

Trimble Access: OSTN15 Transformation Update Procedure

This guide is for use with Trimble Access and is valid for Trimble Access controllers under Access software warranty, for a controller with expired warranty please follow the steps in guide “#38 Trimble Access 2016-03 OSTN15”

Nb. If the Access Controller is already on v2016-10 or newer, then it will already contain OSTN15 in the coordinate system database, however the two files outlined in section 1 below will still need to be copied across to it. It is also worthwhile creating an OSTN15 Template as outlined in section 3.

Prerequisites:

- Access Controller with current software warranty (Nb. TSC3 used in this guide)
- USB cable to connect to controller or USB stick
- OSTN15 files, these are available via the KOREC web site or from KOREC Support support@korecgroup.com

ostn15.sgf

osgm15.ggf

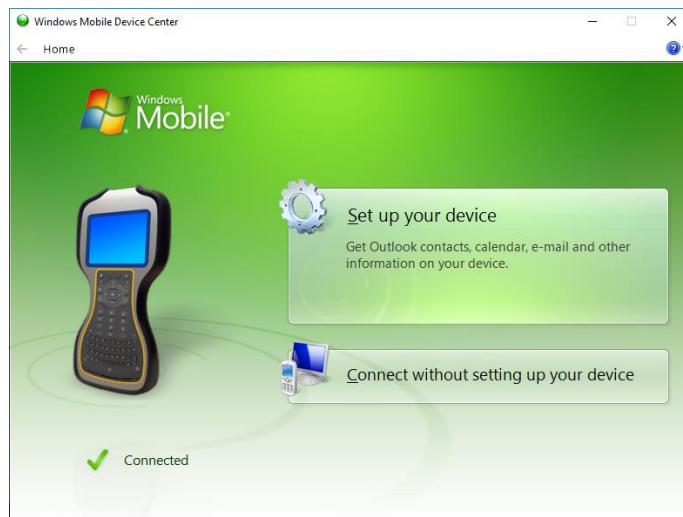
1) Copying OSTN15 & OSGM15 files onto a controller

There are two options available to copy the required OSTN15 files onto the controller.

- a) The first is to connect the PC to the controller via a USB cable
- b) The second is to copy the files on to a USB stick and then onto the controller

a) Connection via USB Cable

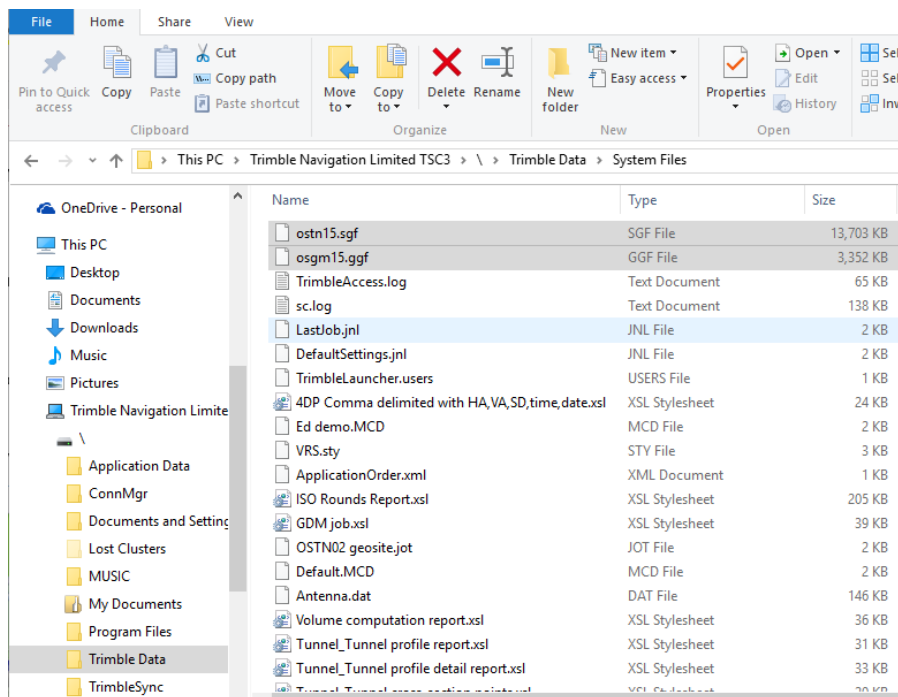
- Connect the TSC3 to a PC via the USB cable provided
- Turn on the TSC3
- Windows Mobile Device Centre should start up and connect to your device
- Select **Connect without setting up your device**



- Hover over **File Management** and select **Browse the contents of your device**



- Browse to **Trimble Data/System files**
- Copy the OSTN15 coordinate shift files to this location, you will need to copy both:
ostn15.sgf & osgm15.ggf



- Continue to **Step 2**

b) Copying files via USB stick

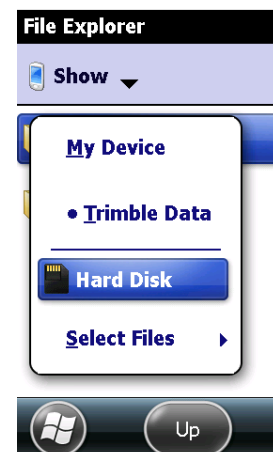
- Copy both OSTN15 coordinate system files onto the USB stick:
ostn15.sgf
osgm15.ggf
- Insert the USB stick into the USB port at the base of the TSC3 controller
- Select the **Files** button



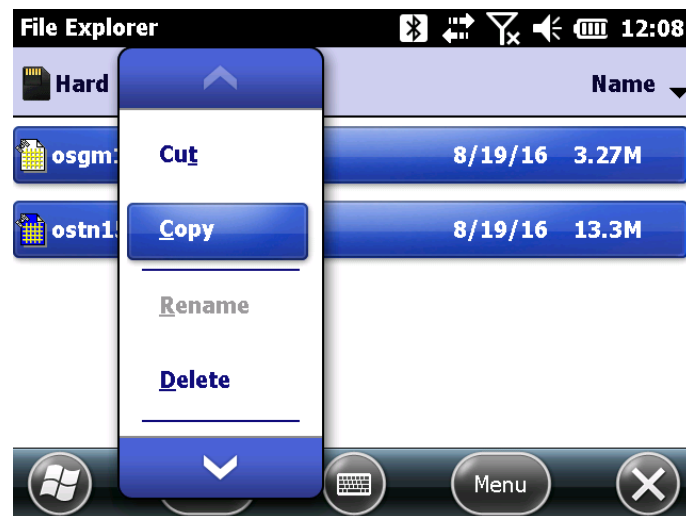
- Windows Mobile File Explorer will start.
- At the top of the screen select the arrow next to Trimble Data and **Hard Disk** will appear on the drop down if the USB stick has been correctly recognised. (If not try inserting the USB again)



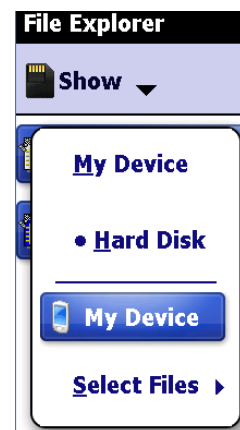
- Select **Hard Disk**
- Highlight the OSTN15 and OSGM15 files, keep the shift button pressed to select both files
- Press and hold the stylus on the screen



- Select **Copy**



- Tap the **Hard Disk** folder name at the top of the screen and select **My Device** from the folder list
- Navigate to **Trimble Data** then **System Files**



- Select a white area of the screen to ensure that no files are currently highlighted. Then press and hold the stylus on the screen and select **Paste**
- If easier, select **Menu > Edit > Paste**

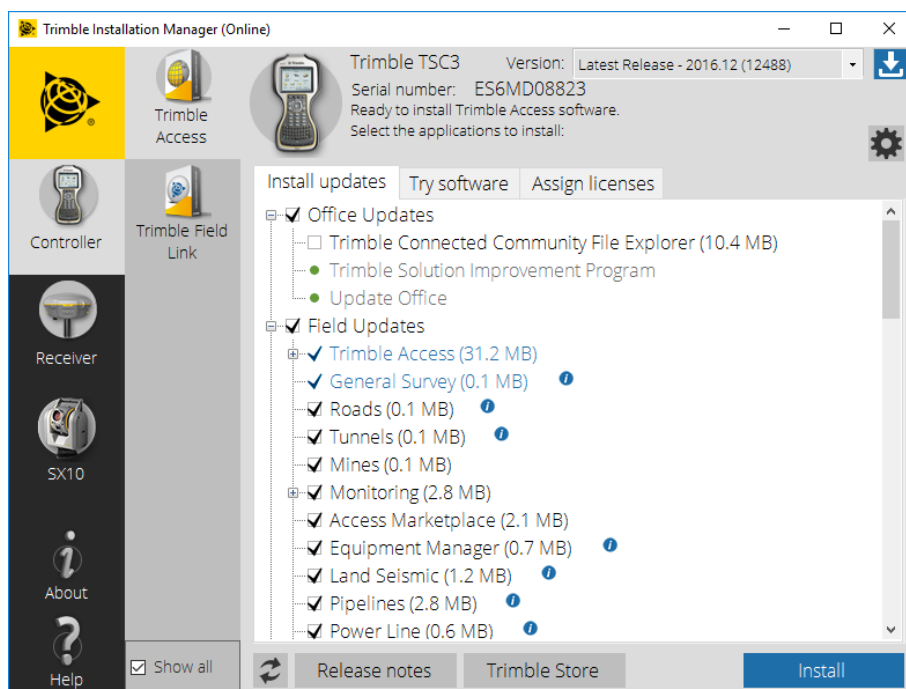


- Close the window by hitting the **X** in the bottom right hand corner

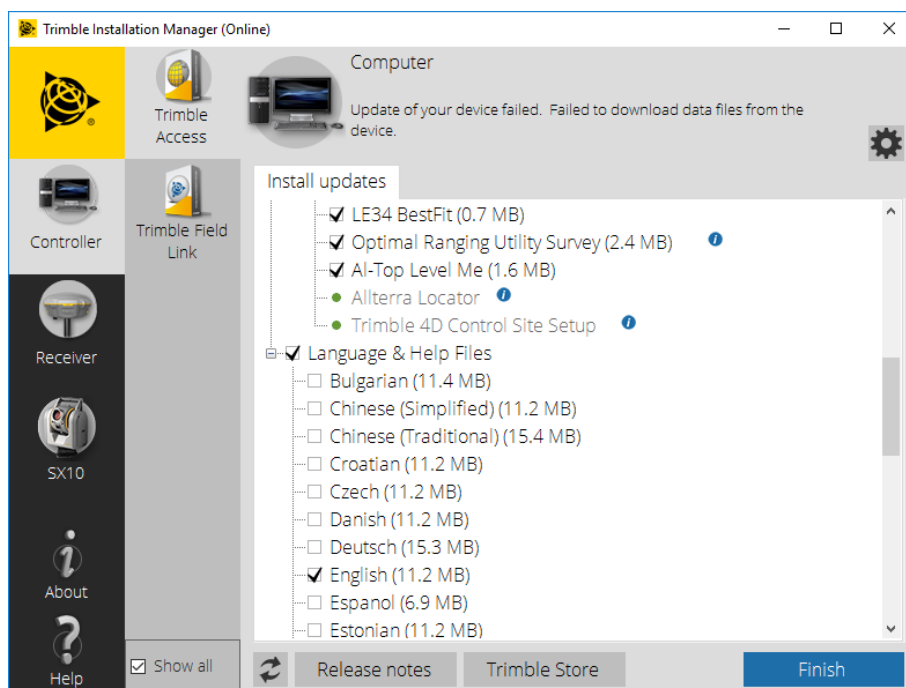
2) Updating Trimble Access to v2016-12 or Newer

Trimble Access is updated by running Trimble Installation Manager (TIM), which can be downloaded from the KOREC or Trimble Web Site. It is run on a PC **connected** to the Access controller via USB cable, or if Access is running on a tablet then TIM is run on the tablet itself.

- Install and launch Trimble Installation Manager



- Press **Install** to update Access to the most recent version permissible given the current warranty expiry date



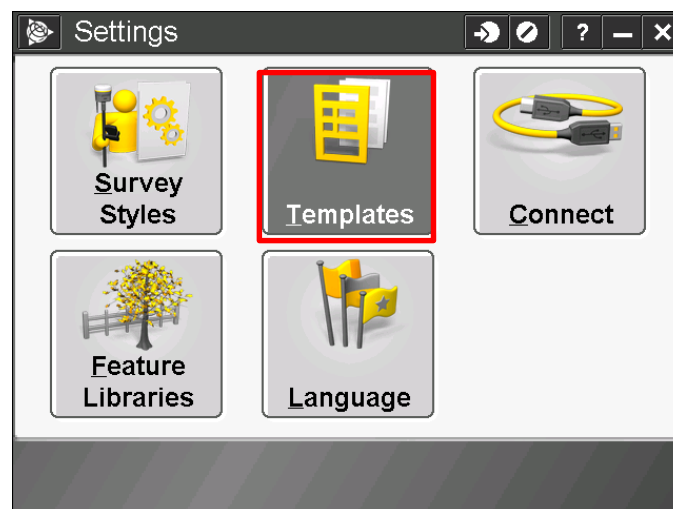
-
- When complete press **Finish**. The OSTN15 entry will now be in the updated coordinate system database on the controller. Next follow the steps in Section 3 below to create an OSTN15 template for use with future jobs.

3) Creating an OSTN15 Template

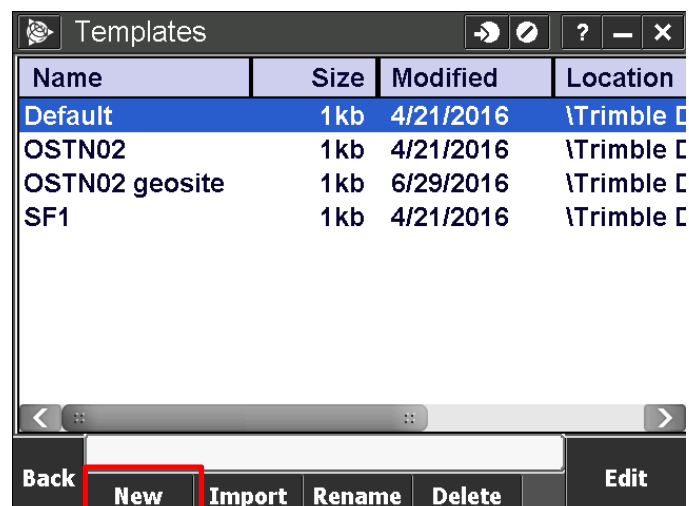
- Select the **Settings** button



- Select **Templates**



- Select **New** at the bottom of the screen



- Enter a new template name: **OSTN15**
- *Nb. If you have templates already set up on the controller you can choose to copy these settings from a previous OSTN02 Template, or just copy the default settings*
- Select the **Coordinate system**

New template

Template name: **OSTN15**

Copy from: **Default**

Properties

Coord. sys.: **OS National Grid (OSTN02) (United Kingdom)**

Units (Dist.): **Meters**

Linked files: **None**

Active map: **None**

Feature library: **None**

Esc Accept

- Choose to **Select from library**

Select coordinate system

Select coordinate system—

☐ Scale factor only

☒ **Select from library**

☐ Key in parameters

☐ No projection / no datum

☐ Broadcast RTCM

Esc Next

- Tap **Next**
- Make the following selections:
 - System: **United Kingdom/Ordnance Survey**
 - Zone: **OS National Grid (OSTN15)**
 - Shift grid file: **ostn15**
 - Tick** Use geoid model

Select coordinate system

System:
United Kingdom/Ordinance Survey

Zone:
OS National Grid (OSTN15)

Datum:
Ordnance Survey (Mol)

Shift grid file:
ostn15

Use geoid model:
☒

1/2

Esc [] [] [] Key in Store

- Select Page 2, by tapping the button in the bottom right of the screen to bring up **2/2**

Geoid model: **osgm15**

Coordinates: **Grid**

Project height: **50m**

Select coordinate system

Geoid model:
osgm15

Use datum grid:
No

Coordinates:
Grid

Project height:
50.000m

2/2

Esc [] [] [] Key in Store

- Tap **Store**

- Tap on the Units (Dist.) button displaying Meters.

New template

Template name:

Copy from:

Properties

Coord. sys.:

Units (Dist.):

Linked files:

Active map:

Feature library:

1/2

Esc Accept

- On page 3/3 of the Units settings screens, check the coordinate order is set to East-North-Elev as shown below.

Units

Distance display:

Area display:

Angle display:

Coordinate order:

Laser VA display:

Coordinate display:

Volume display:

Lat / Long:

Station display:

Time format:

3/3

Esc Accept

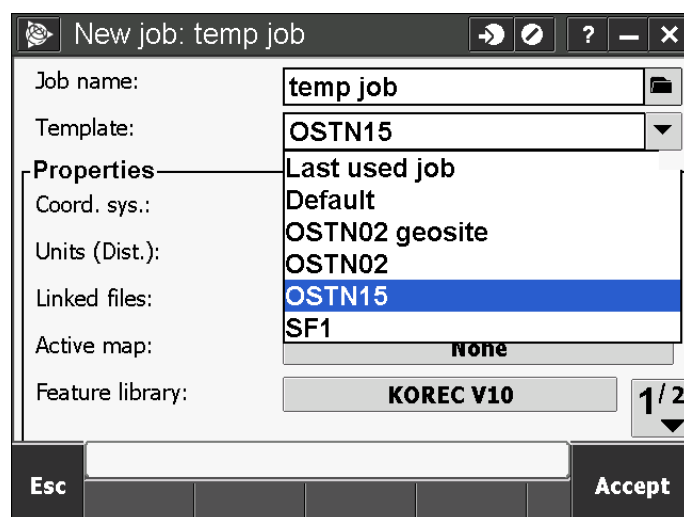
- Tap **Accept**
- At this stage you can link any additional files you may wish to the template, e.g. a Feature library
- Tap **Accept** to complete the template creation process

4) Using OSTN15

You have now correctly set up the OSTN15 transformation files to use with your GNSS surveys.

When starting a new job, it is always possible to select a template to select the coordinate system and other pre-defined values.

In the Template list you will see the new OSTN15 template. Select this template and continue with your normal survey procedure.



When starting a VRSNow Survey using the new OSTN15 files, you **must** select one of the new OSTN15 Mountpoints when prompted.

15_TVN_RTCM_31

15_TVN_RTCM_23

15_TVN_RTCM_31_GPS_Only

15_TVN_CMR_PLUS

15_TVN_CMR_X

15_TVN_DGPS

If set to use RTCM format data then it is advised to select 15_TVN_RTCM_31 and if using CMR then either of the CMR streams will be OK. Use 15_TVN_CMR_X with the Trimble R10.

If a Mountpoint name list isn't displayed during the start of a VRSNow survey, then the name has been pre-set in the GNSS Contacts. Use document - **#41 Trimble Access OSTN15 Mountpoint Change** – to change the pre-set name.