

SOP: KenyaEMR2.x to 3.x Platform Upgrade Guide

(Last updated: Mar 2024)

Goal	To effectively upgrade KenyaEMR Platform from 2.x to 3.x
Who	HIS focal person, EMR Champion
Requirements	Functional KenyaEMR server running on 2.x , Internet, KenyaEMR_Platform_Upgrade_2.x_to_3.x package

Setup Instructions

Step 1: Obtain the installation resources

After downloading the upgrade package, extract it to the 'Home directory'

Instruction

Step 1: Download the latest KenyaEMR_Platform_Upgrade_2.x_to_3.x Package
(Note: Internet connectivity is required).
Extract the package to 'Home Directory'

Use **Ctrl+Alt+T** to open the Terminal window
Navigate into the folder: `cd folder_name [ENTER]`
Type the following command to initiate the upgrade process:
`sudo bash mysql_upgrade.sh [ENTER]`

The script will perform the following actions:

- ✓ Backup all databases in MySQL
- ✓ Remove MySQL 5.6 completely
- ✓ Install MySQL 8.0 and configure
- ✓ Create 'root' user and grant privileges
- ✓ Restore the backed up openmrs database

Step 2: Upgrade to Platform 2.4

`sudo sh setup_script_2.4.sh [Enter]`
The script will perform the following actions:

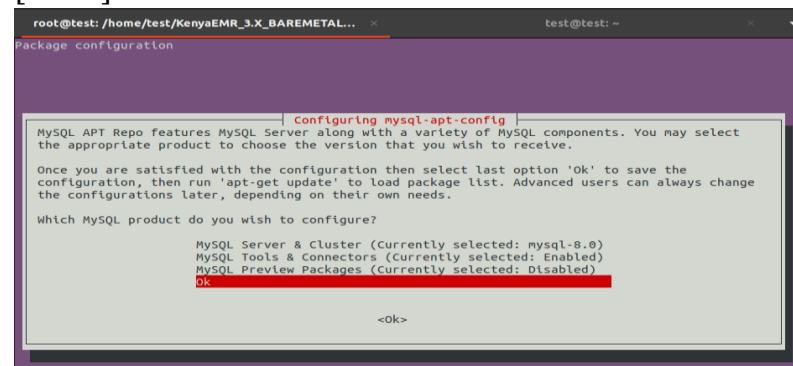
Illustration



```
test@test: ~/KenyaEMR_Platform_Upgrade_2.x_to_3.x
test@test:~$ cd KenyaEMR_Platform_Upgrade_2.x_to_3.x/
test@test:~/KenyaEMR_Platform_Upgrade_2.x_to_3.x$ sudo bash mysql_upgrade.sh
```

NB: Monitor the process and when prompted for password, enter MySQL password and press [Enter]

When below window appears, select 'Ok' using down-arrow key then press [Enter] to continue



```
root@test: /home/test/KenyaEMR_3_X_BAREMETAL... test@test: ~
Package configuration

Configuring mysql-apt-config
MySQL APT Repo features MySQL Server along with a variety of MySQL components. You may select the appropriate product to choose the version that you wish to receive.

Once you are satisfied with the configuration then select last option 'ok' to save the configuration, then run 'apt-get update' to load package list. Advanced users can always change the configurations later, depending on their own needs.

Which MySQL product do you wish to configure?

MySQL Server & Cluster (Currently selected: mysql-8.0)
MySQL Tools & Connectors (Currently selected: Enabled)
MySQL Preview Packages (Currently selected: Disabled)
Ok
<ok>
```

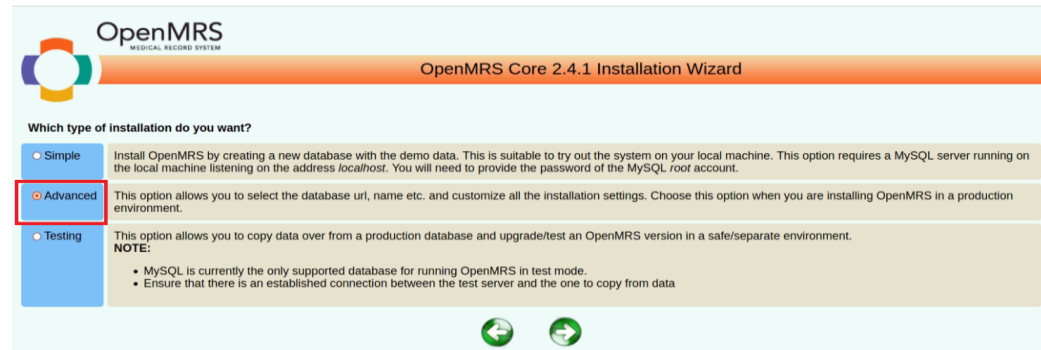
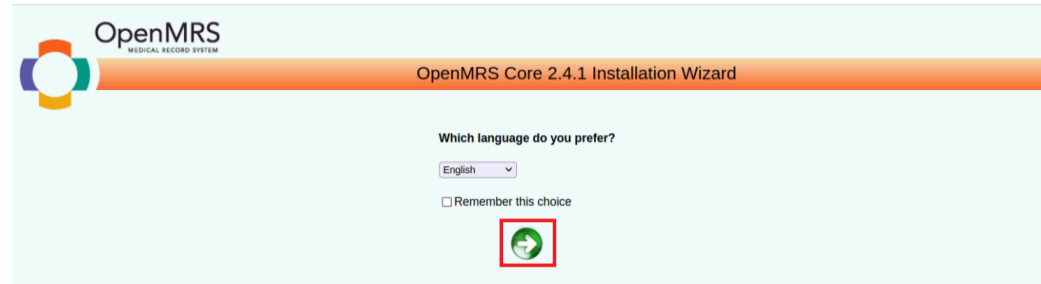
✓ Upgrade concept dictionary

This page will load when you refresh browser for a successful update, click on the arrow to continue with first time setup

Select Advanced option as shown and click next (Right Arrow) to continue

Leave default options and click next as shown

```
test@test: ~/KenyaEMR_Platform_Upgrade_2.x_to_3.x
test@test:~$ cd KenyaEMR_Platform_Upgrade_2.x_to_3.x/
test@test:~/KenyaEMR_Platform_Upgrade_2.x_to_3.x$ sudo sh setup_script_2.4.sh
```



Select 'No' and enter appropriate MySQL username and password (**root** and **test** respectively) then click next to continue

Leave default options and click next as shown

Leave default options and click next as shown

The screenshot shows the 'Step 1 of 5' screen of the OpenMRS Core 2.4.1 Installation Wizard. The title bar is orange and contains the text 'OpenMRS Core 2.4.1 Installation Wizard'. Below the title bar, the text 'Step 1 of 5' is displayed. The main content area is light blue and contains the following elements: a yellow box with the text 'Please specify how to connect to your currently installed database server:'; a text input field for 'Database connection:' with the value 'jdbc:mysql://localhost:3306/@DBNAME?autoReconnect=true'; a text input field for 'Database Driver:' with the value '(Optional) Specify your database driver name'; a yellow box with the text 'Do you currently have an OpenMRS database installed that you would like to connect to?'; a 'Yes' radio button selected, followed by a blue box with the text 'If yes, what is the name of this database?'; a text input field for 'Database name:' with the value 'openmrs'; a 'No' radio button selected, followed by a grey box with the text 'If no, what would you like to name this database? (alphanumeric characters only)'; a text input field for 'Database name:' with the value 'openmrs'; a grey box with the text 'A user that has "CREATE DATABASE" privileges must be specified here so that this wizard can create the new database. (Empty MySQL passwords are not allowed here. If you dont have a MySQL password set for the given user, please set one.)'; a text input field for 'Username' with the value 'root'; a text input field for 'Password' with the value 'test'; a red note 'NB: Don't change anything, click Next'; and two green circular arrows at the bottom, with the right one highlighted by a red square.

The screenshot shows the 'Step 2 of 5' screen of the OpenMRS Core 2.4.1 Installation Wizard. The title bar is orange and contains the text 'OpenMRS Core 2.4.1 Installation Wizard'. Below the title bar, the text 'Step 2 of 5' is displayed. The main content area is light blue and contains the following elements: the OpenMRS logo and 'MEDICAL RECORD SYSTEM' text; a yellow box with the text 'Do you need OpenMRS to automatically create the tables for your current database openmrs?'; a 'Yes' radio button selected and a 'No' radio button; a yellow box with the text 'Do you want to also add demo data to your database - openmrs? (This option only available if creating new tables.)'; a 'Yes' radio button selected and a 'No' radio button; a yellow box with the text 'Do you currently have a database user other than root that has read/write access to the openmrs database?'; a 'Yes' radio button selected, followed by a blue box with the text 'If yes, specify the log in user name and password for that database user:'; a text input field for 'Username' with the value 'root'; a text input field for 'Password' with the value 'test'; a 'No' radio button selected, followed by a grey box with the text 'If no, one will be created for you. However, a user that has "CREATE USER" privileges on the database must be specified here so that this wizard can create the user.'; a text input field for 'Username' with the value 'root'; a text input field for 'Password' with the value 'test'; and two green circular arrows at the bottom, with the right one highlighted by a red square.

Scroll down and click next as shown to continue

OpenMRS Core 2.4.1 Installation Wizard

Step 3 of 5

Do you want to be able to upload modules from the web interface?
Disclaimer: This could be a security risk if a user with upload permissions is ever compromised.
(The alternative is to drop .omod module files into your application data directory and restart OpenMRS)

Yes: No:

Do you want updates to the database to be automatically applied on startup when a new web application is deployed?

Yes: No:

Next button (highlighted with a red box)

Wait until the process is complete

OpenMRS Core 2.4.1 Installation Wizard

Step 5 of 5

Optional. Leave ID field blank to skip.

Implementation name A descriptive name for this implementation (e.g. AMRS installation in Eldoret, Kenya)

Implementation ID This is the unique id for this implementation. Used as the HL7_CODE. Must be limited to 20 characters and numbers. The characters ">" and "!" are not allowed.

Implementation pass phrase This text is a long text string that is used to validate who uses your implementation id. Multiple installations of openmrs can use the same implementation id, but they must all know the passphrase. (Note that if an implementation id is shared, it is assumed that those installations are the same implementation).

Implementation description Text describing this implementation. (e.g. Source for the AMPATH program in Kenya. Created by Paul Biendich)

Next button (highlighted with a red box)

When completed successfully, this page will be loaded on the browser

Add demo data No

Implementation information

Implementation name

Implementation ID

Implementation pass phrase

Implementation description


Runtime properties

Enable uploading modules from the web interface Yes

Update the database automatically on start up when a new release is deployed No

Runtime properties file path /var/lib/OpenMRS/openmrs-runtime.properties

Next button (highlighted with a red box)




OpenMRS
MEDICAL RECORD SYSTEM

OpenMRS Core 2.4.1 Installation Wizard

Tasks to execute	
✓ Create database user	100%
⚙ Update the database	

[Show output details](#)



OpenMRS
MEDICAL RECORD SYSTEM

OpenMRS Platform 2.4.1.0 Running!

If you are seeing this page, it means that the OpenMRS Platform is running successfully, but no user interface module is installed.
Learn about the available [User Interface Modules](#)

If you are a developer, you can access the REST API. (See [REST documentation for clients](#))

Step 2: Upgrade to Platform 2.6

```
sudo sh setup_script_2.6.sh [Enter]
```

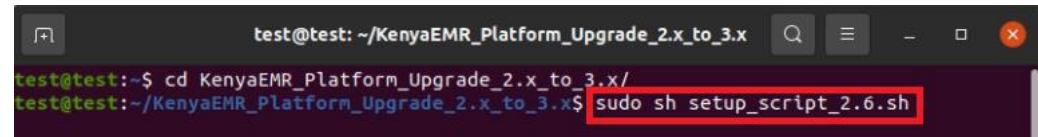
The script will perform the following actions:

- ✓ Upgrade concept dictionary
- ✓ Update modules
- ✓ Resolve CSRF token issues
- ✓ Update Address template hierarchy

When the process is complete, refresh browser and provide login credentials (admin and Admin123) then click next to continue

Scroll down and click next to continue

Wait until the upgrade is completed successfully. Confirm by refreshing browser to load KenyaEMR 3.x login page as shown

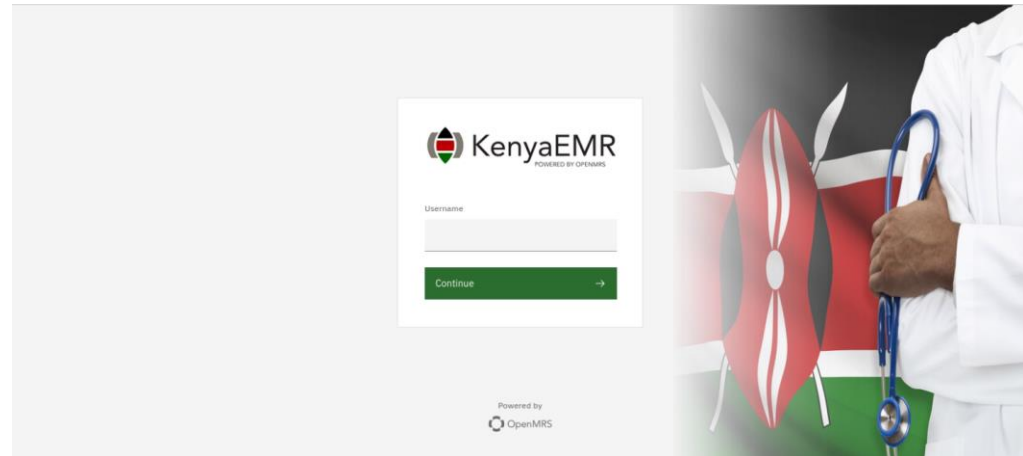


```
test@test: ~/KenyaEMR_Platform_Upgrade_2.x_to_3.x
test@test:~$ cd KenyaEMR_Platform_Upgrade_2.x_to_3.x/
test@test:~/KenyaEMR_Platform_Upgrade_2.x_to_3.x$ sudo sh setup_script_2.6.sh
```



Note: Run the `post_upgrade.sh` script after recreating ETL tables.

Congratulations! You have successfully upgraded KenyaEMR platform from 2.x to 3.x



- For further support, contact KenyaHMIS service desk through the toll-free number **0800722440**.

THE END