

# 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

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## 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 rerunning the script to create 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 installing the new packages)

**To continue using the existing Python Skip steps 2.7 and 2.8**

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](mailto: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 # 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](mailto: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](mailto: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
...
```