

Trimble Access™ Software



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Trimble Inc.

www.trimble.com

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These Release Notes contain information about Trimble® Access™ software version 2017.00.

General Survey

This section includes features, enhancements and resolved issues that also apply to other Trimble Access applications.

New hardware supported

Spectra Precision FOCUS 35 and FOCUS 30 total station support

The Trimble Access software now supports the Spectra Precision® FOCUS® 35 and FOCUS 30 total stations.

SP60 and SP80 GNSS receivers

The Trimble Access software now supports the Spectra Precision SP60 and SP80 GNSS receivers.

Note – *The SP60 and SP80 receivers do not support all the functions that Trimble GNSS receivers do. For more information, refer to the support bulletin [SP60 and SP80 receiver support in Trimble Access](#).*

TSC2 controller no longer supported

Trimble Access version 2017.00 and later cannot be installed on Trimble TSC2 controllers, regardless of the controller's software warranty status. During the last year the TSC2 platform has shown it is underpowered for recent versions of Trimble Access. To continue developing Trimble Access we are no longer able to support the installation of new versions of Trimble Access to the TSC2 controller. TSC2 controllers can continue running Trimble Access version 2016.12.

New features and enhancements

More easily copy job files from a different location

The new *Copy job files from* option in the *Jobs* screen enables you to copy a job from a location such as an external drive into Trimble Access. Files associated with the job can be copied at the same time, including files collected during the survey (for example, image and scan files) or project files (for example, feature library and linked files).

This feature complements the *Copy job files to* feature that was added in Trimble Access version 2016.10. Use the *Copy job files to* and *Copy job files from* functions to easily copy jobs and associated files from one folder to another, or from one controller to another using an external drive such as a USB stick. When you use *Copy job files from*, jobs are copied into the current <username> folder on the controller.

For more information, refer to the topic **Copying job files from a different location** in the [General Survey Help](#).

Enhancements to copy job files to a different location

The *Copy job files to* option in the *Jobs* screen now supports copying project files associated with the job. Select the appropriate check boxes to copy the following project file types:

- Coordinate system files
- Active map files
- Feature library files
- Linked files
- Media files

In addition, some other minor workflow enhancements were made.

For more information, refer to the topic **Copying job files to a different location** in the [General Survey Help](#).

Longer job names supported

The character limit for job names has been increased from 16 characters to 32 characters.

Keyboard shortcut for selecting job or folder

When opening a job, you can now press the first character of the job or folder name on the controller keypad to select the first job or folder that begins with that character. If multiple items start with the same character, press the first character again to move through the list.

Enhancements to selecting a code from the feature library

When selecting a code, you can now tap the *Match* softkey to search for items in the feature library that contain the exact string entered, anywhere in the code or description field. Previously, searching for characters using the 'C' (code) or 'D' (description) field returned only items where the string entered occurred at the beginning of the code or description field.

For more information, refer to the topic **Measure codes** in the [General Survey Help](#).

Staking to the alignment

You can now measure your position relative to an alignment. When staking an alignment select the *Stake* option *To the alignment* to see the Station, Offset and V.dist values from your current position to the selected alignment.

Option to configure behavior when exiting alignment stakeout

You can now configure the behavior of the General Survey software when exiting from a stakeout alignment. You can configure the software to either return to the main menu, or to display the *Select a file* screen, which enables you to select a different alignment. To configure this option, tap the *Options* softkey in the *Select a file* screen.

Improved workflow when adjusting conventional instruments

- When performing instrument adjustments on the connected conventional instrument, you typically want to complete more than one type of adjustment. Now on completing an instrument adjustment you are returned to the *Instrument / Adjust* screen instead of the

General Survey main menu.

- The *Electronic level* screen now includes a *Calib* softkey that takes you to the *Compensator calibration* routine in the *Instrument adjustment* screen.

Improved Trimble SX10 scanning total station support

Trimble Access version 2017.00 provides the following enhancements for the Trimble SX10 scanning total station:

- Improved performance for measurements has reduced the time taken for a standard measurement by approximately 1 second.
- The *Survey report* has been enhanced to include panorama and scan information collected with an SX10.

Distance offset values are now reset

When measuring topo points in a conventional survey using a distance offset, the offset values specified are now reset to 0 when you open a different job.

Conventional instrument tilt compensation status now recorded for every job

During a conventional survey, the Trimble Access software now records the tilt compensation status of the connected instrument in each job.

Previously, if the compensator had been set to Off in a job, but was set to On for a different job, and you then returned to the previous job with the compensator still enabled, the compensator status recorded in that job was incorrect.

Improved dual-frequency echo sounder support

When using a dual-frequency echo sounder, the second depth returned from the echo sounder is now displayed in the *Continuous topo* screen, and the point record in the *Review job* screen now shows the correct units.

For more information on using an echo sounder to store depths, refer to the topic **Continuous topo – conventional** or **Continuous topo – GNSS** in the [General Survey Help](#).

Improved download speed for receiver files

Significant improvements have been made to the download times for receiver files. In general, the time taken to import files from the receiver when using:

- Serial port communications is now one third faster.
- Bluetooth communications is now two thirds faster.

Mobile data service providers in Germany: T-Mobile support

The list of service providers has been updated to include the new APN for M2M Portal 2 SIM cards. This plan is named "M2M-2". Older Portal 1 M2M SIM cards use the APN in the plan named "M2M-1".

Resolved issues

- **Offset control code:** An issue when using the *Horizontal offset* control code with a closed figure, where the main line closed correctly but the offset lines were not closed as expected is now resolved.
- **Arc control codes:** When using control codes to create a new arc immediately after ending an arc, the new arc is now drawn at the expected starting point.
- **Calculation of slope values:** An issue when calculating the grade as a percentage where the software incorrectly converted the entered run:rise or rise:run ratio if the rise value was between 1 and 2 is now resolved.
- **Calculation of volume from surface area:** An issue where if you selected *Cogo / Compute volume* and *Surface area* was already selected in the *Method* field, then the volume was not calculated is now resolved.
- **Switching the SX10 from Wi-Fi to LRR mode:** An issue when connected to a Trimble SX10 scanning total station using a third-party tablet running Trimble Access, where you were unable to switch the instrument from Wi-Fi mode to long range radio (LRR) mode using the *Instrument functions / Connections* screen in Trimble Access is now resolved. It was always possible to switch modes using the **Power** button on the instrument.
- **Changing the target type to or from DR before a measurement is stored:** An issue where changing the measurement type to or from DR after measuring a point but before the measurement was stored resulted in the measurement being stored with incorrect measurement type information is now resolved. Now if you change the measurement type to or from DR before storing the measurement you must remeasure.
- **Proximity warning during conventional survey:** An issue when measuring codes where the proximity warning for a duplicate point with a different name did not appear if the *View before storage* check box was not selected is now resolved.
- **Standard deviation warning during conventional survey:** An issue when measuring during a conventional survey where the message "Required standard deviation not achieved, use distance anyway?" appeared and you selected *No*, the distance was actually used instead of discarded is now resolved.
- **Auxiliary GPS:** An issue where the *Auxiliary GPS* menu no longer appeared in the *Settings* menu is now resolved. This issue was introduced in Trimble Access version 2016.00.
- **Column headers in Point – Residuals screen:** An issue where the *Point – Residuals* screen did not show column headers for ΔHA , ΔVA , and ΔSD values is now resolved.
- **RTX – Loading a custom SV frequency:** An issue where editing an existing custom RTX SV frequency in the connected GNSS receiver would round that frequency up when saving it back to the receiver is now resolved.
- **RTCM Transformation:** An issue with RTCM Transformation coordinate systems where the grid coordinates of measured GNSS points were not always updated in near real time is now resolved.
- **AccessVision screen:** An issue when the software did not always show the expected AccessVision screens after you selected *Navigate to point* is now resolved.
- **3D map:** The following issues in the 3D map are now resolved:
 - Zooming to extents was incorrect and the height of text on the map was incorrect when the units for the job were set to feet.

- Cut/Fill and DTM information on the bottom right of the map was not always visible when a dark background image was used.
- Some elements in DXF files could not be displayed in the map if the range of coordinates for elements in the file was too large. Now elements that lie outside the extents of the DXF file are not used.
- Some blocks in DXF files were being positioned incorrectly in the 3D map.
- When using the increasing NW coordinate system with a background image, the image was not positioned correctly in the map after performing a station setup.
- When using the increasing NW coordinate system with more than one background image, the images were not positioned correctly in the map.
- **2D map:** The following issues in the 2D map are now resolved:
 - When attempting to add a TIFF file to the job that was too large to display, the software sometimes incorrectly warned there was no associated world file, instead of warning that the background file was too large. The software now shows the correct warning.
 - After creating a surface when using a background image, the surface was slow to appear, or slow to redraw after panning or zooming in the map.
 - When using the increasing NW coordinate system with a georeferenced background image, the image was displayed correctly in the 3D map but was incorrect in the 2D map.
- **Display issues on 10" tablets:** The following issues are now resolved on 10" tablets:
 - Keyboard display
 - Video display
 - Joystick display
 - eLevel display
 - Overly large text in measure and station setup screens
- **Alerts on 10" tablets:** An issue where attempting to dismiss an alert on a 10" tablet closed the *Alerts* window but did not dismiss the alert notification is now resolved.
- **Maths equations in the Help:** Formatting errors that resulted in issues with the display of maths equations in Chapter 20 of the *General Survey Help* ("Calculations performed by the General Survey software") are now resolved.
- **Application errors:** You should no longer see occasional application errors when you do any of the following:
 - In the *Login* screen, use the operating system keyboard to enter a new user name while the dropdown list of user names is shown.
 - During export, attempt to overwrite an existing shapefile that is being used by another application or within Trimble Access, for example by the map.
 - While using the calculator, repeatedly select the *Show all values on the stack* option and then select the same value as the value currently shown.
 - Delete a point with a check shot, and then review the check shot.
 - Tap one of the buttons to control the display and size of the AccessVision graphical display.
 - Perform a *Distance offset* or *Dual-prism offset* during a conventional survey when using an AccessVision screen.
 - Measure a circular object using the center + tangent method and the calculated horizontal angle difference is too large.

Pipelines

New features and enhancements

Pipelines Tally and Joint Map Updater Utility

The Trimble Access Pipelines Tally and Joint Map Updater utility is used to merge the updated tally and joint map data from multiple field crews into a master set of files in the office at the end of each day. The master tally files are then distributed to each field crew, ready for the next day's work. An XML file containing all the merged data is also available for generating custom reports from.

The utility is available for download from www.trimble.com/Survey/Trimble-Access-IS.aspx by clicking *Downloads* on the right and navigating to the *Trimble Access Pipelines* section.

This utility is updated from time to time. To view the latest update information and all updates to the utility since it was first released, view the *Pipelines Tally and Joint Map Updater Utility Release Notes* document available with the utility download file.

Resolved issues

- **Unique joint ID check:** An issue where the software did not always check that the joint ID was unique when the existing joint ID was changed is now resolved.
- **Find softkey in Create tally screen:** An issue where using the *Find* softkey to locate a tally item that does not have a unique ID created a new tally item instead of adding the unique ID to the existing tally item is now resolved.
- **Application errors:** You should no longer see occasional application errors when you do any of the following:
 - Attempt to review the attributes for a measured point in the *Review job* screen when opened from the *Jobs* screen in the Pipelines application. This was an issue only when the feature library selected for the job did not match the feature library used to measure the points or the feature library was set to *None* after the points had been measured.
 - Attempt to swap the values entered in the joint behind ID and the joint ahead ID fields in a new joint map record, before the new record had been saved to the joint map file.

Roads

New features and enhancements

Option to configure behavior when exiting the Define or Survey menus

You can now configure the behavior of the Roads software when exiting the *Define* or *Survey* menu. You can configure the software to either return to the main menu, or to display the *Select a file* screen, which enables you to select a different road. To configure this option, tap the *Options* softkey in the *Select a file* screen for either the *Define* or *Survey* menu.

Vertical distance for cross slope

When a cross slope is applied when measuring your position relative to a string or staking a station on a string, the *V. Dist cross slope* value is now displayed at the navigation screen. Previously, this value was only available at the *Confirm stakeout deltas* screen, which meant you had to measure the position before you could mark the stake.

UI improvement for measuring position relative to road or string

When measuring your position relative to:

- The road, a dashed green line is drawn from your current position to the horizontal alignment/master string when you are within 30m of the alignment/string.
- A string, a dashed green line is drawn from your current position to the selected string when you are within 5m of the string.

This feature is only available when using the graphical selection method.

UI improvement when defining a GENIO road

When defining a new road:

- If you are defining a new string from an existing string for a GENIO road, the name of the string that the new string is derived from is now displayed at the top of the graphical screen.
- You can now see your current position, provided you have started a survey.

Resolved issues

- **Position relative to string:** An issue when measuring your position relative to a string, where your position would temporarily jump to a different position in the selection screen is now resolved. This issue occurred after you had viewed the *Defined construction offsets* screen. Once you started navigating, the software used the correct position.
- **Navigation arrow not pointing to the start of the string:** An issue when measuring your position relative to a string in a Trimble or LandXML road or relative to an additional string in a Trimble road, where sometimes the navigation arrow always pointed north instead of to the start of the string is now resolved.
- **Flickering tablet screen:** An issue when using a tablet to measure relative to a string with a calculated construction offset applied where the screen would flicker is now resolved.
- **Graphical selection of additional strings:** An issue where it became difficult to select an additional string the closer the string came to being at right angles to the alignment is now resolved. Strings at right angles to the alignment could not be selected graphically at all, but they could still be selected using the tap and hold menu.
- **Non-tangential elements in additional strings:** An issue when defining an additional string, where the icon preceding the line element was not shown in red if the element was non-tangential is now resolved. This was an issue only after the road had been stored.
- **Application errors:** You should no longer see occasional application errors when you do any of the following:
 - Select a computed subgrade position to stake.
 - Attempt to access the cross section view when measuring your position relative to a side slope string in a Trimble or LandXML road. This was an issue only in a conventional survey when using the graphical option to select the survey method and when your current

position was not adjacent to the selected string and you accessed, and then closed, the tap and hold menu before attempting to access the cross section view.

AccessSync

New features and enhancements

Synchronize files between the controller and Trimble Connect

You can now use AccessSync to synchronize files between the controller and the Trimble Connect cloud-based collaboration platform.

To successfully synchronize with the appropriate cloud-based platform, select the appropriate login mode when logging in to the Trimble Access software:

- Offline
- Trimble Connect
- TCC

If you are used to using the Trimble Connected Community to store data and share information and are considering moving to Trimble Connect, you may find it useful to understand the key differences between the two platforms. These are:

- Trimble Connect does not have the concept of an organization; instead, data is organized in projects and folders.
- You can share folders or projects with anyone who has a Trimble Connect account, or invite new users.
- Trimble Connect uses a simpler folder structure; you don't need to create *To the Field* or *System Files* folders in your project before transferring data to the controller.
- You can more easily share files from the field with other users who are in the field, simply by synchronizing your data with the Trimble Connect project. Other field users won't need to wait for someone in the office to move those files before they can download them to their controller.
- When logged in to Trimble Connect on a tablet, the maximum file upload can be increased from 8 MB to 256 MB.

To create a free Trimble Connect account, go to <http://connect.trimbleaccess.com>.

For more information, refer to the [Trimble Access Services Help](#).


File transfer speed improvements

File transfer speeds are approximately twice as fast as previous versions.

Downloads for updated files are automatically paused on the controller

In previous versions of AccessSync, when a file was updated on the server and downloaded to the controller multiple times, the default behavior was to create a new version of the file on the controller. In this release, AccessSync detects multiple versions and automatically pauses the download to prevent an excess of files being created on the controller. The download can be resumed manually if the field user requires the updates. As with previous versions of AccessSync, the latest version of a file has a number appended to the filename to indicate it is a newer version.

File conflict rules

File conflict rules for the selected folder and subfolders (for example, to define file versioning or overwrite settings on the controller) can now be configured from within AccessSync. To access these settings, click in the *Status* column from within AccessSync to view the list of files in the folder and then tap the Settings button . Settings defined in this screen are saved in the .fsoxml file. In previous versions the .fsoxml file needed to be modified in a text editor.

Note – *To prevent propagation of controller file versioning settings, .fsoxml files are no longer uploaded from the controller to the server.*

Installation Information

This section provides information on installing version 2017.00 of the Trimble Access software.

Installing the software and licenses on the controller

Operating system installation

With a new Trimble Tablet, the operating system is not installed. Turn on the Tablet to install the Windows® operating system and then apply Windows updates.

With all other new controllers, the operating system is already installed.

From time to time new operating systems are made available and can be found at www.trimble.com/Survey/Controllers.aspx.

WARNING – *Operating system updates will erase all data from the device. Make sure you backup your data to your PC before installing. Otherwise you may lose your data.*

Note – *The process of upgrading Trimble Access from one version to another converts the jobs (and other files like survey styles). If you copy the original Trimble Access data files off the controller and then upgrade the operating system, before installing the new version of Trimble Access please ensure you copy the original Trimble Access data files back onto the controller. If you follow these steps then the original Trimble Access files will be converted and made compatible with the new version of Trimble Access.*

Software and license installation

Before you use your controller, you must install the applications and licenses using the Trimble Installation Manager. If you have:

- Never installed the Trimble Installation Manager, go to www.trimble.com/installationmanager for installation information.
- Previously installed the Trimble Installation Manager, you do not need to reinstall it because it updates itself automatically. Select *Start / All Programs / Trimble Installation Manager* to start the Trimble Installation Manager.

For more information, click *Help* in the Trimble Installation Manager.

Note – *For Trimble CU controllers, Trimble Access version 2013.00 and later can be installed only on the Trimble CU model 3 (S/N 950xxxxx). Trimble CU models 1 and 2 have insufficient memory to run later versions of Trimble Access.*

Am I entitled to this version?

To install and run Trimble Access software version 2017.00, you must have a warranty agreement valid up to 1 March 2017.

When you upgrade to version 2017.00 using the Trimble Installation Manager, a new license file is downloaded to your device.

Updating office software

When you upgrade to version 2017.00, you must also update your office software. These updates are required if you need to import your General Survey jobs into Trimble office software such as Trimble Business Center.

When you upgrade the controller using the Trimble Installation Manager, the office software on the computer that has the Trimble Installation Manager installed is also upgraded.

To upgrade other computers that were not used to update the controller, do one of the following:

- Install the Trimble Installation Manager onto each computer and then run Office updates.
- Run the Trimble Update Office Software packages for the Trimble Access software from www.trimble.com/support_trl.aspx?Nav=Collection-84862.
- Use the Trimble Data Transfer utility:
 - You must have version 1.51 or later installed. You can install the Data Transfer utility from www.trimble.com/datatransfer.shtml.
 - If you have version 1.51, you do not need to update to a later version of the Data Transfer utility; you can run one of the Trimble Update Office Software packages from www.trimble.com/support_trl.aspx?Nav=Collection-84862.
- If you only need to update the latest version of the Trimble Business Center software, you do not need to run the Trimble Installation Manager to update the office software. The required converters are now available on the controllers running the Trimble Access software and, if required, they are copied from the controller to the computer by the Trimble Business Center software.

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, a software program is installed on your computer. Every time that you connect your controller to this computer using ActiveSync® technology or the Windows Mobile® Device Center, the Trimble Access software generates a log file that 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 uninstall the Trimble Solution Improvement Program. If you no longer wish to participate in the Trimble Solution Improvement Program go to *Add or Remove programs* on your computer and remove the software.

Documentation

Trimble Access Help is "context-sensitive." To access the Help, tap ? at the top of the screen.

A list of Help topics appears, with the relevant topic highlighted. To open the topic, tap its title.

Go to <http://apps.trimbleaccess.com/help> to download a PDF file of the Help. A separate PDF file is provided for each application.

Software and Hardware Requirements

Trimble Access software version 2017.00 communicates best with the software and hardware products shown below. The software can also communicate with any version later than that shown.

Trimble software	Version
Trimble Business Center (32-bit)	2.99
Trimble Business Center (64-bit)	3.81

Trimble receiver	Version
Trimble R10	5.20
Trimble R8s	5.20
Trimble R2	5.20
Trimble R8-4, R8-3	5.20
Trimble R6-4, R6-3	5.20
Trimble R4-3, R4-2	5.20
Trimble R9s	5.20
Trimble NetR9 Geospatial	5.20
Trimble R7	5.01
Trimble R5	5.00
Trimble Geo7X	4.95
Trimble GeoXR	4.55
Trimble R8-2, R6-2, R4-1	4.64
5800, 5700 II	4.64
Spectra Precision SP60/80	3.30

Trimble instrument	Version
Trimble V10 imaging rover	E1.1.70
Trimble SX10 scanning total station	S1.36.5
Trimble VX Spatial Station	R12.5.51
Trimble S5/S7/S9 total station	H1.1.20
Trimble S8 total station	R12.5.51
Trimble S6 total station	R12.5.51
Trimble S3 total station	M2.2.30

Trimble instrument	Version
Trimble M3 total station	V2.0.4.4
Spectra Precision FOCUS 30/35 total station	R1.6.7

For the latest software and firmware versions, see also

<http://trl.trimble.com/dscgi/ds.py/Get/File-93082/Survey%20Software%20and%20Firmware.pdf>.

Controller operating system support

Trimble TSC3 controllers with Microsoft Windows Mobile Version 6.5 Professional can run Trimble Access software version 1.8.0 to version 2011.10.

Trimble TSC3 controllers with Microsoft Windows Mobile Embedded Handheld 6.5 must have Trimble Access version 2012.00 or later.