ompp_export_dat.py

Parsa Abadi

January 19, 2025

1 Introduction

ompp_export_dat.py is a Python utility script to export model output data from an OMPP-compatible SQLite database into .dat files.

By processing the contents of a given SQLite database, ompp_export_dat.py creates a series of .dat files, one for each table found in the database.

2 Usage

To run the script, invoke the Python interpreter with ompp_export_dat.py, followed by two arguments: the input SQLite database file and the output directory where the .dat files will be generated.

Example Syntax

python ompp_export_dat.py <input-sqlite-file> <output-directory>

Arguments

<input-sqlite-file> The path to the SQLite database that contains OMPP
 model output tables.

<output-directory> The path to the directory where the script will write
 the generated .dat files.

3 Example

Below is an example invocation of the script on a Windows system. This example uses the RiskPaths model output database and exports data to the user's desktop folder ompp_exportDAT.

C:\OpenM\openm\libopenm\common> python ompp_export_dat.py C:\OpenM\models\RiskPa

As the script runs, it displays informational messages for each processed table and confirms where the .dat file is written:

```
ompp export dat: Processing table 'T01 LifeExpectancy'
write_to_dat_file: Data written to 'C:\Users\parsaba\Desktop\ompp_e
ompp export dat: Processing table 'TO2 TotalPopulationByYear'
write_to_dat_file: Data written to 'C:\Users\parsaba\Desktop\ompp_e
ompp_export_dat: Processing table 'T03_FertilityByAge'
write_to_dat_file: Data written to 'C:\Users\parsaba\Desktop\ompp_e
ompp_export_dat: Processing table 'TO4_FertilityRatesByAgeGroup'
write_to_dat_file: Data written to 'C:\Users\parsaba\Desktop\ompp_e
ompp_export_dat: Processing table 'TO5_CohortFertility'
write_to_dat_file: Data written to 'C:\Users\parsaba\Desktop\ompp_e
ompp export dat: Processing table 'TO6 BirthsByUnion'
write_to_dat_file: Data written to 'C:\Users\parsaba\Desktop\ompp_e
ompp export dat: Processing table 'TO7 FirstUnionFormation'
write_to_dat_file: Data written to 'C:\Users\parsaba\Desktop\ompp_e
ompp export dat: Successfully exported 'C:\OpenM\models\RiskPaths\o
                  to 'C:\Users\parsaba\Desktop\ompp_exportDAT'
```

This output confirms that each table has been processed and that the corresponding .dat files have been created successfully.

ompp_export_dat: Database connection closed.

4 File Contents

Within each generated .dat file, the script includes a header line with the table name and columns, followed by rows of data. These rows are space-separated by default.

5 Error Handling

If the input database does not exist or the output directory is invalid, the script logs an error message and stops. Database connectivity issues or unexpected runtime errors are also reported to help you diagnose and fix problems quickly.