**Creating County Data Manager Databases**

**Using the Generic County XML Script**

(3/29/2012)

The MOVES application can be used to create County Data Manager (CDB) databases for use with MOVES County scale simulations. This can be done through the MOVES graphical user interface (GUI), or, as described here, by using a "command line" input. This “command line” option allows you to first populate a series of MS Excel spreadsheets containing all of your county specific data and then to apply an XML script to create a set of MOVES-ready CDB databases using a single batch command. Data that will be the same in multiple counties can be contained in a single spreadsheet so that you do not have to manually replicate the information for each county. Using a command line batch approach can save significant time, avoid errors and make it easier to update all or some of the databases if new information becomes available.

Creating an County Database XML Script

We have created an XML template script that can be edited to incorporate your data. Begin with a copy of the template and open the file using a text editor, such as Notepad. There are two mandatory changes you must make.

First, you much update the path (C:\......\) to indicate where your spreadsheets are located. Having a path statement allows the spreadsheets to be located anywhere in your network system.

Secondly, you will have to name your county database. The default name in the template (cXXXXXy2011\_in20120601) follows the EPA naming convention. The "XXXXX" characters should be replaced by the Federal Information Processing Standard (FIPS) code for your county, including a leading zero, if necessary. The digits following the "y" indicate the calendar year of the county database. Eachcounty database can represent only one calendar year. The digits that follow the "in" indicate the date of creation for the database in a YYYYMMDD format. Including a date can help distinguish this version of the database from any previous (and subsequent) versions that may have been made.

You will also see the string "Your Description Text Here." in the template. This is an opportunity to describe the data that is being supplied to the county database. You can supply over 4,000 characters in this location to describe your data. At minimum, you might want to reference other documents that describe the data and include a date that is specific to the spreadsheet being used as a data source. This text ends up in the AuditLog table in your county database each time you update the database.

The template uses generic names for the spreadsheets that correspond roughly to the tabs in the County Data Manager GUI. If you name your spreadsheets differently, you will have to change the file names in the script as well.

You will need a unique name for each of your XML files. Since you will need an XML file for each county, we suggest that you use the same file naming convention that we have for the county databases themselves, including the county FIPS code, calendar year and data of creation. Like:

cXXXXXy2011\_in20120601.xml

The template script is shown in Appendix A.

Running the County Database XML

Once you have an XML script file and have created all of the spreadsheets referenced in the script, you need to create a DOS batch file to run MOVES from the command line. (You do not need to launch the MOVES GUI.)

Appendix B shows an example batch file to run MOVES. The rows beginning with "rem" are "remarks" and do not affect the running of MOVES. The first active row ("cd"), changes the directory you will be operating out of to the location of your MOVES application.. You will need to make sure you properly put in the path to the MOVES directory and have the proper name of the MOVES folder. Next the batch file calls the SETENV batch file, which locates the Java application using the MOVESConfiguration.txt file located in the MOVES directory. Then, the batch file calls the ANT application to compile the MOVES Java code. This does not take long and assures that any changes that have been made in the code are compatible with your operating system. The last line is the "command line" that runs MOVES.

The command line invokes Java and points to the command line class. The "-i" string tells MOVES to read and execute the county database XML. The final part of this command line contains the location (path) of the XML script file and the name of the file itself.

Be sure to update both the path to your version of MOVES and the path to your XML script file.

To run multiple XML files to create multiple county databases, simply add more lines to the end of the batch file similar to the last line in the example, with a different XML file named on each row.

The batch file can be run by double-clicking on the batch file itself, or by invoking the batch file name from a DOS window.

**Appendix A**

<moves>

<importer mode="county" >

<filters>

<roadtypes>

<roadtype roadtypeid="1" roadtypename="Off-Network"/>

<roadtype roadtypeid="2" roadtypename="Rural Restricted Access"/>

<roadtype roadtypeid="3" roadtypename="Rural Unrestricted Access"/>

<roadtype roadtypeid="4" roadtypename="Urban Restricted Access"/>

<roadtype roadtypeid="5" roadtypename="Urban Unrestricted Access"/>

</roadtypes>

</filters>

<databaseselection servername="localhost" databasename="cXXXXXy2011\_in20120601"/>

<agedistribution>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<sourceTypeAgeDistribution>

<filename>C:\......\AgeDistribution.xls</filename>

<section>sourceTypeAgeDistribution</section>

</sourceTypeAgeDistribution>

</parts>

</agedistribution>

<avgspeeddistribution>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<avgSpeedDistribution>

<filename>C:\......\AverageSpeedDistribution.xls</filename>

<section>AvgSpeedDistribution</section>

</avgSpeedDistribution>

</parts>

</avgspeeddistribution>

<avft>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<avft>

<filename>C:\......\FuelType.xls</filename>

<section>avft</section>

</avft>

</parts>

</avft>

<fuel>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<FuelSupply>

<filename>C:\......\Fuel.xls</filename>

<section>FuelSupply</section>

</FuelSupply>

<FuelFormulation>

<filename>C:\......\Fuel.xls</filename>

<section>FuelFormulation</section>

</FuelFormulation>

</parts>

</fuel>

<zonemonthhour>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<zoneMonthHour>

<filename>C:\......\MeteorologyData.xls</filename>

<section>ZoneMonthHour</section>

</zoneMonthHour>

</parts>

</zonemonthhour>

<rampfraction>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<roadType>

<filename>C:\......\RampFraction.xls</filename>

<section>RoadType</section>

</roadType>

</parts>

</rampfraction>

<roadtypedistribution>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<roadTypeDistribution> <filename>C:\......\RoadTypeDistribution.xls</filename>

<section>roadTypeDistribution</section>

</roadTypeDistribution>

</parts>

</roadtypedistribution>

<sourcetypepopulation>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<sourceTypeYear>

<filename>C:\......\SourceTypePopulation.xls</filename>

<section>sourceTypeYear</section>

</sourceTypeYear>

</parts>

</sourcetypepopulation>

<vehicletypevmt>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<HPMSVTypeYear>

<filename>C:\......\VehicleTypeVMT.xls</filename>

<section>HPMSVTypeYear</section>

</HPMSVTypeYear>

<monthVMTFraction>

<filename>C:\......\VehicleTypeVMT.xls</filename>

<section>MonthVMTFraction</section>

</monthVMTFraction>

<dayVMTFraction>

<filename>C:\......\VehicleTypeVMT.xls</filename>

<section>DayVMTFraction</section>

</dayVMTFraction>

<hourVMTFraction>

<filename>C:\......\VehicleTypeVMT.xls</filename>

<section>HourVMTFraction</section>

</hourVMTFraction>

</parts>

</vehicletypevmt>

<imcoverage>

<description><![CDATA[Your Description Text Here.]]></description>

<parts>

<IMCoverage>

<filename>C:\......\IMPrograms.xls</filename>

<section>IMCoverage</section>

</IMCoverage>

</parts>

</imcoverage>

</importer>

</moves>

**Appendix B**

rem \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

rem \*\* Edit the Generic\_County\_Template.xml file. \*\*

rem \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

rem Change the string: cXXXXXy2011\_in20120601

rem to the name you wish to use for your county database.

rem

rem Change the string: Your Description Text Here.

rem to describe the contents of each data spreadsheet you provide.

rem

rem Change the string: C:\......\

rem to the path to the folder that contains your spreadsheets.

rem Be sure to change the paths in this batch file as well.

rem

rem \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

rem \*\* Edit this file. \*\*

rem \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

rem Change the string: C:\......\MOVESYYYYMMDD

rem to the path to your version of MOVES.

rem

rem Change the string: Generic\_County.xml

rem to the name of (and path to) your edited Generic\_County\_Template.xml file.

rem

cd "C:\......\MOVESYYYYMMDD"

call setenv.bat

call ant compile

rem -----------------------------------------------------------

java gov.epa.otaq.moves.master.commandline.MOVESCommandLine -i "C:\......\Generic\_County.xml"