**Migration of LAMIS Facilities’ Data to NMRS**

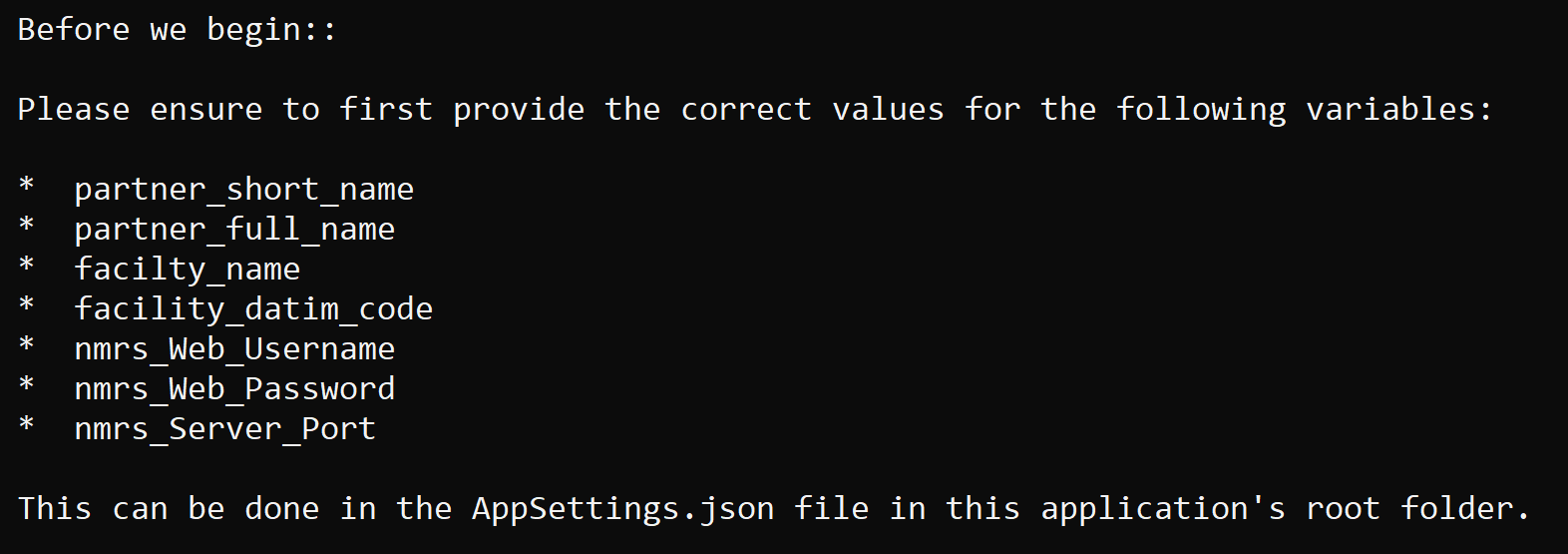
*The User Guide*

**Pre-requisites:**

* Ensure the existing **webservices.rest** omod in your modules folder is replaced with **webservices.rest-2.29.0**
* Please remember to grant access to everyone in the **Templates** folder. If you choose to migrate from data files, then ensure that you place the files in the **Data Files** folder where the data files and templates located so that the migration tool can access them
* You also need to enter the **LAMIS ID** for this Facility (This is the primary key from the Facility table in the LAMIS Database). This will help to ensure that data for the right facility is migrated in the case where there is more than one facility data in the same LAMIS database
* Also ensure to first provide the correct values for the following variables:

1. **partner\_short\_name**
2. **partner\_full\_name**
3. **facilty\_name**
4. **facility\_datim\_code**
5. **nmrs\_Database\_Name**
6. **nmrs\_Web\_Username**
7. **nmrs\_Web\_Password**
8. **nmrs\_Server\_Port**

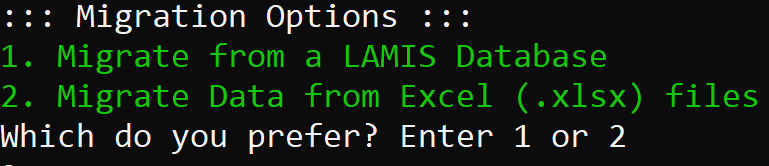
This can be done in the **AppSettings.json** file in this application's root folder.



**Migration Options:**

The tool was designed such that one can choose whether to migrate data from LAMIS databases or from data files which are LAMIS data exported to CSV files. You will be presented with the options listed below on the screen. You need to type **1** or **2** and the press the **Enter** key.

1. Migrate from a LAMIS Database
2. Migrate Data from Excel (.xlsx) files

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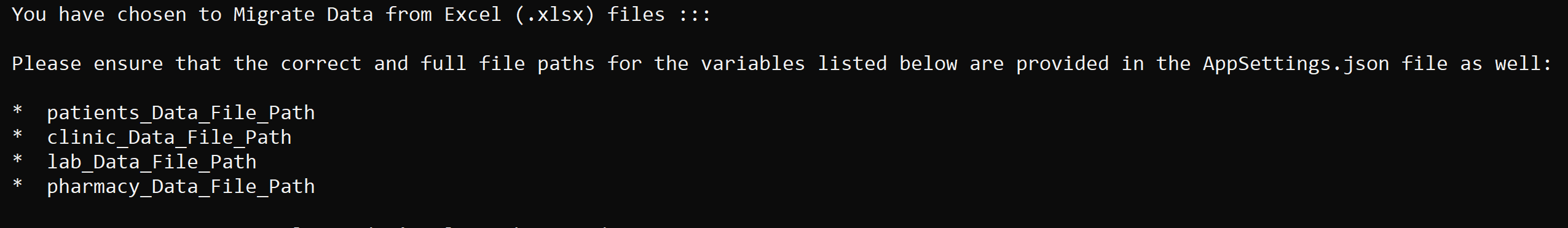
If you choose option 2, that is, to Migrate Data from Excel (.xlsx) files, please ensure that the correct and full file paths for the variables listed below are provided in the AppSettings.json file as well:

**\* patients\_Data\_File\_Path**

**\* clinic\_Data\_File\_Path**

**\* lab\_Data\_File\_Path**

**\* pharmacy\_Data\_File\_Path**

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The exported CSV files must be converted to **Excel (.xlsx)** files before migrating the data from the files.

**Data Export to data files:**

For each facility, the appropriate data from the **patient**, **clinic**, and **laboratory** tables can be exported directly to a CSV file from the PG Admin interface, but the data from **pharmacy** table must be generated using the script below. After generating the data with this script, it can then be exported to CSV.

select pharmacy\_id,patient\_id,facility\_id,date\_visit, r.description as regimen, rt.description as regimentype,duration,morning,afternoon,evening,adherence,next\_appointment,time\_stamp from (select \* from pharmacy where facility\_id = **facility\_ID**) as p join (select \* from regimen) r on p.regimen\_id = r.regimen\_id join (select \* from regimentype) rt on p.regimentype\_id = rt.regimentype\_id;

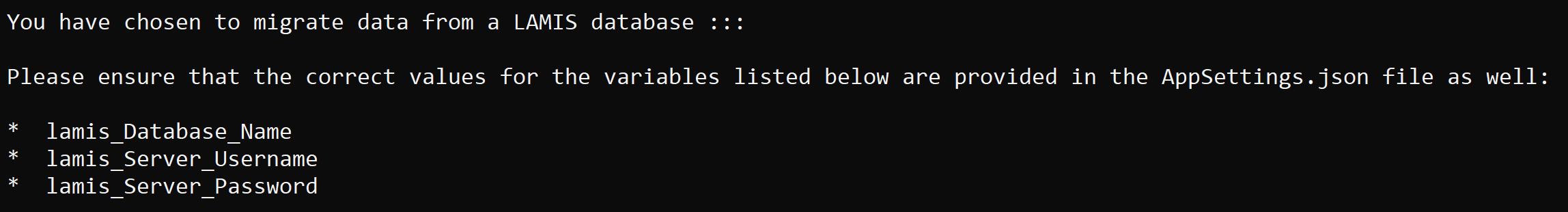
The variable **facility\_ID** in the script above must be provided in the case where there are more than one facility data in the database.

If you choose to migrate directly from a database, then ensure that the correct values for the variables listed below are provided in the **AppSettings.json** file as well

**\* lamis\_Database\_Name**

**\* lamis\_Server\_Username**

**\* lamis\_Server\_Password**

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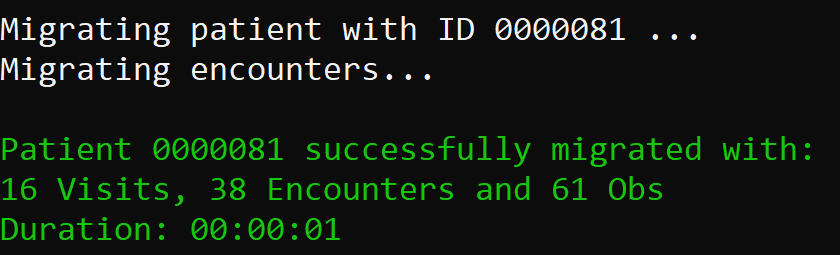
**Migration Process :**

Once the correct values for all the necessary variables are provided, the migration process is quite simple and easy to monitor. The tool pulls patients in batches of 10, iterates through each of them to pull their corresponding programs and encounters. It then migrates each patient and their data to designated NMRS database via the OpenMRS core API. The use of the API to push the data is very helpful in ensuring that the data meet the predefined standard in terms of validity.

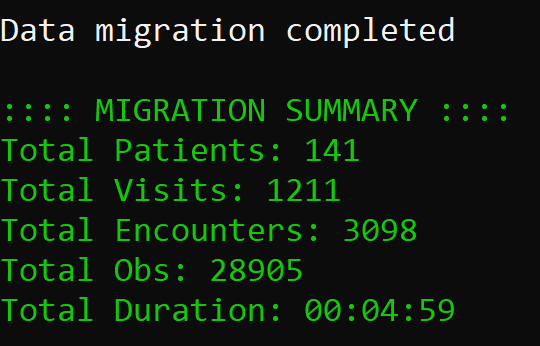
**\*NOTE: The NMRS application must have been started and running (must have shown the log in page) before the migration should be started so that the migration tool can access the NMRS API.**

The process shows each patient with how many Visits, Encounters, and Observations that were successfully migrated. The migration process for any data entity does not continue if a single observation or data element fails validation at the API end. This makes it very easy to migrate failed data or corrections without worrying about duplicating the data when an update migration is needed.

The migration process feedback is as shown on the snapshot below:



When the migration completes, a summary feedback is displayed as shown below:



You will need to evaluate the migration process by observing the messages shown on the console. You can reinitiate the migration process to push in corrections made on failed data.

**Compatibility :**

1. **Windows**

Double-click the executable file (**LAMIS-NMRS.exe**) to launch the application and everything is straight-forward from that point.

1. **LINUX**

Follow the below steps to run your application on Linux:

1. Copy publish folder to your ubuntu machine
2. Open the terminal (CLI) and Go to the project directory
3. Provide execute permissions:

chmod 777

./LAMIS-NMRS

1. Execute application

./LAMIS-NMRS