

Step by Step Oracle 21c Installation On Linux



Description:-

In this posting we are going to see the step by step Oracle 21c Database Installation on Linux.

Note:-

- Oracle Database 19c is the current long term release, and it provides the highest level of release stability and longest time-frame for support and bug fixes.
- **Oracle Database 21c, also available for production use today as an innovation release**, provides an early insight into the many enhancements and new capabilities.
- Oracle have announced there will be no 22c release, so the next release after 21c will be 23c, which will be the next long term release.
- If you are on 19c than you need to wait until 23c is released

Step :-1 Download the database 21c software

Once you've downloaded the software, unzip file to the oracle home directory. With Oracle 21c , you don't need any staging directory. You can just unzip to Oracle Home. Here we have download Oracle 21.3 from the Oracle 21c linux [download page](#).

Step:-2 Create the new groups and users.

```
[root@oracle21c ~]# groupadd -g 54321 oinstall
[root@oracle21c ~]# groupadd -g 54322 dba
[root@oracle21c ~]# groupadd -g 54323 oper
[root@oracle21c ~]# useradd -u 54321 -g oinstall -G dba,oper oracle
[root@oracle21c ~]# passwd oracle
```

Step:-3 Create Oracle home directory and give ownership to Oracle user

```
[root@oracle21c ~]# mkdir -p /u01/app/oracle/product/21.0.0.0
[root@oracle21c ~]# chown -R oracle:oinstall /u01
[root@oracle21c ~]# chmod -R 775 /u01
```

Step:-4 Setup Oracle user bash_profile

```
[oracle@oracle21c ~]$ cat .bash_profile
export ORACLE_BASE=/u01/app/oracle
export ORACLE_HOME=/u01/app/oracle/product/21.0.0.0
export ORACLE_SID=TEST
export PATH=/usr/sbin:$PATH
export PATH=$ORACLE_HOME/bin:$PATH
export LD_LIBRARY_PATH=$ORACLE_HOME/lib:/lib:/usr/lib
export CLASSPATH=$ORACLE_HOME/jlib:$ORACLE_HOME/rdbms/jlib
```

Step:-4 Copied the Oracle Software and unzip

```
[oracle@oracle21c 21.0.0.0]$ cd
[oracle@oracle21c ~]$ cd /u01/app/oracle/product/21.0.0.0/
[oracle@oracle21c 21.0.0.0]$ ls -lrt
total 3036356
-rwxrwxr-x. 1 oracle oinstall 3109225519 Aug 24
00:10 LINUX.X64_213000_db_home.zip
[oracle@oracle21c 21.0.0.0]$ unzip LINUX.X64_213000_db_home.zip
```

Step:-5 Start the installation

Open an X-Windows session to the server as the “oracle” user.

/u03/app/oracle/product/21.0.0.0/runInstaller

Once the GUI starts, respond as follows:

```
[oracle@oracle21c ~]$ cd /u01/app/oracle/product/21.0.0.0/
[oracle@oracle21c 21.0.0.0]$ ./runInstaller
```

Click on Setup Software Only and then do Next


Select Configuration Option

Configuration Option**Database Installation Options**

- Install Type
- Typical Installation
- Root script execution
- Prerequisite Checks
- Summary
- Install Product
- Finish

Select any of the following install options.

- ☐ Create and configure a single instance database.
This option creates a starter database.

 ☒ Set Up Software Only

Note 1: For RAC install, do 'Set Up Software Only' and then execute DBCA (Database Configuration Assistant) from the oracle home.

Note 2: To upgrade an Oracle Database, do 'Set Up Software Only' and then execute DBUA (Database Upgrade Assistant) from the oracle home.

[Help](#)

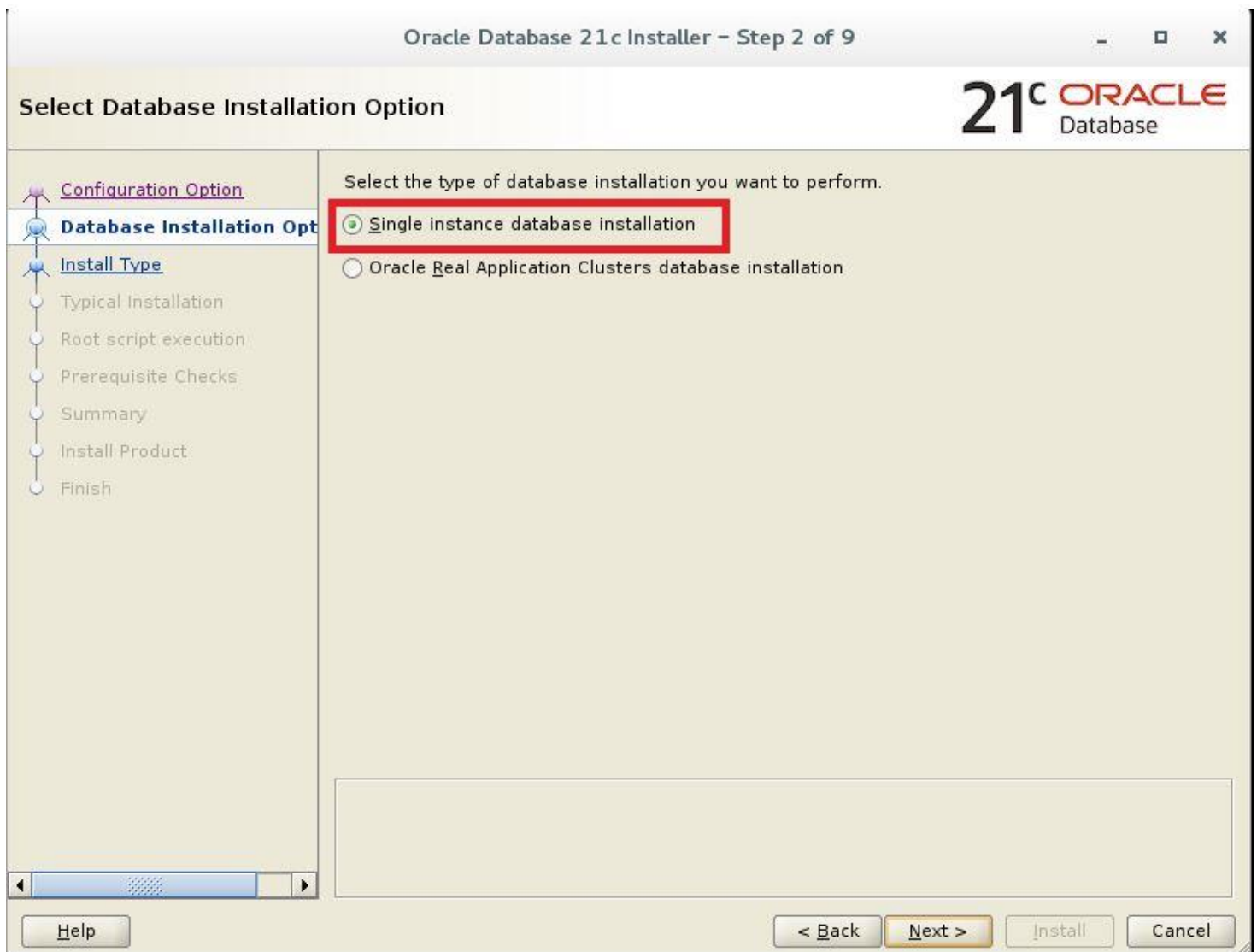
< Back

Next >

Install

Cancel

Click on Single Instance database installation and click Next



Click on Type of edition you require and then click next-choose Enterprise Edition

Select Database Edition

- [Configuration Option](#)
- [Database Installation Options](#)
- Database Edition**
- [Installation Location](#)
- Operating System Groups
- Root script execution
- Prerequisite Checks
- Summary
- Install Product
- Finish

Which database edition do you want to install?

☒ **Enterprise Edition**

Oracle Database 21c Enterprise Edition is a self-managing database that has the scalability, performance, high availability, and security features required to run the most demanding, mission-critical applications.

☐ **Standard Edition 2**

Oracle Database 21c Standard Edition 2 is a full-featured data management solution ideally suited to the needs of medium-sized businesses.

Help

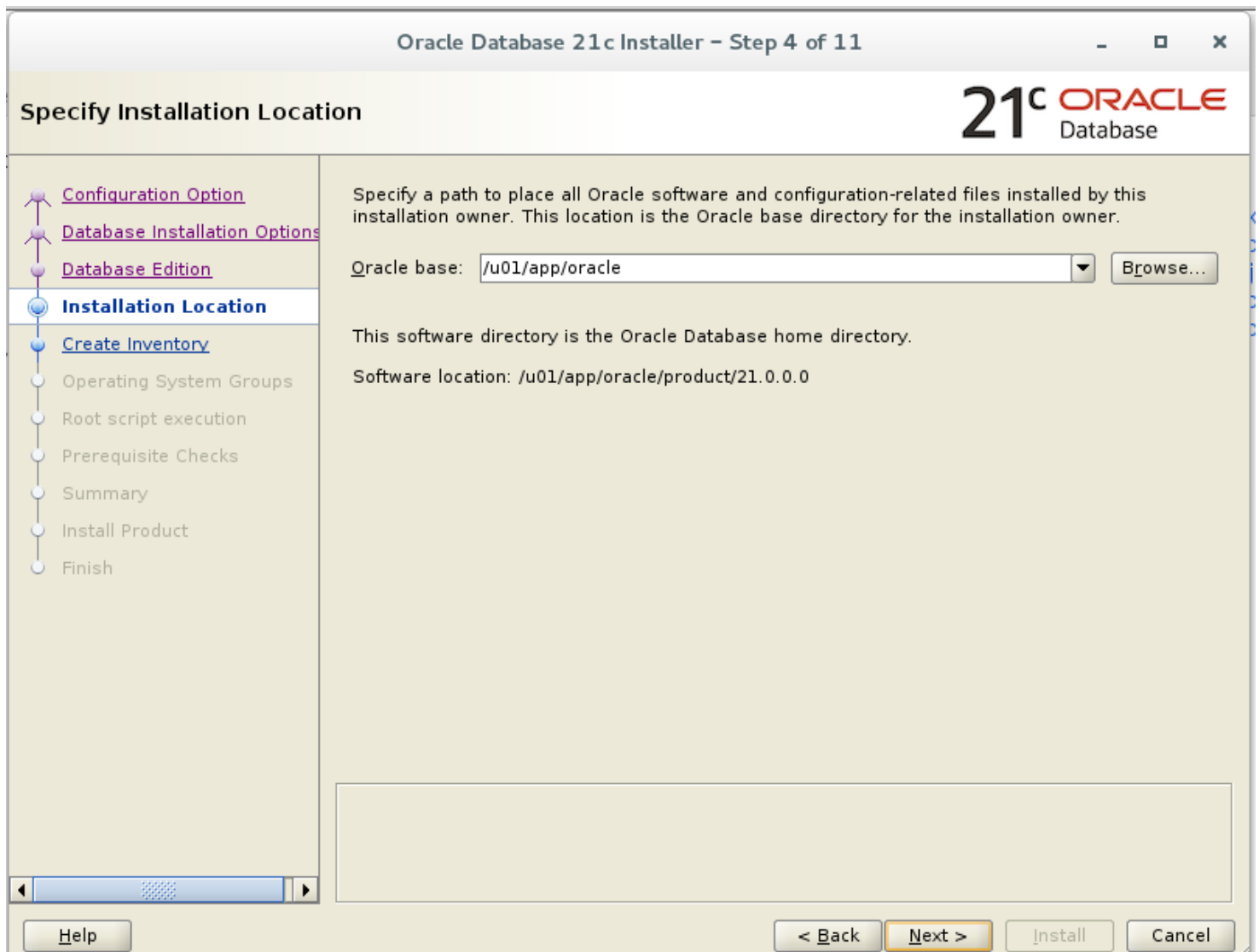
< Back

Next >

Install

Cancel

Check the Oracle Base Location and then click next



Choose the default and click next

Create Inventory

- Configuration Option
- Database Installation Options
- Database Edition
- Installation Location
- Create Inventory**
- Operating System Groups
- Root script execution
- Prerequisite Checks
- Summary
- Install Product
- Finish

You are starting your first installation on this host. Specify a directory for installation metadata files (for example, install log files). This directory is called the "inventory directory". The installer automatically sets up subdirectories for each product to contain inventory data. The subdirectory for each product typically requires 150 kilobytes of disk space.

Inventory Directory:

Specify an operating system group whose members have write permission to the inventory directory (orainventory).


orainventory Group Name:

Privileged Operating System groups

- [Configuration Option](#)
- [Database Installation Options](#)
- [Database Edition](#)
- [Installation Location](#)
- [Create Inventory](#)
- [Operating System Groups](#)**
- [Root script execution](#)
- [Prerequisite Checks](#)
- [Summary](#)
- [Install Product](#)
- [Finish](#)

SYS privileges are required to create a database using operating system (OS) authentication. Membership in OS Groups grants the corresponding SYS privilege, eg. membership in OSDBA grants the SYSDBA privilege.

Database Addministrator (OSDBA) group:

Database Operator (OSOPER) group (Optional): 

Database Backup and Recovery (OSBACKUPDBA) group:

Data Guard administrative (OSDGDBA) group:

Encryption Key Management administrative (OSKMDBA) group:

Real Application Cluster administrative (OSRACDBA) group:

[Help](#)

< Back

Next >

Install

Cancel

We can choose to run the root.sh from installation only by providing the root password or sudo information. Here we choose to take the manual root.sh and just click Next

Oracle Database 21c Installer – Step 7 of 11

21^c ORACLE
Database

Root script execution configuration

Configuration Option

Database Installation Options

Database Edition

Installation Location

Create Inventory

Operating System Groups

Root script execution

Prerequisite Checks

Summary

Install Product

Finish

During the software configuration, certain operations have to be performed as "root" user. You can choose to have the installer perform these operations automatically by specifying inputs for one of the options below. The input specified will also be used by the installer to perform additional prerequisite checks.

☐ Automatically run configuration scripts

☒ Use "root" user credential

 Password :

☐ Use sudo

 Program path :

 User name :

 Password :

Help

< Back

Next >

Install

Cancel

Perform Prerequisite Checks

Perform Prerequisite Checks

- Configuration Option
- Database Installation Options
- Database Edition
- Installation Location
- Create Inventory
- Operating System Groups
- Root script execution
- Prerequisite Checks**
- Summary
- Install Product
- Finish

Verifying that the target environment meets minimum installation and configuration requirements for products you have selected. This can take time. Please wait.

68%

Checking OS Kernel Parameter: semmns ...

Help

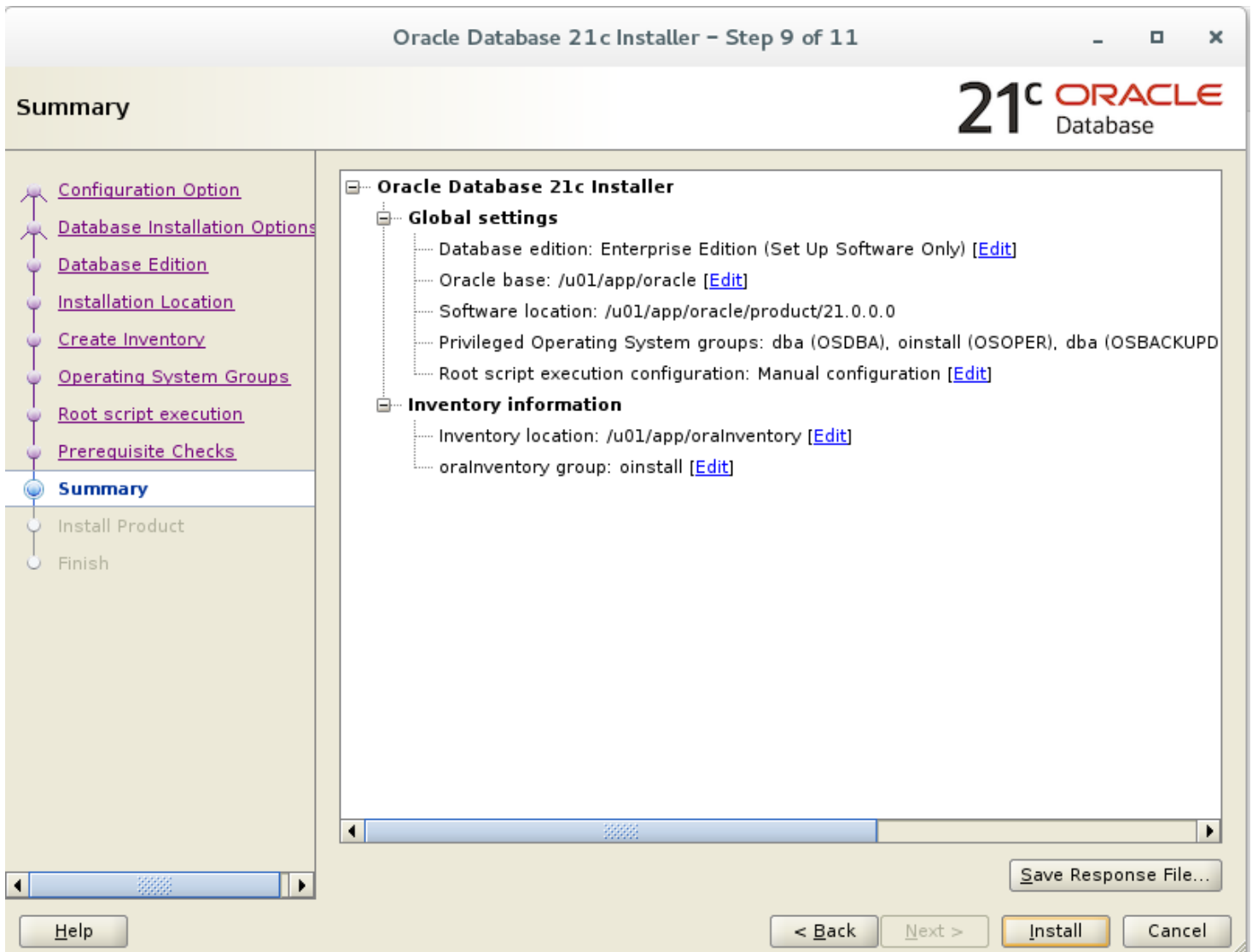
< Back

Next >

Install

Cancel

Summary



Run the root scripts when prompted.

As a root user, execute the following script(s):

/u01/app/oraInventory/orainstRoot.sh

/u01/app/oracle/product/21.0.0.0/root.sh

[root@oracle21c ~]# /u01/app/oraInventory/orainstRoot.sh

Changing permissions of /u01/app/oraInventory.

Adding read,write permissions for group.

Removing read,write,execute permissions for world.

Changing groupname of /u01/app/oraInventory to oinstall.

The execution of the script is complete.

[root@oracle21c ~]# /u01/app/oracle/product/21.0.0.0/root.sh

Performing root user operation.

The following environment variables are set as:

ORACLE_OWNER= oracle

ORACLE_HOME= /u01/app/oracle/product/21.0.0.0

Enter the full pathname of the local bin directory: [/usr/local/bin]:

Copying dbhome to /usr/local/bin ...

Copying oraenv to /usr/local/bin ...

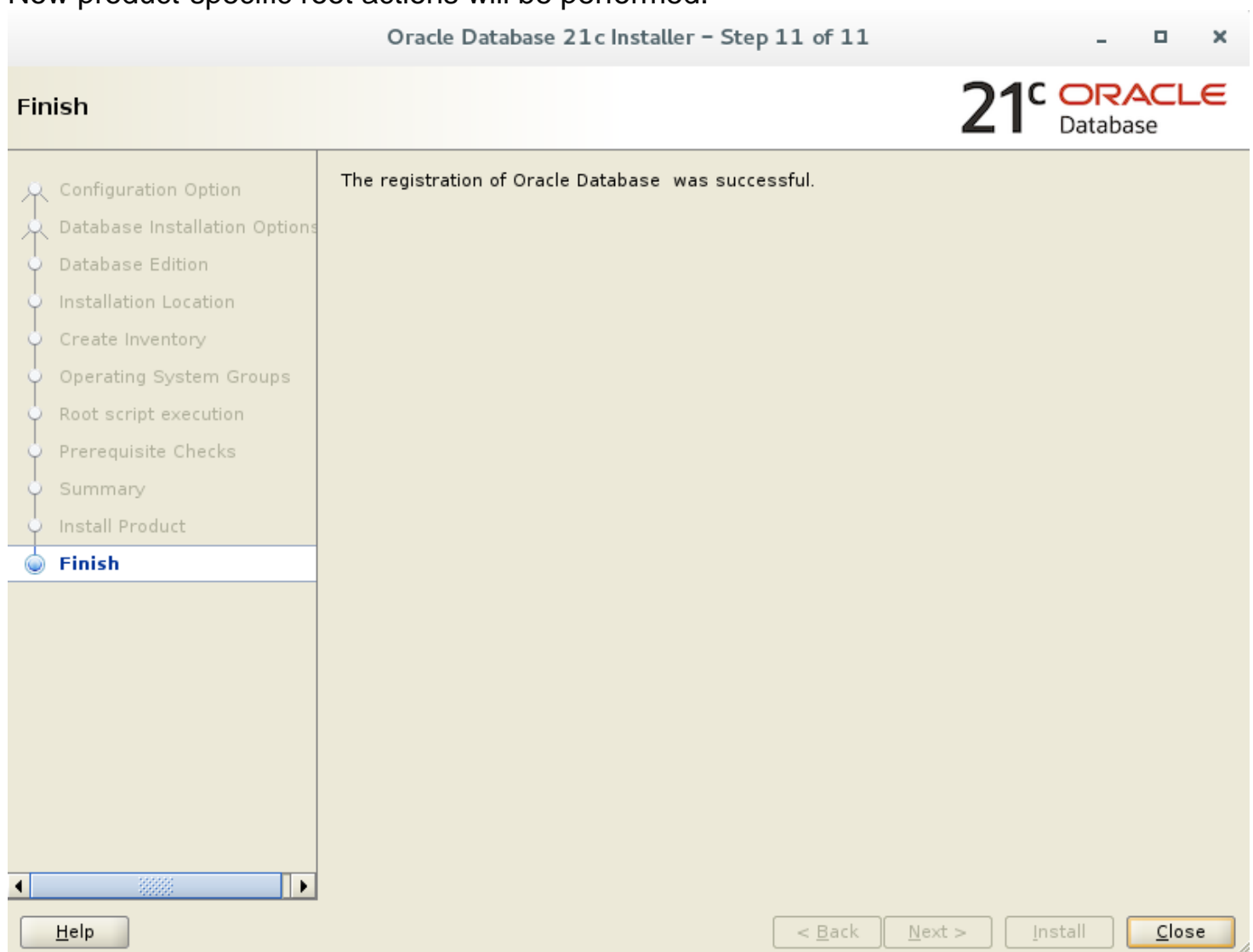
Copying coraenv to /usr/local/bin ...

Creating /etc/oratab file...

Entries will be added to the /etc/oratab file as needed by
Database Configuration Assistant when a database is created

Finished running generic part of root script.

Now product-specific root actions will be performed.



We have successfully completed the Oracle Database 21c Installation On Oracle Linux 7 (OL7).