**NG-CHM PROJECT UTILITY ANT SCRIPT FUNCTIONALITY**

There are 4 utility ANT scripts that create ancillary products from the NG-CHM Project. Each of these scripts have all of the arguments required provided within the script. So they need only be executed to produce the intended output:

1. **build\_galaxymapgen.xml**: This script creates the *GalaxyMapGen.jar*. This jar is to be copied to the top-level directory (*NG-CHM\_Galaxy)* in the NG-CHM\_Galaxy project. The JAR provides HeatmapDataGenerator functionality to the Galaxy NG-CHM interface.
2. **build\_mapgen.xml**: This script creates the *MapGen.jar*. This jar is to be copied to the top-level directory *(./Web Content/WEB-INF/lib/)* in the NG-CHM\_GUI\_Builder project. The JAR provides HeatmapDataGenerator functionality to the NG-CHM GUI Builder application.
3. **build\_shaidyRmapgen.xml**: This script creates the *ShaidyRMapGen.jar*. This jar is to be copied to the Shaidy project. The JAR provides a HeatmapDataGenerator interface to Shaidy, converting chm.json Shaidy input to heatmapProperties.json and executing the HeatmapDataGenerator.
4. **build\_shaidyRmapgen.xml**: This script creates the *ShaidyRMapGen.jar*. This jar is to be copied to the Shaidy project. The JAR provides a HeatmapDataGenerator interface to Shaidy, converting chm.json Shaidy input to heatmapProperties.json and executing the HeatmapDataGenerator.
5. **build\_ngchmApp.xml**: This multi-part script can create both the stand-alone NG-CHM Viewer (*ngChmApp.html*) and the NG-CHM mimimized Widget (*ngchmWidget-min.js*) for embedding NG-CHM Viewer functionality into other applications (e.g. Galaxy and the NG-CHM Builder). The widget may be copied to the NG-CHM GUI Builder project directory (./Web Content/javascript) and the NG-CHM Galaxy project directory (.mda\_heatmap\_viz/static/javascript). The NG-CHM stand-alone Viewer html file may be copied to the NG-CHM GUI Builder project directory (./Web Content) and the NG-CHM Galaxy project directory (.mda\_heatmap\_viz/static). However, first the html file must be zipped into a zip file titled (*ngChmApp.zip*). The script contains targets for creating just one file, the other, or both at the same time. Typically, it is executed to create both when the contents of the NG-CHM Viewer project are ready to be ported to the other projects.