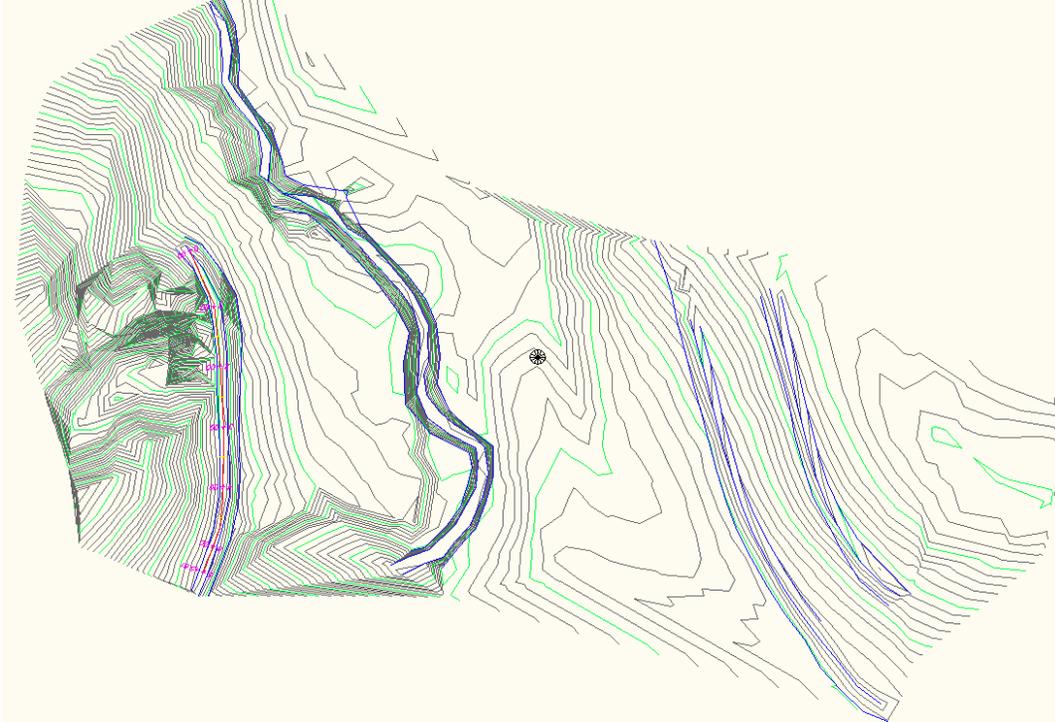
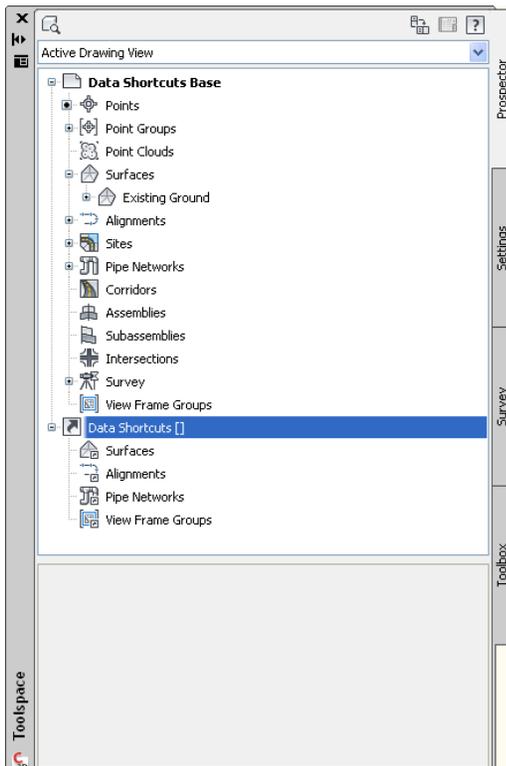


This guide covers the procedure for sharing data between individual drawings by way of a link to an external file. The types of data that can be shared includes surfaces, alignment, pipe networks, and view frame groups.

The example in this guide includes a base map drawing with a file name of *Data Shortcuts Base.dwg* that contains an existing ground surface and an alignment along a diversion. External references will be created for the surface and alignment that can then be included in additional drawing called *New Drawing.dwg* that represents an additional plan set for a project.



Links to external files are controlled in the *Data Shortcuts* section on the *Prospector* tab in *Toolspace*.

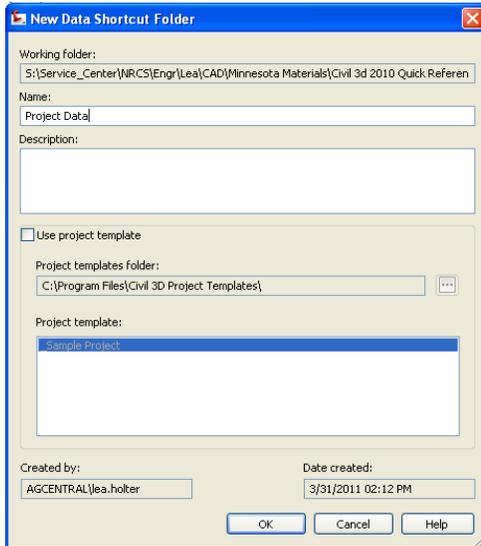


Set up the Data Shortcuts in the drawing *Data Shortcuts Base.dwg*

1. Set up a working folder where the data shortcut folder will be created.

Right click on *Data Shortcuts* [] on the *Prospector* tab in *Toolspace* and select *Set Working Folder...* Browse to a folder where you want to store the data shortcut files. This can be the same folder where the drawing files are stored.

2. Set up the data shortcut folder



Right click on *Data Shortcuts* [] on the *Prospector* tab in *Toolspace* and select *New Data Shortcuts Folder...*

In the *New Data Shortcut Folder* window, type in a name for the data shortcut folder.

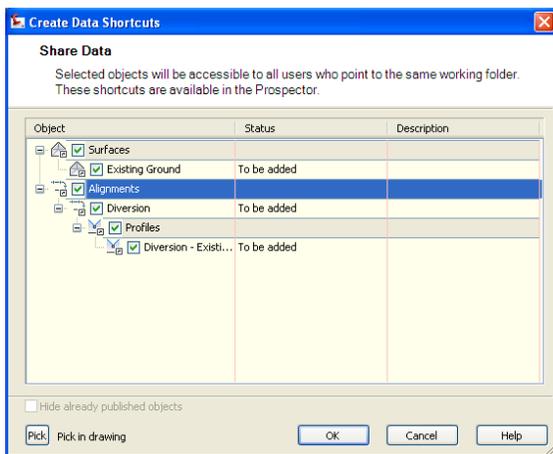
An optional description can be provided.

You can also use a project template to automatically set up subfolders under the data shortcut folder. These could be folder that you can use to store files such as quantity calculations, design documentation and specifications.

Click on the *OK* button when finished making changes in this window.

3. Create Data Shortcuts

To create the data shortcut files, right click on *Data Shortcuts* [] on the *Prospector* tab in *Toolspace* and select *Create Data Shortcuts...*



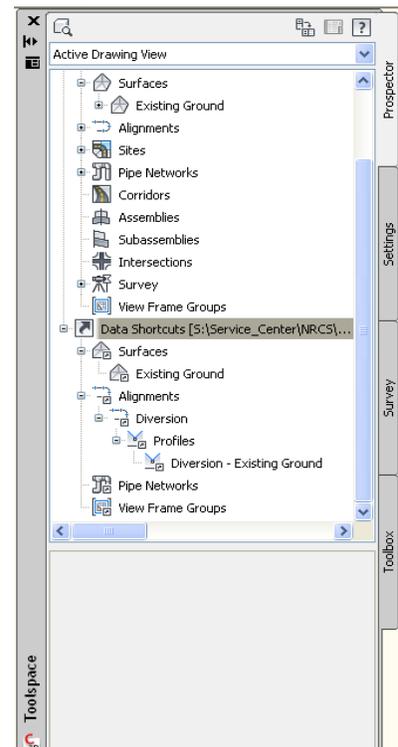
In the *Create Data Shortcuts* window, select the data from the drawing that you want to export to the data shortcut files. If there are profiles in the drawing, they will be listed under the alignment that they are associated with.

Click on the *OK* button to create the files.

If you look in the data shortcut folder location

that you specified in Step 2, you would see that a new folder called *_Shortcuts* has been created. This folder contains subfolders that are used to store the individual files that contain the data that was exported from the drawing. This data is saved in Land XML format, which can now be linked into other drawings.

The data shortcut links should also appear in the *Data Shortcuts* section on the *Prospector* tab in *Toolspace*.



Link the Data Shortcuts Into the *New Drawing.dwg* file

1. When you open a different drawing or create a new drawing, the most recently used working folder will still be set up in the Data Shortcuts area on the Prospector tab in Toolspace.

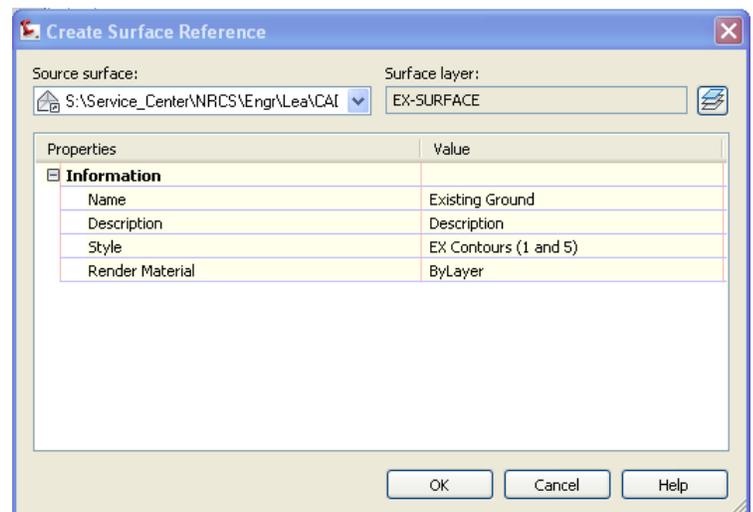
Check to make sure you have the correct working folder set by right clicking on *Data Shortcuts []* on the *Prospector* tab in *Toolspace* and selecting *Set Working Folder...*

Once you verify that you have the correct working folder set, you can set up the link to the information in the data shortcut files.

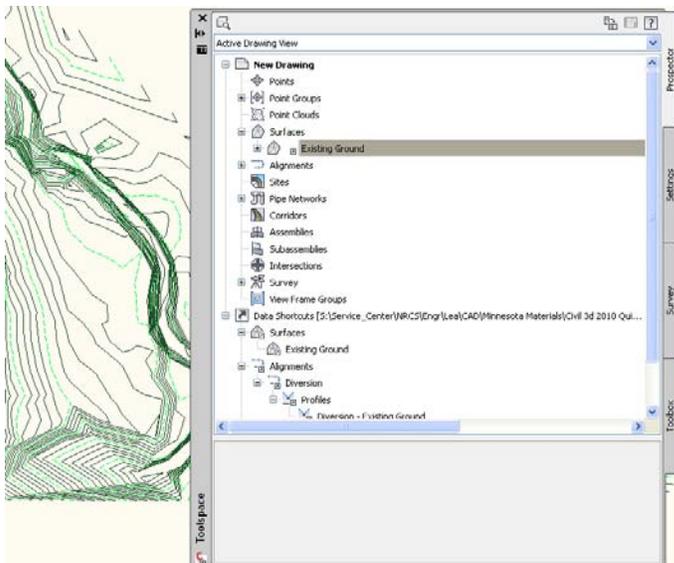
2. If you expand the sections under Data Shortcuts, you will see all of the information that is available in the data links that you can link to in the current drawing.
3. To establish a data link, right click on the feature you want to create a link to and select *Create Reference...* from the shortcut menu.

A Create Reference window for the type of object that you selected will appear, such as the Create Surface Reference window shown to the right. The source file where the surface being referenced is located is shown, and you can provide a name for the data link object and select the style that will be assigned to the object.

Click on the OK button to create the data shortcut.



4. The feature that you selected, in this case a surface, will be referenced into the current drawing and will now appear in the listing on the Prospector tab in Toolspace. Linked objects are listed with a  icon next to their name with marks them as a data link.



You can also promote an object by right clicking on its name and selecting *Promote* from the shortcut menu. An object that is promoted will be inserted into the current drawing and will no longer be linked to the original object in the base drawing, and changes made to the original object in the base drawing will not be carried through into the current drawing.

5. Repeat Step 3 as needed to create additional data links into the drawing.

Maintaining the Data Links

Once the data links are established, changes made to the base drawings where the objects used to create the links are stored will automatically be updated in any drawings referenced to those links. In other words, if you open the *Data Shortcuts Base.dwg* file and change the alignment or alter the surface, those changes will automatically be made the next time you open the *New Drawing.dwg* file.

If you have a drawing open when changes are made to a file that contains objects that are linked into the file you are working in, you will receive a message at the bottom right hand side of the window that lets you know that the data shortcut definitions have changed. Click on [Synchronize](#) to update the links in the drawing.

