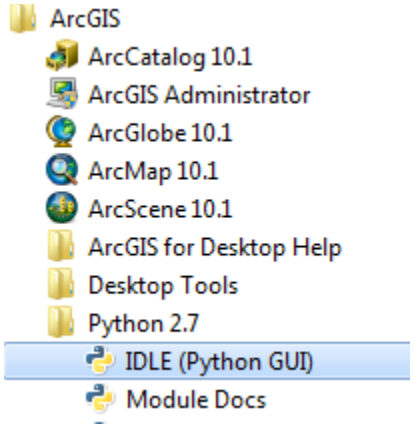
Pacific Northwest
NATIONAL LABORATORY

Quick Guide for Generating Stream Network Files

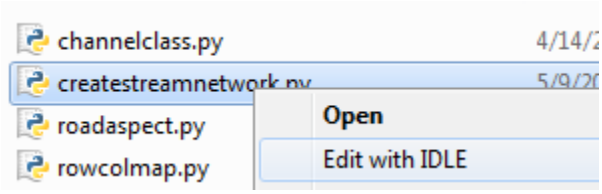
1. Check your environment setting
   Python 2.7 or later for ArcGIS is essential to run the scripts
   Spatial Analysis Tool is required (for now)
   To check setting: Windows Start – All Programs – ArcGIS folder



2. Working directory and Inputs

   Put the python scripts in the same directory as the DEM and MASK/MOUTH layer

   Right click on "createstreamnetwork.py" – Edit with IDLE



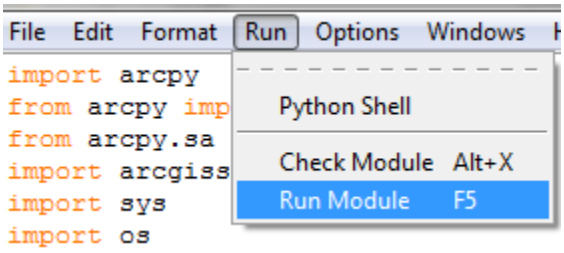
   Enter the directory you want the work to be performed **workspace** (use the same format as the sample below)
   Set **path** the same as workspace (use the same format as the sample below)
   elev – DEM (pre-filled)
   wshed – watershed mask or watershed outlet
   soildepth – name of soil depth file
   streamfile – name of stream network shape file
   key -- 'MASK' or 'MOUTH'
   source -- Min source area to initiate stream
   mindepth -- Minimum Soil Depth
   maxdepth -- Maximum Soil Depth

Sample Input:

```
#---------------------------------------------------------------------#
#-------------------------- WorkSpace  -------------------------------#
#---------------------------------------------------------------------#
env.workspace = "C:\\Users\\username\\Documents\\foldername"
path = "C:/Users/username/Documents/foldername/"

#---------------------------------------------------------------------#
###########           Setup Input
#---------------------------------------------------------------------#
elev = "dem"                              # name of DEM GRID file
wshed = "mask"                            # name of MASK file
soildepth = "soild"                       # name of soil depth file
streamfile = "streamfile"                 # name of stream arc file
key = 'MASK'                              # Enter 'MASK' or 'MOUTH'
source = 4860000                          # Min source area to initiate stream
mindepth = 0.76                           # Minimum Soil Depth
maxdepth = 2.01                           # Maximum Soil Depth
```

3. Run Scripts
   Run script from IDLE editor Toolbar – Run – Run Module



4. Output

   stream.network.dat

   Stream.map.dat

   Stream network will be stored in the geodatabase under the same directory