



# Exporting Data Using LANDXML

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# Exporting Data using LandXML

- **What is LandXML?**

LandXML is an ASCII data exchange format based on XML (extensive markup language).

LandXML is a way of specifying civil engineering and surveying data.

LandXML is a specification, a format.

Most XML can be easily interpreted and read by people and computers.



# Exporting Data using LandXML

- HTML = “I know how it looks”. Web pages.
- XML = “I know what it means, and your software will tell me how it should look”.  
XML describes how the data is organized.



# Exporting Data using LandXML

- **Who supports LandXML?**

Endorsed by more than 180 land development and transportation industry professionals from 86+ organizations.

Bentley, Autodesk, Eagle Point, Leica, Topcon, Carlson Software, Trimble, ...

US Federal Highway Administration, FDOT, US Army Corp of Engineers, US Environmental Protection Agency, ...



# Exporting Data using LandXML

- **Uses of LandXML**
  - ✓ Customized Reports. Templates. User creates them.
  - ✓ Data Exchange. Software provides the format.



# Exporting Data using LandXML

- **Typical Scenarios**

- ✓ FDOT Project Done in Geopak...City/County requestes information in Autocad format.
- ✓ FDOT Project done in Geopak...Surveyor needs geometry information in ASCII format.
- ✓ FDOT Project done in Geopak...Site Development Division of your company needs geometry in Inroads.

**LandXML to the rescue !!!**



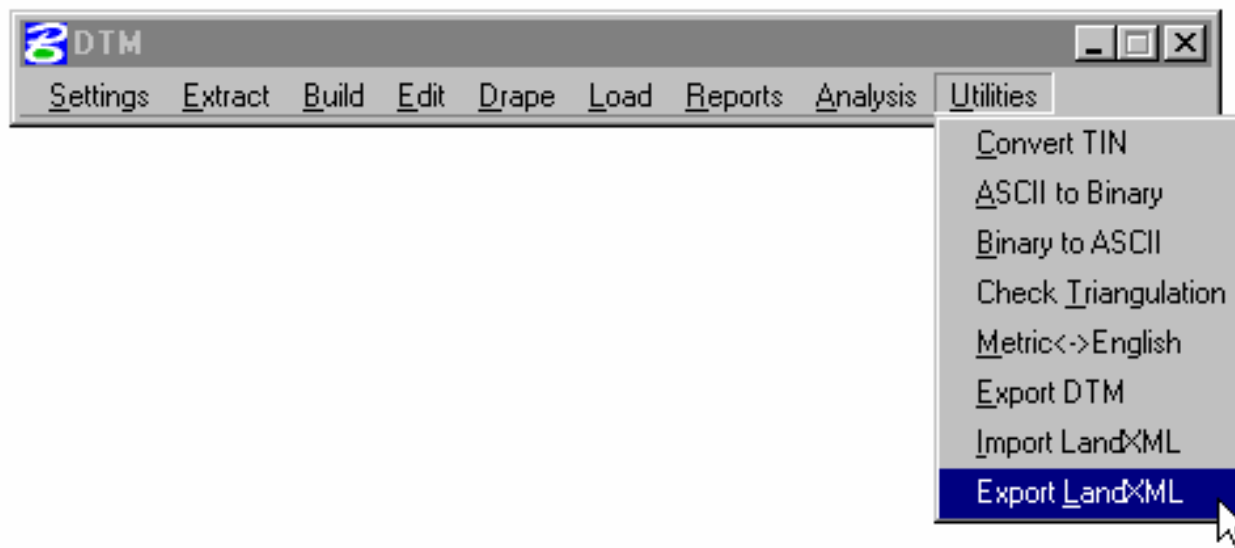
# Exporting Data using LandXML

- **Geopak can Export/Import**
  - ✓ Geometry points
  - ✓ Chains
  - ✓ Profiles
  - ✓ DTM (dat files)



# Exporting Data using LandXML

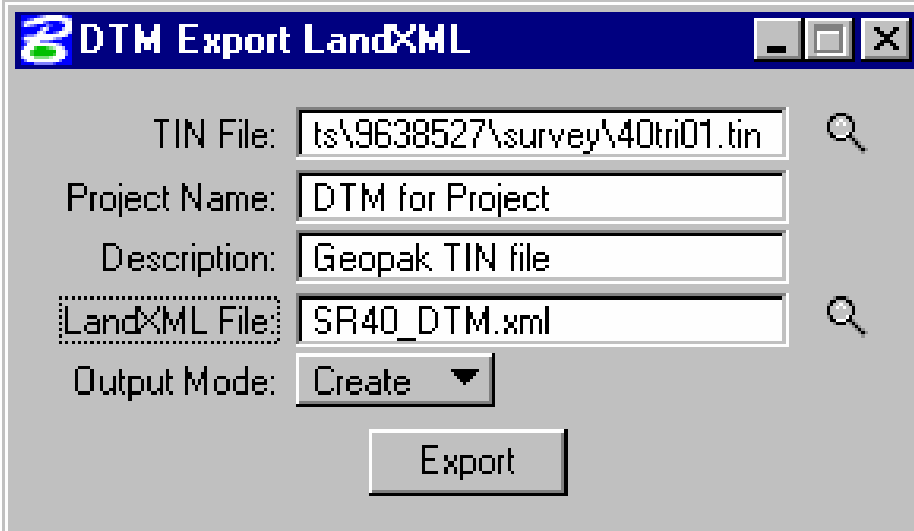
- Geopak DTM





# Exporting Data using LandXML

- Geopak Export DTM



**DTM Export LandXML**

TIN File:  🔍

Project Name:

Description:

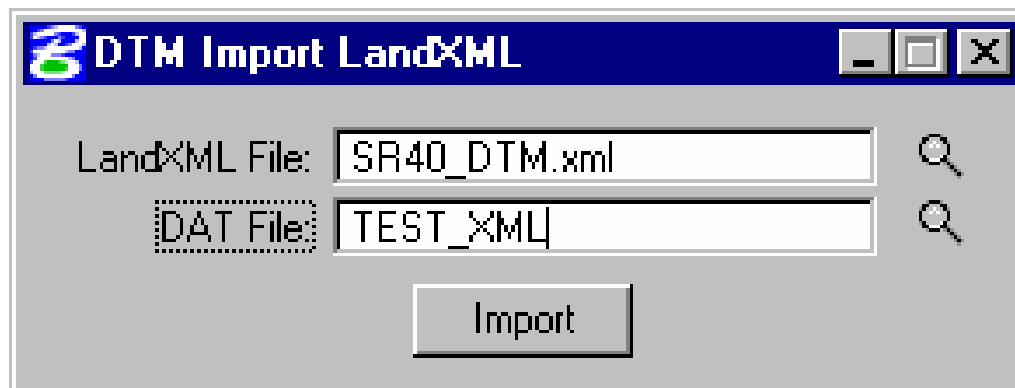
LandXML File:  🔍

Output Mode:



# Exporting Data using LandXML

- Geopak Import DTM





# Exporting Data using LandXML

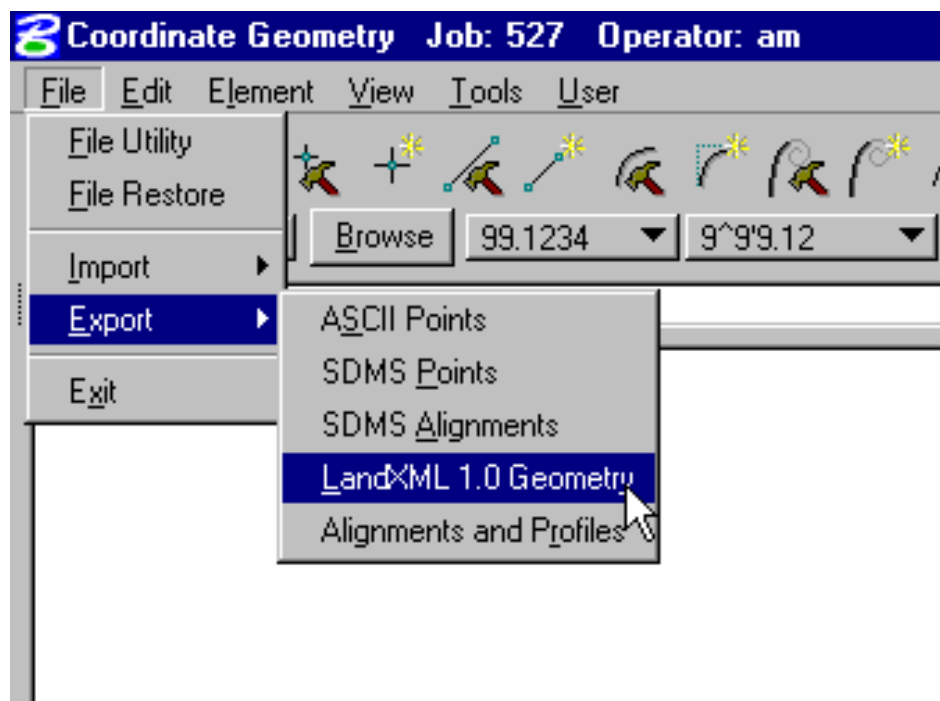
- Geopak XML file

```
C:\e\W8_Projects\9638527\roadway\SR40_DTM.xml - Microsoft Internet Explorer provided by Bentley Systems
File Edit View Favorites Tools Help
Back Forward Stop Home Search Favorites Media
Address C:\e\W8_Projects\9638527\roadway\SR40_DTM.xml Go Links
msn Search Highlight Options Pop-ups Blocked (63) Hotmail
temperatureUnit= Fahrenheit pressureUnit= inchesHG />
</Units>
- <Surfaces name="Triangles" xmlns="">
- <Surface name="Triangles" desc="Triangles">
- <SourceData>
- <DataPoints>
<PntList3D>1763260.663000 555714.397000 78.000000
1763218.897000 555741.885000 78.099000 1763288.151000
555756.163000 79.099000 1763177.131000 555769.372000
77.699000 1763246.385000 555783.651000 78.899000
1763135.365000 555796.860000 77.399000 1763298.933000
555808.924000 79.800000 1763204.619000 555811.139000
78.199000 1763396.775000 555811.612000 80.280000
1763388.926000 555812.364000 77.555000 1763379.348000
555813.203000 79.201000 1763375.717000 555813.963000
79.606000 1763364.319000 555815.451000 79.998000
1763353.542000 555816.191000 79.658000 1763349.263000
555817.594000 78.939000 1763364.787000 555818.474000
80.043000 1763341.163000 555818.772000 77.703000
1763389.952000 555819.166000 77.705000 1763376.559000
555819.696000 79.705000 1763398.406000 555819.961000
80.449000 1763380.195000 555820.073000 79.330000
1763332.277000 555821.207000 80.015000 1763354.403000
555821.755000 79.735000 1763350.155000 555823.098000
78.998000 1763093.598000 555824.349000 77.500000
1763341.668000 555824.391000 77.864000 1763273.873000
555825.417000 79.500000 1763377.532000 555826.325000
79.820000 1763355.159000 555826.635000 79.802000
1763391.230000 555827.626000 77.901000 1763333.624000
Opening page file://C:\e\W8_Projects\9638527\roadway\SR40_DTM.xml... Unknown Zone
```



# Exporting Data using LandXML

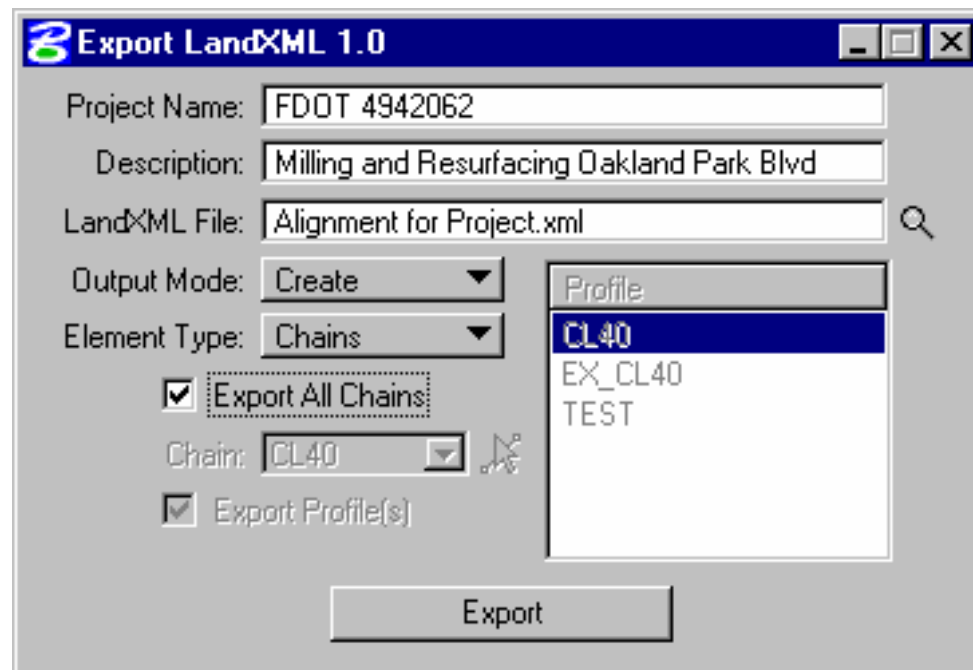
- Geopak Geometry





# Exporting Data using LandXML

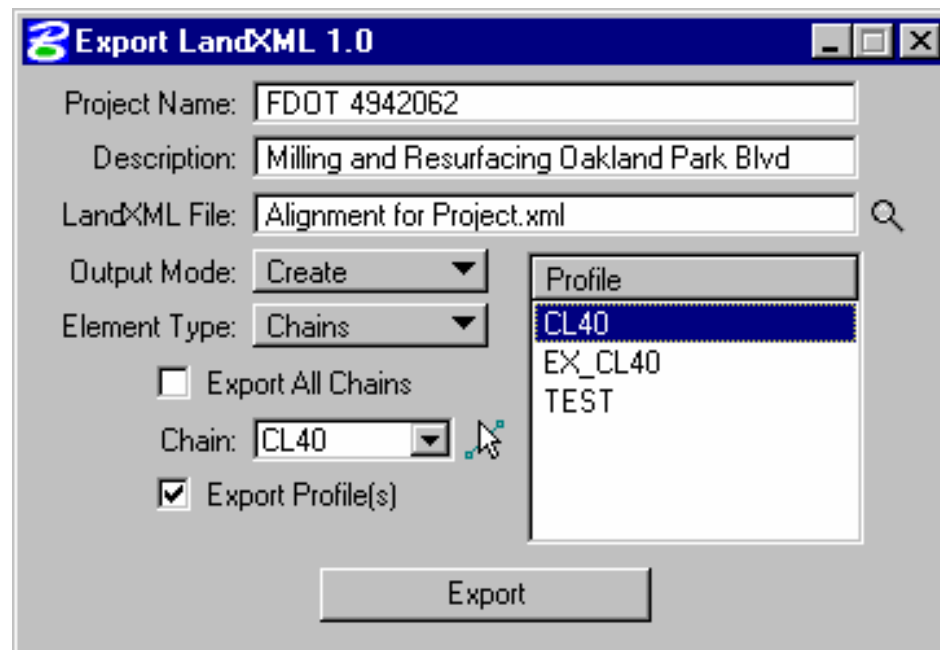
- Geopak Geometry (all chains)





# Exporting Data using LandXML

- Geopak Geometry (single chains)





# Exporting Data using LandXML

- Geopak Geometry XML

```
<?xml version="1.0" encoding="Windows-1252" ?>
- <LandXML
  xsi:schemaLocation="http://www.landxml.org/schema/LandXML-1.0
  http://www.landxml.org/schema/LandXML-1.0/LandXML-1.0.xsd"
  version="1.0" date="2006-05-10" time="07:04:30"
  xmlns="http://www.landxml.org/schema/LandXML-1.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Project name="FDOT 4942062" desc="Milling and Resurfacing Oakland
  Park Blvd" />
  <Application name="GEOPAK" desc="Export COGO Chain to LANDXML."
  manufacturer="Bentley Systems, Inc." version="08.05.02.35"
  manufacturerURL="http://www.bentley.com" />
- <Units>
  <Imperial areaUnit="squareFoot" linearUnit="foot"
  volumeUnit="cubicFeet" temperatureUnit="fahrenheit"
  pressureUnit="inchHG" />
  </Units>
- <Alignments>
  - <Alignment name="CL40" length="19864.816672"
  staStart="3000.000000">
  - <CoordGeom name="CL 40">
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