# Linkage of OnSSET to the OpenMod4Africa Platform

OnSSET can be installed on a local machine and requires a series of inputs. Most of the of the spatial data for the African countries can be downloaded from <https://energydata.info/dataset>.

Uploading the output of the model requires summarizing the OnSSET output for each country according to the variables and scenario defined in OpenModAfrica. The outputs of the OnSSET model for the different countries can be download by using the Global Electrification Platform (GEP) web site at <https://electrifynow.energydata.info/>.

## Workflow

The OnSSET files are available in CSV format and can be converted by using a PowerShell script, that allows to summarize the results by using MS Excel formulas and Pivot tables. The values are then copied and pasted in the corresponding OnSSET data in MS Excel. The script is available at the linkage GitHub repository: <https://github.com/openENTRANCE/linkages/>.

OnSSET generates 96 files for each country, with different spatial resolution, according to distribution of the human population. A Python script is being developed to analyze the data stored in the OnSSET CSV files and insert the values in the model MS Excel file, for each of the 6 scenarios considered. The script will be uploaded on the openENTRANCE linkage GitHhub respository once it has been completed.

Step 1

Download the OnSSET output files from <https://electrifynow.energydata.info/> and <https://energydata.info/dataset>. Please note the size of the output file for each country is often more than 5 GB.

Step 2

Unzip di scenario output files and convert it to MS Excel by using the script “csv\_to\_xls.ps1” provided. This step will be superseded when the new Python script is released.

Step 3

Summarize the values of the Excel files and copy the results in the OnSSET data MS Excel file. The procedure will be replaced by a Python script.

### Uploading OnSSET results to the OpenMod4Africa Scenario Explorer

The nomenclature for the variables is available in the OnSSET OpenENTRANCE repository on GitHub. The variables, regions and scenarios of the OnSSET data MS Excel file must be present in GitHub to allow the upload to complete successfully. The workflow explained above explains the steps to ensure that the format and the content of the file is appropriate for the Scenario Explorer platform.

The OnSSET data MS Excel file can be uploaded by using the upload tools of the Scenario Explorer platform.