, simply press **F1**.

Miscellaneous

- **Trimble ID Requires Two-step Verification** - To protect your sensitive data and meet industry best practices, Trimble requires users to use two-step verification (2SV) when signing in. You will receive a verification code via email each time you sign in. This secondary factor ensures that only you can access your account, even if your password is compromised.
- **Dark theme is now available (beta)** - TBC now has a dark theme. Use **Options >General > Display** to switch from the light to the dark theme and vice versa. This feature is currently in beta. (See **Display Options** in the help).
- **Change the working background color** - A new checkbox under **Options > General > Display** allows you to customize the background color of the graphic views. (See **Display Options** in the help.)
- **TBC Online Help** - In the Support tab, click the **Field System Help Portal** icon to connect to TBC online help.
- **TBC Assistant (Beta)** - Access the new **TBC Assistant** to chat with the Trimble AI Assistant. Ask questions and get quick answers to your queries. Find the link on the **Support** tab. The **TBC Assistant** requires internet access and is currently in beta testing.
- **ANZ Toolbox integration with TBC** - Now available globally, the ANZ Toolbox brings a robust suite of over 80 specialized commands directly into the core of TBC. Originally developed exclusively for the Australia and New Zealand markets, these highly sought-after tools have proven their universal value and are now exclusively available to all TBC Subscription License holders.

Designed to eliminate manual data friction, this comprehensive toolset spans data preparation, drafting, 3D modeling, and construction workflows. Users can instantly elevate their daily operations with powerful features like advanced CAD geometry cleanup, automated plan annotations and dynamic tables, rapid 3D solid extrusions for BIM utility modeling, and highly detailed as-built conformance reporting.

Whether you need to seamlessly manage metadata, instantly adjust linestring elevations, or perform rapid grid volume calculations, this toolset delivers immediate ROI. Best of all, these highlighted features only scratch the surface of what is possible with the 80+ new commands now at your fingertips.

Data Exchange and Management

- **Connected Workspace support for Trimble Perspective data** - Existing Connected Workspace workflows now support the import of scanned data from Trimble Perspective, software specifically designed for in-field scanner control and complete registration when working with a Trimble 3D laser scanning system like Trimble X9 or X12. (See **Share Projects and Data Using Connected Workspace** in the help.)
- **Exchange a coordinate system with Trimble Connect** - When you exchange data in the Connected Workspace command, you can now compare your TBC coordinate system's projection, datum, and geoid with Trimble Connect's and then choose to either:
  - Push your TBC Project's coordinate system to Trimble Connect, or
  - Pull the coordinate system from your Trimble Connect Project into your TBC project

  to synchronize them. Doing either of these reduces the chances of mismatched coordinate systems between office and field data. In addition, you can click Details to see additional information on TBC's and Trimble Connect's zone, such as the global reference datum, site calibration status, local site coordinates, datum method, and shift grid. (See **Share Projects and Data Using Connected Workspace** in the help.)

  Note: You must be an Administrator of the Trimble Connect project to push your TBC coordinate system to Trimble Connect.
- **Prepare Trimble Access jobs in the Connected Workspace** - You can now generate and set up jobs with project data for Trimble Access directly within TBC. This enables you to prepare field work with linked data and configured project settings before the operators are in the field. This is the initialization of office-to-field workflows in which the jobs are created before reaching the field devices so the job setup is completed before field operations start. (See **Share Projects and Data Using Connected Workspace** in the help.)
- **Trimble Sync Manager changes** - **Trimble Sync Manager (TSM)** is no longer automatically installed with TBC. Go to https://help.fieldsystems.trimble.com/trimble-sync-manager/installation.htm to install TSM as a stand-alone product.
- **End-of-life for the Trimble Connected Community** - The Trimble Connected Community (TCC) site and workflows have been deprecated, so the TBC to TCC integration has been disabled and references removed from relevant documentation. Related tools, like TabletSync, TCC Explorer and Office Synchronizer, as well as filespaces like the Business Data Center, are no longer available. If you used TCC before, you need to transition to WorksManager for related data exchange workflows. If needed, contact your dealer, support engineer, or sales representative for more information.

- **Create Field Data Assignment** - The end of life of Trimble Sync Manager is planned for 2026. Use the new **Create Field Data Assignment** feature instead. (See **Share Data with Trimble Access Using Create Data Assignment** in the help.)
- **SiteVision AR exporter installation** - The SiteVision AR exporter is now installed as part of the TBC installation, so users no longer need to take any additional steps to install it.
- **Customize and organize Flags** - The flags feature has been upgraded, enabling you to organize categories of flags, customize their appearance, and demarcate flagged items (for instance, objects which have gone through the QA process versus those that have not). (See **Flags Pane** in the help.)
- **Enhanced 3D Drive-Over Surfaces**- The **3D drive over surfaces** feature now has several new vehicle navigation options. This allows simpler navigation, offers new points of view (vehicle POV and bird's eye POV), and has easier left and right viewing. (See **3D Drive View** in the help.)
- **Updated Integration with Trimble Access** - The JobXML (.jxl) format now supports the new key in arc method **Center point and radius** introduced by Trimble Access 2026.10. This ensures a smoother integration when importing and exporting JobXML files (version 6.34) (See **Import and Export Data Using Trimble Access Drive** and **Import JobXML Files (.jxl)** in the help.)

Survey and COGO

- **Improved Coordinate System interoperability** - When you change the Coordinate System and Zone in your project and you select a predefined geoid model, the Coordinate System Database has been updated so you no longer have to enter the vertical datum name manually. It is now entered automatically, streamlining the Coordinate System selection workflow. (See **Coordinate System Settings** in the help.)
- **Updated Coordinate System Database** - The newest Coordinate System Database v115 includes the following enhancements:
  - Added the GR_HEPOS2011 geoid model for Greece.
  - Added fifteen UTM zones for Indonesia on SRGI2013(2021.0).
  - Added the SIRGAS-ITRF2008 epoch 2016.434 datum for the Dominican Republic.
  - Added the SVD2024 vertical datum for Svalbard, Norway.
  - Added the KNgeoid26 geoid model for South Korea.
  - Added a beta version of the Canadian NATRF2022(CSRS) modernized reference frame with SGEOID2022-beta2.
  - Added ISO identifiers to the REDGEOMIN 2024 datum and zones for Chile.
  - Added a grid transformation from CSRN2025 (NAD83 2011) to CA SRS Epoch 2017.50 for California zones 1–6.
  - Added the TUREF datum for Turkey with a local velocity model and ITRF2020-to-TUREF transformation.
  - Added a new Romanian geoid 2025.09 and a new Stereo 70 zone using a shift grid for Romania (ROMGEO).

NOTE: While the new Romanian Stereo 70 offers sub-centimeter horizontal accuracy, comparison with the ROMGEO Tool may show elevation differences up to 25 cm, particularly in mountainous regions. This discrepancy is due to what we suspect is a bug in the ROMGEO Tool, where its geoid model uses an unusual Nearest Neighbor interpolation that creates discontinuities. Standard interpolation methods used by Trimble Geoid cannot reproduce these specific discontinuities, leading to the observed elevation differences.

- Added support for RGNC 2015 and improved support of RGNC91-93 for New Caledonia, using a grid transformation between RGNC 2015 and RGNC91-93.
- Updated the Italian displacement model with improved velocity data from the European Dense Velocities project, extending coverage to Lampedusa and the Pelagie Islands.
- Updated the EGM 2008 India geoid with a full-coverage version (EGM 2008 Full India).
- Corrected EPSG codes for legacy NTF Lambert zones in France and added Esri/FME interoperability aliases.
- Improved Esri and FME interoperability aliases for Finland (EUREF-FIN), France (RGF93 v2b), United Kingdom (OSGB36), Belgium (Datum 72), and Tunisia (Carthage).
- Marked the Puerto Rico/NAD83 zone group as obsolete.

- **Work in a dynamic datum at a specific epoch** - When working with a time-dependent datum, you can now work at a specific epoch that is not the default reference epoch for the selected datum. This provides the flexibility necessary to select an epoch that meets special needs (for example, in areas with recent earthquakes or distorted datums). Note that this feature is intended for experienced users, as incorrect settings may lead to inaccurate results. (See **Change the Coordinate System** and **Project Management Options** in the help.)
- **Reference Data Shop Download** - Use the ***Select Reference Stations to Download*** dialog to download reference station data in different data formats, including all RINEX versions plus Trimble T01, T02, T04, TGD, and DAT. (See **New Provider Options** and **Reference Data Shop Download Options** in the help.)
- **Points at Station Offset Report** - Generate a Points at Station Offset report that displays a list of the station offset points. The report includes the point name, description, station, offset, easting and northing, and the elevation for the baseline and orthogonal points. (See **Create Points at Station Offsets** and **Run a Report** in the help.)
- **Save and recall parameters in Transform Survey Points** - Use the load and save functionality for transformation settings to store and recall rotation and moving survey point parameters. Apply the same transformation to this project or a new project without the original reference points. Transformation parameters are saved to an XML file that contains the transformation points and coordinates. (See **Transform Survey Points** in the help.)
- **Additional autofields for GNSS attributes** - New entry methods are supported for additional automatically filled GNSS attributes to point feature types. The following entry methods can be set in the **Feature Definition Manager**: Latitude (local), Longitude (local), Estimated accuracy, Est. vertical accuracy, GNSS device, GNSS serial number, Correction status, Correction source, Capture method, PDOP, HDOP, Satellite count, and Epoch count.

CAD

- **Copy/Paste** - TBC now offers standard Windows copy/paste functionality to exchange vector data and a high-resolution bitmap screenshot via the clipboard. This enables simple data transfer between TBC projects, and also between TBC and external applications like Microsoft Word. Copy/Paste supports several graphical data types, as well as sheets and sheet sets. Point clouds are excluded, and coordinate system transformations are not performed.
- **Create at Interval Enhancements** - The **Create at interval** feature has been upgraded, which increases its usability and offers new options to users.
- **Area Point Based report** - Generate an Area Point Based report using selected features or geometry. The report includes the polygon feature's name, total perimeter, total area, and corner points with coordinates and feature codes. (See **Run a Report** in the help.)
- **View Filter Manager Enhancement** - TBC now enables you to hide layers if they do not contain objects. Use **Show empty layers** and **Hide empty layers** from the context menu to switch between these modes. This results in a less cluttered pane, making it easier to find and work with important layers. Additionally, the Context menu has been reworked, to improve understandability. (See **View Filter Manager** in the help.)
- **Filter layers in all layer dropdown lists** - When selecting a layer in any drop-down **Layer** list, you can now type any part of the layer name in the list to narrow the number of layer options. The function is case insensitive and uses “*” as placeholder. This makes it easier to pick a specific layer. (See **Specify an Object or Property in a List or by Picking in a View** in the help.)
- **Enhancements to the Block Features** - The functionality of block features in feature code libraries has been enhanced. Scale blocks by ground or paper units, allowing the block's size to remain constant in the **Sheet view** or scale based on real-world dimensions. It allows list attributes to determine which blocks are displayed. Scale and rotate blocks according to attribute entries. Define how the elevation of multi-point blocks is calculated from the underlying points (average, minimum, maximum, etc.) and add a single label to the resulting block. (See **Share Projects and Data Using Connected Workspace > To configure a feature code library (.fxl)** in the help.)
- **Line Length Preview Feature** - When measuring a distance or creating a polyline or linestring, TBC now displays the 2D distance from the last point to the cursor. If snapping is active, the 2D distance to the snapped object is displayed. Switch this feature on or off in **Options > General > Display.**
- **Use Snaps in the 3D View** - You can now use running snap markers in the 3D View. These snap options are available: Point, End point, Midpoint, Near point, Center point, Surface/mesh vertex, and Point cloud. Individually switch Snaps for Point clouds on and off, and show snap markers. (See **Set Running Snap Modes** in the help.)
- **Import points into any chosen layer** - TBC now allows you to import points into any layer in the project, or to create a new layer to import points into. (See **Import Data** in the help.)
- **Layer Group Manager enhancements** - The TBC **Layer Group Manager** has been enhanced. You can now color-code layer groups. You can also filter which layers are visible in the Layer Manager using a new dropdown filter. Finally, if you resize the columns, the changes persist when you close and reopen Layer Manager. (See **Manage Layer Groups** in the help.)

- **Standardize Layers enhancements** - The new **All layers** tab shows all the available layers. When you select layers from this list, they appear in the **Selected layers** tab. This makes the list of layers far more manageable when standardizing layers. (See **Standardize Layers** in the help.)
- **Add new segments to a polyline** - Add new segments to a polyline using the **Insert segment** command, which automatically converts the polyline to a linestring. (See **Insert a Segment into a Linestring or Polyline** in the help.)
- **Use a hotkey to insert a radius while entering or digitizing a line** - You can now use hotkeys to change a segment type when you digitize a line, linestring, or contour. The following hotkeys are available:
  - **s** - Change the segment type to **straight**.
  - **a** - Change the segment type to **best fit arc**.
  - **d** - Changes the segment type to **smooth curve**.
  - **x** - Delete the last segment.

  (See **Digitize a Linestring** and **Digitize Contour Lines** in the help.)
- **Custom fields for linestrings** - TBC now features three optional custom fields for lines, linestrings, and boundaries. Define the custom fields in **Settings > Custom Fields > Linestrings**. Custom field values are shown as columns in the Excel **Area/Length/Count Report.** (See **Custom Field Settings** and **Run an Area/Length/Count Report** in the help.)
- **Flip line labels to the opposite offset if they overlap** - If line labels overlap, they are now automatically flipped to the opposite offset if that offset is empty. This makes it easier to see longer labels on short lines. (See **Create and Edit Label Table** Styles in the help.)
- **Crop Vector Data from a PDF Based on Image Boundary** - The **Import vector PDF data** command now enables you to clip the imported vector data based on the image boundary. This integrates a multi-step workflow into a single command. (See **Import Vector PDF Data** in the help.)

Point Clouds

- **Run a Boeing Bump Index Report** - You can now run a report that evaluates the condition of a runway or other airport surface based on the Boeing Bump Index (BBI) standard. This pavement analysis can help you determine when and where airfield maintenance is needed. Unlike general road indexes (like the International Roughness Index), the BBI focuses on individual surface irregularities based on their wavelength (length) and amplitude (height). Bumps are classified into three categories: acceptable, excessive, and unacceptable. (See **Run a Boeing Bump Index Report** in the help.)
- **Advanced Point Cloud Filtering enhancements** - Apply a median elevation filter to point clouds using actual measured points rather than averaged points. (See **Extract Filtered Point Cloud Regions Based on Elevation** in the help.)
- **Ramp Compliance Report** - Use the new **Ramp Compliance Report** to calculate and report slope measurements, length, landing and safety characteristics, and visuals of the ramp to validate Americans with Disabilities Act (ADA) Compliance. (See **Create a Ramp and Run an ADA Ramp Compliance Report** in the help.)

Photogrammetry

- **Updated Aerial Classification Model** - The aerial point cloud classification model has been updated. It now offers more accurate classification for open pit mining and industrial buildings. (See **Extract Classified Point Cloud Regions** and **Adjust Aerial Photo Stations** in the help.)

Corridors and Alignments

- **Support for surfaces in the IRI Report** - In the International Roughness Index (IRI) report, you can now perform computations based on a surface so that an IRI score can be calculated for road designs before doing any actual paving work in the field. This allows you to run the report on surfaces that represent either new road designs or models of existing pavement. If wheel paths have been draped on a surface, the surface name appears in the summary sheet. (See **Run an International Roughness Index Report** in the help.)
- **Key Horizontal Alignment Points** - There are several new options when setting Key Horizontal Alignment Points, including **Point of Spiral, Curve to Tangent**, and **Tangent to Curve**. (See **Horizontal Alignment Label Settings** in the help.)
- **Generate Points on Stations** - The new **Generate Points on Stations** command enables you to export the coordinates on stations of alignment, which makes it easy to stake out the coordinates for site layout. (See **Horizontal Alignment Label Settings** in the help.)

Mines

- **New 3D Mesh feature** - Create 3D watertight meshes from point clouds to aid in the creation of 3D mine development maps, or to provide to mine engineers for mine planning design. Calculate the extracted ore volume for drives and stopes point cloud data. This enables geologists and mine surveyors to determine if ore extraction is progressing according to plan, and to accurately track resource depletion. (See **Calculate 3D Mesh** in the help.)
- **Underground mine feature extraction** - Extract CAD information from point cloud datasets to create 3D CAD linestrings at key points along tunnel scans. Surveyors can now extract centerlines (floor, tunnel center, and backs) and contours (floor, mid/rib, shoulder, and backs). This enables mine surveyors to extract the necessary underground development geometry needed to update survey maps.

Takeoff

- **Create Custom Categories** - In addition to the default layer categories (Original, Design, Utilities, etc.) you use to build takeoff surfaces, you can now define up to three custom categories. For example, you could create a category for a surveyed surface based on an 'as-of' date between original ground and finished design dates. As you add layered data to these custom categories, corresponding surfaces are created when you build takeoff surfaces. These custom surfaces can also be selected in takeoff reports like the Earthwork Summary. (See **Categorize Takeoff Layers** in the help.)

- **New Site Improvement Report** - The Site Improvement Report enables you to run a report showing site improvement names, planimetric areas, and units; you can then export the report into Excel or CSV. If you enable and name custom fields for site improvement definitions in Project Settings, and populate these user-defined fields in the Material and Site Improvement Manager, the values will appear in this report. (See **Run a Site Improvement Report** and **Custom Field Settings** in the help.)
- **Region Volume Report** - The **Compute Region Volume** command now enables you to draw a polyline to create boundaries. In addition, you can now save region volume results, which you can view and edit on the **Region volume** command as well as the **Project Explorer** and the **Properties** pane. (See **Compute Volumes for a Region** in the help.)

Mobile Mapping

- In the **Rectified Camera Views** tool, the description now specifies the direction each camera is facing (e.g., **Rear**, **Right-left**, etc.) instead of using index numbers. This change makes it easier to identify and interpret camera views based on their orientation rather than numerical indices.
- In the **Register a Run** (or **Register a Mission**, or **Generate POSPac Position Fixes**) tool, the **Point Cloud Smart Picking** tool now includes direct residuals to GCP helping you choose the optimal target center, regardless of the target type. These residuals are updated whenever you modify the template, such as:
  - Changing the center of the target by selecting a new center or moving it with the keyboard arrows (including fine adjustments using the Shift key).
  - Adjusting the bolt size when selecting a **GV Target**.
- **Import Ortholane Images** - You can now import previously generated ortholane images into TBC, to use in pavement condition inspections. (See **Import Ortholane Images** in the help.)
- **Pavement inspection for jointed concrete** - Inspect pavement condition now supports the inspection of rigid pavement (jointed concrete). (See **Inspect Pavement Condition** in the help.)
- **Inspect Pavement Condition workflow enhancements** - The Inspect Pavement Condition workflow has been updated. The **Use cross section intervals** feature enables you to calculate the cross slope for asphalt segments and sample units. Additionally, use the **Confirm Selection** button to select multiple batches with different analysis parameters for inspection. (See **Inspect Pavement Condition** in the help.)

BIM

- **3D Object from Lines** - Select a group of lines to form a shape and extrude it along a control line. This command rapidly creates cross-section strings and watertight 3D shells for your setting-out or as-built BIM models.
- **3D Object from Shape** - Extrude a closed 2D polygon along a chosen control line to instantly generate 3D shells, cross-sections, and longitudinal strings. It is an incredibly fast way to build volumetric solids for your BIM workflows.
- **3D Objects from Polygon** - Select one or multiple closed linestrings and apply a depth, elevation, or surface projection offset to quickly create 3D solid objects. This is an excellent tool for rapidly generating volumetric shapes and adding them to your BIM Groups.

- **3D Objects from Surface** - Transform surface models into 3D solid objects by applying a depth offset or projecting the surface to a specific elevation. You can optionally use closed boundary strings to limit the extent of the newly generated volumetric solid.
- **3D Object Report** - Select multiple 3D shells and IFC mesh objects to automatically report their specific volumetric quantities, names, and 12d attribute data. The extracted data is output to an on-screen table and can be exported as a comprehensive Excel report.
- **Explode 3D Objects** - Easily deconstruct complex 3D solid objects into component lines and points. This command separates top, bottom, and vertical faces onto different layers, allowing you to quickly extract source data for terrain modeling.
- **Transform 3D Objects** - Spatially adjust one or more 3D BIM objects by translating or rotating them around a user-defined axis. This command provides precise control over X, Y, and Z movements and rotations to perfectly align your models.
- **Create BIM Utilities** - Instantly generate individual BIM utility chambers and pipes. These can be circular, rectangular or custom shapes and include banks of conduits. Users can specify precise dimensions, and depth values to quickly construct accurate as-built or design utilities for their BIM models.
- **Edit BIM Utility** - Easily modify existing BIM utilities within your project. This tool allows you to dynamically adjust the structural dimensions, and shapes of previously created utility objects.
- **Utilities Auto Draft** - Automate underground BIM creation by mapping feature codes and attributes to automatically generate intelligent utility pipes and nodes from 3D data. Rule sets can be easily imported, exported, and reused to instantly draft complex utility networks.

Surfaces

- **Add images to subgrade surfaces** - Use the Add Image to Subgrade Surface command to drape one or more georeferenced images onto any of these 'subgrade' surface types: finished design with subgrades adjusted, overexcavation, subgrade, and topsoil. Adding an image, such as a PDF site plan, onto a surface lets you see topographic or design information in the context of the 3D terrain. (See **Add Images to Subgrade Surfaces** in the help.)
- **Surface Group Manager** - Use **Surface Groups** to organize surfaces into named groups. Surface groups appear in the **View Filter Manager** under the **Surfaces** category, enabling visibility control at both the individual surface and group level. (See **Create and Edit a Surface Group**, **Create a Surface**, and **Create a View Filter** in the help).

Drafting

- **Create Spot Cut/Fill Labels** - You can now create a dynamically updating (Smart Text) label that shows either the cut or fill value at a specific location on a cut/fill map. (See **Create a Cut/Fill Label for a Spot Elevation** in the help).
- **New Print by selection command** - The new **Print by selection** command provides a simplified way to print a selected area. Select an area in the **Plan view**. The print dialog opens, allowing you to send that selection directly to a printer or PDF. (See **Print a View or Report** in the help.)

- **Print plan view** - This new feature lets you easily create plan view plots as either single or multiple plans arranged in a grid or along a line. Standard drafting templates now store their plan size, support north arrows, and scale bars or scale smart texts. (See **Print Plan View** in the help.)
- **Add new boundaries to an existing dynaview boundary set** - Dynaview boundary sets that are created by **Create Dynaview Boundary Set** or **Print Plan View** are now displayed in the Project explorer in a new branch. Use this feature to add boundaries to the sets, using the context menu.
- **Convert to Linestring** - Crucial for data preparation as it strips away problematic User Defined Coordinate Systems (UCS) that cause orientation issues from third-party CAD imports.
- **Convert to Horizontal Linestring** - This feature simplifies complex geometry by stripping vertical tab data from linestrings for easier horizontal processing.
- **Line Node Cleanup** - Automate the removal of duplicate nodes and cleans up messy imported CAD lines.
- **Annotate Objects** - Now you can automate the drafting process by extracting live object properties and writing them as text to the screen in bulk.
- **Insert Excel Table** - Enhance plan deliverables by embedding and formatting Microsoft Excel spreadsheets directly into the graphic Plan View.

Important notes and known issues

See the TBC Help for a complete, up-to-date list of important notes and known issues related to TBC.

- **Trimble Connect UK Support:** Trimble Connect support for the UK has been postponed. You cannot currently select the UK region when exchanging field data between TBC and Trimble Connect for these Connected Workspace functions/data:
  - Dataset Workspace
  - Trimble Mobile Mapping data
  - Trimble Access data
  - Publish to TRCPS

System requirements

Microsoft operating system:	Windows 11 (64-bit version)
Processor:	Dual-core 1.80 GHz or better minimum
	Quad-core 3.0 GHz or better recommended (additional cores with hyper-threading support highly recommended for Aerial Photogrammetry and Scanning modules)
	Intel Core Ultra 9 285K or equivalent for large Mobile Mapping data sets (for example, eight runs totaling 75 kilometers)
Random access memory (RAM):	4 GB or more recommended

	32 GB minimum, 128 GB or more recommended for Aerial Photogrammetry and Scanning modules
	192 GB DDR5 for large Mobile Mapping data sets (for example, eight runs totaling 75 kilometers). LIDARQC run alignment process requires a high amount of memory for alignment of large projects. If only processing MX50 or MX60 data, smaller amounts of RAM are sufficient, but 128 GB would still be recommended.
Hard disk space available:	50 GB or more recommended
	100 GB or more on solid-state drive required for Aerial Photogrammetry, Mobile Mapping, and Scanning modules
	The recommended SSD overall hard drive capacity is 2 TB or more for Aerial Photogrammetry and Scanning modules
	Storage: 12TB 7200rpm or higher HDD or SATA SSD for large Mobile Mapping data sets (for example, eight runs totaling 75 kilometers)
	Boot: Samsung 9100 Pro M.2 NVMe (or equivalent) for large Mobile Mapping data sets (for example, eight runs totaling 75 kilometers)
Monitor:	1280 x 1024 or higher resolution with 256 or more colors (at 96 DPI)
I/O Ports:	USB 2.0 port required if HASP hardware key is used
Graphics:	DirectX 11 compatible graphics card with 512 MB memory or more
	OpenGL version 3.2 or later required when working with point cloud data (latest version recommended)
	10 GB or higher graphics card (for example, NVIDIA Quadro P4000) recommended when working with Aerial Photogrammetry and Scanning modules
	NVIDIA RTX 5080 16GB GDDR7 or higher for large Mobile Mapping data sets (for example, eight runs totaling 75 kilometers)
	Note: 6 GB or higher NVIDIA graphics card with CUDA compute capability (5.0 or higher) required when working with point cloud classification.
	Note: If you are using a laptop computer with both an integrated (on-board) graphics card and a discrete NVIDIA graphics card enabled via Optimus technology, your computer must allow you to select to disable the integrated graphics card and use only the discrete graphics card when working with point cloud data. See "Disabling a laptop integrated graphics card" in the "Important Notes" topic in the TBC Help.

Important!

It is critical that you keep your graphics driver(s) updated if you are working with point cloud data.

Whether your computer has one or multiple graphics cards installed, you must ensure each has been updated with the latest driver provided by the card's manufacturer. The best way to determine if your driver needs to be updated and, if so, perform the update is to visit the card manufacturer's website. For more information, see "Update and Configure Your Graphics/Video Driver" in the online Help.

(If, instead, you decide to update your driver using the Windows Device Manager and the "Search automatically" option, the program may suggest using a Microsoft-approved WHQL version of the driver. However, to ensure you have the latest bug fixes and new features for your graphics card, it is recommended that you use the latest manufacturer version instead.)