NHDPlusV2 BasinDelineatorV2 Readme
Horizon Systems Corporation
12/19/2016

Contents

Microsoft SQL Server 2012 Express LocalDB and BasinDelineatorV2 Tool

BasinDelineatorV2 uses MS SQL Server 2012 Express LocalDB. MS SQL Server 2012 Express LocalDB must be installed on the computer that is going to run BasinDelineatorV2. The SQL Server instance must be accessible to the login of the user who will be running BasinDelineatorV2. If SQL Server is installed with default parameters, then the default server instance name is *(localdb)\v11.0*.

Known Problems & Issues

Do not install BasinDelineatorV2 in folders with spaces (e.g., C:\Program Files). ArcGIS Geo-processing tools do not tolerate pathnames with spaces in them. It is recommended that the BasinDelineatorV2 tool be installed under the default "C:\NHDPlusTools" folder. Similarly, do not install NHDPlusV2 datasets under folders/directories with spaces in them.

Basin IDs in the Basin Pour Point file must contain an alpha character. Otherwise, one of the ArcGIS Geo-processing tools interprets it incorrectly as a numeric field.

Please contact nhdplus@hscnet.com if you experience problems with the BasinDelineatorV2.

Installation

Install or upgrade Microsoft .NET (see BasinDelineator "System Requirements" on the NHDPlusV2 Tools webpage). Links to the Microsoft web page for .NET are also on the tools webpage.

Install SQL Server 2012 Express LocalDB and SQL Server 2012 Management Studio. Install packages are available on the NHDPlusV2 Tools webpage

Next, install the BasinDelineatorV2 tool. The install package is available from the FTP link on the NHDPlusV2 Tools webpage.

Create a temporary directory on your hard drive to use for the installation. Place a copy of NHDPlusV2_BasinDelineatorV2_<version number>.7z file into that directory. Use 7-Zip to unzip NHDPlusV2_BasinDelineatorV2_<version number>.7z using the "Extract Here" option. Once the installation is complete, the temporary directory and its contents may be removed, if desired.

Double-click on BasinDelineatorV2Setup.exe to start the installation program. The installation program will place all the necessary application files on your local hard drive and add the necessary entries to your computer's registry. During the installation, you will need to select a location on your hard drive to be used for NHDPlus Tools. This will default to **C:\NHDPlusTools** in the install process. You may change the default to a <drive>:\<foldername> of your choice. The folder may already exist, but that is not required. It is, however, recommended that all NHDPlusV2 tools be installed under the \NHDPlusTools folder. BasinDelineatorV2 will be placed in a sub-folder called \BasinDelineatorV2 under the folder specified during the install.

User Guide for BasinDelineatorV2

The BasinDelineatorV2 user guide is incorporated into the tool and can be accessed from the "Help" button on the BasinDelineatorV2 main window.

Data Requirements

BasinDelineatorV2 expects NHDPlus data to be stored in its default folder structure (in bold). For example:

D:\NHDPlusData (any folder name that doesn't include spaces followed by:)

    \NHDPlusMS

        \NHDPlus05

            \NHDPlusAttributes

            \NHDPlusCatchment

            \NHDPlusFdrFac05a

            \NHDSnapshot

                \Hydrography (etc.,)

        \NHDPlus06

For each NHDPlusV2.1 VPU in which you plan to run BasinDelineatorV2, the following NHDPlusV2.1 data components are required and must be downloaded from the NHDPlusV2 Data page of the NHDPlus web site and installed on your local system:

NHDPlusAttributes

    Contained in the NHDPlusV21_<dd>_<VPUid>_NHDPlusAttributes_<vv>.7z component files

NHDPlusCatchment

    Contained in the NHDPlusV21_<dd>_<VPUid>_ NHDPlusCatchment_<vv>.7z component files

NHDPlusCatchment2

    Contained in the NHDPlusV21_<dd>_<VPUid>_ NHDPlusCatchment2_<vv>.7z component files - (Navigate to the NHDPlus Data Extensions page, click on NHDPlusV2.1 Simplified Catchment Extension and download the file for the appropriate Drain Area and VPU id) - Only needed when using simplified catchments

NHDPlusFdrFac

    Contained in the NHDPlusV21_<dd>_<VPUid>_ <RPUid>_ FdrFac_<vv>.7z component files - Note: There may be more than one file each containing a different RPUid.

NHDPlusSnapshot

    Contained in the NHDPlusV21_<dd>_<VPUid>_ NHDSnapshot_<vv>.7z component files

NHDPlusGlobalData

    Contained in the NHDPlusV21_NHDPlusGlobalData_<vv>.7z component file (On the main NHDPlusV2 Data page, click on Global Data in the upper left)