

ESP Upgrade steps to ESP 3.7

Includes Upgrades to Python (3.8) and Django (3.2)

Revision History

Version Number	Modification Date	By	Description of Changes
1.0	8 Sep 2023	J. Miller	Initial version
1.1	13 Sep 2023	J. Miller	Added verify python3.8 steps

Contents

Revision History	1
1 Overview and Purpose.....	3
2 Instructions.....	3
2.1 SSH to the ESP server Use putty or the client of your choice to ssh into the ESP system.....	3
2.2 Switch to the esp user	3
2.3 Change to the primary ESP install directory and get list of plugins	3
2.4 Verify the current local git branch.....	3
2.5 Fetch the full list of branches from the Git Repository	4
2.6 Checkout the latest 3.7 branch	4
2.7 Run the upgrade-python3.sh script (or upgrade-python3-rhel.sh).....	4
2.8 Verify that python3.8 is installed	4
2.9 Run the install script to install the python virtual environment	5
2.10 Run makeini to generate updated entries in application.ini	5
2.11 Run collectstatic to generate updated static files.....	6
2.12 Run migrate to apply the database updates	6
2.13 Restart Apache/Httpd.....	6
2.14 Verify or reinstall the Condition Algorithms from step 2.3	6
3. Verification.....	6
3.1 UI - ESP Admin Interface	6
3.2 OS-Command Line – ESP Command Line Interface.....	6

1 Overview and Purpose

This document covers the upgrade of ESP from any prior version to ESP 3.7.
The full steps include installing a newer version of Python and Django and recreating the virtual environment.

ESP 3.7 version is backwards compatible with the existing Python version. Therefore, if a site prefers, it can choose to not update Python at this time. (Or if they are having issues obtaining the pkgs)

To continue using the existing Python Skip steps 2.7 through 2.9

If the system has the available space in the /srv partition, it is HIGHLY recommended that you can create a backup of the existing installation by executing the following command:

```
sudo cp -pr /srv/esp/prod /srv/esp/prod-mmddyyy
```

NOTE: For a new installation see ESP Wiki and the Document:

How To Install and Configure ESP 3.7 or later on Ubuntu or Redhat and PostgreSQL

2 Instructions

If you have any questions or encounter any issues with these steps or any part of this upgrade, please reach out to Commonwealth Informatics for support at esp_support@commoninf.com

2.1 SSH to the ESP server

Use putty or the client of your choice to ssh into the ESP system

2.2 Switch to the esp user

```
sudo su - esp
```

2.3 Change to the primary ESP install directory and get list of plugins

```
cd /srv/esp/prod
```

Note: This is the standard ESP installation directory. If the local ESP installation is in a different directory, modify the path to reflect the correct location.

```
./bin/esp nodis --list
```

Save this list of plugins, you will need to reinstall them after the upgrade.

2.4 Verify the current local git branch

```
cd /srv/esp/prod  
git branch
```

Example output:

```
$ git branch  
master  
* version3.5.7.2
```

2.5 Fetch the full list of branches from the Git Repository

```
git fetch
```

2.6 Checkout the latest 3.7 branch

```
Git tag # this will show you all the tagged versions.  
# select the highest number i.e. v3.7.1 and substitute as shown below:
```

```
git checkout v3.7 -b version3.7
```

Example with output:

```
$ git checkout v3.7 -b version3.7  
Switched to a new branch 'version3.7'
```

2.7 Run the upgrade-python3.sh script (or upgrade-python3-rhel.sh)

```
cd /srv/esp/prod
```

Depending on the operating system you will run one of the following:

```
UBUNTU: sudo ./upgrade-python3.sh
```

```
RHEL: sudo ./upgrade-python3-rhel.sh
```

2.8 Verify that python3.8 is installed

Perform the following as the esp user

```
sudo su - esp
```

type:

```
which python3.8
```

REQUIRED OUTPUT:

```
UBUNTU:  
/usr/bin/python3.8
```

```
RHEL:  
/usr/bin/python3.8 # RHEL 8.x  
OR  
/opt/rh/rh-python38/root/usr/bin/python3.8 # RHEL 7.x
```

To see the specific version, Type:

```
python3.8 -V
```

SAMPLE OUTPUT:

```
python3.8.16
```

Note: If these do not line up with expected responses, please contact Commonwealth Informatics for assistance @ esp_support@commoninf.com

2.9 Run the install script to install the python virtual environment

```
cd /srv/esp/prod
```

```
UBUNTU: ../install.sh
```

```
RHEL7:  ./install-rhel7.sh
```

```
RHEL8:  ./install-rhel8.sh
```

If you receive the following error:

```
...  
ModuleNotFoundError: No module named 'pip'
```

Run the following commands:

```
source bin/activate  
wget https://bootstrap.pypa.io/get-pip.py  
python3.8 get-pip.py  
deactivate
```

Rerun the ./install.sh (or ./install-rhelx.sh) script from the previous step

If you continue to encounter error or any issues, contact support at esp_support@commoninf.com

2.10 Run makeini to generate updated entries in application.ini

```
/srv/esp/prod/bin/esp makeini
```

2.11 Run collectstatic to generate updated static files

```
/srv/esp/prod/bin/esp collectstatic
```

(answer **yes** to the prompt to copy over files)

2.12 Run migrate to apply the database updates

```
/srv/esp/prod/bin/esp migrate
```

2.13 Restart Apache/Httpd

UBUNTU: `sudo systemctl restart apache2`

RHEL: `sudo systemctl restart httpd`

2.14 Verify or reinstall the Condition Algorithms from step 2.3

```
cd /srv/esp/prod  
./setupPlugins.sh
```

select each condition and select install – then go to the bottom and select “perform selected actions”

Once the command prompt returns, verify the plugins are installed by typing:

```
bin/esp nodis -list
```

3. Verification

3.1 UI - ESP Admin Interface

Verify that you can login to the Browser based UI and that the status page loads properly.

Load the two pages below to verify basic functionality:

1 - Navigate to the Administration drop down menu and Select “Site Administration”

Select “Condition Configs” under the Conf heading near the top of the page
You should see a list of conditions and settings

2 – Next select the “home” breadcrumb link or click the back button and then

Scroll down to the EMR section and select “Provenances”
You should see a list of files loaded, the most recent at the top.

Next verify basic Command line functionality

3.2 OS-Command Line – ESP Command Line Interface

ssh in to the ESP server and execute the following commands (update the directory as needed.)

1. **cd /srv/esp/prod**
2. **bin/esp nodis -list** # this should produce a list of installed plugins - sample below:

```
chlamydia
depression
gonorrhoea
hepatitis_b
...
tuberculosis
```
3. **bin/esp migrate -list** # this should produce a list of migrations - all should be completed (marked X)

```
admin
[X] 0001_initial
auth
[X] 0001_initial
[X] 0002_alter_permission_name_max_length
[X] 0003_alter_user_email_max_length
[X] 0004_alter_user_username_opts
[X] 0005_alter_user_last_login_null
[X] 0006_require_contenttypes_0002
conf
[X] 0001_initial
[X] 0002_load_initial_data
[X] 0003_auto_20160513_1020
[X] 0004_auto_20180619_1326
[X] 0005_auto_20180829_1148
[X] 0006_SynchReportableRXDX
...
```