

Exporting Data from Eagle Point into Civil 3D

This document is intended for two main audiences:

- Eagle Point users who wish to share civil design data with Civil 3D users.
- Civil 3D users who wish to migrate legacy Eagle Point data.

What is LandXML? LandXML (Land Extensible Markup Language) is a data format that allows civil, survey and other land development information to be shared between applications. Many survey instruments, civil/survey CAD applications and GIS applications can import and export LandXML files. Using LandXML, moving data is very simple. For more information about LandXML visit www.landxml.org.

Using Land XML many objects created in Eagle Point can be transported into Civil 3D. The following procedures can be used for 2007 through 2009 versions of Civil 3D.

Which objects *do* transfer:

- Alignments
- Lots/ Parcels
- Existing Ground Profile Data
- Design Profile Data
- Nodes/Points
- Surfaces

Which objects *do not* transfer:

- Typical Sections/Assemblies
- Completed Roadways/Corridors
- Cross Section Data*

*On export, there is an option that appears to export cross sections but this functionality is not fully implemented in Civil 3D.

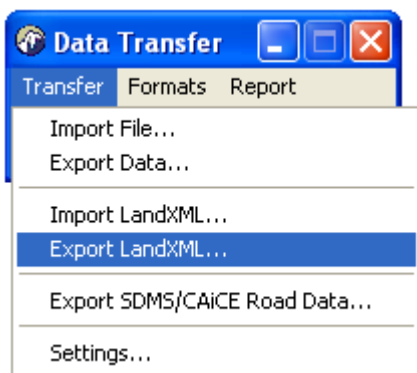


Figure 1

1. In Eagle Point, launch the Data Transfer Module.
2. Go to **Transfer > Export Land XML**
3. In the **Export Land XML** Dialog Box click the Edit drop-down.

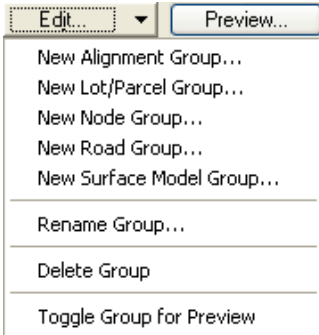


Figure 2

Item by item, we will work through the project and gather the data we wish to export to LandXML.

4. Click **New Alignment Group...**

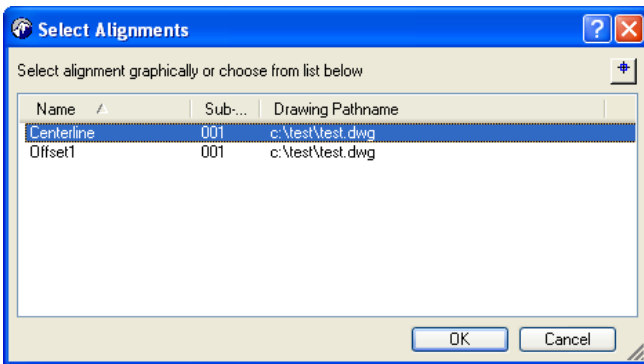



Figure 3

5. In the New LandXML Alignment Group dialog box, click **Select Alignments**.

6. Select the Alignments you wish to export.

You may use the  key to select multiple Alignments at once.

7. Click **OK**

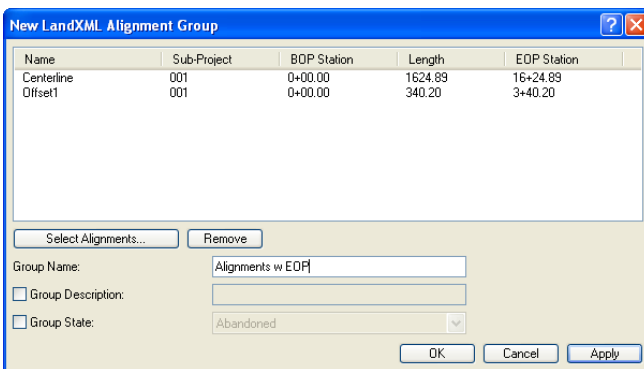


Figure 4

8. Give the group a name to be used in export, and then click **OK**.

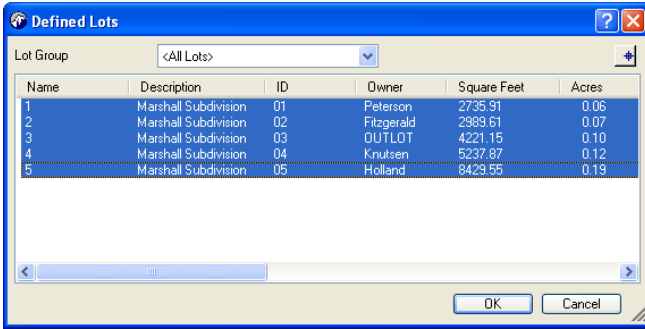


Figure 5

9. Back under the **Edit** dropdown, select **New Lot/Parcel Group...**

10. In the New LandXML Lot/Parcel Group, click **Select Lots**

11. Select the lots you wish to add to the data.

12. Click **OK**.

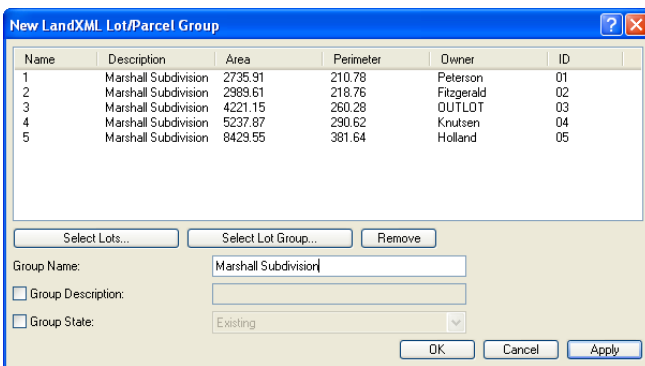


Figure 6

13. Give the Group a name and click **OK**.

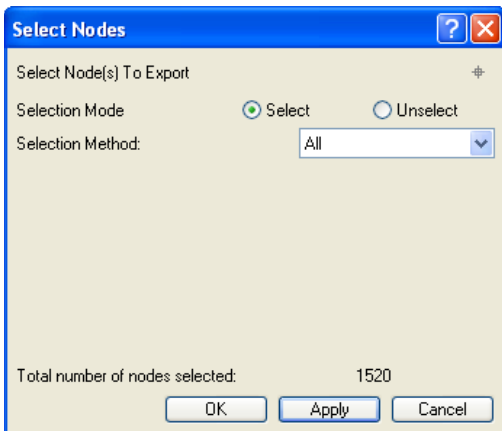


Figure 7

14. Moving on to the points, select **New Node Group** from the Edit drop-down menu (Figure 2).

15. Click **Select Nodes**.

16. In the Select Nodes dialog box (Figure 7) verify that the Selection Mode is set to **Select**

17. Change the Selection Method to **All**.

18. Click **Apply**.

19. The number of points present in the Eagle Point project should appear near the bottom of the dialog box.

20. Click **OK**.

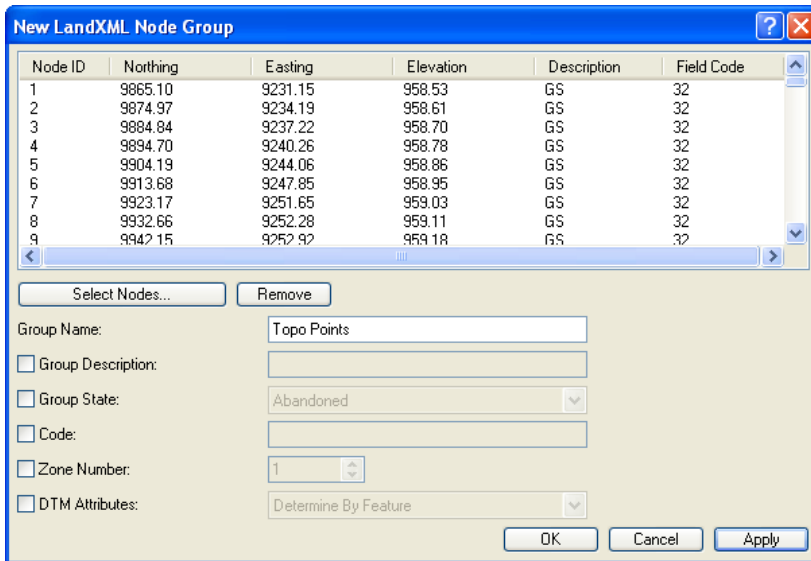


Figure 8

21. Give the point group a name.
22. All other settings shown in Figure 8 are optional.
23. Click **OK**.

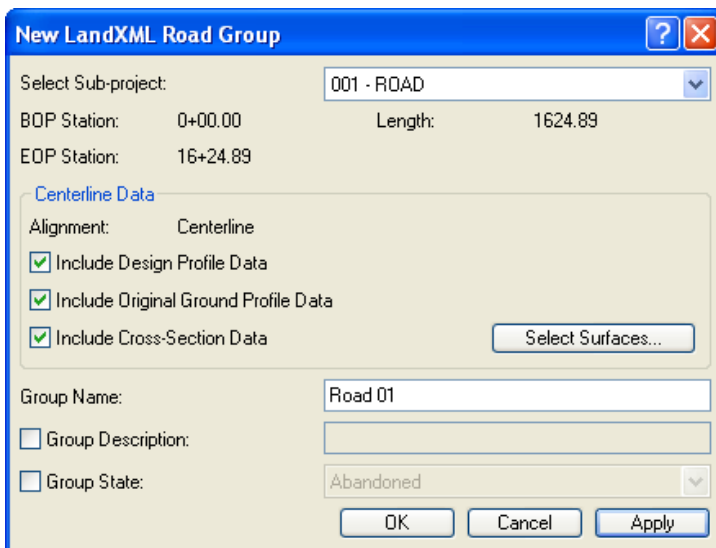


Figure 9

24. From the Edit menu select **New Road Group**.
25. Select the subproject you wish to add from the pull-down menu.
26. Toggle on all the available centerline data types as shown in Figure 9.
27. Click **OK**.

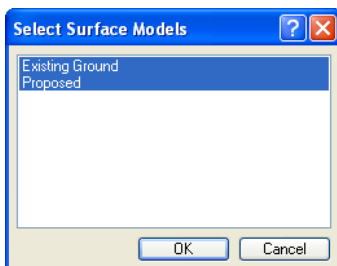


Figure 10

28. Lastly, we will add the surface model group to the XML file.
29. Click **New Surface Model Group** from the Edit menu.
30. Click **Select Surface Models**.
31. Select the surface models you wish to export and click **OK**.

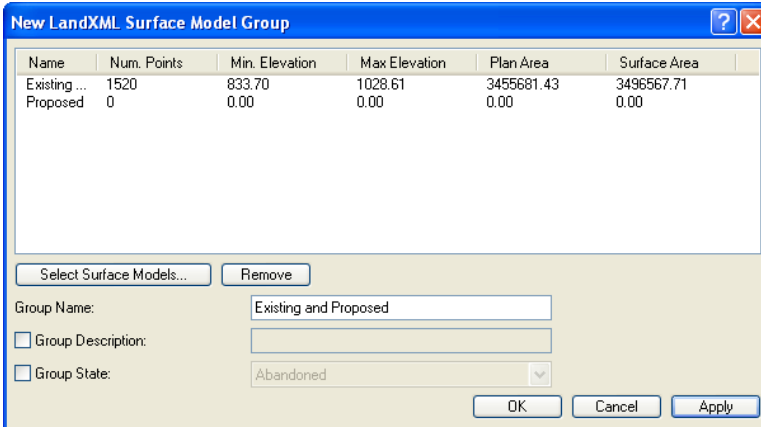


Figure 11

32. Give the group a name and click **OK**.

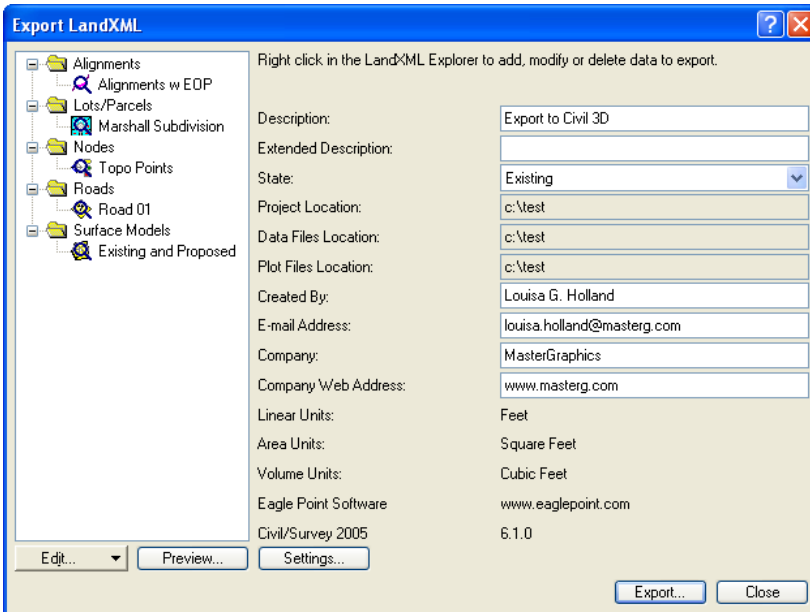


Figure 12

At this point all the group names you have created for export should be shown in the main Export LandXML dialog box.

33. Click on **Settings** to verify the units and precision appropriate to your project.

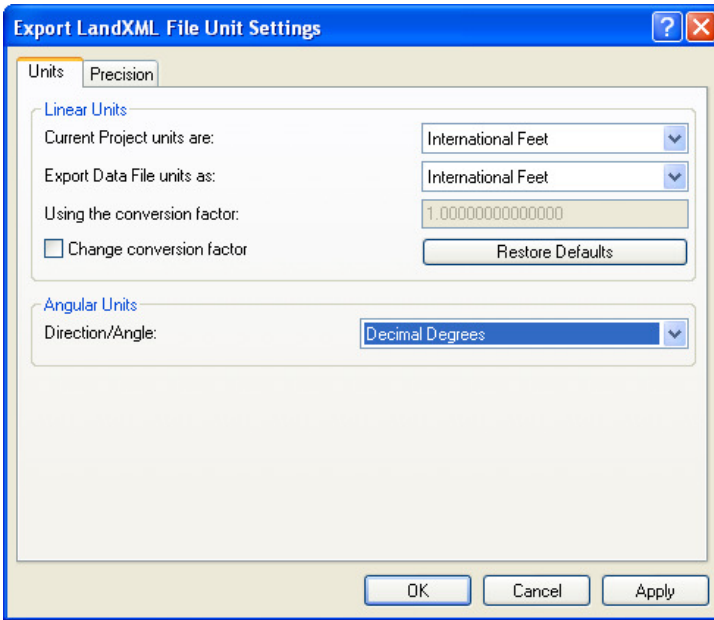


Figure 13

34. In the units tab, and verify the current and exported length setting.

Note that the default unit types in both Eagle Point and Civil 3D are International Feet with decimal angular degrees. Your project may differ.

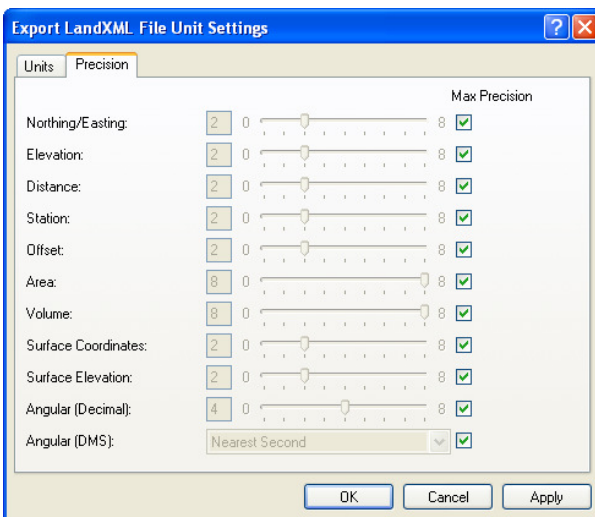


Figure 14

35. On the Precision tab, verify that Max Precision is checked on for all geometry types.

36. Click **OK** to exit the Export LandXML File Unit Settings

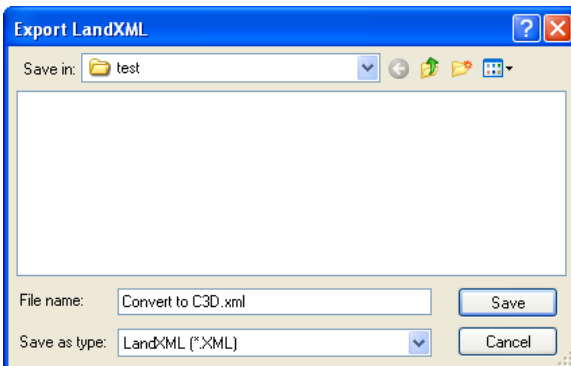


Figure 15

37. On the main Export LandXML window, click **Export**.

38. Browse to your project directory, and type in a name for the file.

39. Click **Save**.

40. In Civil 3D, make sure you are in a drawing that contains your styles and settings.
41. Go to **File > Import > Import LandXML**

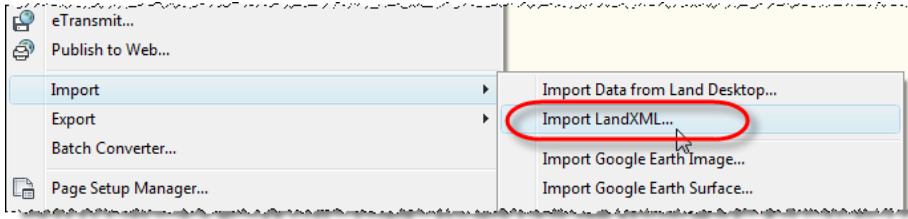


Figure 16

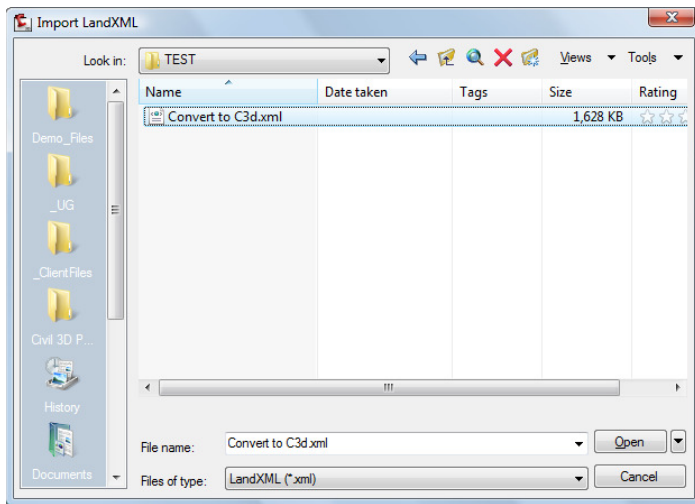


Figure 17

42. Browse to the location of the LandXML file and select it.
43. Click **Open**.

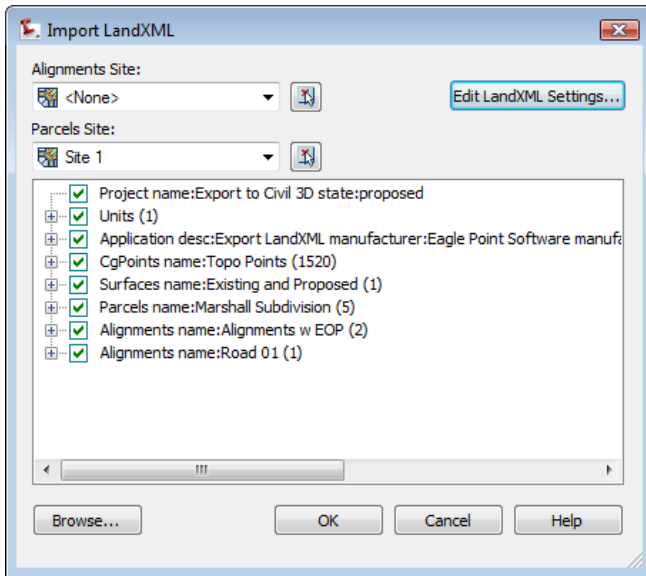


Figure 18

The objects you are about to import will appear in the list.

44. Verify the site you wish to send your alignments and parcels. If no site exists for parcels, it will automatically default to Site 1.
45. Click **Edit LandXML Settings...**

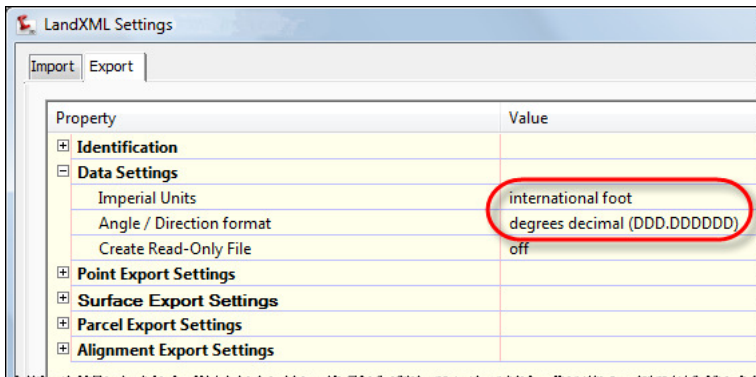


Figure 19

46. In the Export tab, verify the Data Settings. Be sure they match the settings that were used on export from Eagle Point.

(In versions 2008 and prior, there is a Data Conversion setting in the Import Tab that controls conversion from Survey Feet to International Feet.)

47. Click **OK**
48. Click OK on the Import LandXML dialog box.
49. You will soon see objects appear in their default styles. These are now true Civil 3D objects that can be manipulated as if they were native to the project.

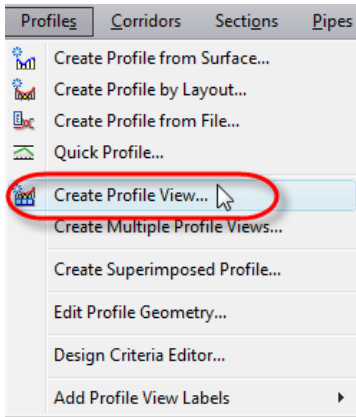


Figure 20

In the case of your profiles, a view needs to be made to see the imported profile data.

50. Go to **Profiles > Create Profile View**.

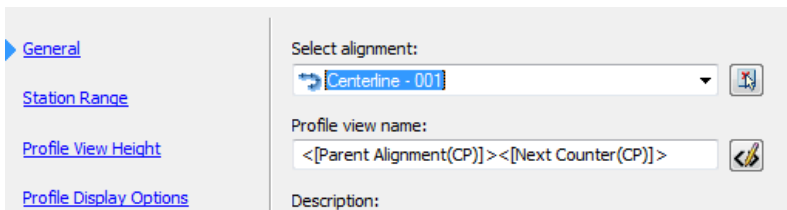


Figure 21

51. Select the Alignment that you'd like to work with.

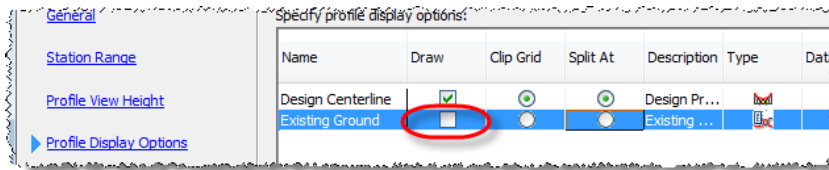


Figure 22

52. In the Profile Display Options area, verify the data you wish to draw in your view.

Note that an existing ground profile pulled in from a LandXML file is not dynamic with the surface model. You will want to uncheck any existing ground surfaces from the Profile Display options and extract the profile from the surface model.

53. Click **Create Profile View**.

At this point, if you are going to continue working with the project in Civil 3D, you can XREF the original Eagle Point base drawing into the Civil 3D project drawing.