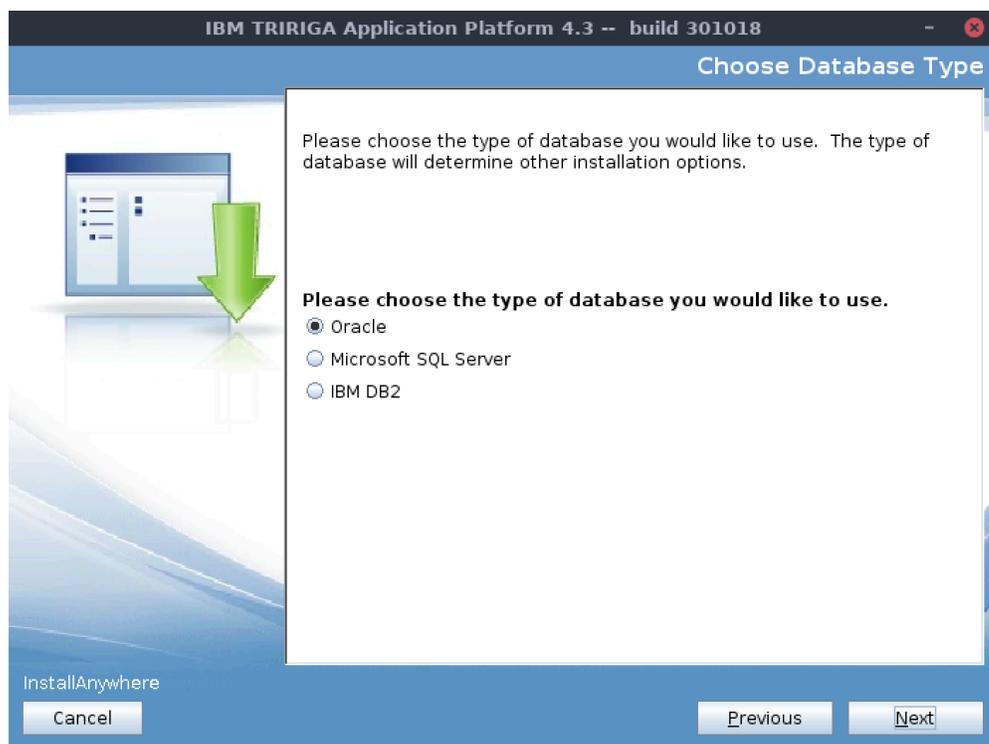
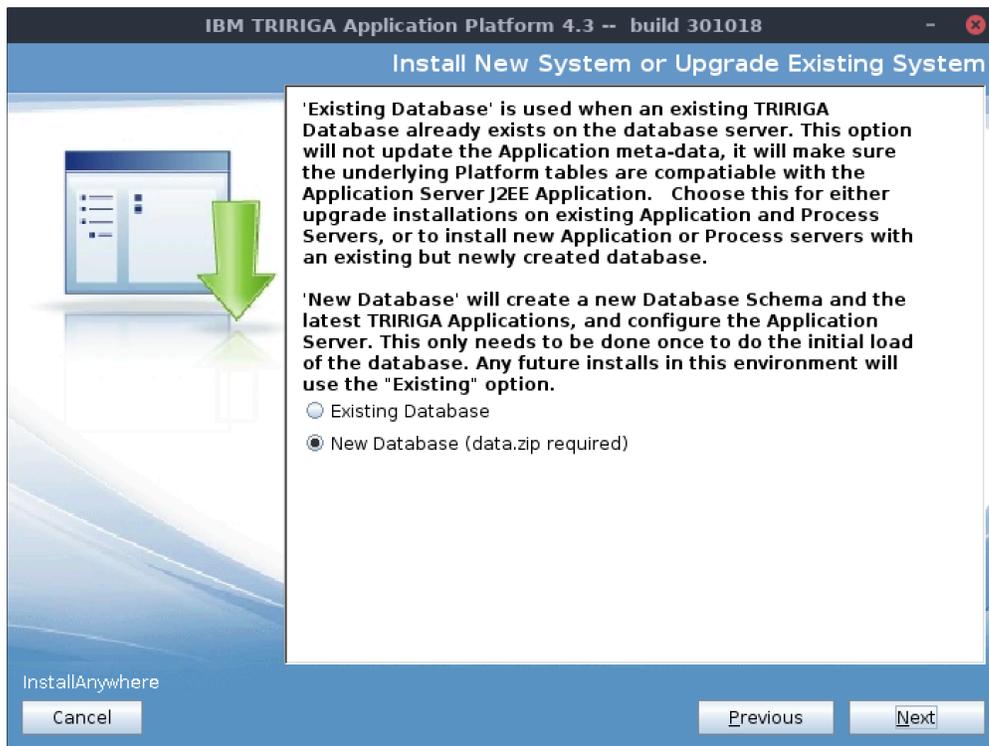


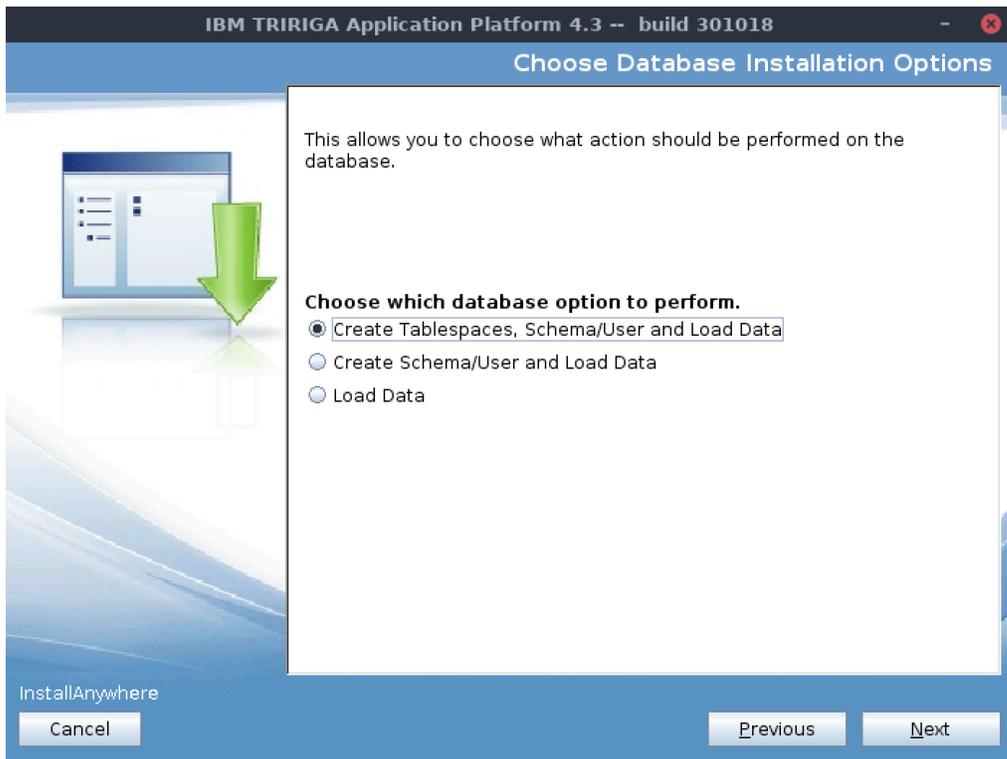
# Steps to install TRIRIGA on Oracle over TLS

This installation guide documents the keys steps to getting the TRIRIGA installer to install the database on oracle over TCPS. This guide assumes that you have TCPS properly configured and can connect using a database query tool.

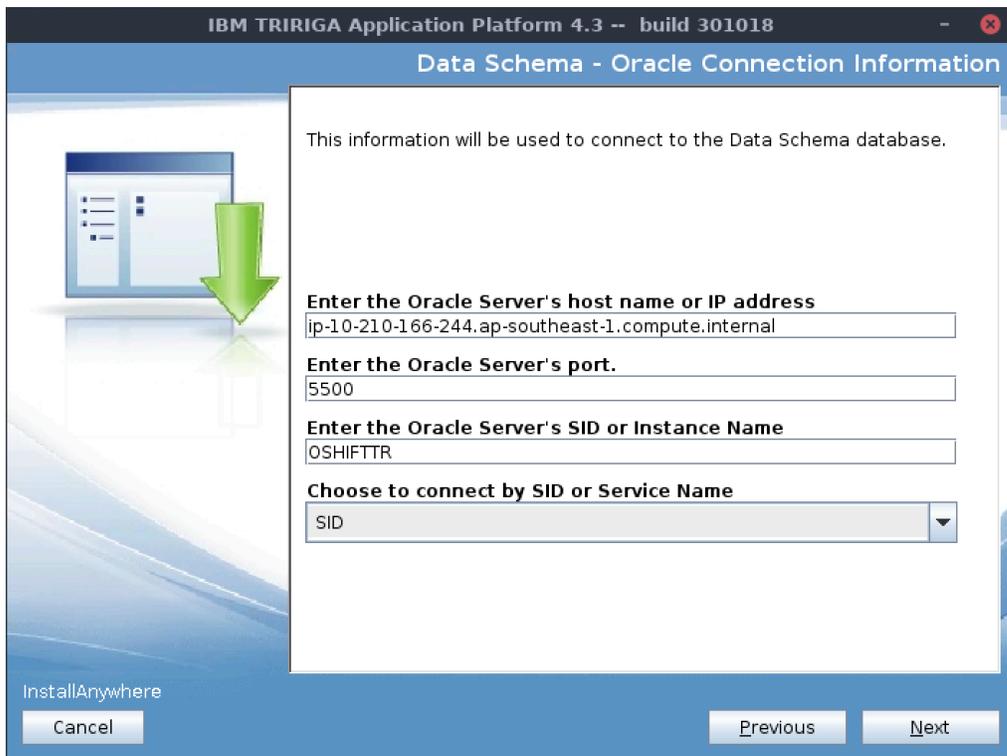
Although steps are showing GUI UI, this should also work with command line for Linux.



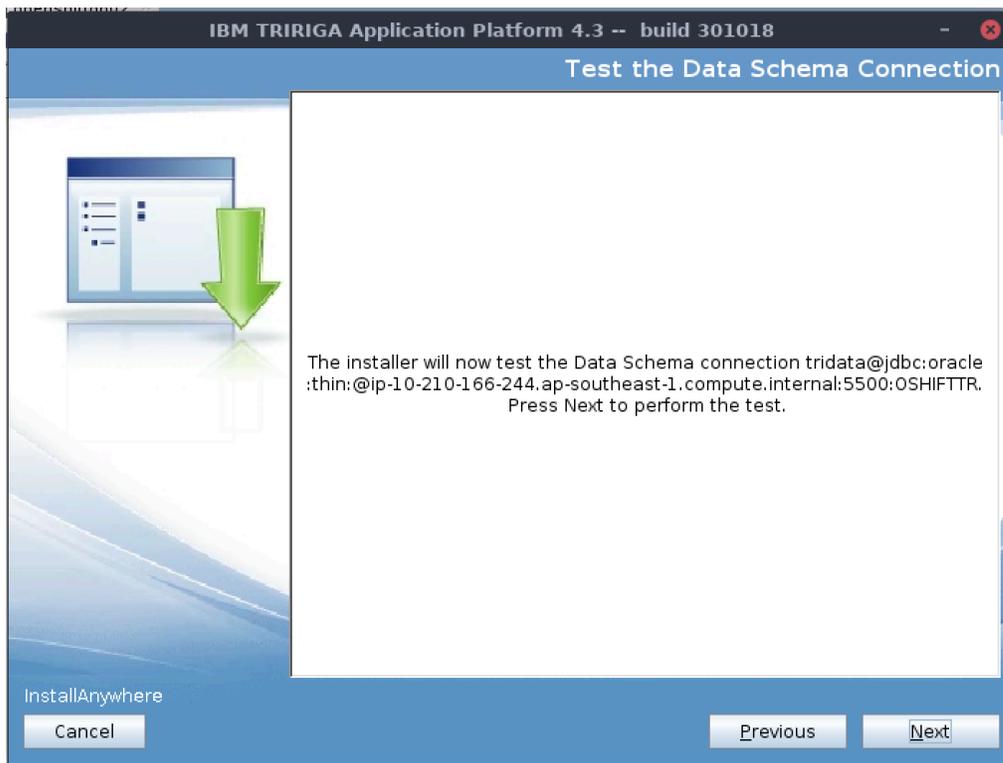
Select which data you want the installer to configure:



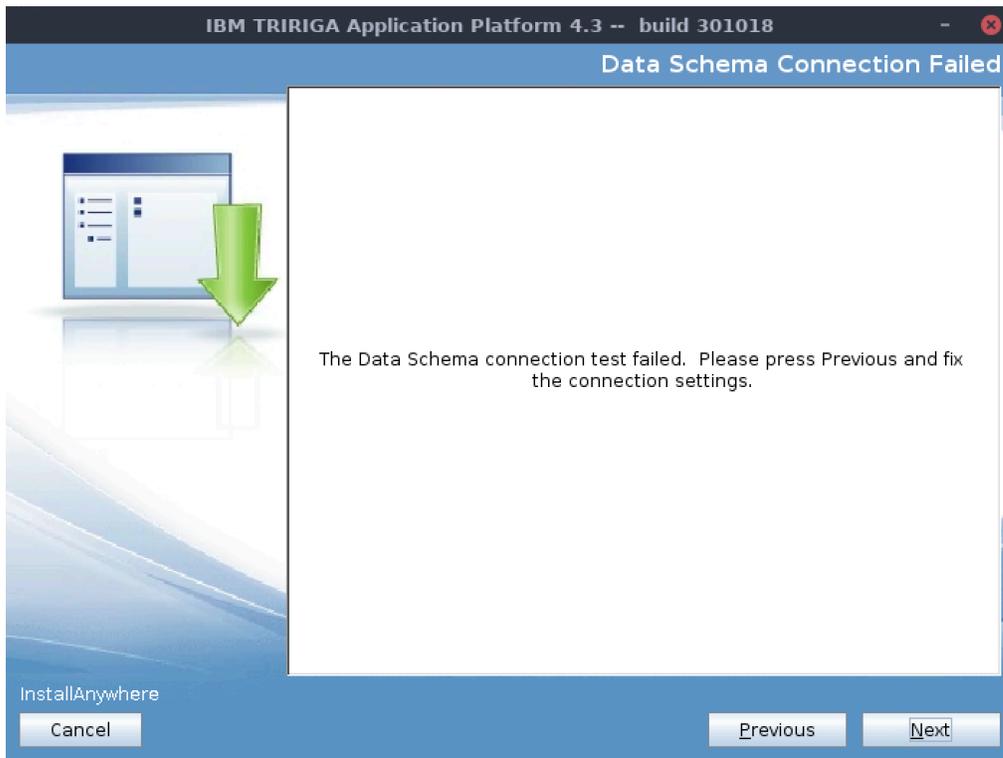
Enter the connection details as you normally would for a TCP connection, and then continue to configure the rest of the db options (users, table-spaces, etc)



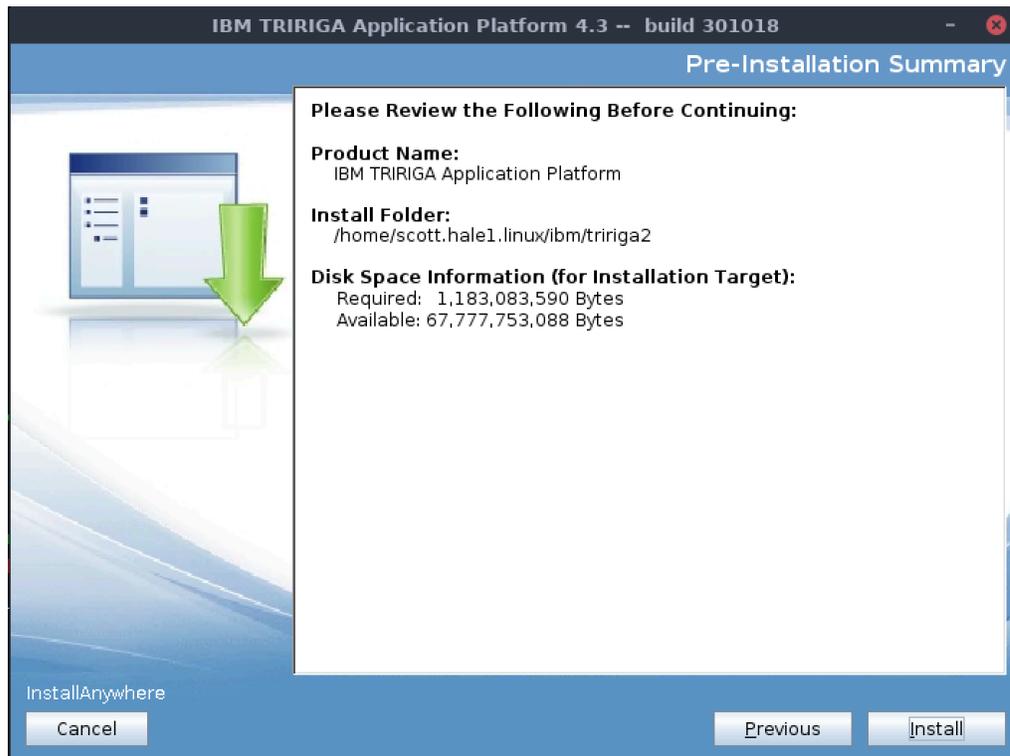
When you get to installer step that the tests connection click Next



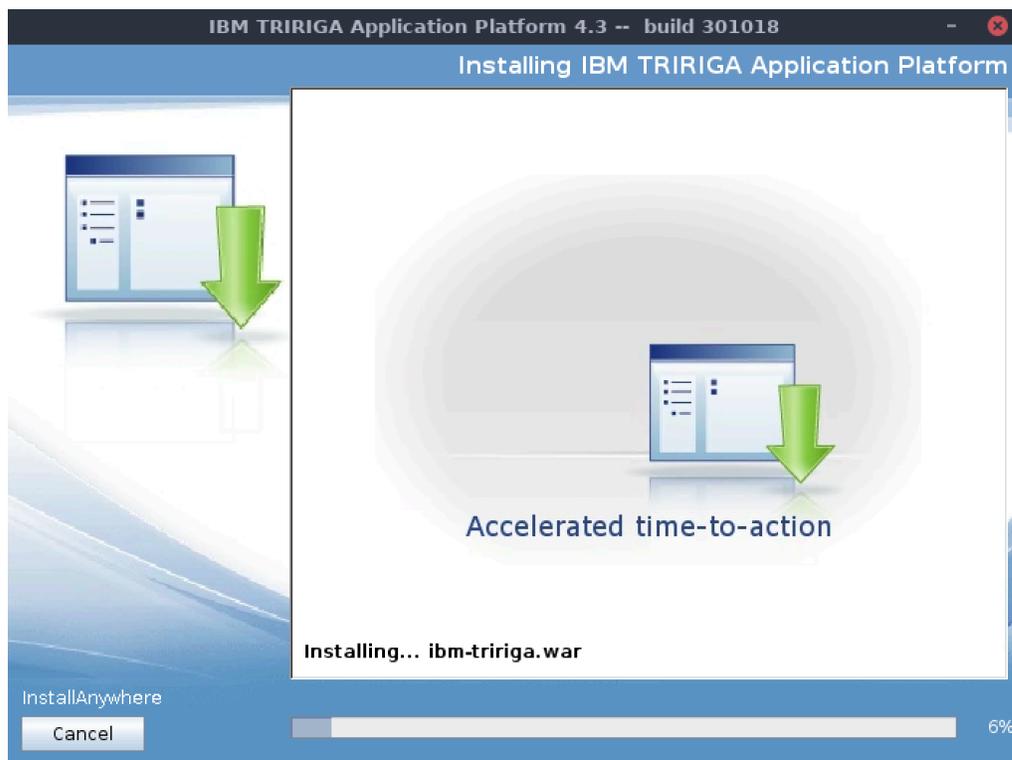
The connection will fail. That is okay just go ahead and click *Next* on this screen and continue configuring the time zone the data pools, and font end server.



When you get to the Pre-Installation Summary step click *Install*.



The installer will now deploy the configuration files onto the local file system.



Once files have been deployed (progress bar shows 100% and the next step is displayed) we will step away from the installer, navigate to the local install directory and open the build.properties file.

In build.properties let's replace the *data.db.url* and *data.admin.url* strings with the jdbc connection strings configured for TCPS

In my case that TCPS jdbc string looked like this:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCPS)
(HOST=ip-10-210-166-244.ap-southeast-1.compute.internal)(PORT=5500))
(CONNECT_DATA=(SERVER=DEDICATED)
(SERVICE_NAME=OSHIFTTR)))
```

NOTE- there must not be ANY whitespace in the data.db.url and data.admin.db.url entries



```
build.properties ✕
db.driver=oracle.jdbc.OracleDriver

# Database Information
data.db.username={{(vckz1LAeelPVZxgyQqg+UQ==)}}
data.db.password={{(vckz1LAeelPVZxgyQqg+UQ==)}}
data.admin.db.username={{(tIpxrn+I7bs=)}}
data.admin.db.password={{(uZwE3gFHVmKKNyvngKcTg==)}}
data.db.url=jdbc:oracle:thin:@ip-10-210-166-244.ap-southeast-1.compute.internal:5500:OSHIFTTR
data.admin.db.url=jdbc:oracle:thin:@ip-10-210-166-244.ap-southeast-1.compute.internal:5500:OSHIFTTR
data.db.host=ip-10-210-166-244.ap-southeast-1.compute.internal
data.db.port=5500
data.db.name=OSHIFTTR
data.db.stype=:
data.db.pool.min=10
data.db.pool.max=100
data.db.data_tbspace=TRIDATA_DATA
data.db.datafile=tridata43x_data01.dbf
data.db.datasize=2500
data.db.index_tbspace=TRIDATA_INDX
data.db.indxfile=tridata43x_indx01.dbf
data.db.indxsize=2500
data.db.bufferpool=TRIRIGABUFFERPOOL
```

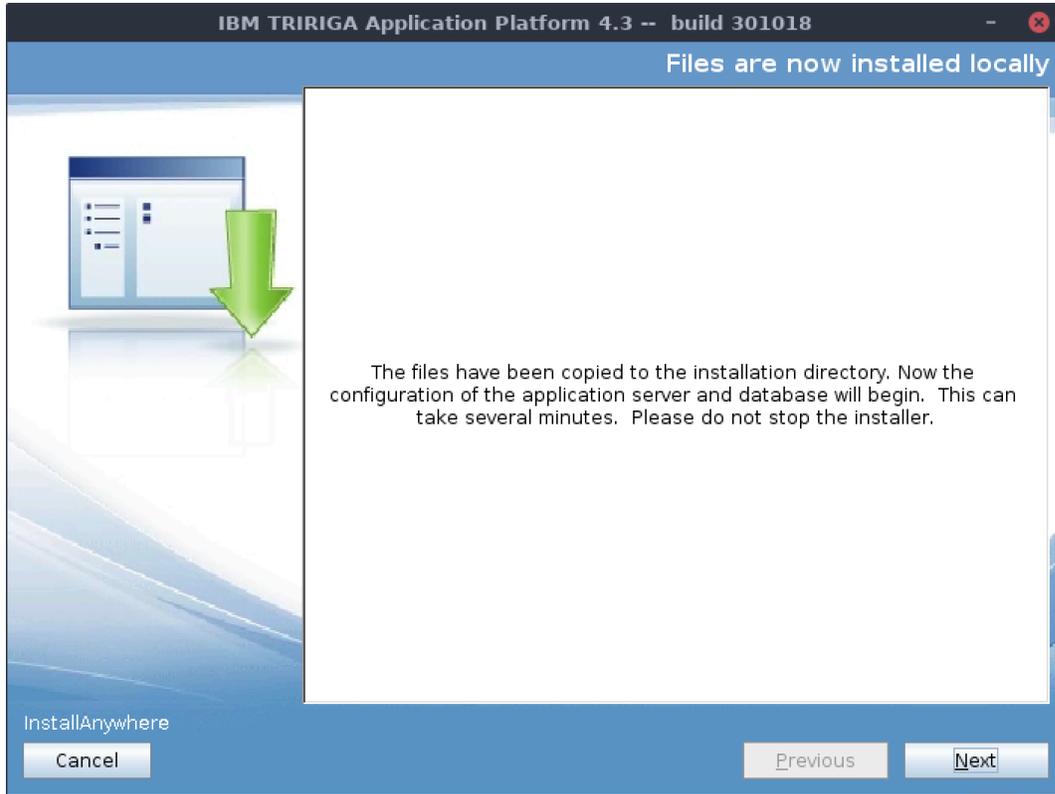


```
*build.properties ✕
db.driver=oracle.jdbc.OracleDriver

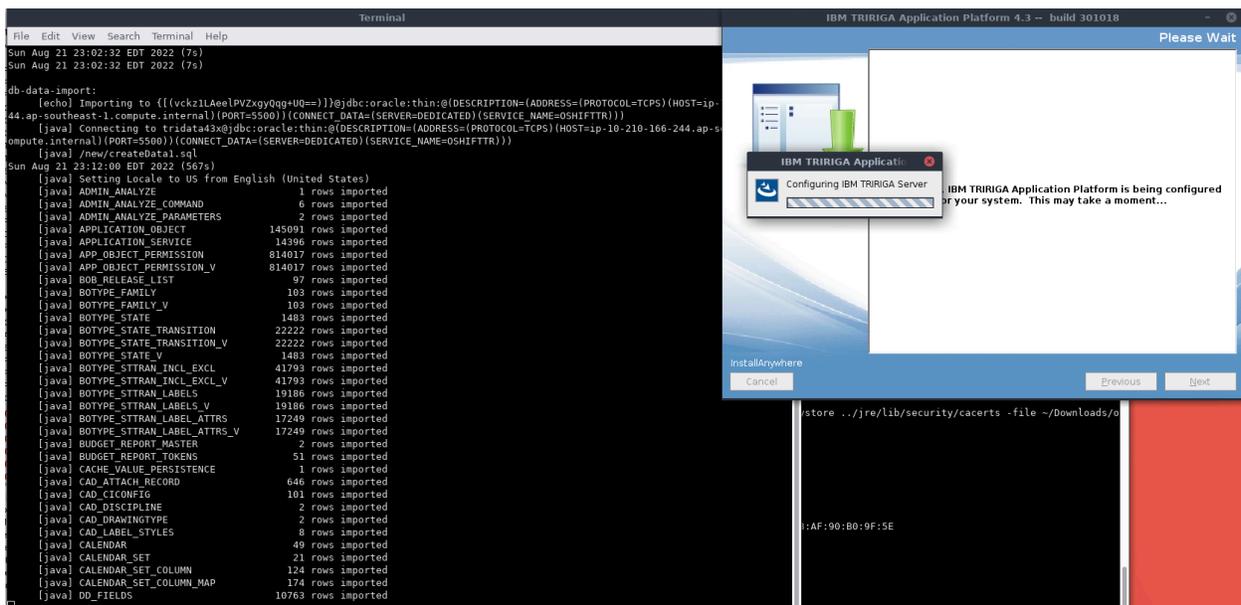
# Database Information
data.db.username={{(vckz1LAeelPVZxgyQqg+UQ==)}}
data.db.password={{(vckz1LAeelPVZxgyQqg+UQ==)}}
data.admin.db.username={{(tIpxrn+I7bs=)}}
data.admin.db.password={{(uZwE3gFHVmKKNyvngKcTg==)}}
data.db.url=jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCPS)(HOST=ip-10-210-166-244.ap-southeast-1.compute.internal)(PORT=5500))(CONNECT_DATA=(SERVER=DEDICATED)(SERVICE_NAME=OSHIFTTR)))
data.admin.db.url=jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCPS)(HOST=ip-10-210-166-244.ap-southeast-1.compute.internal)(PORT=5500))(CONNECT_DATA=(SERVER=DEDICATED)(SERVICE_NAME=OSHIFTTR)))
data.db.host=ip-10-210-166-244.ap-southeast-1.compute.internal
data.db.port=5500
data.db.name=OSHIFTTR
data.db.stype=:
data.db.pool.min=10
data.db.pool.max=100
data.db.data_tbspace=TRIDATA_DATA
data.db.datafile=tridata43x_data01.dbf
data.db.datasize=2500
data.db.index_tbspace=TRIDATA_INDX
data.db.indxfile=tridata43x_indx01.dbf
data.db.indxsize=2500
data.db.bufferpool=TRIRIGABUFFERPOOL
```

Please note that in the screen shot above text wrap is enabled on my editor, there should be no newlines in the jdbc connection string.

Save the build.properties file and now let's return to the installer and continue with the installation. Click *Next* on the screen shown below.



The installer will now connect and complete the installation over TCPS. To view the installer progress you can tail the ant.log file in the installation directory.



Once the installer has completed verify that the ant.log shows successful completion of the installation (the install anywhere console or gui may show a false negative due to the *Data Schema Connection* error displayed in the steps above).

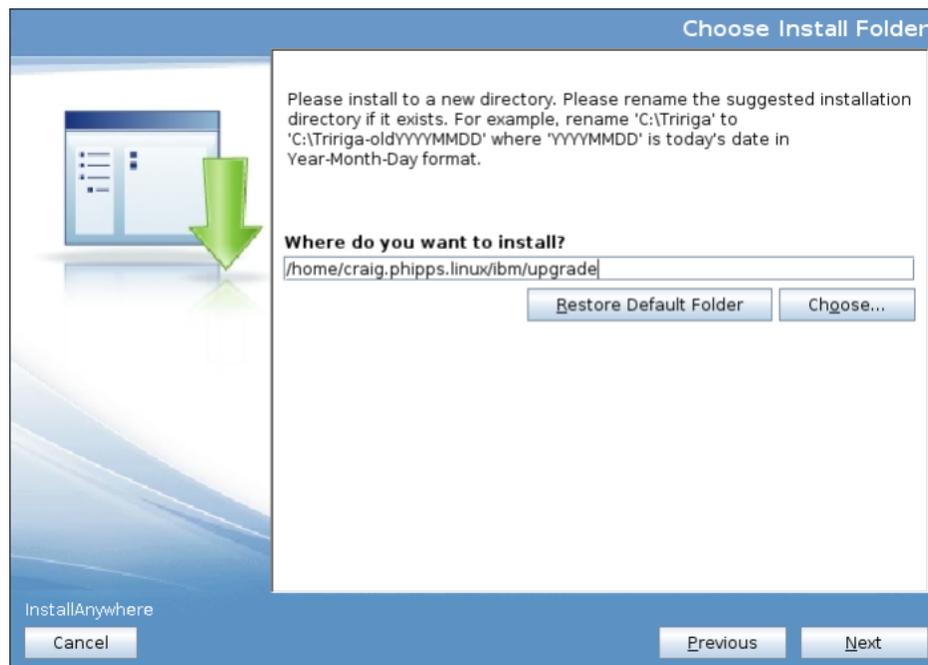
Also check your jdbc connection settings in the application server configuration to ensure the tcps is enabled then start your application server.

## Steps to upgrade TRIRIGA on Oracle over TLS

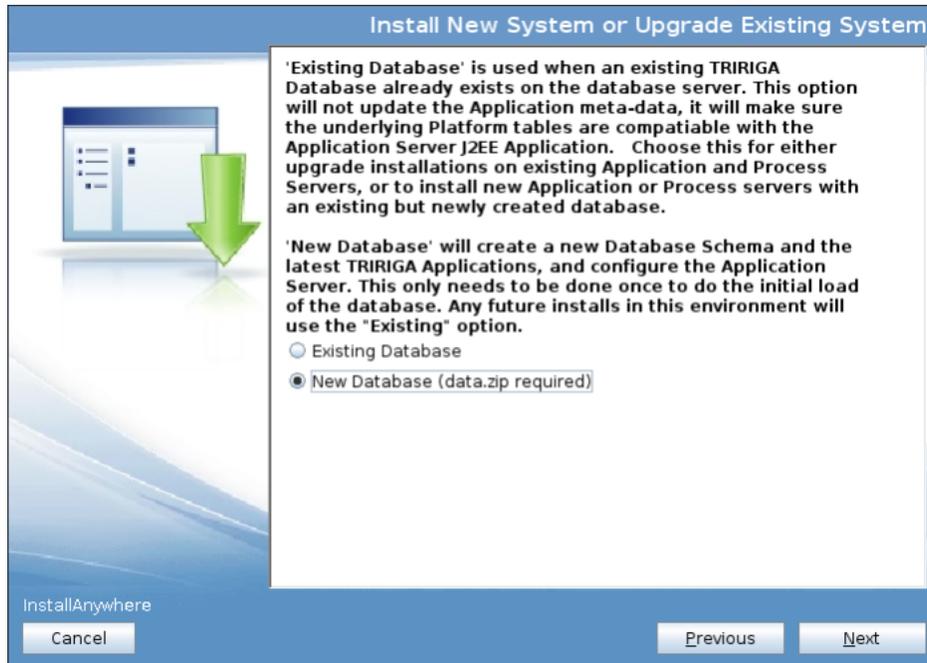
These steps are to allow you to upgrade TRIRIGA over TLS without a change to the TRIRIGA installer, for this to work, we need to make the installer think you are doing a clean install even though it will end up being an upgrade. You will need to pull down the installer and the data.zip even though the installer will not use the data.zip.

**IMPORTANT – need to make sure the build you are upgrading is NOT a downgrade as the internal check by the installer will not be done. Make sure the TRIRIGA installer version is greater (i.e. 4.0 -> 4.1).**

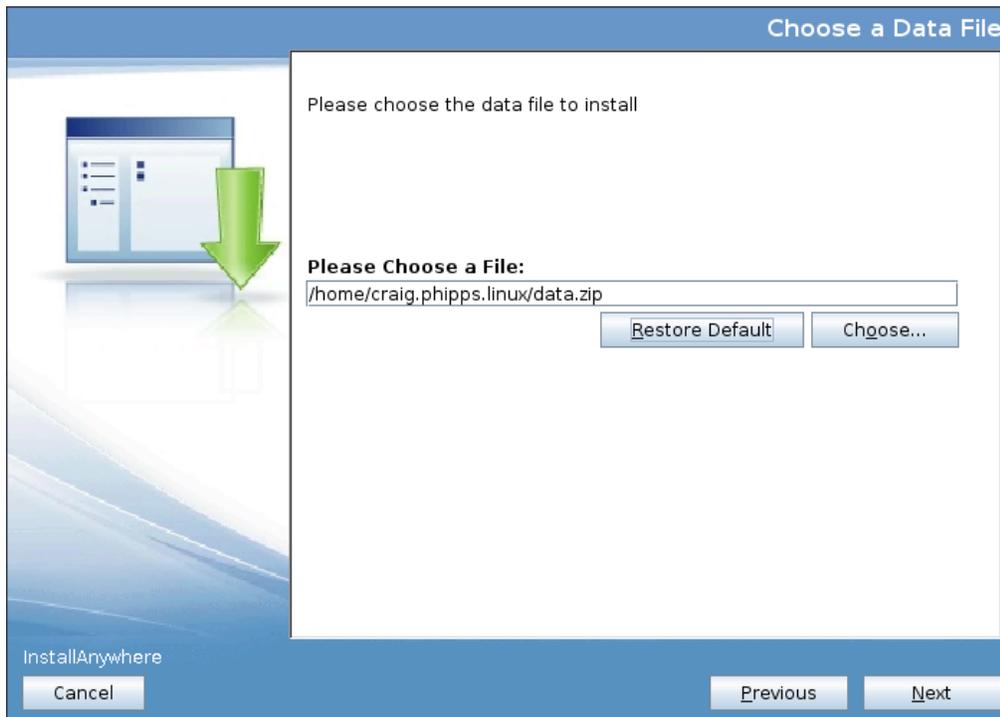
Make sure to type in the directory where you want the upgrade to go to. Like with a normal TRIRIGA upgrade process, the upgrade directory must be a directory different from the original directory.



Since we are tricking the installer, tell the installer you want a new install.



Include the data.zip for the installer.



When filling out all the other pages including database information, mail server, application server and settings, use the same data as the previous install.

The screenshot shows a window titled "IBM TRIRIGA Application Platform 4.3 -- build 301018" with a sub-header "Data Schema - Oracle Connection Information". The window contains a blue sidebar on the left with a green arrow pointing down. The main area has a white background with the text "This information will be used to connect to the Data Schema database." Below this are four input fields: "Enter the Oracle Server's host name or IP address" with the value "ip-10-210-166-244.ap-southeast-1.compute.internal", "Enter the Oracle Server's port." with the value "5500", "Enter the Oracle Server's SID or Instance Name" with the value "OSHIFTR", and "Choose to connect by SID or Service Name" with a dropdown menu set to "SID". At the bottom, there are buttons for "Cancel", "Previous", and "Next".

IBM TRIRIGA Application Platform 4.3 -- build 301018

Data Schema - Oracle Connection Information

This information will be used to connect to the Data Schema database.

**Enter the Oracle Server's host name or IP address**  
ip-10-210-166-244.ap-southeast-1.compute.internal

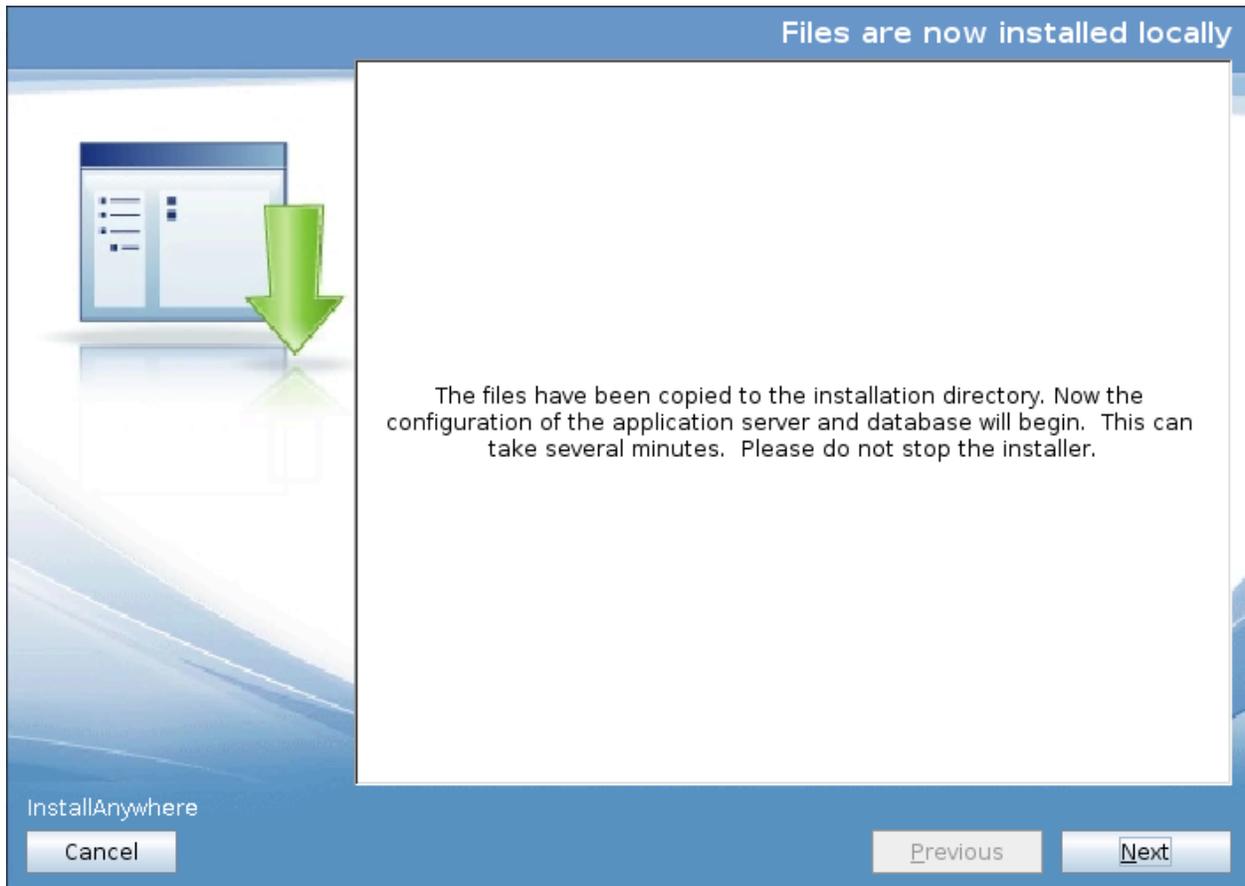
**Enter the Oracle Server's port.**  
5500

**Enter the Oracle Server's SID or Instance Name**  
OSHIFTR

**Choose to connect by SID or Service Name**  
SID

InstallAnywhere  
Cancel Previous Next

Continue past the failed connection test until you reach this page and TRIRIGA files have been copied to the new upgrade directory.



Edit the build.properties in the new upgrade directory.

```
#####  
# Configurable properties #  
# /install/ant/build.properties #  
# #  
# populated by IA #  
#####  
build.number=301139  
  
db.create.tablespace=0  
db.create.user=0  
db.create.schema=1  
upgrade.install=0  
new.install=1  
  
configure.wlp=1  
configure.websphere=0  
configure.weblogic=0  
  
configure.db=  
configure.server=  
db.create.data.schema.tablespace=0  
db.create.data.schema.user=0  
db.create.data.schema.environment.properties=0  
is.84.platform=0  
  
old.install.dir=  
  
# Web Application Context Root; set to "/" by default  
context.path=/sqa
```

The following must to be updated at the top of the build.properties. Changing these will make the installer now do an upgrade instead of a new install.

```
db.create.tablespace=0
db.create.user=0
db.create.schema=0
upgrade.install=1
new.install=0
```

```
old.install.dir=<the full path to the previous TRIRIGA install directory>
```

Update the data.db.url and data.admin.db.url as you did in the initial install.

NOTE- there must not be ANY whitespace in the data.db.url and data.admin.db.url entries



```
*build.properties X
db.driver=oracle.jdbc.OracleDriver

# Database Information
data.db.username={{(vckz1LAeelPVZxgyQgg+UQ==)}}
data.db.password={{(vckz1LAeelPVZxgyQgg+UQ==)}}
data.admin.db.username={{(tIpxrn+I7bs=)}}
data.admin.db.password={{(uZwE3gFHVmKKNyvnqKctTg==)}}
data.db.url=jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCPS)(HOST=ip-10-210-166-244.ap-southeast-1.compute.internal)(PORT=5500))(CONNECT_DATA=(SERVER=DEDICATED)(SERVICE_NAME=0SHIFTR)))
data.admin.db.url=jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCPS)(HOST=ip-10-210-166-244.ap-southeast-1.compute.internal)(PORT=5500))(CONNECT_DATA=(SERVER=DEDICATED)(SERVICE_NAME=0SHIFTR)))
data.db.host=ip-10-210-166-244.ap-southeast-1.compute.internal
data.db.port=5500
data.db.name=0SHIFTR
data.db.stype=:
data.db.pool.min=10
data.db.pool.max=100
data.db.data_tablespace=TRIDATA_DATA
data.db.datafile=tridata43x_data01.dbf
data.db.datasize=2500
data.db.index_tablespace=TRIDATA_INDX
data.db.indexfile=tridata43x_indx01.dbf
data.db.indxsize=2500
data.db.bufferpool=TRIRIGABUFFERPOOL
```

Save and exit from the build.properties. Now finish the installer.

Check the ant.log and make sure it completes without errors.

Start your server, it should be upgraded. Check the server.log.

# Steps to apply fix pack for TRIRIGA on Oracle over TLS

Pull down fix pack and make sure it is appropriate for the TRIRIGA you are fix packing.

Check the build.properties and make sure the data.db.url and the data.admin.db.url are correct for your tcps connection.

Run the fix pack installer. Check the ant.log.