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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Contents

[Revision History 1](#_Toc145505253)

[1 Overview and Purpose 3](#_Toc145505254)

[2 Instructions 3](#_Toc145505255)

[2.1 SSH to the ESP server Use putty or the client of your choice to ssh into the ESP system 3](#_Toc145505256)

[2.2 Switch to the esp user 3](#_Toc145505257)

[2.3 Change to the primary ESP install directory and get list of plugins 3](#_Toc145505258)

[2.4 Verify the current local git branch 3](#_Toc145505259)

[2.5 Fetch the full list of branches from the Git Repository 4](#_Toc145505260)

[2.6 Checkout the latest 3.7 branch 4](#_Toc145505261)

[2.7 Run the upgrade-python3.sh script (or upgrade-python3-rhel.sh) 4](#_Toc145505262)

[2.8 Verify that python3.8 is installed 4](#_Toc145505263)

[2.9 Run the install script to install the python virtual environment 5](#_Toc145505264)

[2.10 Run makeini to generate updated entries in application.ini 5](#_Toc145505265)

[2.11 Run collectstatic to generate updated static files 6](#_Toc145505266)

[2.12 Run migrate to apply the database updates 6](#_Toc145505267)

[2.13 Restart Apache/Httpd 6](#_Toc145505268)

[2.14 Verify or reinstall the Condition Algorithms from step 2.3 6](#_Toc145505269)

[3. Verification 6](#_Toc145505270)

[3.1 UI - ESP Admin Interface 6](#_Toc145505271)

[3.2 OS-Command Line – ESP Command Line Interface 6](#_Toc145505272)

# 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

## SSH to the ESP serverUse 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

## 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

## 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

…