ESP Update Instructions

from 3.4.x to 3.4.13

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# Overview

This document covers a standard update from ESP version 3.4.x to 3.4.13

If the branch is less than 3.4, please contact CII for assistance with the upgrade:

[esp\_support@comoninf.com](mailto:esp_support@comoninf.com)

ESP Release notes are found here - > <https://gitlab.com/ESP-Project/ESP/-/releases>

# Instructions

## SSH to the ESP server

ssh to the esp server as esp or other local user

## Switch to the esp user

sudo su esp

## Change to the primary ESP install directory

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.

## Update application.ini with never\_send\_result\_strings

Edit the application.ini file and add the default list of strings that are exempt from sending in case reports. Modify the path as needed for the current installation.

vi /srv/esp/prod/etc/application.ini

Add the following lines beneath the "fake\_patient\_mrn = ""  line, then save and exit -> **:wq** in vi

# regexp for result strings that should not be sent on any case report  
# use caution when modifying or adding to these values  
never\_send\_result\_strings = CANCELLED|DECLINED|^DUPLICATE|^ERROR|^INVALID|^INSUFFICENT|^NA$|^NOT DONE|NOT PERFORMED|^NOT TESTED|^NOT VALID|^NP$|^PENDING$|^QNS$|REPLACED|RESULTS BELOW|SCANNED|^SEE|^STABILITY|^TEST$|^TESTING|^TNP|SEE TEXT|NOT AVAIL|^NO RESULT|^UNABLE TO|QUANTITY NOT SUFFICIENT|PATIENT HAS NO SITE|PATIENT REFUSED

## Verify the current git branch

git branch  
  
Example output:

$ git branch

master

\* version3.4.12.2

**Verify that the branch with the \* is greater than or equal to 3.4.**

If the branch is less than 3.4, please contact CII for assistance with the upgrade:

[esp\_support@comoninf.com](mailto:esp_support@comoninf.com)

## Fetch the latest branches from the repository

git fetch

## Checkout the 3.4.13 branch

git checkout v3.4.13 -b version3.4.13  
  
Example Output:  
$ git checkout v3.4.13 -b version3.4.13

Switched to a new branch 'version3.4.13'

Verify you are on the new branch by running git branch

git branch

Example Output:  
$ git branch

\* version3.4.13

master

release/3.4.13

If you have any issues with checking out the latest branch, please contact CII for assistance: [esp\_support@commoninf.com](mailto:esp_support@commoninf.com)

## Apply the database updates

/srv/esp/prod/bin/esp migrate

## Restart Apache/Httpd

Ubuntu: sudo service apache2 restart

RHEL: sudo systemctl restart httpd (OR sudo service httpd restart )

# Verification Steps

## Release Specific Verification

**Verify that Bicillin is in the Drug Synonym table**

Login to the Browser based ESP UI   
Navigate to the Administration drop down menu and Select “Site Administration”.   
Scroll down to the “Static” Section and select the “Drug Synonym” link  
Enter bici or Bicillin in the search and hit Enter or click the Search button

You should see a row for Bicillin

**Generic name Other name**  
PENICILLIN G BICILLIN

## Generic Verification Steps – for any release

### UI - ESP Admin Interface

Verify 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.

**cd /srv/esp/prod**

**bin/esp nodis –list** # this should produce a list of installed plugins – sample below:

anaplasmosis  
asthma  
chlamydia  
depression  
gonorrhea  
hepatitis\_b  
hepatitis\_c  
hiv  
hypertension  
syphilis  
tuberculosis

**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

[X] 0007\_AnaplasBabesioConfigs

contenttypes

[X] 0001\_initial

[X] 0002\_remove\_content\_type\_name

emr

[X] 0001\_initial

[X] 0002\_auto\_20151204\_1116

[X] 0003\_auto\_20160513\_1020

[X] 0004\_load\_initial\_data

[X] 0005\_auto\_20160811\_0535

[X] 0006\_auto\_20170925\_1308

[X] 0007\_auto\_20180829\_1148

[X] 0009\_RiskFactors\_04162019

[X] 0010\_Facility\_ProviderIDs\_04162019

[X] 0011\_Encounter\_fields\_renamed

hef

[X] 0001\_initial

[X] 0002\_auto\_20151204\_1050

nodis

[X] 0001\_initial

[X] 0002\_auto\_20160513\_1020

[X] 0003\_auto\_20160624\_1615

[X] 0004\_auto\_20170918\_1419

[X] 0005\_auto\_20170918\_1515

[X] 0006\_auto\_20170919\_1049

[X] 0007\_auto\_20171018\_1415

[X] 0008\_auto\_20180305\_1123

sessions

[X] 0001\_initial

sites

[X] 0001\_initial

static

[X] 0001\_initial

[X] 0002\_auto\_20160513\_1020

[X] 0003\_load\_initial\_data

[X] 0004\_specimensourcesnomed

[X] 0005\_auto\_20180829\_1151

[X] 0006\_drugSynsforAnaplasBabesi

# For Sites actively reporting to MDPH

You can ignore this section unless you are actively reporting cases to the Massachusetts Department of Public Health

## Update DPH Portal with new Provider and Encounter LOINCs

Login to the Production DPH portal and Navigate to

Mapping -> Organism > Miscellaneous - Test not related to “Organism”   
 (double click to load the details)  
 Select the LOINC tab and scroll or search for NA-1746 and add the following LOINC codes into the   
 Local Code column - Essentially replicating the value in the left column in the right column.

**CODE DESCRIPTON ONLY – do not paste**

NA-1746 ESP\_PRESC\_PROVIDER\_NAME

NA-1747 ESP\_PRESC\_PROVIDER\_NPI

NA-1748 ESP\_ENCOUNTER\_FAC\_TX\_NAME

NA-1749 ESP\_ENCOUNTER\_FAC\_TX\_ADD

NA-1750 ESP\_ENCOUNTER\_FAC\_TX\_CITY

NA-1751 ESP\_ENCOUNTER\_FAC\_TX\_STATE

NA-1752 ESP\_ENCOUNTER\_FAC\_TX\_NPI

NA-1753 ESP\_PRIM\_PROVIDER\_NAME

NA-1754 ESP\_PRIM\_PROVIDER\_NPI

NA-1755 ESP\_ORDER\_PROVIDER\_NAME

NA-1756 ESP\_ORDER\_PROVIDER\_NPI

NA-1757 ESP\_ENCOUNTER\_FAC\_ORD\_NAME

NA-1758 ESP\_ENCOUNTER\_FAC\_ORD\_ADD

NA-1759 ESP\_ENCOUNTER\_FAC\_ORD\_CITY

NA-1760 ESP\_ENCOUNTER\_FAC\_ORD\_STATE

NA-1761 ESP\_ENCOUNTER\_FAC\_ORD\_NPI

NA-1762 ESP\_MANAG\_TX\_PROVIDER\_NAME

NA-1763 ESP\_MANAG\_TX\_PROVIDER\_NPI

Scroll back to the top when done, and click on the SAVE Link under the search area..

## For Sites actively reporting Syphilis to MDPH

### Review site specific Titer results that are mapped to the RPR Abstract Lab

1 - Login to the system as the esp user and start the psql command as shown and paste in the select statement. Save the results, as it will be needed in the step “Updating the DPH Portal”.

**psql -d esp**

**select count(\*), e.result\_string from emr\_labresult e, conf\_labtestmap c where e.native\_code = c.native\_code and c.test\_name ='rpr' and e.result\_string ilike '%:%' group by result\_string order by result\_string;**

2 - Review non titer results and add them to the excluded positive and negative strings as needed. See Step 3 for details. In the same psql command window, paste in the below select statement to see all non titer results mapped to rpr tests.

**select count(\*), e.result\_string, e.native\_code from emr\_labresult e, conf\_labtestmap c where e.native\_code = c.native\_code and c.test\_name ='rpr' and e.result\_string not ilike '%:%' group by result\_string,e.native\_code order by result\_string;**Normally all non-titer results should be ignored for tests mapped to RPR Lab. For all local Labs mapped to the ESP “RPR” Lab we need to exclude any results that would match existing Positive Result Strings that by default apply to all Labs. These strings will need to be added to the “Excluded Positive” String configuration for that specific Lab. Otherwise default string processing will turn these into Positive Events, and could cause false positives. The results strings need to be Excluded for each Lab - in the Reporting Section of the Lab Test Map page of the UI, see the next step for details.

3 – Steps to Ignore a Positive or Negative String for a Specific Lab:  
  
 Login to the ESP UI and navigate to the Administration drop down menu and Select “Site Administration”  
 Under the Heading “Conf” Select the “Lab Test Maps” Link  
 Enter the Native\_Code from the SQL Result in step 2 and click Search  
 Click on the number link in the ID column for the test you want to modify  
 Click the (Show) link after the “Result Strings” Section to expand that area of the page  
 Find the strings that you want to add to the Excluded Positive Strings Section  
 Add the strings(s) by either double clicking it or highlighting one(or more) in the left panel,   
 and then clicking the **>** button to make it appear in the panel on the right  
 Once all the strings are in the right panel, scroll to the top or bottom of the page   
 and click on the “Save” button

### Update the DPH portal to use Titer values vs. Snomed

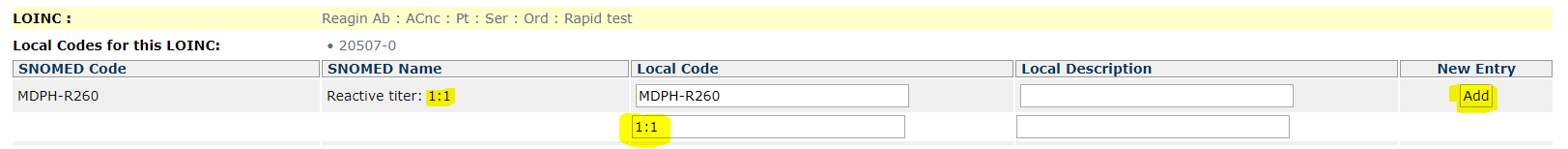
**Map all distinct RPR Titers in the DPH portal, removing the old MDPH- Values.**

AFTER updating to 3.4.13 and BEFORE the next daily processing occurs you will need to make changes to the Production DPH Portal Mappings for Syphilis

1 - Login to the Production DPH portal and Navigate to Mapping -> Organism -> “Treponema pallidum – Syphilis“   
 (double click Syphilis to load the details)  
 Select the SNOMED Tab and find all the LOINCs that have titer results – two common ones are below:  
 LOINC : Reagin Ab : ACnc : Pt : Ser : Ord : Rapid test

LOINC : Reagin Ab : ACnc : Pt : XXX : Qn : VDRL  
 For all the LOINCS that have titers

Click on the Add button for each Titer and Add the actual Titer Value in the local code to match the Titer Values in the SNOMED Name Column. See the example below for the 1:1 titer. Add these for every LOINC/Titer mapped.



NOTE: At a minimum all of the distinct titer values returned in the result from the query in step 4.2.1  
  
Scroll back to the top when done, and click on the SAVE Link under the search area.  
  
Notify DPH of update so they can monitor future uploads of syphilis cases.

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