

README shapefile_to_empipeline

Download Instructions: Unzip the shapefile_to_empipeline.zip file to a folder on your computer. It will unpackage this README file and the shapefile_to_empipeline.msi installer file. Run the .msi installer. If you choose the default install path, it will install to C:\Program Files\CEMVN\build_shapefile_to_empipeline or C:\Program Files (x86)\CEMVN\build_shapefile_to_empipeline. The installation folder will include the shapefile_to_empipeline.exe program executable and several python library files (.pyd and .dll files). The .exe file must remain in the same folder as its associated library files in order to run correctly.

Input File Requirements: The shapefile_to_empipeline utility program will check for files with a .shp file extension. Each .shp file that is found will be opened as an ESRI shapefile using the OGR/GDAL open source libraries, and will be evaluated to check whether it contains 3D line or 3D point features. If the shapefile includes 3D line or point features, those vertices will be read and output into a .em format file.

Running the Program (Option 1): The simplest way to run the program is to copy one or more ESRI shapefiles into the same folder as the shapefile_to_empipeline.exe executable. Double-click on the shapefile_to_empipeline.exe file to run it. The program will search for all .shp files in that folder, and will generate a .em file for each shapefile that can be correctly parsed and has 3D line or point topology.

Running the Program (Option 2): The shapefile_to_empipeline utility program can also be run by opening a CMD prompt on your computer. Type in the full path to the shapefile_to_empipeline.exe executable at the prompt. You can specify 0 arguments or 1 argument.

0 arguments:

```
"C:\Program Files\CEMVN\build_shapefile_to_empipeline\shapefile_to_empipeline"
```

1 argument:

```
"C:\Program Files\CEMVN\build_shapefile_to_empipeline\shapefile_to_empipeline" C:\temp2
```

If 0 arguments are specified, the program will search for any .shp files in the same folder as the shapefile_to_empipeline.exe, and process those files. If 1 argument is specified, it can either be the full path to a single file or the full path to a folder on the computer. The shapefile_to_empipeline.exe program will parse the specified shapefile or all .shp files in the specified folder.

When the shapefile_to_empipeline utility program is run from the CMD prompt, it will echo back messages of success or parsing errors encountered. If an .em file is not being generated when you run the shapefile_to_empipeline utility by double-clicking on the program executable, try running the executable from the CMD prompt. This will generate messages that are not displayed when the program is run using Option 1.

Feedback: If you have any questions about the shapefile_to_empipeline utility program, contact the CEMVN PLOVER email: **MVN-Plover_ED-SE@usace.army.mil**