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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# 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**

# 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)

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

## Switch to the esp user

sudo su - esp

## 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.

## Verify the current local git branch

cd /srv/esp/prod  
git branch  
  
Example output:

$ git branch

master

\* version3.5.7.2

## Fetch the full list of branches from the Git Repository

git fetch

## 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'

## 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

## 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](mailto:esp_support@commoninf.com)

## 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)

## Run makeini to generate updated entries in application.ini

/srv/esp/prod/bin/esp makeini

## Run collectstatic to generate updated static files

/srv/esp/prod/bin/esp collectstatic

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

## Run migrate to apply the database updates

/srv/esp/prod/bin/esp migrate

## Restart Apache/Httpd

UBUNTU: sudo systemctl restart apache2

RHEL: sudo systemctl restart httpd

## 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

## Verification

### 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

### 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  
gonorrhea  
hepatitis\_b  
…   
tuberculosis

1. **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

…