

Trimble Access


Version 2024.10 Release Notes

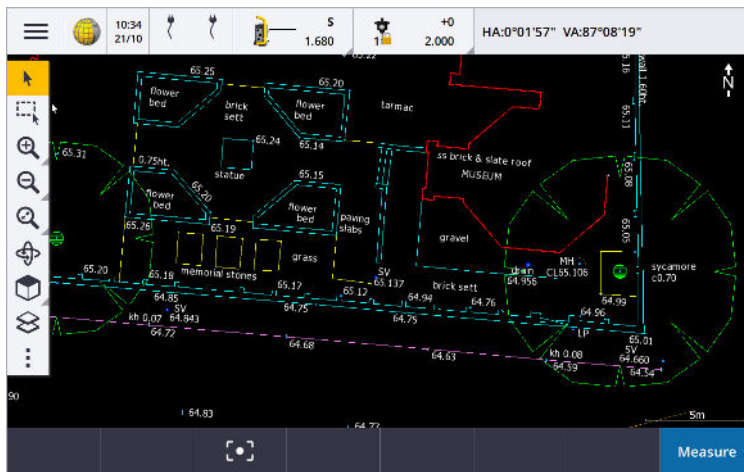
This release of the Trimble® Access™ software includes the following changes.

New features and enhancements

Map dark mode

The new **Dark mode** setting in the **Map settings** screen enables you to change the map background to black. This can be useful when working in low light conditions or for better contrast when working with light colored linework.

To view the **Map settings** screen, tap  in the map toolbar and then select **Settings**. The **Dark mode** check box is included in the **Display** group box.



KML and KMZ file support

You can now link Google Earth KML or KMZ files to the job and display them in the map.

Because KML and KMZ files are always in the WGS 1984 coordinate system they can be linked to any job that uses a projected coordinate system. They will not display in a job that uses a **Scale factor only** or **No projection / no datum** coordinate system, as the WGS 1984 coordinates cannot be transformed to job coordinates. While KML and KMZ files do not provide survey accuracy, they are useful for providing general geographical information relevant to the job, such as a polygon showing the limits of the job site or a nearby wetland sketched onto the local area in Google Earth, which is accurate to within a few meters.

You can select features in a KML or KMZ file in the map in Trimble Access and view attribute information about them. Use the **Snapp-to** toolbar to more easily select the point you are interested in or the end of a line.


Taped distances enhancements

Trimble Access 2024.10 includes the following enhancements when using the **Taped distances** cogo function to quickly add points that define rectangular structures, such as a building or building foundations:

- You can now start the workflow from a single known point and then tie in to a second known point, rather than starting from two known points. The initial orientation for the one point method is set by tapping anywhere on the screen, and the line direction is later refined when you tie in to the second known point.
- With both the **One point** or **Two points** method, when you tie in to a known point the misclose value is displayed. You can then choose to adjust the misclose to distribute the error, or you can add the last distance without adjusting.
- The **Edit** softkey now enables you to make changes to any line distance, direction, or name that has not yet been stored.
- The orientation of each line can now be easily set using the + and - keys. Enter + in front of the **Length** value to change the orientation by +90° (clockwise), or enter - to change the orientation by -90° (counter-clockwise).

For more information, see the topic **Taped distances** in the [Trimble Access Help](#).

Organizer improvements

- **Rule-based groups** set up in the Trimble Connect Organizer are now supported in Trimble Access. Previously only groups saved as manual groups were available in Trimble Access.
- You can now review items selected from one or more BIM models while using the **Organizer** tool. To review items, tap **Organizer**  on the **BIM** toolbar, make your selection and then tap **Review**. Tap an item from the **Review** list to select it. Use the **Prev** or **Next** softkeys to review another item. Tap **Esc** to return to the **Organizer** form.
- Selections are now retained when the **Organizer** is closed.

NMEA output from GNSS receiver enhancements

Trimble Access 2024.10 provides the following enhancements for sharing positions from the connected GNSS receiver as NMEA-0183 messages and sending them to another device.

- When using a controller running Android, you can now select **Bluetooth** in the **Receiver port** field. Previously, Bluetooth connections were supported only when using a controller running Windows. When you select **Bluetooth** in the **Receiver port** field, the Trimble Access software assumes the additional device is connected using Bluetooth port 1 on the GNSS receiver.

NOTE - To use Bluetooth to output NMEA messages when using a controller running Android, a GNSS receiver with Trimble ProPoint technology must have firmware version 6.28 or later. If the GNSS receiver does not have Trimble ProPoint technology, the receiver must have firmware version 5.68 or later.

- The available ports to use for NMEA outputs now includes the **USB virtual serial port** option. This is used with cable PN 80751, from the USB lemo port on the receiver to a USB-A connector. The **USB serial port** option remains the same, which supports cable PN 87144, from the USB lemo port on the receiver to a DB9 serial connector.

For more information, see the topic **NMEA output options** in the [Trimble Access Help](#).


NMEA output from instrument enhancements

Trimble Access 2024.10 provides the following enhancements for sharing positions from the connected conventional instrument and sending them to another device.

- All streamed data output formats are now available over Bluetooth for both Windows and Android devices.
- In addition to the existing **Pseudo NMEA GGA** data output option for streaming northing, easting, and elevation values, we have now added the standard **NMEA GGA** data output option for streaming latitude, longitude, and altitude values from the controller to the connected instrument. The **NMEA GGA** option complies with NMEA-0183 Standard for Interfacing Marine Electronic Devices.

For more information, see the topic **Data output options** in the [Trimble Access Help](#).

Measuring with feature codes enhancements

- You can now reset all buttons in the **Measure codes** screen to the original code at any time. From the **Measure codes** screen, tap  to view the **Edit measure codes** screen and then tap the **Reset all string numbers** button. This removes any string suffix from the buttons.
- When you make changes to the default template of groups in the feature library file in the **Measure codes** or **Edit measure codes** screen, the changes apply only to the controller on which the change has been made, and do not affect the default groups in the feature library file.

Set function keys to measurement methods

You can now set a function key to any measurement method available in the **Measure topo** or **Measure points** screen. This allows you to switch between different measurement methods without having to use the touchscreen. It also enables a smoother workflow when using **Measure codes**.



For example, if you need to switch measurement methods while using **Measure codes**, then assign the methods to function keys. When you use the function key the **Measure topo** or **Measure points** form opens with the measurement method and highlighted code from **Measure codes** already set.

Compute azimuth enhancements

In Trimble Access you have always been able to compute the azimuth between two points by entering two point names separated by a hyphen (for example, PointName1-PointName2) into any **Azimuth** field.

- You can now compute the azimuth in any **Azimuth** field by tapping in the **Azimuth** field, then tapping the first point in the map and then tapping the other point. You can also select a line and the software will copy the azimuth of the line into the **Azimuth** field.

This is especially useful when creating offset points during stakeout, as the stakeout offset screen can now be viewed alongside the map so that you can select a line or pairs of points in the map to define the offset direction.

- After calculating the azimuth between two points you can now modify the calculated azimuth:
 - To make it perpendicular, tap  and select -90 or +90.
 - To reverse the azimuth, tap  and select +180.

This feature is useful when computing points based on an azimuth, or when setting the azimuth for offset points.

Compute horizontal distance enhancements

You can now compute the distance in any **horizontal distance** field by tapping in the **H. Dist** field, then tapping the first point in the map and then tapping the end point. You can also select a line and the software will copy the distance of the line into the **H. Dist** field.

Option to reset distance offsets

The **Distance offset** observation method in a conventional survey is used when a point is inaccessible but the horizontal distance from the target point to the object can be measured. In previous versions, to facilitate repeat offset measurements, the software remembered the offset values for the next measurement.

To facilitate users that typically measure only one offset, you can now configure the software to automatically reset the distance offset values to 0 after storing a measurement. In the **Measure** screen tap **Options** and then select the **Reset offsets after store** check box in the **Distance offsets** group box.

Improvements when editing text in text fields

- When you tap in a text field to bring up the onscreen keyboard, the text in the field now remains highlighted so that you can easily replace all of the text in the field if needed. If you don't need to replace all of the text, tap again inside the field where you want to edit.
- When you tap and drag in a text field to fully or partially highlight the text in the field, the software now shows the **Cut**, **Copy**, and **Paste** pop-up menu.

Reviewing lines

- When reviewing lines in the map, Trimble Access now shows:
 - **Horizontal distance** and **Slope distance** for polylines and feature coded linework in the job as well as in DXF, WFS, and KML files.
 - **Perimeter** and **Area** for lines where the start and end coordinates are the same
- Tap the **Options** key to change the distance value from grid to ground coordinates.

Creating nodes and storing attributes from a WFS file

When using a Web Feature Service background map, you can select lines or polylines from the WFS file in the map and create points at the ends of lines and at all points along a polyline by selecting the **Create nodes (DXF, Shape, 12da & LandXML)** check box in the **Map settings** screen.

In Trimble Access 2024.10, you can now also create nodes using the tools in the **Snap-to** toolbar. The created points can then be selected for stakeout or Cogo calculations.

When you create nodes or points from entities in the WFS file, Trimble Access now copies the attributes of the entity from the WFS file and stores them with the point in the Trimble Access job.

RTX internet now automatically switches to RTX satellite when needed

When the survey style is configured to use **RTX (internet)**, the software now automatically switches to using **RTX (SV)** if the software cannot connect to the internet or if the internet connection is interrupted. Once the internet connection is restored, the software resumes using **RTX (internet)**.

A message in the status line of the status bar indicates when the RTX source has changed.

NOTE – For the survey style to automatically switch from **RTX (internet)** to **RTX (SV)**, the firmware in the connected GNSS receiver must be version 6.28 or later for receivers that have Trimble ProPoint® technology or version 5.68 or later if the receiver does not have Trimble ProPoint technology.

RTCM-135 radio protocol support

When connecting to Trimble radios where the firmware supports the RTCM SC135 13500.1 over-air radio protocol, Trimble Access now allows the user to set the **Base radio mode** to **RTCM-135**. This radio mode is an industry standard radio-to-radio protocol for the transmission and reception of real time DGNSS base data (including RTK data), which enables radios from different manufacturers to exchange real-time base station data with each other.

Faster rapid points

The rapid point occupation time has been improved by approximately 20% on average.

Topo point occupation time

The topo point occupation time now defaults to 2s/2 epochs to support modular receivers with either HD-GNSS or Trimble ProPoint® RTK engines.

GNSS survey style now defaults to R980 receiver

When creating a new survey style for GNSS, the default receiver in the **Receiver options** screen is now **R980 internal** for the Trimble R980 receiver.

Default survey styles are created by Trimble Access when a new installation of the software is started, but only if there are no existing survey styles. If you are upgrading to Trimble Access 2024.10 from a previous version and there are already survey styles installed on the controller, then the selected receiver type will be the one in the existing survey style.

Media file naming for attribute images

When configuring the standard format for naming media files, the configured image name is now also used for images that are attached to an attribute field that allows images. Previously the configured image name was used only for images attached to the job or attached to an entity in the job such as a point or line.

If you select the **Show with new media file** option in the **Media files** screen, you will be able to edit the media file name in the media file screen after capturing the image.

For more information, see the topic **Media files** in the [Trimble Access Help](#).

Improvements to switching between open forms

Pressing **Ctrl + Tab** to move between open screens (excluding the map) in one direction, or pressing **Ctrl + Shift + Tab** to move between open screens in reverse order now works between forms in different applications.

Calculator function key no longer switches to General Survey

If you set a controller function key to open the calculator in Trimble Access and then pressed that function key to use the calculator when using a different Trimble Access app (for example, Trimble Access Roads) the calculator now opens in that app instead of switching to General Survey.

NOTE – If you already have the calculator set to a function key in a previous version of Trimble Access then after upgrading to Trimble Access 2024.10 you will need to unassign the calculator from the function key and then reassign it to see the new behavior.

Enhanced TIFF file support

TIFF files with YCbCr color compression with (1,1) chroma subsampling are now supported.

Renamed distance to surface deltas

We have renamed the **V. Dist surface** and **Perp. Dist surface** deltas to **V. Dist to surface at current position** and **Perp. Dist to surface at current position** to distinguish them from the new **V. Dist to surface at target** and **Perp. Dist to surface at target** deltas added for Trimble Access Roads for this release.

Bentley Open Road Design file support

You can now export job data as LandXML files that can be viewed in Bentley Open Road Design software. In the **Export** screen, select **LandXML** and then select the **Bentley compatible format** check box.

Exporting polylines

You can now export polylines with station and offset values for the staked points using the **Road-line-arc stakeout report** stylesheet or the **Cut sheet 2** stylesheet.

The **Road-line-arc stakeout report.xls** file is installed to the **System Files** folder on the controller when you install Trimble Access. Installing or updating the software to version 2024.10 will update the installed **Road-line-arc stakeout report.xls** file.

You can download the updated **Cut sheet 2.xls** file from the [Download stylesheets](#) page and then copy the file to the **System Files** folder on the controller.

Exporting to FBK files

The FBK file export option now supports output of polar vectors, such as **Horizontal tilt offset** measurements. These are reduced to NEZ in the FBK file.

You can download the updated **FBK file.xls** file from the [Download stylesheets](#) page and then copy the file to the **System Files** folder on the controller.

Norwegian cadastral tolerance enhancement

When performing cadastral tolerance checking, Trimble Access always calculates the covariance in 3D. In Trimble Access 2024.10 the new **reliability3D** value in the xml file is set to **false** to provide a 2D value. If a 3D value is needed, set the **reliability3D** value to **true**.

Download the updated **CadastralTolerances - Norway.xml** file from the [Download configuration files](#) page and rename the file to **CadastralTolerances.xml** before copying it to the **System Files** folder on the controller.

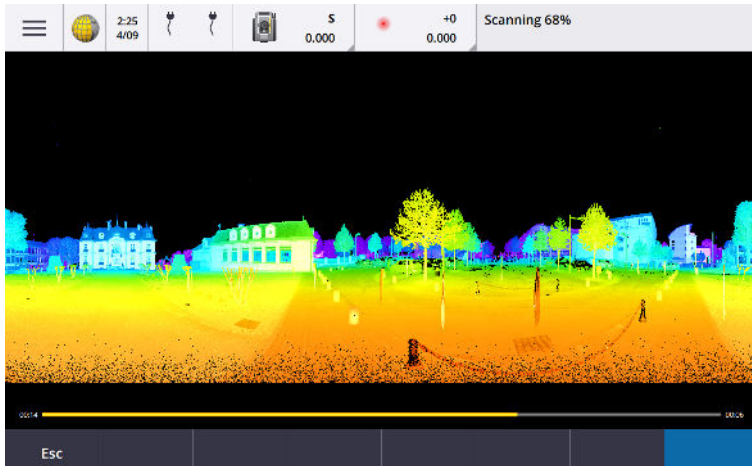
Enhancements to multiselect attributes

For feature library FXL files created using the Feature Definition Manager in the Trimble Business Center software, we have improved the appearance and behavior of extended list attributes or "multiselect" attributes:

- Multiselect attribute values are now summarized in the attribute field. Tap inside the field to edit the selected values.
- When selecting or editing multiselect attributes, a check mark indicates the value or values that are selected.

Software now shows progress of the scan

When scanning using a Trimble SX10 or SX12 scanning total station, the software now shows the progress of the scan rather than a progress bar.



Closing job improvements

We have improved the names of the buttons in the **Closing job** form when there are forms open that have unsaved changes when switching jobs or exiting the software.

- Select one of the forms listed and tap **Return to** to view the form and the unsaved changes.
- Tap **Close all** to discard changes and close all forms.
- Tap **Cancel** to return to the software without closing the job.

Restrict job visibility setting no longer available for cloud projects

We have removed the **Restrict job visibility** setting from the **Team members** tab for cloud projects.

If you have previously used the **Restrict job visibility** setting to restrict team members from seeing a job if it is not assigned to them, then this setting is now ignored in Trimble Access.

Export to Trimble DC v10.0

Trimble Access no longer supports export to Trimble DC v10.0 files. You can still export job data to Trimble DC v10.7.

GNSS emulator improvements

The GNSS emulator allows you to test, demonstrate, or deliver training with Trimble Access using a simulated connection to a GNSS receiver.

- The **Sigma** tab of the GNSS joystick window now includes a **Noise** check box to emulate the presence of signal noise causing slight changes in position between epochs when measuring at the "same" location.

For **Precise** measurements the amount of noise emulated is +/-5 mm. For **Coarse** measurements the amount of noise emulated is +/-0.5 m. To prevent these fluctuations in measurements at the "same" location, clear the **Noise** check box.

- When running Trimble Access on a desktop computer you can now click and drag the **GNSS joystick** pop-up window outside of the Trimble Access window, if needed.

Improved support for SnakeGrid

Trimble Access now supports all available types of SnakeGrid files, which can be purchased online and imported into large projects to minimize distortion.

Coordinate System Database updates

The Trimble Coordinate System Database installed with Trimble Access includes the following enhancements:

- Upgraded datums for Ecuador, Colombia & Chile with new displacement model VEMOS 2022
- Added support for new realization of WGS84 (G2296)
- Added support for Dubai Local TM Zone
- Added Geoid Model for South Tyrol
- Polish DB zones and ease import of VA zones in Germany
- Fixed RTX in Croatia using ETRS89 as global reference datum
- Updated displacement model for Japan JGD2011 to 2024 version
- Updated GSI Geoid 2011 for Japan to latest version 2.2
- Fixed RTX in Portugal and cleanup predefined systems
- Added new extraction of EGM2008 for Zambia
- Added Turkish Geoid Model-2020 and use it as default with Turkish zones

Resolved issues

- **Viewing Team tab after sign in:** We have fixed an issue where if you were prompted to sign in after selecting the **Team** tab, the software still did not show the information in the **Team** tab once you were signed in.
- **Cloud settings:** We have fixed an issue where if **Allow auto sync to use mobile data** was disabled then all auto syncing activity was blocked, even when the controller was not on a cellular (mobile data) connection.
- **Function keys:** We have fixed an issue where the description of the function key location on the controller disappeared if you reassigned the function to a different function key.
- **Point manager:** We have fixed an issue where if you edited the coordinates of the first point in a group of duplicate points, the updated coordinates were not shown in the **Point manager** screen until you closed and then reopened the **Point manager** screen.
- **Custom import file error:** We have fixed an issue when importing a text file using a custom import defined by an .ixl file, where the software reported a "File error" if non-data lines in the text file included form feed or tab characters.
- **Exporting to LandXML:** We have fixed an issue where polylines created between points in Trimble Access and feature coded circles and curves were not exported when exporting the job to LandXML.

- **Exporting to GVX:** We have fixed some issues when exporting to GNSS Vector Exchange format so that data exported from Trimble Access now imports into Opus projects. The updated stylesheet is installed with version 2024.10 of the software and is also available from the [Download stylesheets](#) page.
- **Auto-panning in Cogo:** We have fixed an issue where when you open a Cogo function, if the selected entity (highlighted in yellow) was completely off the screen then the map did not automatically pan and zoom to the selected entity if large models were shown in the map.
- **IFC world files:** When downloading an IFC file as a TrimBIM (.trb) file, Trimble Access now recognizes and uses the IFCW world file to position the TrimBIM file.
- **Linked surface files appearing in wrong project:** We have fixed an issue where linked surface files from a previous project were remembered and appeared in the **Layer manager** or in the map in a different project.
- **Multiple points after favoriting properties:** We have fixed an issue where the software stored multiple points if you enabled and disable **Favorite properties** of an attribute multiple times when reviewing the virtual point before saving it to the job.
- **Reset limit box:** We have fixed these issues with the limit box:
 - Resetting the limit box no longer causes the entire map to reload. Reloading all files in the map could cause a delay when using large files.
 - Resetting the limit box when the map is in Plan view with North up, now sets the limit box orientation (**Reference azimuth**) to 0 degrees.
- **Web feature service:** We have fixed the following issues when using a web feature service:
 - Each feature type is now shown using one of 16 available colors.
 - Polygons are no longer shown as polylines, but now as filled polygons.
 - WFS data appeared in the wrong place in the map if the WFS service provided GeoJSON data and the job file used a large datum transformation between WGS84 and Local LLH.
 - Trimble Access now sends namespace parameters when requesting features to improve reliability of obtaining all data from the selected WFS.
- **Web map service:** We have fixed an issue where attempting to connect to a web map service on a Windows controller running Trimble Access 2024.01, the WMS returned a SSL handshake failed message.
- **Feature coded linework:** Offset lines defined as part of the line feature code in the Feature Definition Manager are now drawn in the map in Trimble Access. Previously only offset lines drawn using control codes were shown in the map.
- **Offset polylines:** We have fixed an issue where a polyline containing adjacent arcs was calculated incorrectly if there was a large difference in the size or offset distance between the adjacent arcs.
- **Offset to surface:** We have fixed an issue where the arrow that showed the offset to surface in the map was displayed at twice the perpendicular distance. The numbers were correct, this was just a display issue.
- **Stringing softkeys in Measure codes:** When the Multicode button is enabled in the **Measure codes** screen, the + Str, - Str and Find Str softkeys are no longer shown because they cannot be used when in Multicode mode.
- **Last used code in Measure codes:** We have fixed an issue when using the 1-9 keys on the keypad to select the code, where when you returned to **Measure codes** after storing a point the software did not highlight the last used code.

- **Adding a note in Measure codes:** After keying in a note the highlight on the last used code button in the **Measure codes** screen is now retained, so that you can press **Enter** to easily measure the next point using the last used code.
- **Offset control codes:** We have fixed an issue where the software would append multiple horizontal and/or vertical offsets to the code field when using a code and an offset control code when the **Multicode** button is enabled.
- **Last used distance offset:** We have fixed an issue when measuring topo points where the last used distance offset shown in the software was incorrect if the **View before storage** check box in the **Measure topo options** screen was not selected.
- **Vertical and Perpendicular deltas:** We have fixed an error reporting vertical and perpendicular deltas during stakeout with a conventional instrument, where when applying a vertical offset to the surface, the calculated offset from the surface was in the wrong position.
- **Stakeout prefix and suffix:** We have fixed an issue where the **Prefix** and **Suffix** fields appeared in the **Stakeout options** screen only if these fields were set in the survey style.
- **Staking polyline:** We have fixed an issue where if you reversed the polyline direction during stakeout then tapping the **Sta+** or **Sta-** softkey did not work correctly until you re-entered the station interval.
- **CAD toolbar:** We have fixed an issue where if you used the **Start Smooth Curve** or **Start Tangible Arc** code from the **CAD** toolbar, the code was not automatically removed from the code field after the first point.
- **Navigate to point:** Values for elevation (**Elev.**) and vertical distance (**V.Dist.**) are now shown when navigating to a point using the controller's internal GPS.
- **Reset RTX Convergence:** We have fixed the **Reset** softkey in the **RTX status** form so that the connected GNSS receiver now resets the RTX convergence computation.
- **RTK radio link:** When configuring an RTK radio data link, the connection screen now shows the **Enable call sign** field instead of the **Enable Station ID** field, and the **Call sign** field instead of the **Station ID** field. These field names match the receiver WebUI and are more easily differentiated from the **Station index** field used elsewhere in the software to select specific base stations.
- **RTK base overwrite warning:** If a resection station setup or a station elevation procedure will result in storing a point that will overwrite any RTK base station of the same name stored in the job, the Trimble Access software now displays a warning.
- **RTK base on RTX measured point:** You can now start an RTK base multiple times in the same job on a point in the job measured with RTX. In previous versions, the software stored a check class point when the base was first started on an RTX point, and subsequent attempts at starting a base on that same point name would result in the error message "Point only has checkshot classification". The software now does not store the check class global point of the same name as the RTX point, and multiple base starts in the job on that RTX point are now allowed. Users should ensure that any RTK-RTX offset in the job and the job's time-dependent reference frame information is finalized before starting a base on an RTX point.
- **Controller internet RTCM RTK base:** We have fixed an issue where the height of the received base station point was incorrectly computed and written in the rover job file when using an RTCM RTK broadcast format from an internet base, where that base used the **Controller internet** connection. This was not an issue with an IBSS base using the controller internet connection.
- **SX file space estimates:** We have fixed an issue when starting a scan or panorama using a Trimble SX10 or SX12 scanning total station where the software warned of insufficient file space on the controller, if you change the settings so that a smaller file will be created, the software now re-estimates the file size.

- **Check backsight:** The software no longer starts searching before turning to the backsight when you initiate **Check backsight** when in tracking mode.
- **Auxiliary GPS:** We have fixed an issue where positions from an auxiliary GPS connected via Bluetooth were not used.
- **T10x function keys:** We have fixed an issue where function keys on the Trimble T10x tablet were not supported. You can set up function keys using the Button Manager app installed on the tablet and then assign favorite functions to them in Trimble Access.
- **Controllers not sleeping:** We have fixed an issue introduced in Trimble Access 2024.00 where a controller running Windows would not sleep as expected when Trimble Access was left running but not connected to an instrument or GNSS receiver.
- **Application errors:** We have fixed several issues that caused occasional application errors when using or closing the software. In particular:
 - When capturing an image when the **Attributes** screen is open and there is no file name attribute available.
 - When viewing an RXL file in **Point manager** and changing the display to **Station and offset**.
 - When starting the software when the last used job before the software previously closed was using a CadastralTolerances.xml file.
 - After viewing the **Stakeout options** screen when the **Navigate to point** screen was open on a controller running in portrait mode.
 - After completing a scan using a Trimble SX10 or SX12 scanning total station.
 - When configuring an EM940 Empower RTK radio, after changing country and channel spacing settings.
 - When performing a pole bias adjustment.
 - When creating a new job from a JXL file after having just modified the visibility of layers in the **Layer manager** of the current job.
 - When returning to the **Survey Basic** screen when it has been set to full size when connected to a Trimble total station with VISION technology.
 - After exiting the round early when measuring rounds where points use feature codes that include attributes.

Roads

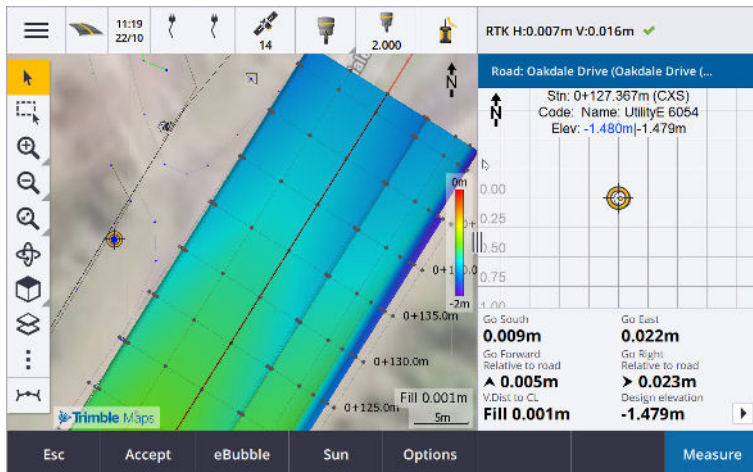
Enhancements

Easy staking of additional points during road stakeout

During road stakeout you can now select additional points from the map to stake, whether staking from a **road design file** or from **strings and surfaces**.

Use the **Additional points** method to stake design features that are not part of the road design file, such as key positions for a drainage system, lamp posts, or road signs, without having to leave the Roads app and switch to General Survey. Additional points provide station and offset details from the primary alignment or string.

During stake out, stake additional points as needed. Tap any point in the job or tap a point in any kind of linked file, including DXF, BIM, or CSV.



For more information, see the topic [Stake additional points](#) in the [Trimble Access Help](#).

New distance to surface at target deltas

We have added two new road deltas:

- V.Dist to surface at target
- Perp. Dist to surface at target

These new deltas give the vertical or perpendicular distance to the surface at the target location. For example, the **V.Dist to surface at target** delta when staking a station on a string gives the vertical distance *to the surface under the station*, or when staking a string it gives the vertical distance *to the surface under the string*.

To distinguish these deltas from the existing **V. Dist surface** and **Perp. Dist surface** deltas, we have renamed them to **V.Dist to surface at current position** and **Perp. Dist to surface at current position**.

Road drive through now supported on Android

When using the Roads app on a controller running Android, you can now view an automated 3D drive through of the road definition for a road design file. Previously this feature was available only when using a controller running Windows. To start drive through, tap the alignment in the map, tap **Review** and from the plan view tap **3D drive**.

Performance improvements

We have improved the performance of Trimble Access Roads when using:

- **Any road files during stakeout:** Users will see fewer map loading messages and better responsiveness.
- **LandXML files:** Excessive stations/cross sections present in some design files has been removed on straight lines, initial loading of the road in the map has been improved and excessive reloading of the road has been reduced.

Resolved issues

- **Negative chainage on curve:** We have fixed an issue when staking to the road, where if the position being staked was located on an arc exceeding 180 degrees, then the station value became negative and the **V.dist to CL** value showed ?.
- **Additional points:** We have fixed several issues with additional points, including:
 - Construction offsets for additional points are now drawn correctly in the cross section view. Previously, they were drawn incorrectly (not starting at the additional point).
 - When using the **Select** softkey to view the **Additional points** list, tapping **Esc** to leave the list without making a selection would display incorrect horizontal construction offset graphics in the map.
 - Where the cross section view was available when reviewing additional points on a 2D alignment. The cross section view is now only available when alignments are 3D.
 - Selected additional points in an RXL road file were incorrectly highlighted in the cross section view.
- **Horizontal construction offset:** We have fixed these issues when using a horizontal construction offset:
 - When changing the design elevation in the navigation screen, the horizontal construction offset now displays correctly in the cross section view.
 - When staking an additional point or a point on an additional string, the horizontal construction offset is no longer displayed in the plan view.
- **Off-road or off-string deltas:** When staking **To the road** or **To the string** where the current position is off the road or string, the software no longer shows navigation deltas as these cannot be calculated. Previously the software showed deltas that were incorrectly calculated to the end station position.
- **Staking a station on a string:** When staking a station on a string the cross section of the additional surface is now displayed at the station location, instead of at your current location.
- **Station out of range error:** The software no longer shows a station out of range error when you stake a station on a string where the primary string is an arc.
- **Staking to two strings:** When staking **To two strings** using the primary string as one of the strings, both string names are now displayed in the navigation screen.
- **Staking to the string:** You can no longer select the primary string when staking to the string, as this method is for staking other strings. To stake to the primary string, use the **To the primary string** method.
- **Select reference alignment:** We have fixed an issue where the **Select reference alignment** item was not available from the tap and hold menu when staking **To the primary string**.
- **Staking to an alignment:** We have fixed an issue when staking to an alignment, where if there was another alignment with the same name visible in the **Layer manager**, the stake deltas were reported to the wrong alignment.
- **Cross section view incorrectly showing 2D points:** We have fixed an issue where 2D points (points with no elevation) were able to be viewed in the cross section view. Only 3D points can be viewed in the cross section view.
- **Edited design elevation:** When exiting stakeout, the edited design elevation is now discarded and the original design elevation is used next time.
- **Design station:** We've resolved an issue where the **Design station** display during alignment stakeout was null instead of showing the selected design station.

- **Application errors:** We have fixed several issues that caused occasional application errors when using or closing the software. In particular:
 - When attempting to view a 12da file that contains an alignment that starts with an exit transition curve instead of the expected entry transition curve, the software now warns why the alignment cannot be displayed. The rest of the file can be viewed and used. Previously the software would automatically close when encountering this error.
 - When attempting to view a 12da file on a controller running Android where the file includes lines that contain only vertical stationing with no horizontal stationing.
 - When viewing an RXL file in **Point manager** and changing the display to **Station and offset**.
 - When staking **To two strings** where one or both strings folded back onto itself.
 - When attempting to stake a station on an alignment when the RXL road contains a side slope element in the template.
 - When selecting multiple entities in a LandXML file and then tapping the **Define** softkey.
 - When reviewing a LandXML file where multiple strings have identical names at the same station.
 - When attempting to review the road definition of a road design file using the **3D drive** feature when **Auxiliary GPS** was enabled.

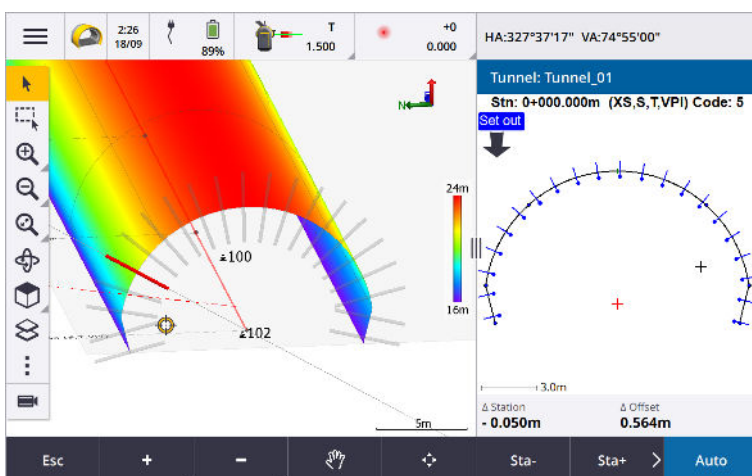
Tunnels

Enhancements

Set out positions shown in map during setout

All set out position types are now shown in the map as 3D objects. Previously, set out positions were shown only in the cross section view. When multiple set out positions are selected, the current position being set out is shown as a red 3D object, with a thin line projecting past the ends of the 3D object. Other selected positions are shown as a gray 3D object.

Displaying these as 3D objects in the map provides a better 3D visual representation of where set out positions are located, and makes it easier to confirm correct positioning.



Scanning and surface inspection now available within the Tunnels app

When connected to a Trimble SX10 or SX12 scanning total station, you can now perform a scan or a surface inspection from the **Survey** menu of the Tunnels app. Previously, scanning and surface inspection were available only by switching to the General Survey app.

NOTE – To scan a tunnel using a Trimble VX Series or S Series instrument that has Trimble VISION technology, you will need to switch to the General Survey app. Surface inspections cannot be performed on scans completed using Trimble VX Series or S Series instrument.

Tunnel drive through now supported on Android

When using the Tunnels app on a controller running Android, you can now view an automated 3D drive through of the tunnel definition. Previously this feature was available only when using a controller running Windows. To start drive through, tap the tunnel in the map, tap **Review** and from the plan view tap **3D drive**.

Resolved issues

- **Application errors:** We have fixed several issues that caused occasional application errors when using or closing the software. In particular:
 - When attempting to review the tunnel definition using the **3D drive** feature when **Auxiliary GPS** was enabled.

Mines

Enhancements

Blast hole selection

Trimble Access 2024.10 provides the following enhancements to make blast hole selection easier:

- The **Blast hole definitions** list now appears alongside the map so that you can see the selected points on the map.
- Changes you make to the list of selected points, point order, or line direction from the list are reflected in the map.
- To manually reorder the points, you can now tap them in the list and drag them up or down.
- You can remove any points from the list that do not require staking. Press **Ctrl** to select more than one point at a time and then tap **Remove**. To remove several points at once you can select a point in the list and then tap **Remove ↓** or **Remove ↑** to remove all points below or above the selected point in the list.

Resolved issues

- **Blast hole names:** We have fixed an issue where Trimble Access was incorrectly modifying the names of blast holes imported from Surpac files.

- **Application errors:** We have fixed several issues that caused occasional application errors when using or closing the software. In particular:
 - After tapping the column header to reorder blast holes and then tapping the **Swap** softkey to reverse the direction of the blasthole.

Pipelines

Resolved issues

- **Pipelines folder:** We have fixed an issue where the **Pipelines** folder was being downloaded to the controller with the job. The **Pipelines** folder is no longer downloaded, as it is only used in the cloud during tally file processing.

Supported equipment

Trimble Access software version 2024.10 communicates best with the software and hardware products listed below.

NOTE – For best performance, hardware should always have the latest available firmware installed.

For more information on recent software and firmware versions, refer to the [Trimble Geospatial Software and Firmware Latest Releases document](#).

Supported controllers

Windows devices

The Trimble Access software runs on the following Windows® 64-bit devices:

- Trimble TSC7 controller
- Trimble T7, T10, T10x, or T100 tablet
- Supported third-party tablets

For more information on supported third-party tablets, refer to the support bulletin [Trimble Access on 64-bit Windows 10 & 11](#), which can be downloaded from the [Support bulletins](#) page in the [Trimble Access Help Portal](#).

Android devices

The Trimble Access software runs on the following Android™ devices:

- Trimble TSC5 controller
- Trimble TDC6 handheld data collector
- Trimble TDC600 handheld data collector

- Trimble TDC650 handheld GNSS receiver (only with Trimble Access subscription)
- Trimble TCU5 controller

TIP – Trimble Access is designed to be used in **Portrait mode** or in **Landscape mode** on the **TDC6 and TDC600 handheld**. There are small differences in the UI to accommodate the portrait screen and the Android operating system. For more information, see the topic **The Trimble Access workspace** in the [Trimble Access Help](#).

NOTE – The **Trimble TDC650 handheld GNSS receiver** can only be used with Trimble Access subscriptions - it cannot be used with Trimble Access perpetual licenses. The TDC650 is designed for GNSS-only surveying and does not support connections to total stations. Trimble Access apps that require conventional surveys cannot be used on the TDC650. These include Trimble Access Tunnels, Mines, and Monitoring. For more information on using the TDC650 with Trimble Access, refer to the **Supported GNSS receivers** section below.

Supported conventional instruments

Conventional instruments that can be connected to the controller running Trimble Access are:

- Trimble scanning total stations: SX12, SX10
- Trimble VX™ spatial station
- Trimble S Series total stations: S8/S6/S3 and S9/S7/S5
- Trimble mechanical total stations: C5, C3, M3, M1
- Trimble SPS Series total stations
- Trimble RTS Series total stations
- Spectra® Geospatial total stations: FOCUS® 50/35/30
- Supported third-party total stations

The functionality available in the Trimble Access software depends on the model and firmware version of the connected instrument. Trimble recommends updating the instrument to the latest available firmware to use this version of Trimble Access.

NOTE – You can connect to a Trimble SX10 or SX12 scanning total station from the TSC5 controller, the TDC600 model 2 handheld and the TDC6 handheld. However, connections to a Trimble SX10 or SX12 scanning total station are not supported when using the TCU5 controller or the TDC600 model 1 handheld.


Supported GNSS receivers

GNSS receivers that can be connected to the controller running Trimble Access are:

- Trimble R series integrated GNSS surveying systems:
 - With a built-in inertial measurement unit (IMU): R980, R780, R12i
 - With a built-in magnetometer tilt sensor: R12, R10
 - Other R series integrated GNSS receivers: R580, R8s, R8, R6, R4, R2
- Trimble Catalyst™ GNSS positioning service receiver: DA2
- Trimble modular GNSS surveying systems: R750, R9s, NetR9 Geospatial, R7, R5
- Trimble SPS Series GNSS Smart Antennas: SPS986, SPS985, SPS985L, SPS785, SPS585

- Trimble SPS Series GNSS modular receivers: SPS85x
- Trimble Alloy GNSS Reference Receiver
- Trimble TDC650 handheld GNSS receiver
- Spectra Geospatial integrated GNSS receiver with a built-in inertial measurement unit (IMU): SP100
- Spectra Geospatial integrated GNSS receivers: SP85, SP80, SP60
- Spectra Geospatial modular GNSS receivers: SP90m
- FAZA2 GNSS receiver
- S-Max GEO receiver

NOTE –

- To use a **TrimbleDA2 GNSS receiver** with Trimble Access you must have a supported Catalyst subscription and you must be signed in. To view the types of licenses assigned to you or to the controller, tap  and select **About**. For more information, see the topic **Installing Trimble Access** in the [Trimble Access Help](#).
- As noted in the **Supported controllers** section above, the **Trimble TDC650 handheld GNSS receiver** can only be used with Trimble Access subscriptions, not perpetual licenses. When used with Trimble Access, the TDC650:
 - Can connect to an external antenna such as the Trimble Zephyr 3 antenna but cannot connect to another GNSS receiver.
 - Can connect to other survey equipment such as an echo sounder or laser rangefinder.
 - Can be used as a GNSS RTK solution only, providing accuracy at the following levels:
 - Centimeter accuracy - Horizontal: 10mm, Vertical: 15mm
 - Decimeter accuracy - Horizontal: 70mm, Vertical: 20mm
 - Sub-meter accuracy - Horizontal: 300mm, Vertical: 300mm
 - Cannot be used with RTX and cannot be used for postprocessing.
 - Does not support camera-based eLevel.
- When using a Spectra Geospatial SP90m, SP85, SP80 or SP60 receiver, not all functionality in the Trimble Access software is available. For more information, refer to the support bulletin **Spectra Geospatial receiver support in Trimble Access**, which can be downloaded from the [Support bulletins](#) page in the [Trimble Access Help Portal](#).

Installation information

License requirements

To install Trimble Access 2024.10, licenses are required for the General Survey app as well as for each Trimble Access app you want to use.

- **Perpetual licenses**

Perpetual licenses are licensed to the controller. The controller must have a Trimble Access Software Maintenance Agreement valid up to **1 October 2024**.

- **Subscriptions**

Subscription licenses are assigned to an individual user. When used with a subscription license, you can install Trimble Access 2024.10 onto any supported controller.

If you have a perpetual licenses on an existing controller but you wish to retire that controller and replace it with a new one, you may be able to relinquish the perpetual Trimble Access license from the existing controller and transfer it to the new one.

For more information, see [Software licenses and subscriptions](#) in the [Trimble Access Help Portal](#).

Don't have a current license? You can still try out the software

If you do not have the required licenses you may be able to try out the software for a limited time.



The options are:

- Create a **48-hour license** for Trimble Access if you are not able to sign in and use your subscription or if you have purchased a perpetual license but it has not yet been assigned to your controller.
- Create a **30-day Demonstration license** for Trimble Access if the controller does not have a current perpetual license. This type of temporary license is available on supported Windows and Android controllers.
- Create a **30-day Trial license** for specific Trimble Access apps if the controller has a current perpetual license, but no license for the specific app you want to try. This type of temporary license is available only on supported Windows controllers.

For more information, see [Installing a temporary license](#) in the [Trimble Access Help Portal](#).

Installing or upgrading Trimble Access

To install the software to your controller, use the appropriate Trimble Installation Manager for your controller operating system:

- Trimble Installation Manager for Windows 
- Trimble Installation Manager for Android 

For more information, see [Installing Trimble Access](#) in the [Trimble Access Help Portal](#).

NOTE – Job (.job) files created using a previous version of Trimble Access are automatically upgraded when you open them in the latest version of Trimble Access. Once jobs are upgraded they can no longer be opened in a previous version. For more information, see [Using existing jobs with the latest version of Trimble Access](#) in the [Trimble Access Help Portal](#).

Learning resources

To learn more about Trimble Access software features and how to get the most out of the software, visit the resources below.

Trimble Access Help Portal


The **Trimble Access Help Portal** is available at help.trimblegeospatial.com/TrimbleAccess/ and includes the full contents of the on-board *Trimble Access Help* in 14 languages, as well as links to videos available from the Trimble Access YouTube channel.

The **Downloads** area of the **Trimble Access Help Portal** provides links to download useful resources, including:

- Support bulletins
- Software and utilities
- Template files
- Stylesheets
- Sample data
- Release materials (including slide presentations and videos)
- PDF guides

You can view the **Trimble Access Help Portal** from any computer that has an internet connection, without needing to have the Trimble Access software installed. You can also view it from your mobile phone, or from the controller running Trimble Access if you chose not to install the on-board help.

Trimble Access Help

The *Trimble Access Help* is installed with the software when you select the **Language & Help Files** check box in Trimble Installation Manager. To view the installed help, tap  in the Trimble Access software and then select **Help**. The *Trimble Access Help* opens, taking you right to the help topic for the current screen in the Trimble Access software.

Trimble Access YouTube channel

The Trimble Access YouTube channel provides a large number of videos highlighting useful software features. Watch videos on recently added features or take a look at one of the playlists to explore a specific area of the software.

We post new videos regularly, so make sure to click **Subscribe** on the Trimble Access YouTube channel page to get notified when new videos are available.

Trimble Access Apps

The Trimble Access software suite offers surveyors and geospatial professionals a range of specialized field applications designed to make fieldwork easier. With an easy-to-use interface, optimized workflows, and real-time data synchronization, the Trimble Access software suite enables you to accomplish more every day. Improve your competitive edge by selecting the applications that best suit the work that you do.

Trimble Access apps supported on Windows devices

The following Trimble Access apps are supported when running this version of Trimble Access on a **supported Windows device**:

- Roads
- Tunnels
- Mines
- Land Seismic
- Pipelines
- Power Line
- Katastermodul Deutschland
- Monitoring
- AutoResection
- BathySurvey

Trimble Access apps supported on Android devices

The following Trimble apps are supported when running this version of Trimble Access on a **supported Android device**:

- Roads
- Tunnels
- Mines
- Pipelines
- Power Line
- Katastermodul Deutschland
- Monitoring
- AutoResection
- AllNAV Rounds

NOTE – Changes to the Trimble Access apps that are supported can change after release. For up to date details, or details on apps supported with previous versions of Trimble Access, refer to the support bulletin **Trimble Access App availability**, which can be downloaded from the **Support bulletins page** of the Trimble Access Help Portal.

Legal information

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