

Setting Up a New Project

**SPECTRA PRECISION SURVEY OFFICE
TUTORIAL**



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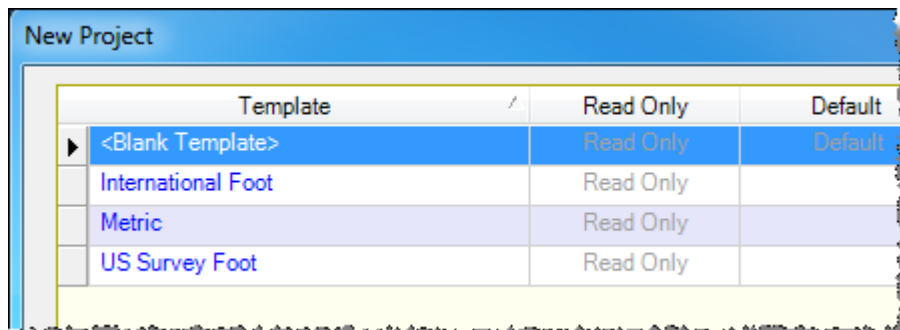
About this tutorial

In this tutorial, you will set up a new project, select various project settings, and save the project as a template that can be used for other new projects.

Note: If you need additional help at any time you are using the software, press **F1** to display the online help.

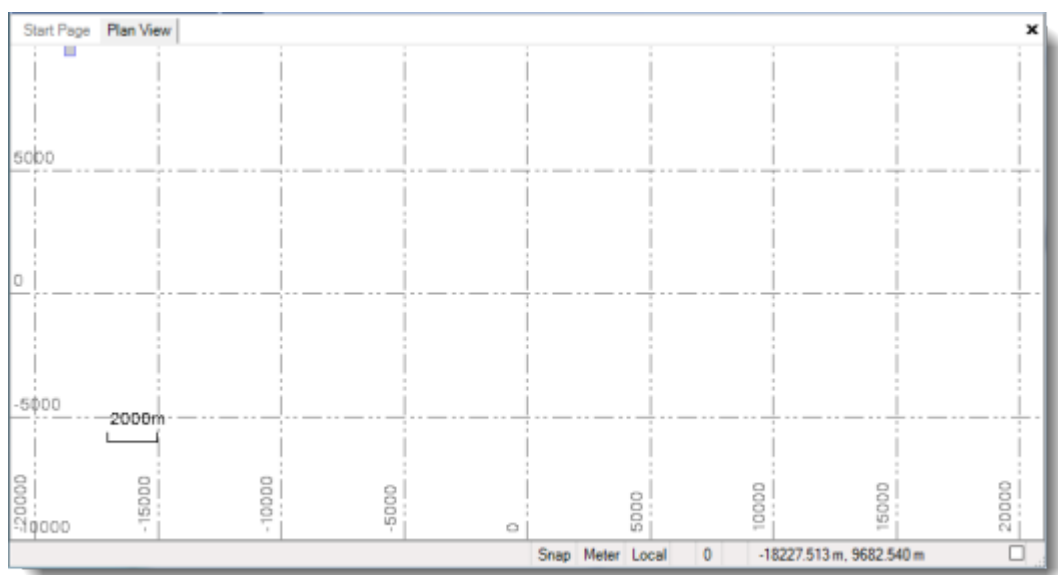
Step 1. Create a new project

1. On the **Spectra Precision Survey Office** menu bar, select **File > New Project**.
The **New Project** dialog displays.



2. Ensure *<Blank Template>* is selected in the list, and click **OK**.


The **Plan View** displays in the **Spectra Precision Survey Office** window. You are now ready to select configuration settings for your project.

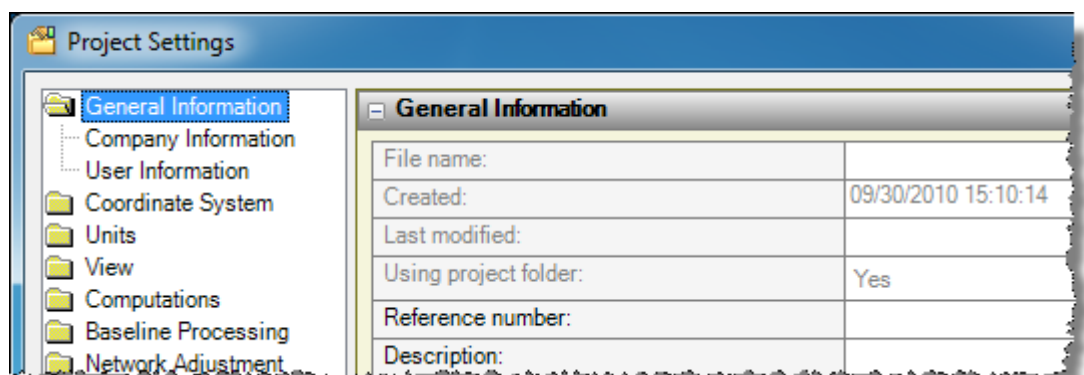


Note: This figure shows the **Plan View** with a white background. Your background may be black. If you want to change it to white, select **Tools > Options** and select **Background color: White** in the **Options** dialog.

Step 2. Select project settings

You can select a large variety of settings for your new project. For this tutorial, you will specify various **Coordinate System**, **Unit**, **Baseline Processing**, and **View** project settings. For all other project settings, you will keep the defaults.

To open the **Project Settings** dialog, select **Project > Project Settings**. Or, click the **Project Settings** icon  on the toolbar.



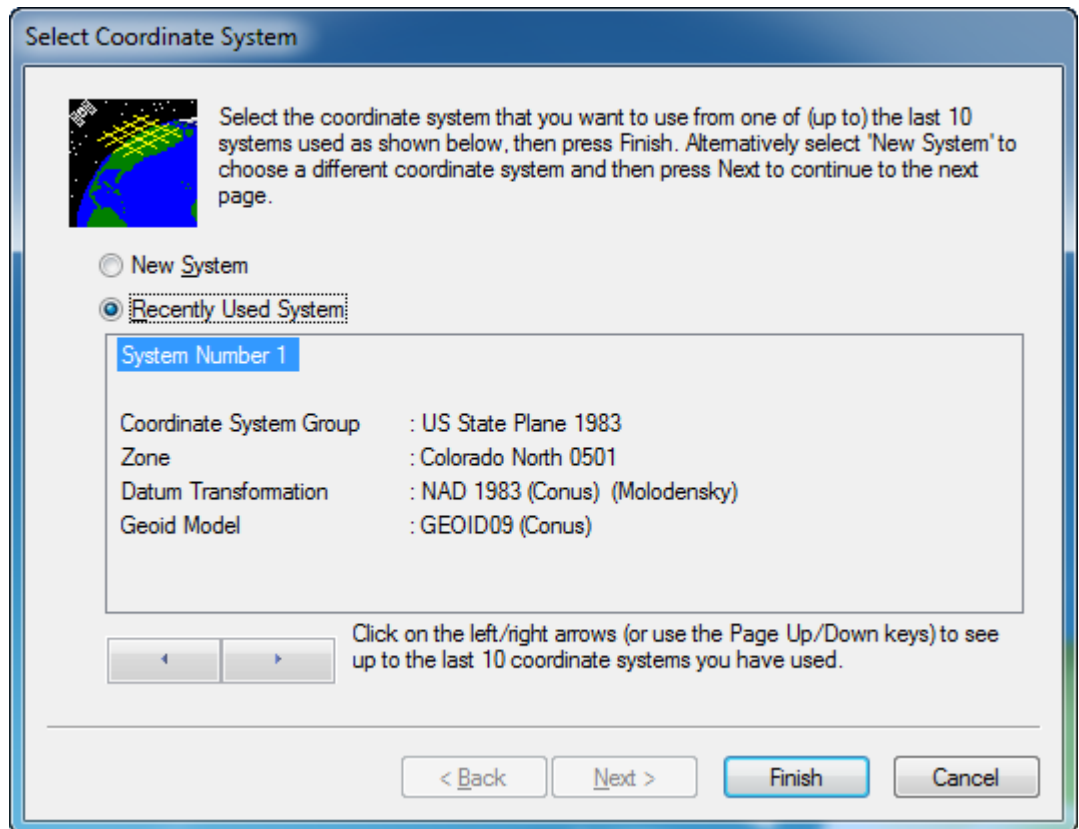
2a. Select Coordinate System settings

In this step, you will select the coordinate system you want to use for your project.

1. In the navigation (left) pane in the **Project Settings** dialog, select **Coordinate System**.
2. Click the **Change** button.

Step 2. Select project settings

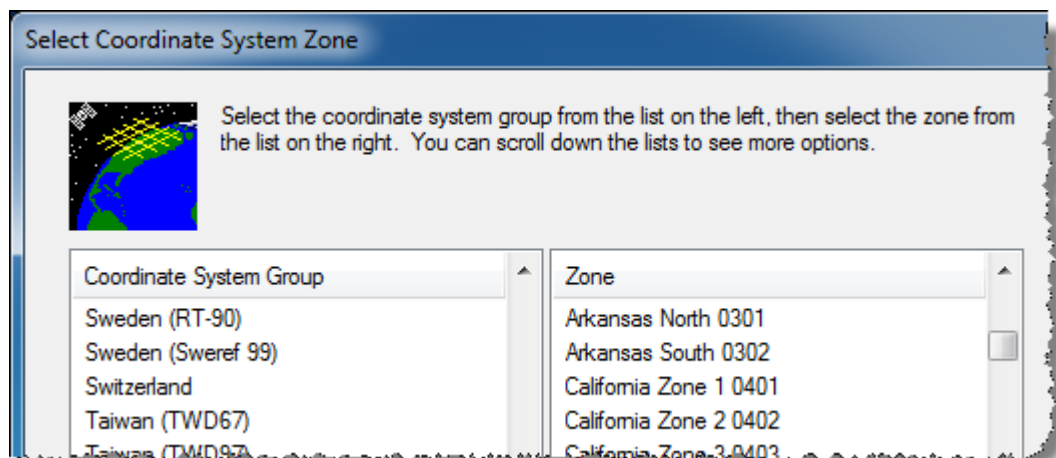
If you have previously selected a coordinate system, the **Select Coordinate System** dialog displays showing a list of previously used systems. If this dialog displays, click the **New System** option and click the **Next** button.



If no systems have been previously selected, or you clicked the **New System** option in the **Select Coordinate System** dialog, the **Select Coordinate System Type** dialog displays.

3. In the **Select Coordinate System Type** dialog, select the **Coordinate System and Zone** option. Then click the **Next** button.

The **Select Coordinate System Zone** dialog displays.

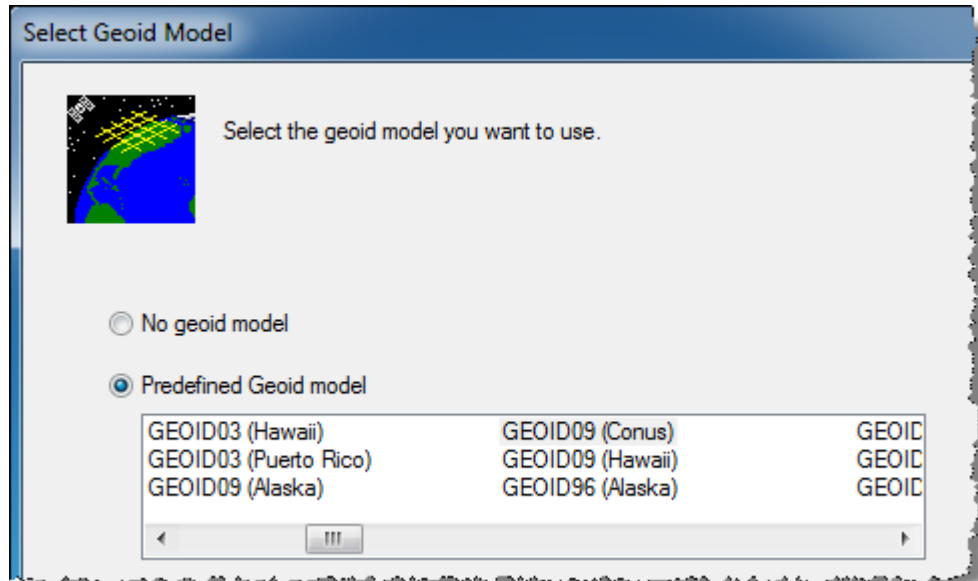


4. Do the following:

Step 2. Select project settings

- a. In the **Coordinate System Group** list, select *US State Plane 1983*.
- b. In the **Zone** list, select *Colorado North 0501*.
- c. Click **Next**.

The **Select Geoid Model** dialog displays.



5. Do the following:
 - a. Select the **Predefined Geoid** model option.
 - b. Select *GEOID03 (Conus)* in the list.

The **Coordinate System Manager** is a standalone utility that gives you access to your coordinate system database (*Current.csd*). In **Coordinate System Manager**, geoid models can be predefined. The predefined model is selected in the **Select Geoid Model** dialog.

- c. Click the **Finish** button.

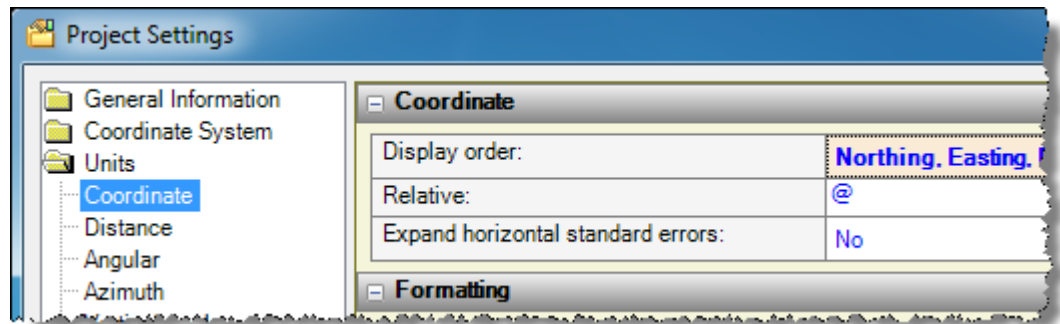
The **Project Settings** dialog displays showing the selected coordinate information in the **Summary** section of the **Coordinate System** pane.

2b. Select Units settings

You will use the **Units** settings to select the coordinate, distance, and GPS time unit settings you want to use for your project.

Step 2. Select project settings

1. In the navigation (left) pane in the **Project Settings** dialog, select **Units > Coordinate**. Then, in the **Display Order** drop-down list, select *Northing, Easting, Elevation*.

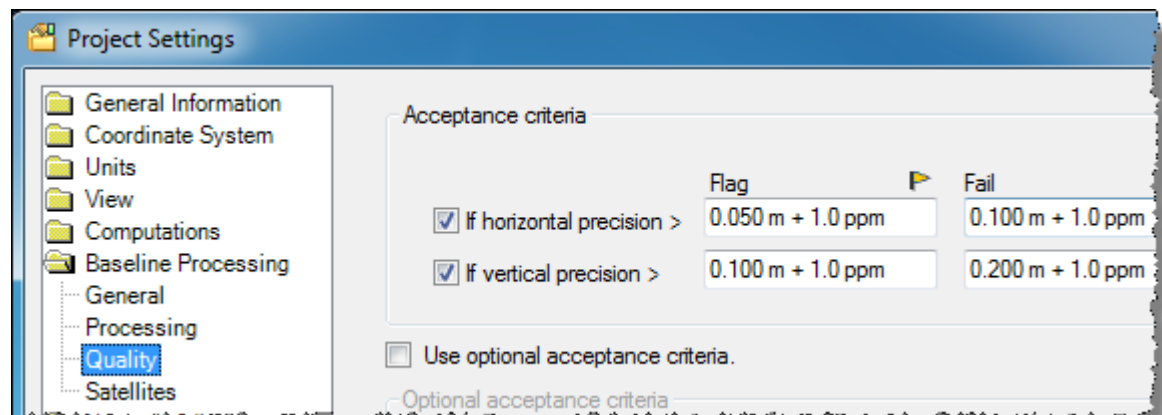


2. In the navigation pane in the **Project Settings** dialog, select **Units > Distance**. Then, in the **Display** drop-down list, select *Meter*. In the **Foot definition** drop-down list, select *US survey foot*.
3. In the navigation pane in the **Project Settings** dialog, select **Units > GPS Time**. Then, in the **Display** drop-down list, select **GPS**.

2c. Select Baseline Processing settings

Next, you will enter horizontal and vertical values that, if exceeded, will cause processed baselines to be flagged or fail altogether.

1. In the navigation (left) pane in the **Project Settings** dialog, select **Baseline Processing > Quality**.

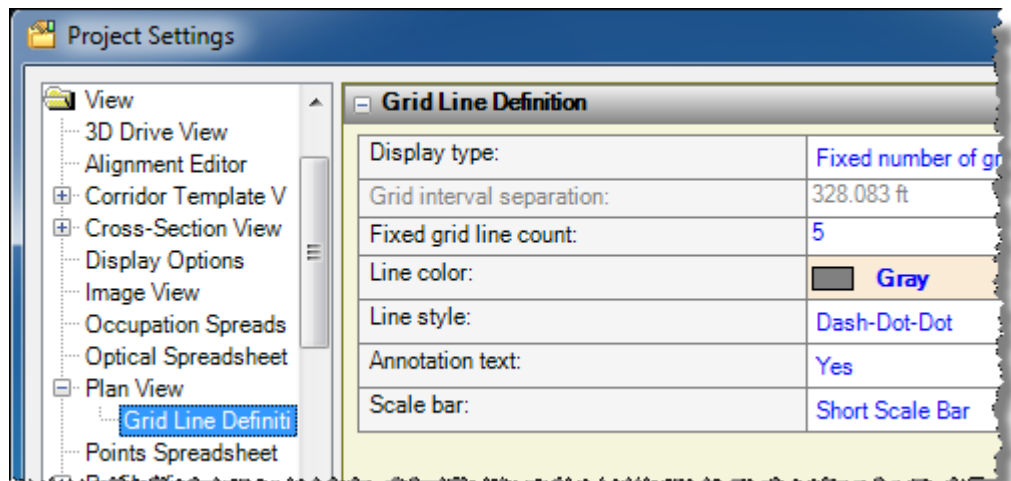


2. Enter **Acceptance criteria** properties as follows:
 - a. Check the **If horizontal precision** checkbox and enter the following values:
 - **Flag:** *0.020 m + 1.0 ppm*
 - **Fail:** *0.050 m + 1.0 ppm*
 - b. Check the **If vertical precision** checkbox and enter the following values:
 - **Flag:** *0.050 m + 1.0 ppm*
 - **Fail:** *0.100 m + 1.0 ppm*

2d. Select View settings

In this step, you will change the color of the grid lines displayed on the **Plan View**. You will also select to include grid/ground properties in the **Point Spreadsheet** and maximum PDOP values for post-processed vectors in the **Vector Spreadsheet**.

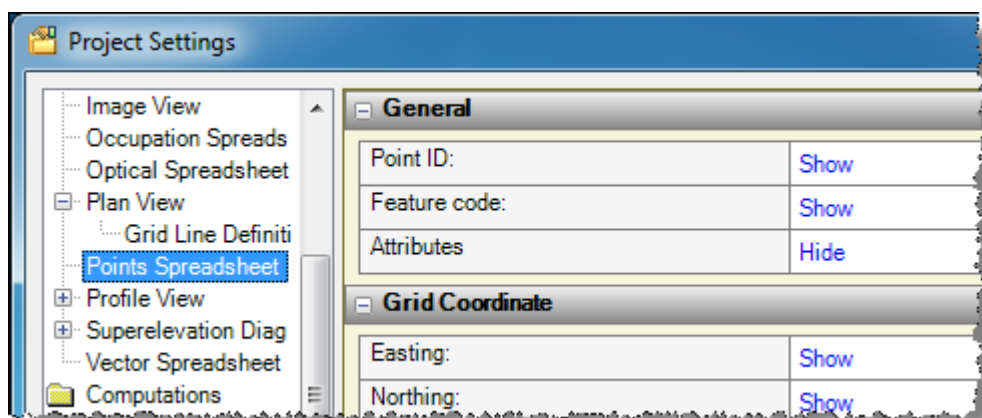
1. In the navigation (left) pane in the **Project Settings** dialog, select **View > Plan View > Grid Line Definition**.



2. In the **Line Color** drop-down list, select **Magenta**.

This will change the grid lines displayed on the **Plan View** to magenta, making them easier to see if you are, for example, viewing photographs.

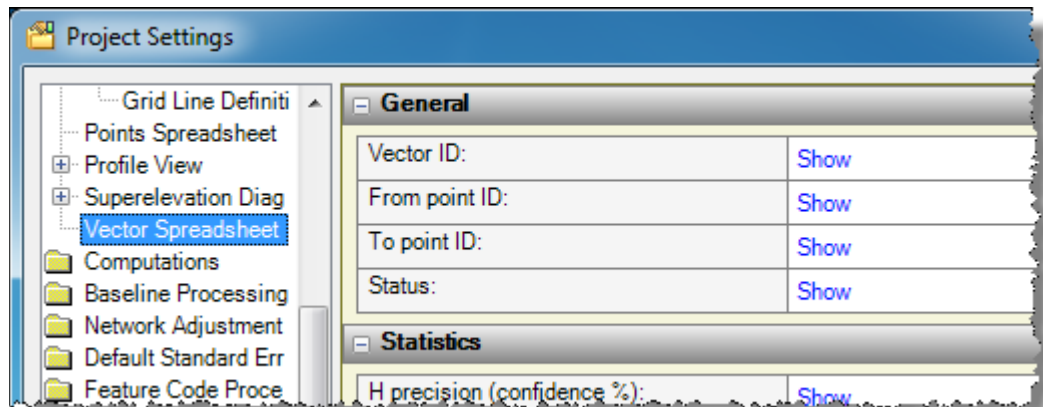
3. In the navigation pane in the **Project Settings** dialog, select **View > Points Spreadsheet**.



4. Scroll to the **Grid/Ground Properties** section and select to show the **Combined scale factor** in the **Points Spreadsheet**.

Step 3. Set display and customization options

5. In the navigation (left) pane in the **Project Settings** dialog, select **View > Vector Spreadsheet**.



6. Scroll to the **Statistics** section and select to show the **Maximum PDOP** value in the **Vector Spreadsheet**.
7. Click **OK**.

You are done selecting project settings. Next you will take a look at some customization options.

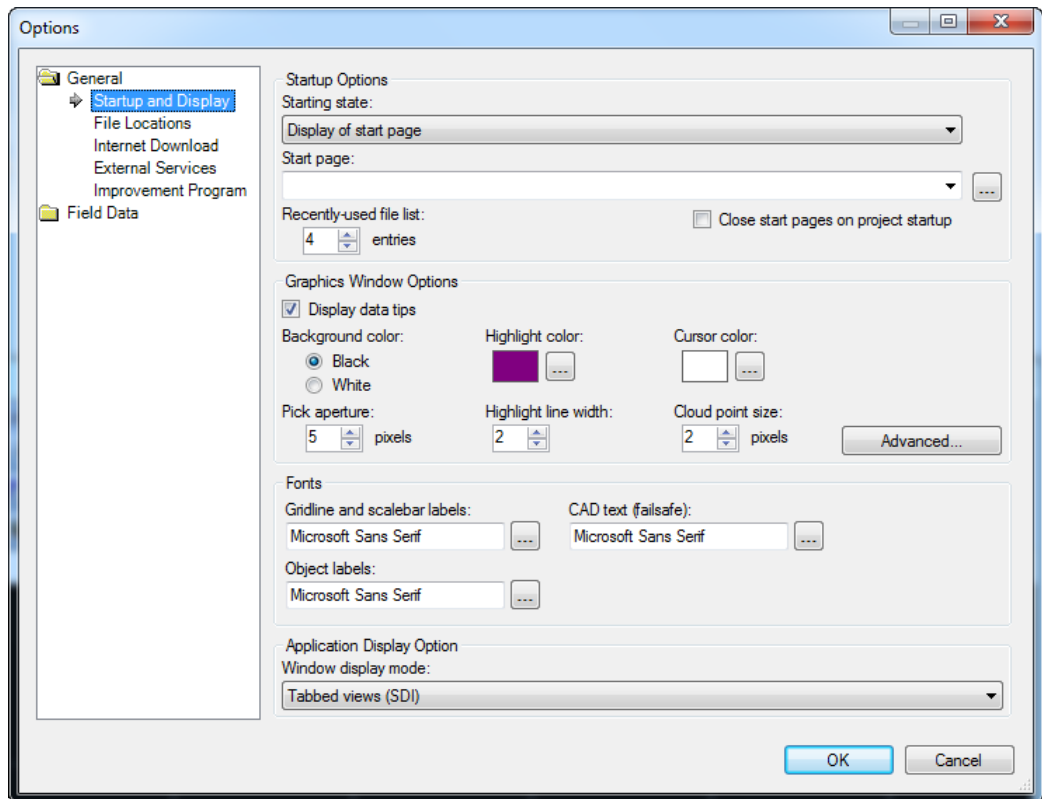
Step 3. Set display and customization options

When starting a new project, you should verify that display options are set appropriately.

1. Select **Tools > Options**.

Step 3. Set display and customization options

The **Options** dialog displays.



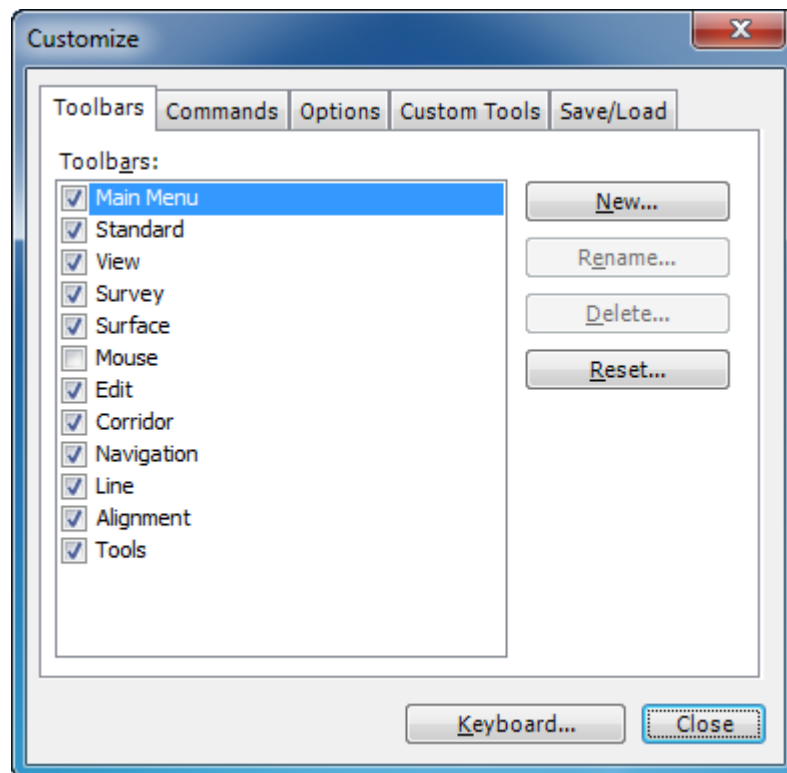
You can change any of the options in this dialog to enhance your view when working in the various displays in the program. Note that any changes you make will persist, regardless of the projects you open, until you change them again.

2. Click the **Advanced** button to view the **Advanced Graphics Options** dialog.

This dialog allows you to control how graphics (for example, photographs) are displayed in your project. If a very large image file does not display correctly due to memory constraints, you might try using this dialog to select a down-sampled size that will enable it to display correctly. For this tutorial, you will not make any changes.

3. Click **Cancel** to close the **Advanced Graphics Options** dialog. Then click **Cancel** to close the **Options** dialog.
4. Select **Tools > Customize**.

The **Customize** dialog displays.




Take a moment to explore the various tabs and buttons in this dialog. (There is no need to make any changes at this time.)

- **Toolbars** tab - Select this tab to specify which toolbars are displayed, and create new custom toolbars.
 - **Commands** tab - Select this tab to "drag and drop" commands directly into a menu or toolbar, and rearrange menu commands and toolbar buttons.
 - **Options** tab - Select this tab to personalize the look of menus and toolbars.
 - **Custom Tools** tab - Select this tab to create commands to open other tools installed on your computer.
 - **Save/Load** tab - Select this tab to create and save toolbar and menu layouts.
 - **Keyboard** button - Click this button to manage keyboard shortcuts.
5. Click **Close** to close the **Customize** dialog.

Now is a good time to save your new project and give it a name.

Step 4. Save your project

1. Select **File > Save Project**. Or, click the **Save Project** icon  on the toolbar.
2. In the **Save As** dialog, navigate to **..My Documents\Spectra Precision Survey Office**, which is the typical location for storing project files on your computer.

3. In the **File name** field, enter *Setting Up a Project YourName.vce*. Then click **Save**.

The **Spectra Precision Survey Office** window displays the new project name in the title bar.

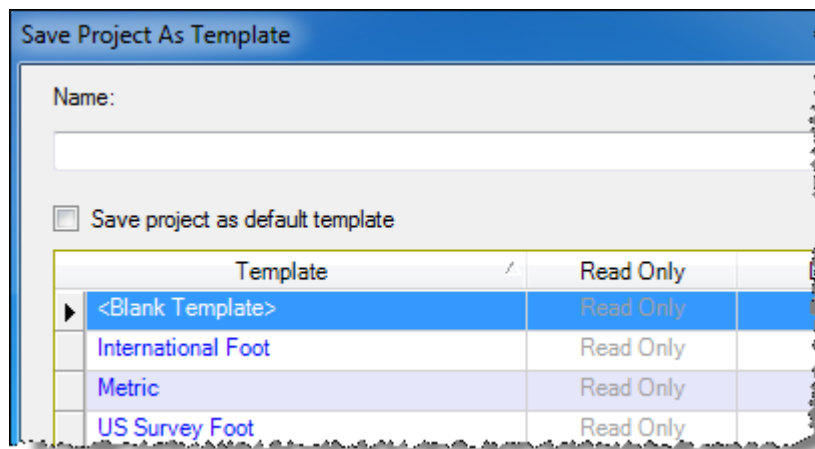
The next procedure explains how to save your new project into a template that can be used for other projects.

Step 5. Create a project template

If you expect to create future projects located within the same geographical area to be used for your new project, you can save your project settings as a project template.

1. Select **File > Save Project As Template**.

The **Save Project As Template** dialog displays.



2. In the **Name** field, enter *Setting Up Template*.

You could select the **Save project as default template** checkbox to specify that new projects default to using this project template.

There is no need to save a project template based on this tutorial. So, in the next step, instead of clicking **Save** as you would normally do to save the template, you will click **Close**.

Note: After saving a template, you can continue to modify it as necessary (for example, change additional project settings). These modifications would be included in the template the next time you use it.

3. Click **Close** to close the dialog without saving the template.
4. Select **File > Close Project**.