RELEASE NOTES

TRIMBLE® ACCESS™
SOFTWARE

Version 2013.01
Revision A
March 2013

&Trimble.

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Release Notes

Corporate Office

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Release Notice

This is the March 2013 release (Revision A) of the *Trimble Access Release Notes.* It applies to version 2013.01 of the Trimble Access software.

Product Information

This section contains information about the Trimble® Access™ system version 2013.01.

The Trimble Access software provides a collection of survey tools for use in the field, and web-based

services for the office and in the field. These applications may be installed on the controller, the office computer, or on servers hosted by Trimble, depending on the parts you have purchased.

New controllers

Trimble S3 total station, Trimble M3 total station, and Trimble GeoXR, TSC3, Trimble CU, TSC2® controllers

The controller operating system is already installed. You must use the Trimble Access Installation Manager to install or update the base software, any additional applications, and the application license(s).

For more information, see Updating the software and installing licenses on the controller .

Trimble Tablet controller

The operating system is not installed. Turn on the controller to install the Windows® operating system and then apply Windows updates. Then install the Trimble Access Installation Manager, which in turn installs the applications and license(s).

For more information, see Updating the software and installing licenses on the controller .

Updating the software and installing licenses on the controller

Before you use your controller, you must install the applications, application updates, and license files that you purchased using the Trimble Access 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.

If you previously installed the Trimble Access Installation Manager software, you do not need to reinstall it. When you run the Installation Manager, it connects to the Internet and automatically updates.

To run the Installation Manager, do one of the following:

- For a Trimble Tablet controller: Select *Start / All Programs / Trimble Access Installation Manager.*
- For all other controllers: Select *Start / Programs / Trimble Access Installation Manager* on the office computer and then connect the controller to the computer.

Note - To install Trimble Access on a controller when you do not have access to an Internet connection, download a copy of the Trimble Access Installation Manager and all application files and licenses for the controllers for installation offline. To do this you must know the serial numbers of the controllers that Trimble Access will be installed on.

For more information on updating Trimble Access applications and licenses, go to www.trimble.com/taim/.

Am I entitled to this version?

To install and run Trimble Access software version 2013.01, you must have a warranty agreement valid up to 1 February 2013.

When you upgrade to version 2013.01 using the Trimble Access Installation Manager, a new license file is downloaded to your device.

For further information on how to install or update your software and license file, refer to the help file in the Trimble Access Installation Manager.

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.

Converting job and style files and transferring data after an upgrade

During the upgrade of applications on the controller, all existing \Trimble Data files on the controller are downloaded to the office computer. When required, they are converted so that they are compatible with the new applications and then they are transferred back onto the controller.

During installation, new versions of files such as the predefined ASCII import and export formats are installed on the controller. If you created new custom import or export formats, or modified and **renamed** the existing formats, these files are also reinstalled on the controller during the upgrade/installation of the new applications.
If you modified the predefined formats and saved them with the same name, they are replaced when you upgrade the controller. The downloaded files still exist on your office computer.
If you create new formats or customize the predefined formats, Trimble recommends that you save the files with a new name. Use the Trimble Data Transfer utility or ActiveSync technology to transfer these files back onto the controller once the upgrade is complete.

*Note - You **cannot** copy old jobs onto the controller for the General Survey software to convert on-the-fly.*

The files are backed up in the following locations:

Office computer operating system	Backup location
Windows XP	C:\Documents and Settings\<user name>\Local Settings\Temp\<controller serial number>-TA\<Timestamp>
Windows Vista®/Windows 7/Windows 8	C:\Users\<user name>\AppData\Local\Temp\<controller serial number>-TA\<Timestamp>

Note - You can upgrade a controller with Trimble Survey Controller™ files, and these are converted to General Survey files.

When the files are installed on the controller, they are initially saved to a folder called [UpgradedFromTrimbleSurveyController]. When you first run the Trimble Access software and log into the controller, this folder is renamed to the user name you logged in with.

Using Trimble Access software version 2013.01 with other Trimble products

Trimble Access for Integrated Surveying on Trimble controllers

Trimble Access software version 2013.01 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 Geomatics Office™	1.63
Trimble Business Center	2.82
Trimble RealWorks®	7.1.1
Trimble 4D Control	4.00
Trimble Link™ (AutoCAD Civil and Civil 3D 2011)	6.0.3
Trimble Data Transfer	1.55
Trimble Total Control™	2.73
Terramodel®	10.61

Trimble receiver	Version
Trimble R10	4.70
Trimble R8-2	4.63
Trimble R8-3, R8-4	4.70
Trimble R6	4.63
Trimble NetR9	4.70
Trimble GeoXR	4.55
Trimble R4	4.63
5800 II	4.63
Trimble R7 GNSS	4.63
Trimble R5	4.63
5700 II	4.63

Trimble R8	2.32
5800	2.32
Trimble R7	2.32
5700	2.32

Trimble Instrument	Version
Trimble VX™ Spatial Station	R12.3.39
Trimble S3 total station	M2.1.21
Trimble S6 total station	R12.3.39
Trimble S8 total station	R12.3.39
Trimble M3	1.30 2.10
Trimble 5600 Series	696-03.08
Trimble ATS	696-03.08
Trimble 3600 Elta CP (with interpreter)	1.15
Trimble 3600	2.10

See also: http://trl.trimble.com/dscgi/ds.py/Get/File-93082/Survey%20Software%20and%20Firmware.pdf for the latest software and firmware versions.

Note - Trimble instrument firmware is available on www.trimble.com.

Device Operating System first supported in Trimble Access

Device	Microsoft Windows operating system	First supported in Trimble Access version
Trimble Tablet	Microsoft Windows 7 Professional	1.7.0
Trimble GeoXR	Microsoft Windows Mobile® Version 6.5 Professional	2012.00
Trimble TSC3	Microsoft Windows Mobile® Embedded Handheld 6.5	2012.00
Trimble TSC3	Microsoft Windows Mobile® Version 6.5 Professional	1.8.0
Trimble CU Model 3	Microsoft Windows CE .NET Version 6.0	1.7.0
Trimble S3	Microsoft Windows CE .NET Version 6.0	2012.00
Trimble M3	Microsoft Windows CE .NET Version 6.0	2011.10
Trimble TSC2	Microsoft Windows Mobile® Version 5.0 Software for Pocket PC	1.0.0
Trimble CU		1.0.0

	Microsoft Windows CE .NET Version 5.0	

Updating office software

When you upgrade to version 2013.01, 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 Access Installation Manager, the office software on the computer that has Trimble Access 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 Access 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.asp?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.asp?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 Access 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 Access Latest Release

Trimble Access version 2013.01, March 2013

General Survey version 2.11

Known issues: Resolved

Stakeout delta update - An intermittent issue where the stakeout deltas were not updated when re-measuring the stakeout location using a conventional instrument has been resolved.

GeoXR switching to new base - An issue where, after connecting a Trimble GeoXR to an RTK network that was transmitting ephemeris messages as part of the GNSS correction stream, the message "Switching to new base" appeared every 10 seconds has been resolved.

Roads version 2.11

Known issues: Resolved

Slow Trimble Road Stakeout and application error - An issue where road stakeout started to run very slow, and then resulted in an application error has been resolved. The error occurred due to the

repeat loading of the as-staked points. As-staked points were added to the plan and map view as solid circles in Trimble Access version 2013.00. For version 2013.01 we do not load or differentiate between staked points and not yet staked points, they are all shown as open circles.

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.

Trimble Access Previous Releases

Trimble Access version 2013.00, February 2013

General Survey version 2.10

Note - For Trimble CU controllers the Trimble Access Version 2013.00 can be installed only on the Trimble CU model 3 (S/N 950xxxxx). Trimble CU models 1 and 2 have insufficient memory to support Version 2013.00.

New hardware

Trimble Slate Controller

The Trimble Slate Controller has the following key new features:

Internal GPS

The internal GPS can be used to navigate to a point and for GPS search. GPS search is automatically enabled but a connected GNSS receiver is always used in preference to the internal GPS.

Internal compass

The internal compass provides an aid to navigation.

Internal camera

The 8 megapixel camera can be used to capture and attach an image to a point.

Internal cellular modem

The integrated GSM/GPRS modem enables wireless Internet connectivity.

Internal phone

The Trimble Slate Controller includes a phone.

Additional Trimble Slate Controller information:

The Trimble Slate Controller only connects to a Trimble R4 GPS receiver.

Operating system available in multiple languages

The operating system on the Trimble Slate Controller controller is available in multiple languages. When you turn on the Trimble Slate Controller controller for the first time, you are prompted to select the language for the operating system. The following languages are supported:

◊ English
◊ Spanish
◊ German
◊ French
◊ Italian
◊ Portuguese (Brazilian)
◊ Chinese
◊ Korean
◊ Japanese
◊ Russian

Selecting a language for the operating system also installs the matching Trimble Access language, so you are no longer required to install a Trimble Access language if you selected one of the above operating system languages. If the language you require is not listed above, select the English operating system and then use Trimble Access Installation Manager to install your preferred language.

Note - Once a language is selected, it can only be changed by returning the controller to a Service Center.

New features

Menu improvements: The following improvements have been made to the way menus are displayed:

♦ Previous pop-up lists are now presented as menu buttons. Menu buttons provide easier selection. This change has resulted in the following menu prompts being renamed:

Old menu name	New menu name
End conventional survey	End conv. survey
Compute + subdivide area	Area calculations
GDM data output	Data output
Autolock and Search Controls	Target controls
Direct Reflex	EDM settings
Send data to another device	Send data
Receive data from another device	Receive data

Export fixed format files	Export fixed format
Import fixed format files	Import fixed format
Export custom format files	Export custom format
Import custom format files	Import custom format
Base surface	Initial surface
Major surface	Final surface

♦ A symbol (a small black arrow) has been added to the end of the survey style name when starting a survey, indicating that further action is required before the survey will start.

♦ A symbol (a small black square) has been added to the end of the following end survey options:
   ◊ End GNSS survey
   ◊ End conv. survey
   ◊ End integrated survey

Status line changes: The following prompts have changed:

Style type	Old menu name	New menu name
GNSS	Switch to <style name>	Switch to GNSS
Conventional	Switch to <style name>	Switch to Conventional

Navigation arrow: The navigation arrow has been increased in size offering improved visibility when staking points, lines, arcs, alignments and roads.

Auto F1 / F2: You can now use the *Auto F1 / F2* functionality to automatically stakeout a position on face 2 after the face 1 observation. Previously you could only use *Auto F1 / F2* to measure a point.

Volumes: Support has been added for a new volume method called *Surface area.* This method enables a volume to be calculated from a selected surface and a specified material depth.

Note: The surface area is also displayed.

Remeasuring a GNSS position: Two new behaviors are supported when measuring a position with excess tilt or excess movement:

♦ **Automated behavior:** A new *Auto abandon* option has been added to a GNSS survey type for *Topo point* and *Observed control point.* When selected, points measured using a GNSS receiver with an in-built tilt sensor that experience excess tilt, or, for all receivers, excess movement, during the measurement process will be abandoned and the measurement process restarted.

♦ **Manual behavior:** A new *Re measure* option has been added enabling points that experience excess tilt or excess movement during the measurement process to be discarded and remeasured. Previously you could only continue and store the point, or discard the measurement. This option is available for all points measured using a GNSS receiver with an in-built tilt sensor that experience excess tilt, or, for all receivers, excess movement during the measurement process. The pole should be leveled again before tapping re-measure.

Auto measure: When staking a point, line, arc, alignment or DTM in a GNSS survey, a new *Auto measure* option enabling the General Survey to automatically start measuring when the *Measure* key is tapped has been added. This option can be enabled as part of the survey style. Alternatively, tap *Options* from the stakeout screen to enable auto measure for the current survey.

eBubble calibration:

♦ You can now access the eBubble options from the *Instruments* menu.
♦ You can now calibrate the eBubble without the receiver tracking any satellites.
  ◊ The receiver firmware version must be v4.70 or later.
  ◊ Because the calibration time is stored in the receiver it is important that the controller has the correct time and time zone.

eBubble softkey: An *eBubble* softkey has been added to the *Point, Line, Arc, Alignment* and *DTM* stakeout navigation screens.

GLONASS satellites: Support has been added for tracking GLONASS satellites when the broadcast format has been set to *OmniSTAR* in an RT differential survey.

BeiDou test satellites: You can now track and log the BeiDou test satellite observations.

♦ The BeiDou option is only available for postprocessed surveys.
♦ The BeiDou test satellites are tracked and logged, but not used, for postprocessed surveys.
♦ You can log the BeiDou test satellites data only to the receiver memory.
♦ Both the base and rover receivers must have v4.70 firmware or later installed to track BeiDou test satellites in a postprocessed survey.

QZSS satellite: Improved QZSS satellite (J1) support.

♦ To provide improved initialization times for postprocessed surveys, the QZSS satellite (J1) is now included in the satellite count towards initialization times.
♦ The QZSS L1-SAIF signal can now be used as a correction source for SBAS differential surveys.

QZSS SBAS support: You can now use QZSS SBAS functionality in an RTK survey if your radio link goes down, and in an RT differential survey. For an RTK survey the QZSS option is only available if you are using CMRx as your broadcast format.

Default base radio: For a GNSS survey style the default base radio is now the *Trimble TDL450*. Previously it was the *Trimble PDL450*.

RT differential: The precision default values for an RT differential survey are now set at 0.750 m for the *Horizontal tolerance* and 1.000 m for the *Vertical tolerance.* Previously they were 1.000 m for the horizontal and 3.000 m for the vertical. The tolerances have been reduced due to the latest Trimble receivers having higher-quality tracking.

RTK occupation epoch counter: In RTK, the occupation epoch counter is reset when the precisions go outside tolerance. The counters only count up epochs where the precision of each consecutive epoch meets tolerance. This ensures that all epochs contributing to the final stored coordinate meet the precision criteria. This behavior was implemented for the Trimble Access version 2012.20, October 2012 release but was inadvertently missed from the Help file and not mentioned in the Release notes.

Receiver directory: When transferring files from the receiver to the controller where the receiver has both internal and external memory, the default directory on selecting *Instrument / Receiver files / Import from receiver* is now *Internal.*

DTM display: When displaying the DTM in the map the elevation of your current position is now displayed on the map screen. Previously, only the cut/fill value and the DTM elevation at your current position was displayed. This feature is only available on the Trimble Tablet.

Relative DOP: For receivers with firmware 4.x and later the stored *Relative DOP* record is now set to *No.* This is because these versions of receiver firmware produce constellation DOP.

Configuring base and rover modes: When editing a survey style and connecting to the receiver internal radio you are now prompted to switch to base or rover mode if required.

Receiver files: The following improvements have been made regarding the management of files on a receiver:

- ♦ Files with names longer than 8 characters are now displayed correctly
- ♦ You can now delete files with names longer than 8 characters
- ♦ You can now browse up and down the folder tree, and download files from anywhere on the tree
- ♦ Support has been added for /Internal and /External file system trees on receivers that support both

R8/R6/R4 receivers: Support has been added for R8-4, R6-4 and R4-3 receivers:

Controller internal antenna names: The *TSC3 internal* and *Yuma Internal* antenna names have been renamed to *Controller internal.*

Station display: Support has been added for alternative station display. The station is displayed as per the 10+00.0 option but the value before the + is the station value divided by a *Station index increment.* The remainder is displayed after the +. For example if the *Station index increment* is set to 20, a station value of 42.0 m is displayed as 2 + 02.0 m. This method is available from *Job / Properties of job / Units.* From the *Station display* field select *Station index* and then enter the appropriate value in the *Station index increment* field. This display option is applicable for lines, arcs, alignments, roads and tunnels. It is used in Brazil but may have applications in other markets.

Last used settings retained over upgrade: More last used settings are now retained when upgrading from Trimble Access version 2012.20 or later. Settings such as last used options and methods, and prism configurations are now retained after upgrading with the Trimble Access Installation Manager.

Side slope from alignment: When staking a side slope from an alignment a dashed line is now displayed that connects the side slope catch position, (the point where the side slope intersects with the ground), to the side slope hinge position.

Collimation axis tilt adjustment: The standard deviations of the measured observations are now displayed, and updated, during the measurement process. These values provide an indication of the consistency of your observations.

PIN lock security: You can now set or change the PIN and access the PUK for all Trimble VX Spatial Station or Trimble S Series total station using Trimble Access. Do this from the *Instrument settings* screen. Previously PIN lock security could only be enabled via the Face 2 display on the Trimble VX Spatial Station or Trimble S8 total station.

CSV files: Support has been added for the importing and linking of CSV files that have been stored in Unicode (UCS-2).

Backsight centering error: You can now specify an unique centering error for the instrument and the backsight. Previously, you specified a single centering error that applied to both the instrument and the backsight.

World files: Support has been added for the *.pgw extension for .png image files.

JobXML version number: You can now select a version number when exporting a JobXML file.

Improved behavior when changing your login user name: Now, if you change your *Login User Name* while a survey is running, you are only prompted to restart the survey applications to use the new login. Previously an alert was displayed as well but this has been removed.

Coordinate system database updates:

- ♦ Reference to the Canadian NTv2 datum grid has been added
- ♦ The UPS coordinate systems have been changed to require the selection of a datum
- ♦ The following new coordinate system definitions have been added:
    - ◊ Columbian Bogota MAGNA
    - ◊ Este Central MAGNA
    - ◊ Este Este MAGNA
    - ◊ Oeste MAGNA
    - ◊ Oeste Oeste MAGNA
- ♦ New Russian GKS-2011 and PK-90.11 ellipsoid and datum definitions have been added

Known issues: Resolved

Excess tilt staking an alignment: An issue has been resolved where, having stored a point with excess tilt, and despite the pole being within tolerance, the excess tilt message continued to display.

RTK On Demand: An issue where the *Pause mode* for RTK On Demand did not work for the Trimble R10 receiver has been resolved.

Start base: An issue where the base radio output failed to start when the base was started has been resolved. This was an issue only if you attempted to start the base before the antenna height was displayed in the status bar.

Radio settings: An issue where, despite having tapped *Esc* and electing to abandon changes to the *Enable station ID* option, edits to the radio settings were being saved has been resolved.

Receiver hardware version: The hardware version for the connected GNSS receiver is now displayed in the *Receiver settings* screen.

Trimble S3 total station map display: An issue where GNSS points were not displayed in the map on an Trimble S3 total station has been resolved.

xFill issues:

♦ An issue where the RTX satellite vehicle did not display in the satellite plot or list has been resolved. Previously the satellite vehicle only displayed when xFill started.
♦ An issue where, when creating a new GNSS survey style and selecting R10 as the antenna height, xFill was being automatically selected, has been resolved.

OmniSTAR: If you cancel out of starting an RTK &infill survey where the survey style has been configured to fall back to OmniSTAR, and you select *Continue and start OmniSTAR without waiting for RTK* you will no longer see infill messages appearing in the status line.

SBAS status: An issue where you could not select *SBAS status* from the *Favorites* menu has been resolved. Previously, after adding *SBAS status* to the *Favorites* menu, the text appeared grayed out.

GPS Search / Position: An issue where Trimble Access would attempt to use the wrong receiver type when you used *GPS Search* or the *Instruments / Position* option has been resolved.

RTK base station coordinates: A problem where the incorrect RTK base station coordinates were being used if a new base station was detected during a survey has been resolved. This problem occurred when the new base had the same name but different coordinates as the point with that name in the open job file.

Incorrect status line message: An issue, when connected to a base receiver, where the status line reported *Base survey* but no survey was running has been resolved.

GPS antenna height: An issue where the GPS antenna height in an *Integrated Survey* was not updated when the target height was changed via the gps antenna icon has been resolved.

Continuous GPS points: An issue where attributes were not always being recorded for continuous GPS points has been resolved. This was only an issue for the first sequence of continuous points in a new job, when no other points with attributes had been recorded previously.

RTK initialization: An issue where the initialization mode was not showing the correct mode in the *RTK initialization* screen has now been resolved.

Internet connection: An issue where Trimble Access failed to establish an internet connection after switching the SIM card in a Trimble R10 receiver has been resolved.

Dialup VRS: An issue where the corrections did not restart after redialing to a dialup VRS has been resolved. However, for this to take effect you need receiver firmware 4.62.

GeoXR satellite tracking: A problem where the Trimble GeoXR was failing to track satellites has been resolved in GNSS firmware version 4.54. The software status bar indicated this issue by showing the flashing receiver icon (displayed when attempting to connect) and the satellite icon with 0 beside it. To check the GNSS firmware version installed, in General Survey select *Instrument / Receiver settings.*

Fast fix:

♦ An issue where, having tapped *Fast fix,* you were then forced to tap *Measure* in order to measure a point has been resolved.
♦ *Tilt auto-measure* is now supported for points measured by *Fast fix* from the context sensitive fields in the *Cogo* menu.

Low battery warning: An issue where the low battery warning message was not displayed for the Trimble R10 receiver has been resolved.

Low memory: Improvements have been made that reduce the likelihood of the controller shutting down due to low memory.

Staking a line: An issue where there was a delay in the update of the deltas has been resolved. This was an issue only when using a conventional survey instrument.

Multiple codes: An issue where, if multiple codes of the same name were assigned to a point, the attributes were not being handled correctly has been resolved. Previously, all the attributes for all the features with the same name were grouped together and assigned to each feature. That is, if you had three of the same features, each with four attributes, then each feature was assigned 12 attributes, with all the attributes duplicated for each feature. Furthermore the display of the attributes was not being split up into feature groups.

Trimble Trimble M3 total station issues:

♦ An issue where a red electronic level was displayed when the instrument was in fact level, has been resolved.
♦ An issue where tapping the *Tracklight* button from the GNSS functions screen was not switching on the tracklight has been resolved.

Remote object: An issue where the slope distance for a given *Angles only* observation measured using an Trimble M3 total station was not computed immediately when the angle was measured has been resolved. Previously, if you changed the vertical angle before pressing *Store,* the elevation could

have been incorrectly computed.

Video Auto measure: An issue where the *Auto measure* option accessed from the *Options* sofkey on the *Video* screen only worked for the first measurement has been resolved.

Missing Note: An issue where a note added to a media file that was linked to a point, was lost when the media file was linked to another point or to the job, has been resolved.

DXF export: An issue where entities deleted from a job were being included in a exported DXF file, has been resolved.

Antenna height: An issue where, in some situations in an Integrated survey, the last used non DR target and antenna correction was not used has been resolved.

Voice prompts: An issue where survey-specific voice prompts were played when you were not in a survey has been resolved.

Cogo intersection: An issue where the computed intersection point was incorrect has been resolved. This was an issue only if you accessed and then closed the tap and hold menu before selecting the lines and then, from the tap and hold menu, computed the intersection.

Login alert: An issue where you were not warned to restart survey applications after changing your login has been resolved.

Application errors

You should no longer see occasional application errors when you do any one of the following:

- ♦ Connect to an Trimble R10 receiver with an old antenna.dat file on the controller.
- ♦ Add a new group in *Measure codes.*
- ♦ Attempt to switch to a conventional survey style from the *Confirm staked deltas* screen when staking using an Integrated survey style.
- ♦ Press the Trimble key on a Trimble CU controller and select anything other than *Trimble Access* or *About* from the menu.
- ♦ Close General Survey from the *Alert* dialog after changing the *Username*
- ♦ Attempt to add an ESRI Shapefile for selection as a layer from the map where the Shapefile includes a polyline defined by a single point.
- ♦ Receive a new Automatic RTCM online transformation.

Roads version 2.10

New features

Plan view line work: The plan view line work defining the road is now displayed when staking a Trimble or LandXML road in a GNSS survey or a conventional robotic survey. Previously the line work was only available when staking a GENIO road or reviewing a Trimble, LandXML or GENIO road.

Note - The line work replaces the grid that was added in release - Trimble Access version 2012.20.

Editing side slopes: You can now edit side slope values and select a new hinge offset from the navigation screen. This functionality is available when staking a Trimble or LandXML road by *Station and offset* and *Nearest offset.* To do this tap and hold on the screen and select *Edit side slope.* Previously, this editing functionality was accessed from the *Select New Offset For Side Slope* option from the *Offset* field. This option has now been removed.

LandXML files: Support has been added for LandXML files:

♦ Where the horizontal alignment has been defined by Points of Intersection (PI's).

Note - Curves defined by spiral-arc-connectingSpiral-arc-spiral are not supported.

♦ Where the cross-section elevations are absolute values. If, when selecting a LandXML file from the *Define* or *Survey* menus, and where the cross-section elevations are absolute values, select the *Absolute design cross-section elevations* option to ensure the templates are resolved correctly.
♦ From 12d Model, where the transition type is defined as *cubic.* The cubic type is not identifiable, so when selecting one of these files you are asked to choose the applicable type. Two cubic types are supported:
  ◊ Cubic spiral
  ◊ NSW cubic parabola

NSW cubic parabola: Improved support when defining a NSW cubic parabola by removing the requirement to enter a *Transition Xc* value. The software now computes and displays the *Transition Xc* value from the entered *Radius* and *Length* values.

Auto measure: When staking a road in a GNSS survey a new *Auto measure* option enabling the Roads to automatically start measuring when the *Measure* key is tapped has been added. This option can be enabled as part of the survey style. Alternatively, tap *Options* from the stakeout screen to enable auto measure for the current survey.

Station display: Support has been added for alternative station display. The station is displayed as per the 10+00.0 option but the value before the + is the station value divided by a *Station index increment.* The remainder is displayed after the +. For example if the *Station index increment* is set to 20, a station value of 42.0 m is displayed as 2 + 02.0 m. This method is available from *Job / Properties of job / Units.* From the *Station display* field select *Station index* and then enter the appropriate value in the *Station index increment* field. This method is used in Brazil but may have applications in other markets.

GeoXR scroll bar: When you review a Trimble, LandXML or GENIO road from the cross-section view or, for a GENIO road, select a position to stake from the cross-section view the scroll bar behavior has changed. You now slide the bar up the screen to select a station further down the road.

Navigation arrow: The navigation arrow has been increased in size offering improved visibility when staking a road.

Confirm staked deltas prompt: The prompt for an edited hinge offset for a Trimble road has been renamed to *New hinge offset.* Previously it was *New offset for side slope.*

Precise elevation: When staking out using precise elevation the status line now prefixes the vertical precision with V(TS): when the vertical precision is from the total station.

eBubble softkey: An eBubble softkey has been added to the stakeout navigation screens.

Known issues: Resolved

Position on road: An issue when staking by *Position on road,* where the stored *Station, H.offset* and *V.Dist. to road* values (as displayed at Review job) did not match those for the measured position (as shown in the As-staked deltas screen) has been resolved. This was only an issue when codes with associated feature and attributes were assigned to the measured point. If you moved away from the measured position prior to storing the point with its attributes, the new location was used for the station, offset and V.dist computation if the attributes were not entered using the *Attrib* softkey. That is, if you wait to be presented with the attributes entry form for entering the attributes rather than forcing it using the *Attrib* softkey then the station and offset values were incorrect.

Position from file: An issue where the values at the top of the stakeout out screen did not reflect the position selected has been resolved. This was only an issue when the position was not selected from the list.

LandXML files: An issue where a **<None>** template was not being inserted when consecutive cross sections had a different number or records has been resolved.

Review line work: An issue when reviewing a road where the plan view line work did not correctly represent the road definition has been resolved. Previously, a cross section was not displayed for stations where templates or superelevation records were applied. If these stations were not co-incident with the cross section interval or horizontal and vertical curve positions and the templates at these stations differed from the previous or next template or the superelevation records included widening, the plan view line work did not reflect these stations.

> **Note -** This was only an issue when reviewing a road. When surveying a road all template applications and superelevation records are taken into consideration.

eBubble: An issue where the eBubble was appearing at the selection screen has been resolved. Now, the eBubble only appears when you are staking, measuring and storing the position.

Delta update speed: An issue where the navigation deltas were slow to update has been resolved. This was only an issue when you were surveying a Trimble road by the *Position on road* method using a TSC2 controller.

Application errors

You should no longer see occasional application errors when you do any one of the following:

- ◆ When you attempt to select a position to stake without having selected a file, when staking by *Position from file*
- ◆ Stake by *Position on road* or *Nearest offset* and your position is on or about the end of an entry transition.

Tunnels version 2.10

New features

NSW cubic parabola: Improved support when defining a NSW cubic parabola by removing the requirement to enter a *Transition Xc* value. The software now computes and displays the *Transition Xc* value from the entered *Radius* and *Length* values.

Cross-section guide lines: When surveying by *Auto scan, Position in Tunnel* or *Setout* you can now display a horizontal and vertical line in the cross section view. The vertical line displays as a green line that runs vertically through the centerline. The horizontal line, known as a *Spring line,* displays as a horizontal green line through the centerline and can be offset vertically relative to the centerline. These lines are defined from the *Scan/ Manual settings* screen when you start a survey.

Station display: Support has been added for alternative station display. The station is displayed as per the 10+00.0 option but the value before the + is the station value divided by a *Station index increment.* The remainder is displayed after the +. For example if the *Station index increment* is set to 20, a station value of 42.0 m is displayed as 2 + 02.0 m. This method is available from *Job / Properties of job / Units.* From the *Station display* field select *Station index* and then enter the appropriate value in the *Station index increment* field. This method is used in Brazil but may have applications in other markets.

Known issues: Resolved

Set out positions: An issue where alignment offsets were not applied to set out positions has been resolved.

Monitoring version 2.05

Known issues: Resolved

Level icon: An issue where the icon for the *Level* button on the *Instrument status* screen was not being displayed, when not connected to an instrument, has been resolved.

Level button: An issue where the *Level* button on the *Instrument status* screen was not being enabled when it should, has been resolved.

Land Seismic version 1.40

New features

Conventional instruments: Support has been added for conventional instruments.

Exclusion zones:

- ♦ If the current position is in an exclusion zone the name of the exclusion zone is displayed on the screen.
- ♦ The initial default color assigned to exclusion zones has been set to red.
- ♦ An option has been added to allow the recording of the entry into and exit from exclusion zones.
- ♦ ESRI shape files containing polygon definitions (POLYGON, POLYGONM and POLYGONZ) can now be used directly as exclusion zone files. However you cannot add exclusion zone definitions to a shape file.

New database records: Custom database records are used to record grid definition, crooked line, exclusion zone, exclusion zone entry/exit details as well as specific Land Seismic point details.

Cut/fill values: The computed cut/fill value to the point being staked can now be displayed on the graphical stakeout screen.

Inline/Crossline deltas: The inline/crossline deltas are now shown in green when within layout tolerance even when inside an exclusion zone.

eBubble softkey: An eBubble softkey has been added to the stakeout navigation screens.

Known issues: Resolved

Incorrect default point name: When a new point was selected from the map for stakeout the default design point name was not being updated.

Error on tapping *Stakeout* button twice: It was possible to tap the *Stakeout* button twice from the Seismic stakeout screen resulting in an error causing the system to stop.

Map zoom to extents: The graphical extents of exclusion zones and grid definitions are now taken into account in the map zoom to extents option.

Hatching display: The hatching of exclusion zones will now only be drawn if the *Hatch polygons* map option is enabled.

Azimuth value not remembered: The azimuth between 2 points fields are now being remembered between sessions.

Application errors

You should no longer see occasional application errors when you do any one of the following:

- ♦ Attempt to re-open the current job.
- ♦ Tap the *Stakeout* button when the survey is starting following a previous tap on the *Stakeout* button.

Trimble Access Installation Manager

New features

>**Trimble Solution Improvement Program:** The Trimble Solution Improvement Program is now available with Trimble Tablet installations.

Trimble Access Services

New features

>**Translations:** Trimble Access Services pages within the Trimble Connected Community have been translated into the following languages:

>>♦ French
>>♦ German
>>♦ Italian
>>♦ Portuguese
>>♦ Spanish
>>♦ Korean
>>♦ Japanese

>Translated pages include the administration tools for organization registration, *Manage Users* and *Manage Sites,* as well the user navigation page and newly created project sites.

New features - Released November 2012

>**Business Model Changes:** AccessSync is now **available at no cost** with a current Trimble Access Software Maintenance Agreement (either standard or extended). AccessSync software and licenses can be downloaded now using the Trimble Access Installation Manager.

>**Trimble Connected Community organizations are now freely available for use with the AccessSync service:** These "free" Trimble Connected Community organizations are designed specifically for use with the AccessSync service. To register for a new organization, browse to http://my.trimbleaccess.com. To register, you must have a valid AccessSync license for one controller. Organizations are limited to one per company and include:

>>♦ one sitemanager (administrator) account
>>♦ a maximum of 100 user accounts
>>♦ 10 GB storage space per organization

>**Trimble Connected Community shortcut:** Trimble Connected Community can now be accessed at http://my.trimbleaccess.com

>**New administration tools:** New administration tools within your Trimble Connected Community organization simplify the workflow for managing users (add, edit and delete users) and managing project sites (add, edit and delete project sites). Only the *Sitemanager* can access these tools.

>**Simplified permission controls:** Permission controls within Trimble Connected Community have been simplified for Trimble Access organizations. Permission levels for owner, editor, and viewer on the various elements of the Trimble Connected Community organization have been removed and a user now has access to a project site and data, or not. If a user has access to a project then they can use

the AccessSync service to synchronize data on that project.

Simpler navigation to other sites: A navigation box has been added to the top right of Trimble Access organizations to allow users to easily navigate between the sites they have access to. Data processing and other free services can now be accessed by clicking in the navigation box at the top right of the services pages and selecting *Survey Tools.* Logging in to your organization is not necessary to access free services.

Trimble Access Services within Trimble Business Center: Trimble Access Services within Trimble Business Center have been updated to be consistent with the new web interface. All features that are available within the web interface are now available through Trimble Business Center. Data processing and other free services can now be accessed by clicking in the navigation box at the top right of the services pages and selecting *Survey Tools.*

Known issues: Resolved

AUSPOS Data Processing Service: You can now upload and process GNSS data to the AUSPOS third party data processing service; previously this failed within Trimble Access Services.

Editing user accounts: When editing user accounts the default site that you land on when logging in is no longer reset to the main navigation page.

To All Users **folder:** The *To All Users* folder is now created when a project site is created; previously this folder had to be created manually.

AccessSync version 1.51

New features

History and Back buttons: The **History** and **Back** buttons have been swapped on the folder view form to prevent users accidently clearing the history when they open the form.

Known issues: Resolved

Password restrictions: When in the field, you can now login with the following characters in your password: &# + _. Previously this resulted in an error message.

Trimble Connected Community

New features - Released November, 2012

Trimble Connected Community shortcut: Trimble Connected Community can now be accessed at http://my.trimbleaccess.com

For information on changes, log in to the Trimble Connected Community, go to the TCC Central site (www.myconnectedsite.com/site/tcc/tccsite), and then click *What's New in TCC?*

Other Information

This section applies only to Trimble CU, TSC2, and TSC3 controllers.

Configuring the system options

The new General Survey systems are shipped unconfigured. They are configured automatically when you connect the controller to the instrument. Alternatively, select *Settings / Connect / Survey styles / Options* and then select the option(s) appropriate for you:

- GNSS users - select *GNSS surveying*
- Conventional Total Station users - select *TS surveying*

For more information, refer to the *General Survey Help* or contact your local Trimble dealer.

These options control the styles that are available and the relevant options that appear throughout the software. You can reconfigure the General Survey system at any time.

Connecting a Trimble CU controller to the office computer

The Trimble CU controller communicates through the docking station to the office computer using USB. The docking station must be connected to the office computer through the USB-to-Hirose cable.
You cannot connect the Hirose-to-7-pin lemo cable to a 7-pin lemo-to-DB9 cable (supplied with GNSS systems) and use this to connect the docking station to the serial port on the office computer.

Connecting a TSC2 controller to wireless devices

When you connect a TSC2 controller to a device using wireless technology, the icon on the status bar at the top of the screen should be animated, showing that the connection is being attempted. Once the controller is connected, the icon should appear as two large arrows. This functions correctly in the operating system version 5.0.2, but not in version 5.0.3. However, if you click the icon, the *Connectivity* dialog correctly shows the connection status.

Microsoft ActiveSync technology issues

Microsoft Explorer and the Trimble Data Transfer utility may sometimes fail to find the folders and to show files on the controller. This can occur if another Explorer window is still browsing to the controller from a previous connection, or if the controller has been reset and a new connection made. To avoid this, make sure that you close all Explorer windows before you disconnect the controller.

Pairing a Trimble Tablet with a Trimble CU controller

To avoid time-out issues when pairing a Trimble Tablet with a Trimble CU controller, Trimble recommends that you promptly enter a short pairing code.

Documentation

General Survey 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.

The help is also available from www.trimble.com as a single file download in Adobe Portable Document Format (PDF), which you can view on an office computer, search for a particular word or topic, or print.