

Trimble Access

Version 2019.00

May 2019

These Release Notes describe the new features and changes available in this release of the Trimble® Access™ software.

64-bit operating system support

Trimble Access version 2019.00 is now a 64-bit application and **the following apps are available now**: General Survey, Roads, Tunnels, Mines and Pipelines. Additional applications such as Monitoring are coming soon.

Trimble Access version 2019.00 can only be installed to 64-bit controllers. Supported Trimble controllers – the Trimble TSC7 controller and the Trimble T7 and T10 tablet – are 64-bit. If you install Trimble Access to a desktop computer, laptop, or third-party tablet, you will need to ensure it is 64-bit. Most computers manufactured in the last 10 years are 64-bit.

New hardware support

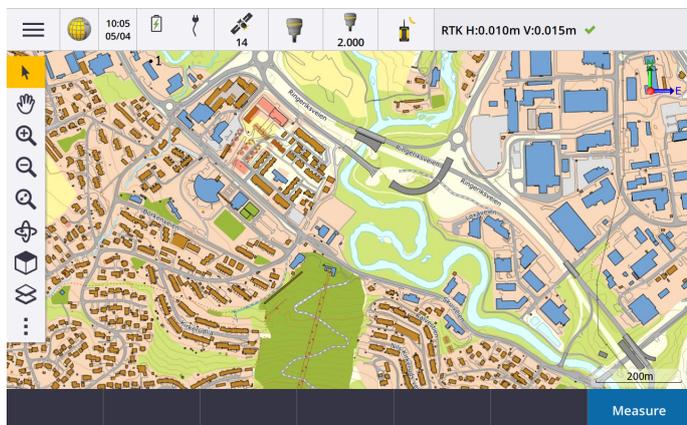
Trimble T7 tablet support

Trimble Access version 2019.00 supports the new Trimble T7 tablet, which provides all the capabilities of the Trimble TSC7 controller in an ultra-rugged tablet form factor. The T7 tablet features a high-definition 7 inch multi-touch screen, 4 programmable function keys, Windows 10 Professional operating system, 8 GB RAM and 128 GB internal storage.

New features

Support for web map services (WMS)

You can now add data from one or more web map services (WMS) to the map. Web map services are an easy way to provide context to the data in your map without having to prepare background map files such as .jpgs or .tif files to cover the project area.



Available web map services depend on your location. To use a web map service, add the WMS and enter the URL you use to retrieve data from the service. Trimble Access saves the configuration information for each WMS in a .wms configuration file in the **Trimble Data / System Files** folder.

When connected to the WMS, you can control the visibility of WMS data (including sublayers) in the **Active map** screen.

For more information, see the topic **Web map services (WMS)** in the [Trimble Access Help](#).

CAD toolbar for creating linework in the map

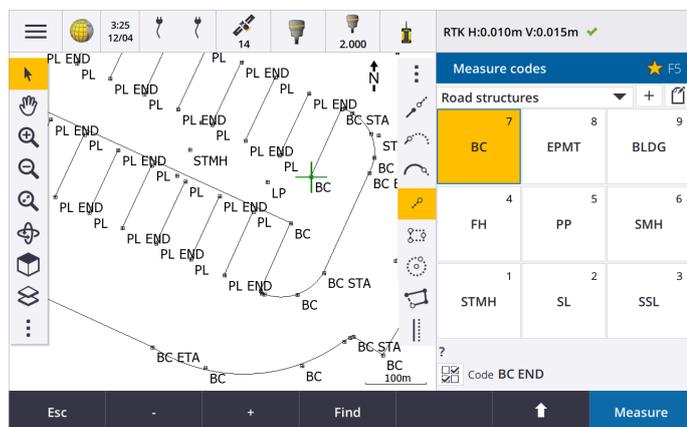
Trimble Access 2019.00 includes the CAD toolbar in the map. The CAD toolbar enables you to easily use control codes to create line, arc, and polygon features in the map as you measure points, or by drawing features using points already in the job. The tools available on the CAD toolbar depend on whether the CAD toolbar is in **Measure mode** or **Drawing mode**.

The CAD toolbar is similar to the one supported on tablets with pre-2018.00 versions of Trimble Access, but is now available to all controllers and can be used with all measurement forms including Measure codes and the Video screen.

CAD toolbar buttons for each feature geometry control code supported by Trimble Access are available. You can now easily create lines, arcs, smooth curves, rectangles or circles, and define horizontal or vertical offsets by tapping the appropriate toolbar button and selecting the line feature code you want to use to identify the feature.

You can easily configure the available CAD buttons on the toolbar by tapping and holding on a button and selecting the new button.

NOTE - To use the CAD toolbar, the currently selected feature library must contain definitions for the required control codes, and the feature code assigned to the feature must be defined as a line.



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

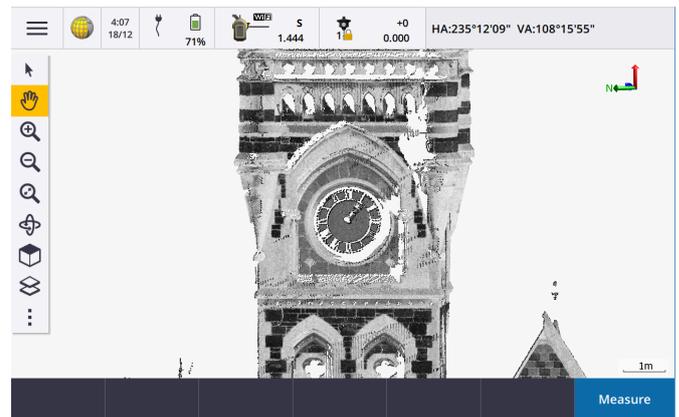
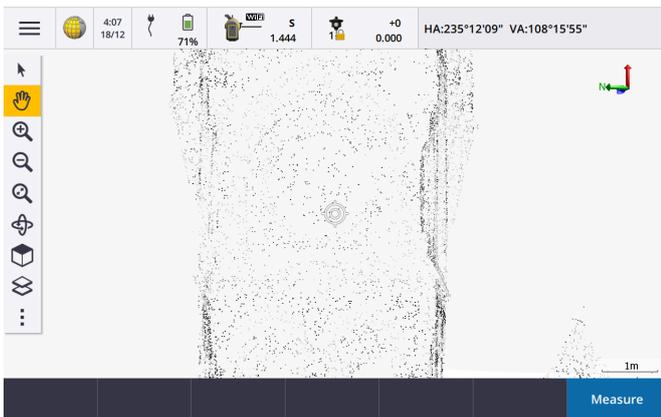
Enhancements

SX10 scan data display enhancements

Trimble Access 2019.00 includes the following enhancements for scan data captured using a Trimble SX10 scanning total station:

- Trimble Access now has dynamic detail loading of point clouds depending on the field of view, so that when you zoom in, the software dynamically loads more details from the zoomed in area.
- Trimble Access can now handle jobs that contain a very large number of SX10 scan points. The size of the job is now effectively only limited by the amount of space available on the controller.
- Two new color modes for scan point clouds shown in the map or video screen. You can now color the point cloud to indicate the elevation of points or the reflective intensity of points using a color (the reflective intensity of points using gray scale was already supported).

The following images show the same scan data in previous versions of Trimble Access (left) and with dynamic detail loading in version 2019.00 (right):



Favorites and Functions enhancements

Favorites and **Functions** enable you to create shortcuts to software screens, map controls, or to enable/disable an instrument or receiver function.

In Trimble Access 2019.00, you can **create groups** of favorites and functions and then use the group that matches your workflow. For example you might use one group when using an SX10 scanning total station and another group when using an R10 receiver. Favorites are accessible from the **Favorites** screen. Activate a function by pressing the appropriate function key. When using groups the function that is enabled when you press **F3** for example, depends on whether you are using the SX10 or the R10 group of functions.

We have added more functions to the **Assign special functions** list. To assign a function key shortcut to a software function for which there is no ☆ icon, tap ✎ in the **Favorites** screen and tap + on the function key you want to use and select the function you want to assign. Some of the newly added functions include:

- **Softkey 1-4:** Actions the command on the corresponding softkey in the current screen (1 through 4, left to right).
- **Zoom level:** When connected to an SX10, zoom to your preferred zoom level. Configure more than one if you frequently switch between a couple of zoom levels.
- **View area of interest:** Return to the map view you have set as the area of interest.
- **Toggle Solid/Wireframe IFC:** Switch between displaying IFC models as solid objects or wireframe.

For more information, see the topic **Favorite screens and functions** in the [Trimble Access Help](#).

IFC file enhancements

Trimble Access 2019.00 includes the following enhancements for IFC files:

- Faster reloading of IFC files once the file has been used in Trimble Access, even when reopening the job or using the same IFC file in a different job.
- You can now compute the center point of a surface in an IFC model. To do this, select the surface in the map and then select **Compute center point** from the tap and hold menu. This is useful to find the center point of a bolt or cylinder so you can then stake it out.
- You can now measure to a surface in an IFC model. To do this, select the surface in the map and then select **Measure to selected surface** from the tap and hold menu. This is useful in determining the perpendicular distance from the physical surface to the design.
- Layers are now named based on the IFCPRESENTATIONLAYERASSIGNMENT attribute in the IFC file, which means the layers are named more appropriately and there will often be more layers shown in Trimble Access, making it easier to select the layers you are interested in.
- Grid lines in IFC files are now supported.
- You can now use .ifczip files directly in the **Active map** screen like a .ifc file.
- You can now configure a function key on the controller to switch between wireframe and solid view of the IFC model.
- You can now stake out and review the coordinates of a point (vertex) in an IFC file without a point being immediately copied into the job. Now, points from an IFC file are copied only when you select them for a Cogo operation. This is consistent with the way Trimble Access works with points from CSV files.

We have resolved several issues with IFC files, where:

- Very large IFC files produced various software issues, including low memory warnings, application errors, or failed to load in the map.
- IFC files with very large coordinate system translations applied did not display correctly in the map.
- White lines in the IFC file were not shown when the **Wireframe** option was selected in the **Show in map** screen. Now, white lines are shown colored black.
- Edges of solid objects sometimes didn't appear in the map.

Support for surfaces in a LandXML file

You can now use a surface in a LandXML file to:

- Measure to a surface
- Stake a DTM
- Stake relative to a DTM

To do this, copy the LandXML file to the appropriate project folder. When you select the surface to use when measuring or staking, the **DTM** field lists all surfaces in the LandXML file. Select the required surface.

Support for surfaces in a DXF file

You can now stake, measure to, and stake relative to a surface in a DXF file.

Reviewing attribute information in DXF, Shape and LandXML files

You can now review attribute information in Trimble Access for entities in a DXF file, Shapefile or LandXML file that have feature types associated with them. To do this, select the entities in the map and then tap **Review**. If you selected more than one entity, select it from the list and tap **Details**.

NOTE – To see attribute information for Shapefile entities, the Shapefile must have an associated .dbf file.

For more information, see the topic **DXF, Shape and LandXML files** in the [Trimble Access Help](#).

Map enhancements

In Trimble Access 2019.00, the  icon replaces the  icon on the Map toolbar and the Video toolbar. Tap  to access map options including settings, scans, and filter settings. In the Video screen, tap  to access settings, snapshot options and filter settings.

Pan to point and **Pan to here** are now available from the  button in the Map toolbar. **Pan to here** is a useful shortcut to center the map at your current location in the map. For more options, such as to change the scale at which to zoom, select **Pan to point** and configure your settings and then tap the **Here** softkey in the **Pan to point** screen.

The **Options** screen previously available from the **Active map** screen in previous versions has been removed, and the **Monochrome** setting and the **Explode polylines**, **DXF null elevation** and **Create nodes** settings for DXF, Shape and LandXML files are now in the map **Settings** screen. To configure these settings, tap  and select **Settings**.

Displaying DTMs in the cross section view

When staking an alignment where the **Display cut/fill to** option is set to **DTM** or **Design + DTM**, the selected DTM is now displayed in the cross section view. It is displayed at your current position as a green line and includes a circle on the DTM indicating your position projected vertically to the surface.

Vertical distance calculator function

The **Calculator** now provides a **V. Dist** softkey. Tap **V. Dist** to calculate the vertical distance between two points. Tap **Accept** to copy the calculated value to the calculator for use in other calculations.

Refresh button in Projects and Jobs screens

The **Refresh** button  is now always available in the **Projects** and **Jobs** screens. Previously the **Refresh** button was only available when you were signed in to Trimble Connect. Tap  to see new projects or jobs, for example projects or jobs recently shared with you in Trimble Connect or if you have used File Explorer to copy a project or job into the **Projects** folder on the controller.

Reviewing attributes in Review job

When reviewing a point that has attributes in the **Review job** screen you can now view the attribute fields and their values without having to tap **Edit**. To change attribute values, tap **Edit** and then tap **Attrib**.

Changes when working with SX10 scan points

Trimble Access 2019.00 includes the following changes to handling points from scan files created using a Trimble SX10 scanning total station:

- You can now review points from a scan file without them being immediately copied into the job. Now, points from a scan file are copied only when you select them for a Cogo operation. This is consistent with the way Trimble Access works with points from CSV files.
- When selecting points from a scan file for stakeout or review, the software now limits the number of scan points that can be selected to a maximum of 20 points at a time. This means the software no longer allows you to select SX10 scan points for stakeout or review by dragging a box around them. To select fewer than 20 scan points, tap the individual points in the map.

SX10 Wi-Fi channel selection

You can now select the Wi-Fi channel to use for communicating with the Trimble SX10 scanning total station. This may be useful in congested Wi-Fi environments. To set the Wi-Fi channel the controller must be connected to an SX10 that has firmware S2.2.x or later installed. Tap  and select **Instrument / Instrument settings**. Tap **Wi-Fi** and select the required channel.

Traversing sequence limit extended to 200 stations

You can now have up to 200 hanging stations in a traverse. In previous versions if you exceeded 50 hanging stations they were not coordinated.

GDM data and pseudo NMEA output

Trimble Access can now output measurement data to another device such as an echo sounder or a computer running third-party software when connected to any supported conventional instrument. Previous versions of Trimble Access supported outputting measurement data only when connected to a Trimble VX or S Series instrument.

Trimble VX and S Series instruments can output data through the foot connector, so you can output measurement data from the instrument or the controller. For other instruments you must connect the controller to the instrument and connect the device to the controller to output data from the controller to the device.

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

FOCUS 30/35 service information

When connected to a Spectra Precision FOCUS 30 or 35 total station, you can tap the **Service** softkey in the **Instrument settings** screen to view the due date of the next instrument service.

Measure topo methods in tracking mode

When measuring a topo point with tracking mode enabled, the **Method** field in the **Measure topo** form now lists all methods, instead of only the methods that support tracking mode.

Dual prism heights in status bar

When measuring a point with a dual-prism offset, the status bar now displays the two prism constants.

New BeiDou PRN support

The BeiDou constellation now transmits PRN numbers up to 63. Trimble Access now supports this when used with Trimble R series receiver firmware version 5.41 and later.

Switching jobs during a survey

When performing job operations on job files other than the current job, Trimble Access now checks if there is an active survey. If there is one, it will prompt you to end the survey before continuing.

GNSS emulator enhancements

Trimble Access version 2019.00 includes the following enhancements to the GNSS emulator:

- The **Move rover here** option is now available from the tap and hold menu in the map when entities in the map are selected. In previous versions, this option was only available if nothing was selected in the map.
- When you tap **Accept** in the **GNSS Emulator** form, the form closes and now shows the map, instead of returning to the **About** screen.
- The **GNSS Emulator** DOS window now automatically closes when you power down the receiver or close the software.

For more information, see the topic **To simulate a connection to a GNSS receiver** in the [Trimble Access Help](#).

Geoid model selection enhancements

Trimble Access now uses either the geoid model name or the geoid model filename to locate the appropriate geoid model. When selecting a geoid model, the geoid model name is now shown alongside the geoid model filename. When creating a job from a JobXML file, the appropriate geoid model is now automatically found using the geoid model name written into the JobXML file.

Coordinate system database updates

- Added coordinate system zones and geoid model for **Vietnam**.
- Updated coordinate system references for **Slovakia**.
- Added county system CCSF-CS13 for **San Francisco**.

- Added Landgate Project Grids and Mainroads Project Grids for **Western Australia**.
- Updated the default geoid models for **Norway, Spain, France** and **India**.

Resolved issues

- **Closing the job:** We have resolved these issues in the **Closing job** screen:
 - When you open the **Closing job** screen the first option in the list is now selected so that when you tap **Accept** the software performs the selected action. Previously no options were selected which meant that tapping **Accept** did nothing.
 - If you select **Close All** in the **Closing job** screen when a scan is in progress, the software now automatically stops the scan and saves it to the current job.
- **Keypad:** We have resolved these issues when pressing keys on the controller keypad:
 - Using a combination of the **SHIFT** and **CTRL** keys on the TSC7 did not always work.
 - If you configured a function key to open the Help, when you pressed the function key the software sometimes switched to a different Trimble Access application.
 - Pressing the spacebar when in the **Active map** screen to select a layer now works correctly.
 - Pressing the left arrow key when focused on a drop-down list field did not always change the value displayed in the field.
 - Pressing the up and down arrow keys when focused on the **Code** list field did not always move the selection up or down the list.
- **Map:** We have resolved these issues in the map, where:
 - When the height units for the job were changed the elevation values for points were not updated in the map.
 - When tapping and holding the **Zoom extents** button on the map toolbar and selecting **Zoom previous**, or using the keypad shortcut **Ctrl + Z**, the map did not always return to the previous view.
 - If the map is empty and you layer on a map file, the map now automatically zooms to display the map entities in the file.
 - The map did not always show active DXF, LandXML or Shapefile map layers in grayscale when the **Monochrome** check box was selected in the layers **Options** screen.
 - The orbit point icon was not being displayed when rotating an IFC model.
 - If you add both an IFC file and a TTM file to the map using the **Layers** screen, both files are now shown in the map as expected. Previously the TTM file was only shown in **Plan** view.
 - We have restored the **Reverse line direction** item to the available options when you tap and hold a line in a linked map file, such as a DXF. This item was inadvertently removed from Trimble Access version 2018.20.
 - The map was not always completely drawn when opening a job.
 - When reopening a job, the software now opens the map showing the last used view for the job.

- **DXF files:** We have resolved several issues with DXF files, where:
 - When you review a polyline in a DXF file that consists of a single element defining a line or an arc you can now see the details that define the polyline, including the start and end point details and slope distance.
 - Trimble Access no longer displays DXF entities that have the `_ModelSpace` flag set to not be in the model space. Showing these entities could cause the map to have very large extents.
 - Rotated OCS (Object Coordinate System) defined arc entities in DXF files are now displayed correctly.
- **LandXML files:** We have resolved the following issues with surfaces in LandXML files, where:
 - Selecting the options to turn off the colour gradient or to display triangles for the surface did not work as expected.
 - The map sometimes showed surface triangles in LandXML files that had been flagged as "invisible" in the XML file.
- **Map display when using Cogo:** We have improved the software behavior when zooming and panning in the map during Cogo computations.
- **Measure to surface:** We have resolved the following issues when measuring to a surface:
 - From the **Measure to surface** form, if you returned to the **Active map** screen and turned off the current surface so that it was no longer visible, the current **Distance to surface** was saved and could then be stored and associated with new horizontal coordinates. Now, if you hide the current surface the **Distance to surface** field shows null (?) and measurements cannot be stored.
 - In a conventional survey with tracking mode enabled, the cogo in-progress line work now points to the closest point on the surface instead of sometimes pointing to the previous point.
 - In a GNSS survey with the **Tilt auto measure** setting enabled, you can now measure to the surface without the software warning a measurement is already in progress.
 - When measuring a compensated point to the surface, the **Measure to surface** details are now stored with the point.
 - Improved performance when using very large surfaces.
- **Points lists:** When viewing lists of points, for example when reviewing points in the map or in the stakeout points list, points are now listed in chronological order. Tap the **Name** or **Code** header to sort by point name or code.
- **Stakeout list cleared when changing selections in the map:** You can now change selections in the map without affecting the current list of stakeout points, as long as the **Stake out point** list is not open. Close the **Stakeout** screen or make sure the stake out point navigation screen is visible to work in the map without changing the **Stake out point** list.
- **Staking the start or end station of a line** When you select the start or end station of the line to stake from the menu in the **Station** field, the **Station** field now updates to display the correct station value. Previously it would stake the start or end station selected, but the correct stationing was not always displayed in the **Station** field.
- **Staking an alignment:** We have resolved an issue when staking an alignment, where a template was inadvertently displayed in the cross section view and the **V.dist** value was reported to the template and not the

alignment. This was an issue only when staking alignments that included templates (ie. a Trimble road) and the alignment was selected from the map.

- **Fast fix:** We have resolved an issue where tapping the **Fast fix** softkey when using some Cogo functions did not automatically populate the **Point name** field with the name of the newly measured point.
- **On-screen keyboard in Area calculations:** We have resolved an issue where if you use the on-screen keyboard to enter the **Name** in the **Area calculation** screen and then closed the keyboard, an imprint of the keyboard remained on screen.
- **Duplicate distance offsets:** We have resolved an issue when measuring a topo point with a distance offset, where after using **Measure codes**, duplicate distance offsets were stored for different horizontal angles.
- **Code value for Station elevation points:** When keying in a point during a station elevation, the **Code** field now correctly shows the code of the current point.
- **SX10 scan in progress sometimes lost when changing jobs:** We have resolved an issue where if you changed jobs while a scan was in progress and the level of the SX10 had changed during the scan, then despite choosing to save the scan in progress the scan data was not saved.
- **SX10 stakeout navigation:** We have resolved an issue where when connected to a Trimble SX10 scanning total station with tracking mode on, if you tapped **Esc** to exit the **Stakeout** screen then the software sometimes stopped providing navigation guidance when you returned to the **Stakeout** screen.
- **Point overlay after updating station elevation with an SX10:** We have resolved an issue when connected to a Trimble SX10 scanning total station, where if you updated the station elevation measurement then points overlaid in the video feed or the total station ray in the 3D map did not update to the new position. This issue affected the display of points only; the points were shown in the correct position if you used the **Turn to** or **Stakeout** functions.
- **Use last station setup:** We have resolved an issue where Trimble Access sometimes assigned the incorrect point type when copying the station setup from another job. The unexpected point type caused an issue on import into Trimble Business Center.
- **Station setup:** We have resolved an issue when completing a station setup with **Auto F1/F2** enabled, where measuring the F2 backsight and then abandoning the measurement and choosing to continue with the F1 backsight point only could result in an incorrectly oriented station setup.
- **Station setup plus:** We have resolved an issue where if you canceled a new station setup plus before making any observations you could no longer use the last completed station setup.
- **Face 1 and Face 2 observations:** We have resolved an issue where the software did not always check that the F1 and F2 observations to the point are within the preset tolerance.
- **Tracking mode fields incorrectly displayed:** The software no longer shows fields and settings related to tracking mode when the connected instrument does not support tracking mode (for example a Trimble C3 or C5 total station).
- **PPM not being calculated:** We have resolved an issue where the **PPM** was not being calculated when you changed the values in the **Pressure** or **Temperature** fields in the **Atmosphere** form in **Review job**.

- **AT360 target ID:** We have resolved an issue when working with multiple targets where it was possible to switch to the AT360 target in Trimble Access but the software was attempting to track the target using an incorrect target ID.
- **GNSS rover antenna height not being read when starting survey in base mode:** We have resolved an issue when starting a rover survey while in base mode where the software would not read the rover antenna height from the survey style after connecting to the rover receiver.
- **RTCM transformation file error message:** We have resolved an issue where special reserved Windows operator characters in RTCM transformation messages caused the message "The residual grid values could not be appended to the transformation file" to appear. These characters are now replaced with an underscore character and added to the .rtd file.
- **Integrated survey resection does not prompt to use GNSS:** We have resolved an issue where during a resection in an integrated survey, if you attempted to measure to a new point, the software warned that the point does not exist but did not offer to switch to GNSS so that the point could be measured.
- **Locating prism in an integrated survey:** We have resolved an issue where **GPS Search** would fail to find the prism if a large **Prism to antenna offset** was entered.
- **Distance offset measurements with zero offsets:** Distance offset measurements that have offset values of zero are now stored with the appropriate standard errors. Previously, they were stored like an offset measurement without any associated standard errors.
- **Project location coordinate fields:** We have resolved an issue where changing the **Project Location Entry method** from **Local coordinates** to **Grid coordinates** did not cause the coordinate fields to change from **Latitude, Longitude, Height** to **Northing, Easting, Elevation** (and vice versa). The **Project location** fields are available when the **Coordinates** field is set to **Ground (calculated scale factor)** or **Ground (keyed in scale factor)**.
- **Project location grid coordinate values:** We have resolved an issue where the **Project location** coordinate fields sometimes changed slightly after entry. This occurred only when **Ground (calculated scale factor)** was selected in the **Coordinates** field.
- **Filtering the feature code list:** When filtering the **Code list** to search for the feature code to select, you can now enable the **Match** function separately for codes and for descriptions. Searching by **Code** still automatically selects the first item found in the **Code list**. Tap or press **Enter** to add the selected code to the **Code** field for the current point. Searching by **Description** no longer automatically selects the first item found in the **Code list**. Tap an item or use the arrow key to select it and then tap or press **Enter** to add the code to the **Code** field for the current point.
- **Multiple codes in Code field in Measure points:** We have resolved an issue where if you tapped the arrow next to the **Code** field and selected a new code after storing a point that was measured with two or more codes in the **Code** field, the new code was appended to the existing code string instead of replacing it.
- **Empty attribute strings stored in job:** We have resolved an issue where if you used the left arrow to select a different attribute value for a menu-type attribute, the software stored an empty string in the job file.

- **Export formats now output UTF-8 strings:** The **CSV WGS-84 lat longs**, **CSV with attributes**, and **Grid (local) coordinates** export formats are now set to output UTF-8 strings. This matches the encoding setting for importing CSV files, which were already set to UTF-8. In previous versions of Trimble Access, these export file formats were set to output ISO-8859-1 strings. To change the encoding to a different format, edit the appropriate IXL and/or XSL file. For more information, refer to the **Creating Custom Import Definitions** PDF available from www.trimble.com/support_trl.aspx?Nav=Collection-62098&pt=Trimble%20Access.
- **Export file error reporting:** A useful error message now appears when you try to export to a non-existent folder or to a folder for which you do not have the appropriate write permissions.
- **GNSS emulator not working:** Trimble Access can now "connect" to the GNSS emulator reliably if you had started Trimble Access when the GNSS emulator was already running.
- **Application errors:** We have fixed several issues that caused application errors when using or closing the software. In particular:
 - The software now allows you to deselect the feature library when creating a new job using the last used job as a template when the feature code list is still open in the software.
 - When measuring points with feature codes, using the **Start Circle (edge)** code to add a line to a circle, and then deleting the line no longer results in an application error.
 - The software no longer shows an application error when you "undelete" points in the **Point manager**.
 - The software no longer shows an application error on opening the **Point manager** when data is being sorted by the **Target height** column.
 - The software no longer sometimes shows an application error when you attach an image to a point in the **Media file** screen.
 - The software no longer freezes when attempting to perform a Cogo transformation of a large number of points.
 - The software no longer occasionally shows an application error when you end a GNSS survey while the software is changing to a new base station.
 - The application no longer stops working correctly when you press a function key while turning a Focus 30 or 35 instrument using the on-screen joystick.
 - The software no longer shows an application error when you start stakeout when connected to a conventional instrument that has Trimble VISION technology and you then start a GNSS survey or an integrated survey with GNSS as the current sensor.
 - Occasionally an issue pairing with a Bluetooth device would cause an application error if the device pairing produced an invalid Bluetooth address. Trimble Access now filters out devices with invalid addresses and does not display them for selection in the **Bluetooth** screen. You can resolve this issue by removing the device and re-pairing.

Roads

New features

Staking out with reference to another road

When staking out a Trimble road using any stakeout method, you can now select a reference road for which the software shows the station and offset values of your current position relative to the reference road. This information is also saved in the job. To select the reference road, tap and hold in the selection screen and tap **Select reference road**.

NOTE – You cannot select a reference road when staking out using the traditional menu selection method. To use this method, stake out from the map or if you are using the menus, change your selection method to graphical.

For more information, see the topic **To show station and offset relative to a reference road** in the [Trimble Access Help](#).

Enhancements

3D map replaces the selection screen when staking a Trimble road

When you select a Trimble road for stakeout, the map now shows the selected road in the 3D map, instead of the selection screen shown in previous versions of Trimble Access. The 3D map provides a better user experience when preparing to stake the road. All the 3D map tools that you are familiar with when using the map in General Survey are available, including gesture support to pan and zoom. The details for the selected entity including any construction offsets are clearly displayed in the form alongside the map. Station and strings can be directly selected via softkeys, while other additional stakeout options are still available from the tap and hold menu. You can orbit the road to provide better visualization of any construction offsets that are applied.

Staking out positions relative to the road

When staking out positions relative to the road, you can now:

- Display the cut/fill value **perpendicular** to the design. To do this, tap the **Options** softkey and select **Perpendicular** in the **Design cut/fill** field. The perpendicular position is drawn on the design in the cross section view.
- View the cross section at your current position in the selection screen.

Displaying DTMs in the cross section view

When staking a Trimble or GENIO road where the **Display cut/fill to** option is set to **DTM** or **Design + DTM**, the selected DTM is now displayed in the cross section view. It is displayed at your current position as a green line and includes a circle on the DTM indicating your position projected vertically to the surface.

Renaming 6D and 12D strings

When creating a road by selecting strings from a GENIO file, you can now rename 6D and 12D strings. Although string names in GENIO files are limited to four characters, this limitation does not apply when you rename it in Trimble Access. Previously this feature was limited to 3D and 5D strings.

12da interface string conversion

When extracting models from a 12da file using the conversion utility in Trimble Access Roads:

- 3D strings that have names starting with **INT** or **IA** are now converted to 5D interface strings in the GENIO file.
- If there are duplicate 6D string names the duplicates are now given an incrementing suffix, ie. -1, -2, -3...

Workflow improvements to the station list when reviewing a road

Trimble roads:

- When reviewing stations with a keyed in value that matches a value in the list, the **Station** field now shows the keyed in value. Previously the software did not accept the keyed in value.
- When reviewing stations with a keyed in value that matches a value in the list, the list scrolls to show the keyed in value.

GENIO roads:

- When you select the **Station** softkey the **Station** field now displays the currently selected station. Previously the field was empty.
- When reviewing stations with values selected from the list, the **Station** field now shows the selected value. Previously the field was empty.
- When reviewing stations with keyed in values, the **Station** field now always shows the keyed in value. Previously the **Station** field was shown as empty though the software did use the entered value.

Workflow improvements when setting the template interpolation method

Now when positioning templates for a Trimble road you are prompted to select the cross section interpolation method when you tap **Accept** in the **Apply template** screen. The **Road cross section interpolation by** field is added to the road **Options** screen. To change the interpolation method for the road, tap **Options** in the road components screen.

Previously you had to select **Options** from the second row of softkeys in this screen. This **Options** softkey has now been removed.

GENIO road horizontal construction offsets

When staking stations on a string, the option to offset a position to the master string has been renamed from **At string** to **To master**.

Stakeout softkey and menu

To be consistent with General Survey, the **Survey roads** software menu has been renamed to **Stakeout roads** and the **Survey** softkey has been renamed to **Stakeout**.

Resolved issues

- **Unexpected map behavior after using 3D drive:** The map no longer sometimes zooms or pans unexpectedly, or occasionally shows an error message, when you use the map zoom tools after using the 3D drive feature.
- **Trimble roads with template gaps:** Trimble roads with template(s) that include elements defined as a gap are now drawn respecting the gap. Previously the gap was shown shaded in the map and when reviewing the road in the plan and 3D drive views.
- **String selection when reviewing Trimble roads:** When reviewing a Trimble road, selecting a new station from the list now shows the selected station on the current string. Previously the software always showed the new station on the centerline string.
- **String selection when reviewing a GENIO road:** The selected string is now highlighted in the **Select string** list. Previously the first string in the list was always highlighted.
- **Selecting a GENIO road after excluding the master string:** We have resolved an issue where if you excluded the master string from a GENIO road then you could no longer select the road from the map for editing, review or stakeout.
- **Keyed in station values:** When reviewing stations with keyed in values, the **Station** field now always shows the keyed in value. Previously the software retained the entered value but the **Station** field was sometimes shown as empty.
- **Staking points with multiple elevations:** We have fixed a number of issues when staking a point where the **Staked deltas format** field was set to **Point – Stake multiple elevs**. These are:
 - The **V. Offset** fields in the **Confirm staked deltas** screen no longer display null values.
 - The descriptions are now remembered for subsequent points.
 - The additional vertical offset, vertical distance and description records created are now available when reviewing the job.
- **12da softkey incorrectly appearing in Define road screen:** The **12da** softkey no longer appears when you are editing the definition of a Trimble or LandXML road. The **12da** softkey incorrectly appeared only when you navigated to this screen using the menu. Defining a road from a 12da file is only applicable to a GENIO road.
- **Renaming strings in a GENIO file:** We have fixed an issue where renaming a derived string sometimes appeared not to work. The string was correctly renamed but if you selected **Edit string** from the tap and hold menu in the map the **String to edit** field showed the previous name.
- **12da conversion to GENIO road:** Some 12da files that would not convert because of duplicate master string names or very small arcs can now be converted to GENIO files.

- **Application errors:** We have fixed several issues that caused occasional application errors when using or closing the software. In particular:
 - When attempting to review a road in 3D where the pivot point is before the start of the road.
 - When staking out additional points, if you tap **Accept** in the **Select a point** screen without first selecting a point.

Pipelines

New features and enhancements

Improved management of duplicate joint IDs

When the software warns that the joint ID specified as the joint ahead has already been used as the joint ahead for another joint map (and similarly for a joint behind), the software now provides an option to return to the joint map record that prompted the warning so that you can correct it. In addition the error is logged in an error file with a time stamp for later troubleshooting, if required.

Supported equipment

Trimble Access software version 2019.00 communicates best with the software and hardware products shown below.

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

The Trimble Access software runs on the following 64-bit controllers:

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

For more information on supported third-party tablets, go to <https://geospatial.trimble.com/product-and-solutions/access> and click **Downloads** to download the **Trimble Access for Windows Minimum Requirements** bulletin.

Supported conventional instruments

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

- Trimble SX10 scanning total station
- Trimble VX spatial station
- Trimble S Series total stations: S8/S6/S3 and S9/S7/S5

- Trimble mechanical total stations: C5, C3, M3, M1
- Spectra Precision® total stations: FOCUS® 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.

Supported GNSS receivers

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

- Trimble integrated GNSS surveying systems: R10, R8s, R8, R6, R4, R2
- Trimble modular GNSS surveying systems: R9s, NetR9 Geospatial, R7, R5
- Trimble SPS Series GNSS Smart Antennas: SPS585, SPS785, SPS985, SPS985L, SPS986
- Trimble SPS Series GNSS modular receivers: SPS85x
- Trimble Alloy GNSS Reference Receiver
- Spectra Precision® receivers: SP60, SP80
- S-Max GEO receiver

NOTE -

- *Trimble Access 2019.00 does not support the SPS986 tilt compensation mode. Starting a survey will switch off the tilt compensation in the SPS986 receiver.*
- *Because the SP60 and SP80 receivers use different GNSS firmware to other supported receivers, not all functionality in the Trimble Access software is available when an SP60 or SP80 receiver is in use. For more information, refer to the support bulletin [SP60 and SP80 receiver support in Trimble Access](#).*

Trimble office software

- Trimble Business Center
- Trimble Sync Manager

Installation information

To install Trimble Access 2019.00 onto a supported controller you must have Trimble Installation Manager installed on the controller and a Trimble Access software maintenance agreement valid up to **1 May 2019**.

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

We have made it easier for you to try out the latest version of Trimble Access. You can use Trimble Installation Manager to create a limited demonstration license and then install Trimble Access 2019.00 onto any Windows 10 computer. Demonstration licenses are limited to adding 30 points per job, however large jobs created elsewhere can

be opened and reviewed. Demonstration licenses allow connections to GNSS receivers and total stations for the first 30 days. After 30 days you can only "connect" to the GNSS emulator and manual instruments.

NOTE – You can only create a demonstration license for Trimble Access on devices that do not already have a Trimble Access license.

For more information, refer to the topic **To try out software** in the [Trimble Installation Manager Help](#).

Supported controllers

For list of supported controllers, see [Supported equipment](#).

To install the software

To download and install Trimble Installation Manager, connect the controller to the internet, and then go to www.trimble.com/tim.

To run Trimble Installation Manager on the controller, tap the **Search** icon in the Windows task bar and enter **Install**. Tap Trimble Installation Manager in the search results to open the Trimble Installation Manager. When you run the software, it updates itself automatically with the latest changes and software releases.

If you have existing Trimble Access data files on an old controller, you can copy them from the old controller to the **C:\Trimble Access Install upload folders** folder on the new controller and use Trimble Installation Manager to convert the files to the latest file formats and transfer them to the appropriate Trimble Data folders on the new controller.

For more information refer to the [Trimble Installation Manager Help](#).

To upgrade to a TSC7 from an older controller

To upgrade from an older controller to a new TSC7, you can relinquish your Trimble Access software license from an older controller that has current software maintenance and after your distributor has reassigned the licenses to your new controller, you can install Trimble Access to the new controller using Trimble Installation Manager. You can also use Trimble Installation Manager to convert data files copied from your old controller to the Trimble Access 2019.00 file versions and install them to the TSC7.

For more information, refer to the topic **To relinquish software licenses** in the [Trimble Installation Manager Help](#).

Updating office software

When you upgrade to version 2019.00, you may also need to use Trimble Installation Manager to update your office software so that you can import your Trimble Access jobs. If you use:

- Trimble Business Center, you do not need to use Trimble Installation Manager as all required updates are handled using the Check for updates utility provided with Trimble Business Center.
- Other office software such as Trimble Link™ to convert job files to other file formats, install the Trimble Installation Manager onto the computer where Trimble Link is installed and then run Trimble Installation Manager to install office updates.

Trimble Solution Improvement Program

The Trimble Solution Improvement Program collects information about how you use Trimble programs and about some of the problems you may encounter. Trimble uses this information to improve the products and features you use most often, to help you to solve problems, and to better meet your needs. Participation in the program is strictly voluntary.

If you participate, the TSIP software is installed on your controller. Each time you start the Trimble Access software, the Trimble Access log file is automatically sent to the Trimble server. The file includes data on what the Trimble equipment is being used for, what software functions are popular in specific geographical regions, and how often problems occur in Trimble products that Trimble can correct.

At any time, you can choose not to participate in the Trimble Solution Improvement Program by uninstalling the TSIP software. To do this, go to the Windows *Add or Remove programs* function on your controller and remove the TSIP software.

For more information, go to www.trimble.com/survey/solution_improvement_program.aspx.

For more information

To view the *Trimble Access Help* on the controller, press the  key on the keypad or tap  in the Trimble Access software and then select **Help**.

To view the *Trimble Access Help Portal* from any computer, go to <https://help.trimblegeospatial.com/TrimbleAccess>.

Legal information

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