Trimble Access

Version 2018.20 October 2018

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

TIP – If you are not yet using Trimble Access 2018.00, make sure you take a look at the release notes for Trimble Access 2018.00 for information on the new-look Trimble Access software.

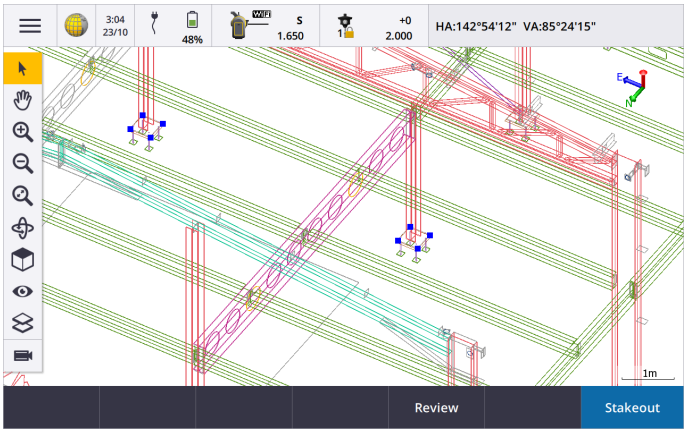
Trimble Access

These changes apply to General Survey as well as other Trimble Access applications.

New features

IFC file support

Trimble Access now supports IFC files, so you can view BIM models in the map, and select points or lines to use in other software functions such as Cogo calculations and stakeout.

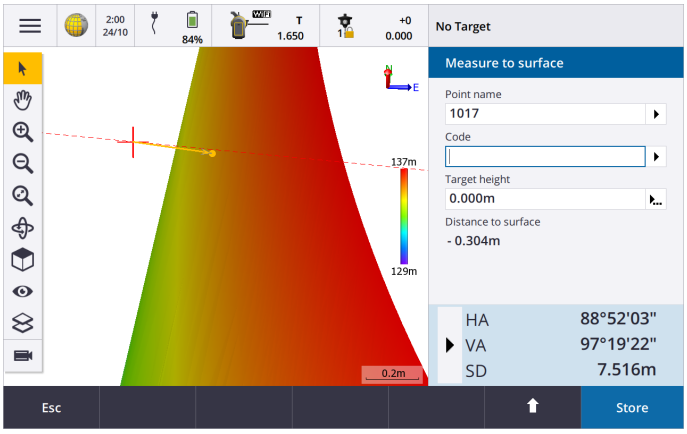


Objects in IFC files can be displayed as solid objects with 100% opacity; you can reduce the opacity or display as a wireframe. To make the object more transparent, or to view the model as a wireframe rather than a solid object, tap and select **Settings** and then modify the options in the **IFC** group box.

For more information, see the topic **Working with BIMs** in the *Trimble Access Help*.

Measure to surface method

The **Measure to surface** measurement method enables you to calculate and store the closest distance from the measured point to the selected surface model. This measurement method is available for both conventional and GNSS surveys.



During measurement, the closest position on the surface is highlighted in the map and a line is drawn from the measured position to the position on the surface. The **Distance to surface** value and the coordinates of the closest point on the surface are stored with the measured point and can be viewed in **Review job** and **Point manager**.

For more information, see the topic **To measure to a surface** in the *Trimble Access Help*.

User configurable map views

You can now set the zoom extent so that part of the map is excluded. This is useful when, for example, you want to exclude a base station position that is several kilometers away. To do this, tap and hold on the map toolbar and select **Set user zoom extent**. Return to this view with a single tap of the button on the map toolbar.

In addition, we have renamed the **Zoom to default** function to **View area of interest**. This function is useful when, for example, you have a large job site and you want to view only the part you are currently working in. Once you have set the area of interest, tap and hold on the map toolbar and select **View area of interest** to return to this view.

For more information, see the topic **Map toolbar** in the *Trimble Access Help*.

Vibration feedback on a TSC7

You can now enable vibration feedback so that the TSC7 vibrates whenever Trimble Access auto stores a point or when a point is ready to be stored.

For more information, see the topic **To turn sounds on and off** in the *Trimble Access Help*.

SX10 in-field camera collimation and calibration

Trimble Access now provides instrument adjustments for in-field collimation and calibration of the Trimble SX10 scanning total station cameras.

Camera collimations should not need to be performed frequently because the cameras are extensively calibrated in the factory and these calibrations are very stable over time and temperature. However, these adjustments are provided so that you can calibrate any of the cameras if you notice issues such as a mismatch between the camera image and measured or scanned points, or if the crosshair is not aligning properly.

Use the **Automatic camera collimation** to determine and correct for collimation errors between Face 1 and Face 2 for the Overview, Primary or Telecamera camera.

Use the **Plummet camera calibration** to calculate and correct to the rotational center of the Plummet camera.

NOTE – *To be able to perform this adjustment, the SX10 must have firmware S2.1.9 or later installed.*

For more information, see the topic **To adjust a Trimble SX10** in the *Trimble Access Help*.

Enhancements

Managing files when synchronizing with the cloud

When downloading files to the controller or uploading files to the cloud, you can now choose to skip the transfer of individual files, if required. This is especially useful when you have large files, such as a large scan file, that you do not want to transfer from the field. In the **Download** or **Upload** screen, tap the icon next to the file and select **Skip this file**. You can upload the file later when you have returned to the office.

When Trimble Access detects there is a file conflict, such as when a file has been changed both on the controller and in the cloud, you can now choose how to resolve the conflict. Tap the icon next to the file and select **Skip this file** to keep the local version of the file, or select **Transfer this file** to overwrite the existing file.

For more information, see the topic **Projects and jobs** in the *Trimble Access Help*.

Favorites enhancements

You can now change the shortcuts that are assigned to the controller function keys, or assign a function key to a software function for which there is no ☆ icon using the **Edit favorites** screen.

Keypad selection of items from the main menu

You can now use the controller keypad to select items from the main menu when the **Favorites** screen is open, you no longer need to arrow left back to the menu before the shortcuts will work. To select an item, press the key corresponding to the first letter of the menu item. For example, press ☰ and then press **H** to open the help, or press ☰ and then press **E** to exit the software.

Improved battery icon

If the battery in the controller is in an unusual state and the power level of the battery cannot be determined, the Trimble Access software now shows the icon. Previously the software showed the charging icon. The icon is also used to indicate if the battery level is close to 0%. If you have inserted a battery that has a higher level of charge then remove the battery and reinsert it. If the issue is not resolved, recharge the battery and try again. If there are still issues, contact your Trimble Distributor.

Improved orbit icon in the map

When you select **Orbit** in the map toolbar, the orbit icon now appears in or near the center of the map to indicate the point of orbit, regardless of the data in the job. Previously the orbit icon only appeared when SX10 scan data was displayed in the map. In addition, the orbit icon is now similar to the one used in Trimble Business Center, replacing the yellow dot used as the orbit icon in previous versions of Trimble Access.

In addition, during a conventional survey you can now see the total station ray when rotating the map using the **Orbit** button.

Previewing construction linework before storage

When offsetting a line horizontally, construction line work showing the proposed new line is now shown before it is stored. Similarly when computing the intersection of two lines where one or both lines are offset horizontally, construction line work is displayed showing the offset line.

Copying the station setup from a different job

You can now copy a station setup from another job with the **Copy last** option. This option is useful when, for example, when you want to store the topo data in one job and the as-built data in another job, and you don't need to re-observe the station setup in the second job.

NOTE – *You should only select* ***Copy last*** *if you are satisfied that the last completed station setup is still valid and you wish to continue observing points from this station. When using a previous station setup, it is good practice to always observe a checkshot to the backsight when you start the survey.*

The software may also provide the **Use last** option. Select **Use last** if you are satisfied that the last completed station setup in the **current job** is still valid.

For more information, see the topic **To reuse a station setup** in the *Trimble Access Help*.

Video crosshair options

You can now change the appearance of the crosshairs in the **Video** screen when using an SX10. This is especially useful when working in situations where the two-tone black and white contrast is not highly visible or when extended crosshairs would assist with aiming the instrument. In the **Video** screen, tap  and then select **Settings**. Scroll to the **Crosshair** section and select the required color and whether to increase the size of the crosshair elements.

For more information, see the topic **Show in video options** in the *Trimble Access Help*.

Filtering scan points in the map

Controlling the display of scan points is now done purely from the **Select scans** screen. To view this screen, tap  and then select **Scans**. We have removed the ability to filter scan points in the **Select filters** screen, to avoid settings in one screen conflicting with the settings in the other.

GNSS joystick for GNSS emulator

When using the GNSS emulator to test, demonstrate, or deliver training with Trimble Access using a simulated connection to a GNSS receiver, you can now control the movement of the GNSS receiver using the **GNSS joystick** popup window which is available within the Trimble Access software. Alternatively, you can tap and hold in the map and select **Move rover here**. Note that to disconnect the GNSS receiver and shut down the GNSS emulator you must close the **GNSS Emulator** DOS window.

For more information, see the topic **To use the GNSS emulator** in the *Trimble Access Help*.

Coordinate system database updates

- Added coordinate system definitions for **Greenland 96**, **Kyrgyzstan** and **Moldova**.
- Corrected the ellipsoid reference for the **GOST 51794-2008** datum.

- Added new geoid model references for **Norway (2018A)**, **Romania**, **Belgium**, **Martinique (RAMART2016)** and **Dominican Republic**.
- Removed the **United Kingdom National Grid** and **Ordinance Survey National Grid** projection types because these have been superseded by newer projection types. Jobs already using these projection types are still supported.

Resolved issues

- **Trimble Access now allows the controller to go to sleep**: The controller now correctly enters sleep mode when the Trimble Access software is left running on the controller, as long is it is not connected to an instrument or receiver.
- **Improved behavior when populating a point field from the map**: The software no longer prevents you from selecting a second point from the map when a read-only field appeared between the first and second point fields in the form, for example in the **Define 3D axis** or **Compute azimuth** forms.
- **Copy job**: Now, when copying a job, the last used option is remembered.
- **Autolock not always engaged when enabled from Favorites screen**: The software now correctly engages Autolock when you enable it from the **Favorites** screen by highlighting the Autolock tile and pressing the **Enter** key. You can also still engage Autolock by tapping the Autolock tile in the **Favorites** screen or by pressing the numeric key corresponding to the number of the Autolock tile.
- **Measure check shot to backsight**: We have fixed an issue where when you pressed **Ctrl** + **K** to measure a check shot from anywhere in the software and then selected a point that is a backsight point, the software did not update the selected target/prism to the one used for the backsight. This issue did not occur if you navigated to the **Measure check shot** screen through the software menu.
- **SX10 scan framing**: We have fixed an issue where drawing polygon frames in a scan station sometimes resulted in crooked lines or multiple polygons if the job involved large false northing and/or easting values. The frame used by the SX10 to scan was correct, the issue only affected the appearance of the frame in the video screen. This issue appeared only for the first frame drawn in a job and was exaggerated when using smaller **At distance** values.
- **R10 or AT360 eBubble not appearing**: We have fixed an issue with the R10 receiver or AT360 eBubble where, if the eBubble was displayed in a **Measure** or **Stakeout** screen and you moved to a different screen before returning to the previous screen the eBubble was no longer shown and the software stopped responding.
- **Selected line changing antenna height**: We have fixed an issue where tapping a line in the map when the cursor was in the **Antenna height** field would populate the **Antenna height** field with the length of the line. Now, selecting a line only fills in the **Horizontal distance** fields in a form. This issue was introduced in Trimble Access version 2018.00.
- **Switching between conventional and GNSS**: We have fixed an issue where switching between a GNSS and conventional survey using the menu item **Switch to GNSS/Conventional** did not always work. Switching using a single tap in the status line area of the status bar always worked correctly.

- **Application errors**: We have fixed several issues that caused application errors when using or closing the software. In particular:
  - The software no longer stops working or shows spurious requests to close other Trimble Access windows when you close a job and then attempt to open another job while the software is still using points in the previous job, for example in the **Review job**, **Electronic level** or **Turn to** screens. Now when you close a job, other Trimble Access windows that use points in that job are automatically closed.
  - The software occasionally stopped working if you accidentally double-tapped **Accept** in the **Stakeout** form.
  - If you attempt to open an integrated survey style which references a GNSS or conventional survey style of the same name as the selected integrated survey style, the software now removes the reference to itself and let you select another survey style.

Monitoring

The new Monitoring application for Windows and Trimble Access 2018.20 is now available.

The new Monitoring application was developed using the same Trimble Access core application as other Trimble Access applications such as General Survey and Roads. As a core Trimble Access application Monitoring is now available on the same platforms as Trimble Access 2018, so it can now run on the Trimble TSC7 controller and T10 tablet.

Monitoring now supports sharing of jobs between other applications, as well as other core functionality such as viewing the video feed from the instrument and accessing the Instrument functions screen. It supports a wider range of instruments than the previous Monitoring application, including the Trimble SX10 scanning total station, all Trimble S Series instruments, SPS instruments, and the Spectra Focus 30/35 total station.

The new Monitoring application supports all the same features as the previous version of Monitoring. For more information see the Monitoring topics in the *Trimble Access Help*.

The new Monitoring application can now be purchased and installed on Windows devices with Trimble Access 2018.20 or later. Any customers that have relinquished licenses from a controller that previously had Monitoring installed, and have transferred those licenses to a Trimble Access 2018.20 Windows device can now install the new version of Monitoring. Customers running earlier versions of Trimble Access (2017 and earlier) can only install the older version of Monitoring. The new version of Monitoring is not available on Windows CE or Windows Mobile devices.

Roads

New features

Support for 12da files

As part of the workflow for defining a GENIO road, you can now use the Trimble Access Roads software to extract models from a .12da file and add them to a new GENIO .mos file. You can then use the new GENIO file to define the

GENIO road definition. This feature is particularly useful if you are not able to export GENIO files from the 12d Model software.

For more information, see the topic **To extract models from a 12da file** in the *Trimble Access Help*.

Enhancements

Defining a Trimble road from the map

You can now define a Trimble road from the map. Make sure nothing is selected in the map and then tap the **Define** softkey to define a new Trimble road.

Defining a GENIO road from the map

You can now define a GENIO road from the map. To do this you must have a master string from a GENIO file selected in the map. To do this, tap  in the map toolbar and then tap the GENIO layer twice to make it visible and selectable in the map. From the map, select the master string so that it is colored blue and then tap the **Define** softkey to define a new GENIO road.

Editing strings in GENIO road files

When creating a road by selecting strings from a GENIO file, you can now rename the string. Although string names in GENIO files are limited to four characters, this limitation does not apply when you rename it in Trimble Access. For 3D and 5D strings you can now also change the string type.

Cut/fill display in the map during road and DTM stakeout

To clarify the behavior when staking a road, the map no longer displays cut/fill values to the road surface. Cut/fill are only displayed in the map when staking using a DTM with the cut/fill values relative to the DTM. The road cut/fill values can be seen in the road stakeout screen. Previously the cut/fill value to the road surface was also shown, which could be confusing especially when a vertical offset was specified for a DTM surface.

Resolved issues

- **Improved behavior when orbiting a road**: The road no longer occasionally disappears when rotating the road.
- **Discarded edits to a road being saved**: We have fixed an issue where if you made edits to a Trimble road and then discarded them before saving, the discarded edits were incorrectly saved. This issue only affected roads that were selected from the map, not via the menu.
- **Navigating when staking a skew offset**: The cross section view is no longer available when you are navigating to a point more than 3m away when staking a skew offset. In Trimble Access version 2018.00 we inadvertently made the cross section view available but because the target is nearly always not at the station being staked the information shown was incorrect.

- **Station or string selection when reviewing a road**: We have fixed an issue when reviewing a road where you could not select a station or string for another road using the softkeys. This issue was introduced in Trimble Access version 2018.10.
- **New GENIO roads not automatically appearing in map**: When you create a GENIO road, by default it is now always automatically shown and is selectable in the map.
- **Reviewing a GENIO road**: We have fixed these issues that occurred when reviewing a 5D string:
  - A duplicate slope value that was displayed in the cross section view has been removed.
  - In certain situations the slope value for the opposite side of the road was displayed. This was an issue in the plan and cross section view when one side of the road was in cut and the other was in fill. The value is no longer displayed.

Application errors: We have fixed several issues that caused application errors when using or closing the software. In particular:

- An application error no longer occurs when you review a GENIO file from the **Define** menu and you tap a station on a string to review. This was an issue only if you selected the **Review** option before selecting **Edit** or if the road was not already layered on in the map. This issue was introduced in Trimble Access version 2018.10.
- An application error no longer occurs when you delete the start point and then another element in the vertical alignment of a Trimble road, or when editing the vertical geometry of an additional string in a Trimble road.
- You will no longer see an occasional application error when you attempt to key in a nominal string value for a GENIO road at **Review**.

Tunnels

Resolved issues

- **Application error**: An application error no longer occurs when you delete the start point and then another element in the vertical alignment of a tunnel, or when editing the vertical geometry of an additional string in a tunnel.

Mines

Resolved issues

- **Auto stakeout report for Mines**: The Auto Stakeout report for Mines now includes points for all auto stakeout methods.

Supported equipment

Trimble Access software version 2018.20 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 controllers:

- Trimble TSC7 controller
- Trimble 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 receivers: SPS585, SPS77x, SPS78x, SPS88x, SPS75x, SPS85x, SPS985, SPS985L, SPS986
- Spectra Precision® receivers: SP60, SP80
- S-Max GEO receiver

NOTE – *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 2018.20 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 October 2018**.

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 2018.20 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 2018.20 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 2018.20, 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