Tools, Tips and Workflows

Point Cloud Task Command Line Tool

LP360, versions 2015.1 Service Pack A and above

BSAU | AWG

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Do you ever find yourself performing the same point cloud task over and over again for larger datasets? A new tool available in 2015.1 Service Pack A may help, allowing you to run point cloud tasks from the command line. Named "LPRunPCT.exe", this application contains a number of command line options and associated parameters for running point cloud tasks via the Windows Command Line Interface (CLI). This has proven useful for customers who perform large numbers of routine tasks, such as classifying ground, vegetation, or buildings over large areas. All you need to do is create a point cloud task, set its parameters, and then save that task as an .xml file. Then you are ready to execute that task using LPRunPCT.exe.

It is important to note that in order to run a point cloud task from the command prompt, a separate license instance is required.

The command line options to execute point cloud tasks are as follows:

LPRunPCT{-h}{-q}{-v}{-t<***task xml file path***>}{-d<***input files folder path***>}{-i}{p<***LP360_PROJECT_PATH***>}
{-f<***input LAS file path***>}{-g<***input geometry shape file path***>}

Below is the list of operations you can use:

-h or -? or –help	Displays usage information
-t	Point Cloud Task options xml file path (mandatory)
-d	Input files folder path. If this option is supplied, -f is ignored
-i	Process files individually from input files folder path, otherwise process as a group. The option is valid only with the –d option
-r	Process files recursively from input files folder path, otherwise process files from the input folder. This option is valid only with the –d option
-f	Input a file path for processing single LAS files.
-g	Input a shape file path for area of interest (AOI) geometries. This is optional. If this option is not provided then the point cloud task will be executed on the entire project.
-p	LP360-PROJECT_PATH. If this indirection is used in the Input/ Output definitions for the point cloud task (strongly recommended), then this path is set by this variable
-v	Verbose. All progress messages that you usually get while running the task either in the status bar or in the progress bar are displayed in the command line; Maximum informational output to STDOUT.
-q	Quiet. No output to STDOUT.

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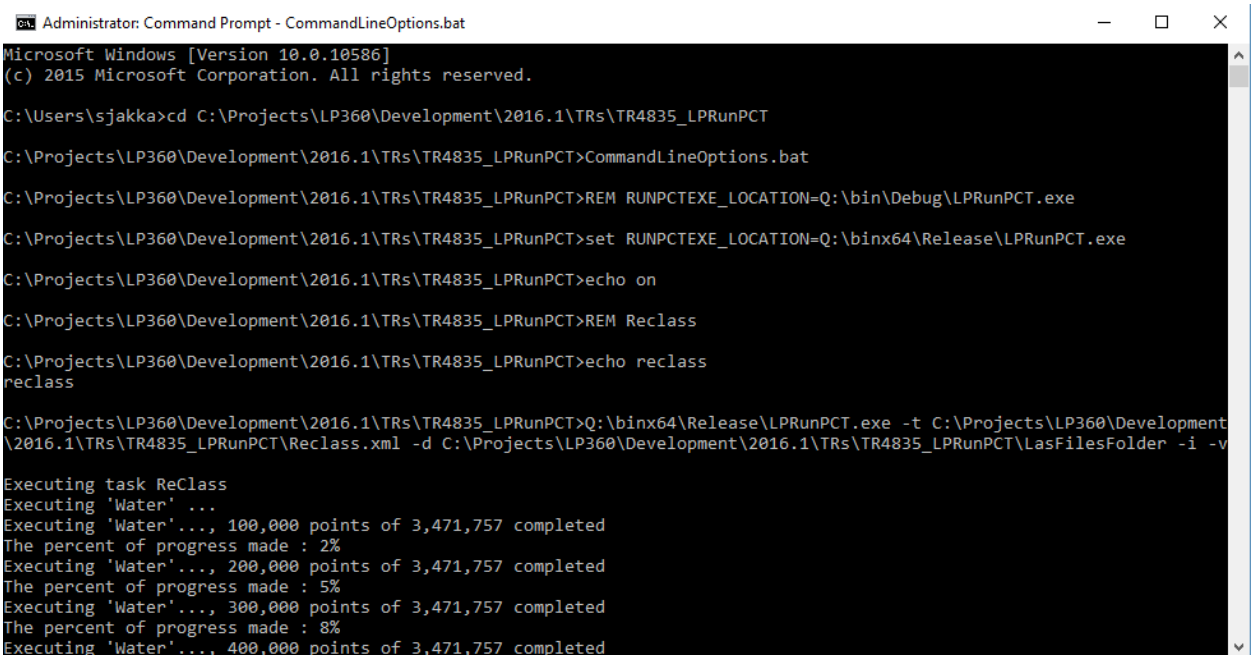

Figure 1: LPRunPCT in action

Limitations:

- You cannot specify a Shape Layer as input geometry. You can only specify either 'Tool_Geometry' or 'File'. If you specify input geometry as 'Tool_Geometry', then you can optionally provide an Area of Interest (AOI) using a shape file. If you have not specified an AOI using a shape file, then the task will be run on the whole project.
- You cannot specify 'LAS Layer' as the input layer (except in the case of the Volumetric task).
- Breakline enforcement settings do not work in the command line. Layer names are used in breakline enforcement and the command line does not recognize layers.
- If you set the 'Selected Feature only' option for a point cloud task, it ignores this option and then proceeds to work on all features.
- The setting to add outputs to the map is ignored.
- The tasks that require you to interact with the map (ex. The Ground Cleaner) cannot be run using the command line tool.

Error Codes returned by LP360:

0	Success
-1	General fatal error
-2	Incorrect parameter
-3	Incorrect license level for the commanded task

The point cloud task command line tool provides users with an efficient and time saving method of executing routine tasks on large data sets.

[User Guide: Point Cloud Task Engine]