Running NetSim via Command Line Interface

NetSim provides options to run simulations via the GUI or via Command line. The Command line mode is preferred for automated execution (batch processing) of simulations. This feature is available from v7 onwards. In v13, NetSim can be run via Command line for Internetworks, Advanced Wireless Networks – MANET, Wireless Sensor Networks, Personal Area Networks and Cognitive Radio Networks only. For other networks NetSim v13 can only be run via GUI

Generating Configuration.xml
After configuring a scenario once you save it, Netsim generates a **Configuration.xml** file in the specific project's directory within its workspace. The default workspace is usually located in "**C:\Users\<Current-User>**" directory and could differ based on your installation.

App Path
App path is the file location in the system in which the NetSim13.0 has been installed. The app path can be found out by right clicking the NetSim Shortcut in the desktop and selecting Open file location. If installed with express settings, the location is, "**C:\Program Files\NetSim Academic\bin**". The path to the bin folder of NetSim is termed as the app path.

IO Path
IO path (Input/output Path) is the path where the input and output files of an application is written. This is similar to the temp path of windows OS. For NetSim, the iopath is **%temp%/NetSim**. The **Configuration.xml** file for the scenario to be simulated should be kept here prior to running the simulation. Note that the IO path must have write permission.

Running NetSim through command line for Simulation
To run NetSim through command line, copy the app path where NetSimCore.exe is present and paste it in the command prompt. Type the following in the command prompt after making sure that the VPN is connected (VPN is required for the people accessing from the outside of the campus)
>**NetSimCore.exe<space>-apppath<space><app path><space>-iopath<space><io path><space> -license<space>5053@172.16.0.3**

Here, <app path> contains all files of NetSim including NetSimCore.exe <iopath> contains Configuration.xml and Configuration.xsd file.

Sample configuration.xml files are available for Internetworks and Cognitive Radio Networks in the <apppath>/Docs/Sample_Configurations folder of the NetSim install directory. Check the file type by opening its properties and rename the sample file as "Configuration.xml" before running NetSim through Command line. Make sure the file is not renamed as named as 'configuration.xml.xml' instead.

Once Simulation is completed successfully and the metrics files that are requested by the end user in Configuration.xml will be written in the iopath.

Note: If any of the folder names contains white space, then mention the folder path within double quotes ("") while specifying the folder name in the command prompt.

To know more about the options that are available to run NetSim via Command line, type the following in the command prompt.

>cd <app path>

>NetSimCore.exe -h