

Adding a predefined coordinate system to SmartWorx Viva



Support (855) 414-9453 E-mail: support@stpg.ca

Step	Sceeen Menu	Instructions	Visual
1.	Job Properties	Creating the coordinate system From the main menu, select 'Jobs & Data', then 'Job Properties' then select the 'Coord system' tab. Tap the blue box with the current coordinate system (WGS 1984 in my example) to enter the selection screen. Select F2/New to create a new coordinate system.	Job Properties: Default Coord system   General Codelist (CAD files Coord system TPS scale   WGS 1984
			Hz:     60°02'58"     V:     114°27'14"     Fn     abc     15:30       Store                 Data           Page
2.	Ellipsoids	<b>Select the ellipsoid</b> Tap the box to the right of 'ellipsoid' to view the list of available Ellipsoids, a custom ellipsoid can be created by pressing F2/new, but for most cases select GRS1980.	New Coordinate System   Image: Coordinate System     Name:   Utm Zone 10 N     Transformation:      Ellipsoid:   GRS 1980     Projection:      Geoid model:      CSC model:      Hz: 60°0257"   V: 114°2714"     Fn abc 15:32
3.	Projections	Create/select the projection Tap the box to the right of 'Projection' to enter the projection creation screen. Select F2/New to define the projection. In the screen, name the projection (in this example I'm calling it a UTM zone10 N). Select UTM as the 'type', specify the zone that you're working in and specify the hemisphere as North. Then press store. N.B If creating a 3TM coordinate system for use in Alberta, you will need to select Transverse Mercator as the Type. Then change the zone width to 3°, and the central meridian to 111°, 114° or 117° depending on your area, and	Image: Second
4.	Geoids	change the CM scale to 0.9999. The rest of the fields can be left as 0. Attach the geoid	
		Tap the box to the right of 'Geoid model' and select the geoid model from the list. Transformation and CSCS model can be left as <none>.</none>	
5.	Coordinate systems	Name the coordinate system (I've used the projection and geoid), then press store to create the coordinate system, you will see it appear in the list of coordinate systems, and it can now be attached to a job. The attachment of the coordinate system can be done before/during/after points are collected in the job without changing the raw data or corrupting the survey.	Edit Coordinate System   >     Name:   Utm 10 N Ht2     Transformation: <none>     Ellipsoid:   GRS 1980     Projection:   UTM 10 North     Geoid model:   1200GVRD     CSCS model:   <none>     Hz:   60°0258"     V:   114°2714"     Fn abc   16:02     Store</none></none>