refer : https://mikesmithers.wordpress.com/2019/01/03/installing-and-configuring-oracle-18cxe-on-centos/

Step 0 :
1. Resource Limits for 18cXE
1)There are limitations on the system resources that will be used. These include :

-2 CPU cores (up from 1 in 11gXE)
-2 GB Ram (1 GB in 11g)
-12GB of User Data (11GB in 11g)
-A maximum of 3 PDBs
-In addition, you can only install one instance of XE per host.

2. Change /etc/hosts
127.0.0.1 localhost
::1 localhost
Your-Server-IP Your-Hostname
#ex.
#192.168.56.4 centos-00

Step 1 : Downloading and installation
1. Head over to the Downloads page(https://www.oracle.com/database/technologies/xe-downloads.html) and download the Oracle Database 18c Express Edition for Linux x64 version.

2. If you're running a Red Hat compatible distro that's not Oracle Linux, you'll also need the Oracle Database Preinstall RPM for RHEL and CentOS.
-I'm running on CentOS7 so I'll get the Release 7 version of this file.

3. At this point, we should now have two rpm files :

$ ls /Downloads
oracle-database-preinstall-18c-1.0-1.el7.x86_64.rpm
oracle-database-xe-18c-1.0-1.x86_64.rpm

4. Next, we need to become root for a bit.

$ su

5. Now we can install the RPMs.
1)The preinstall first (note that you need to have an internet connection available when running this)…

yum localinstall oracle-database-preinstall-18c-1.0-1.el7.x86_64.rpm
Loaded plugins: fastestmirror, langpacks
Examining oracle-database-preinstall-18c-1.0-1.el7.x86_64.rpm: oracle-database-preinstall-18c-1.0-1.el7.x86_64
Marking oracle-database-preinstall-18c-1.0-1.el7.x86_64.rpm to be installed
Resolving Dependencies
--> Running transaction check
---> Package oracle-database-preinstall-18c.x86_64 0:1.0-1.el7 will be installed
--> Processing Dependency: compat-libcap1 for package: oracle-database-preinstall-18c-1.0-1.el7.x86_64
Loading mirror speeds from cached hostfile
epel/x86_64/metalink | 7.4 kB 00:00
* base: mirror.kakao.com

```
 * epel: hk.mirrors.thegigabit.com
 * extras: mirror.kakao.com
 * updates: mirror.kakao.com
base                                                    | 3.6 kB     00:00
epel                                                    | 5.4 kB     00:00
extras                                                  | 2.9 kB     00:00
updates                                                 | 2.9 kB     00:00
(1/2): epel/x86_64/updateinfo                           | 1.0 MB   00:01
(2/2): epel/x86_64/primary_db                           | 6.7 MB   00:00
--> Processing Dependency: compat-libstdc++-33 for package:
oracle-database-preinstall-18c-1.0-1.el7.x86_64
--> Processing Dependency: ksh for package:
oracle-database-preinstall-18c-1.0-1.el7.x86_64
--> Processing Dependency: libaio-devel for package:
oracle-database-preinstall-18c-1.0-1.el7.x86_64
--> Processing Dependency: libstdc++-devel for package:
oracle-database-preinstall-18c-1.0-1.el7.x86_64
--> Running transaction check
---> Package compat-libcap1.x86_64 0:1.10-7.el7 will be installed
---> Package compat-libstdc++-33.x86_64 0:3.2.3-72.el7 will be installed
---> Package ksh.x86_64 0:20120801-140.el7_7 will be installed
---> Package libaio-devel.x86_64 0:0.3.109-13.el7 will be installed
---> Package libstdc++-devel.x86_64 0:4.8.5-39.el7 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

================================================================
 Package                  Arch   Version          Repository      Size
================================================================
Installing:
 oracle-database-preinstall-18c x86_64 1.0-1.el7
 /oracle-database-preinstall-18c-1.0-1.el7.x86_64
                                                                 55 k
Installing for dependencies:
 compat-libcap1             x86_64 1.10-7.el7        base           19 k
 compat-libstdc++-33        x86_64 3.2.3-72.el7      base          191 k
 ksh                        x86_64 20120801-140.el7_7 updates      884 k
 libaio-devel               x86_64 0.3.109-13.el7    base           13 k
 libstdc++-devel            x86_64 4.8.5-39.el7      base          1.5 M

Transaction Summary
================================================================
Install  1 Package (+5 Dependent packages)

Total size: 2.6 M
Total download size: 2.6 M
Installed size: 12 M
Is this ok [y/d/N]:y

-Enter 'y' and…

Downloading packages:
(1/5): compat-libcap1-1.10-7.el7.x86_64.rpm             |  19 kB   00:00
(2/5): libaio-devel-0.3.109-13.el7.x86_64.rpm           |  13 kB   00:00
```

```
(3/5): compat-libstdc++-33-3.2.3-72.el7.x86_64.rpm        | 191 kB   00:00
(4/5): libstdc++-devel-4.8.5-39.el7.x86_64.rpm            | 1.5 MB   00:00
(5/5): ksh-20120801-140.el7_7.x86_64.rpm                  | 884 kB   00:00
--------------------------------------------------------------------------------
Total                                       1.9 MB/s | 2.6 MB  00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : libstdc++-devel-4.8.5-39.el7.x86_64                         1/6
  Installing : ksh-20120801-140.el7_7.x86_64                               2/6
  Installing : libaio-devel-0.3.109-13.el7.x86_64                          3/6
  Installing : compat-libcap1-1.10-7.el7.x86_64                            4/6
  Installing : compat-libstdc++-33-3.2.3-72.el7.x86_64                     5/6
  Installing : oracle-database-preinstall-18c-1.0-1.el7.x86_64             6/6
  Verifying  : oracle-database-preinstall-18c-1.0-1.el7.x86_64             1/6
  Verifying  : compat-libstdc++-33-3.2.3-72.el7.x86_64                     2/6
  Verifying  : compat-libcap1-1.10-7.el7.x86_64                            3/6
  Verifying  : libaio-devel-0.3.109-13.el7.x86_64                          4/6
  Verifying  : ksh-20120801-140.el7_7.x86_64                               5/6
  Verifying  : libstdc++-devel-4.8.5-39.el7.x86_64                         6/6

Installed:
  oracle-database-preinstall-18c.x86_64 0:1.0-1.el7

Dependency Installed:
  compat-libcap1.x86_64 0:1.10-7.el7
  compat-libstdc++-33.x86_64 0:3.2.3-72.el7
  ksh.x86_64 0:20120801-140.el7_7
  libaio-devel.x86_64 0:0.3.109-13.el7
  libstdc++-devel.x86_64 0:4.8.5-39.el7

Complete!
```

2)Install Oracle-xe-18c

```
# yum localinstall oracle-database-xe-18c-1.0-1.x86_64.rpm
Loaded plugins: fastestmirror, langpacks
Examining oracle-database-xe-18c-1.0-1.x86_64.rpm:
oracle-database-xe-18c-1.0-1.x86_64
Marking oracle-database-xe-18c-1.0-1.x86_64.rpm to be installed
Resolving Dependencies
--> Running transaction check
---> Package oracle-database-xe-18c.x86_64 0:1.0-1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

================================================================================
 Package                 Arch         Version      Repository
 Size
================================================================================
Installing:
 oracle-database-xe-18c        x86_64        1.0-1
 /oracle-database-xe-18c-1.0-1.x86_64        5.2 G
```

```
154         Transaction Summary
155         ================================================================================
156         Install  1 Package
157
158         Total size: 5.2 G
159         Installed size: 5.2 G
160         Is this ok [y/d/N]:
161
162       -Once again, enter 'y'…
163         Downloading packages:
164         Running transaction check
165         Running transaction test
166         Transaction test succeeded
167         Running transaction
168           Installing : oracle-database-xe-18c-1.0-1.x86_64
                1/1
169         [INFO] Executing post installation scripts...
170         [INFO] Oracle home installed successfully and ready to be configured.
171         To configure Oracle Database XE, optionally modify the parameters in
            '/etc/sysconfig/oracle-xe-18c.conf' and then execute '/etc/init.d/oracle-xe-18c
            configure' as root.
172           Verifying  : oracle-database-xe-18c-1.0-1.x86_64
                1/1
173
174         Installed:
175           oracle-database-xe-18c.x86_64 0:1.0-1

176
177         Complete!
178
179
180 Step 2 : Configuration.
181   1. Finally, we need to run the configuration.
182
183     # /etc/init.d/oracle-xe-18c configure
184
185       Specify a password to be used for database accounts. Oracle recommends that the
          password entered should be at least 8 characters in length, contain at least 1 uppercase
          character, 1 lower case character and 1 digit [0-9]. Note that the same password will be
          used for SYS, SYSTEM and PDBADMIN accounts: (ex. javaoracle)
186       Confirm the password:(ex. javaoracle)
187       Configuring Oracle Listener.
188       Listener configuration succeeded.
189       Configuring Oracle Database XE.
190       Enter SYS user password:
191       *********
192       Enter SYSTEM user password:
193       *********
194       Enter PDBADMIN User Password:
195       **********
196       Prepare for db operation
197       7% complete
198       Copying database files
199       29% complete
200       Creating and starting Oracle instance
201       30% complete
202       31% complete
```

```
        34% complete
        38% complete
        41% complete
        43% complete
        Completing Database Creation
        47% complete
        50% complete
        Creating Pluggable Databases
        54% complete
        71% complete
        Executing Post Configuration Actions
        93% complete
        Running Custom Scripts
        100% complete
        Database creation complete. For details check the logfiles at:
         /opt/oracle/cfgtoollogs/dbca/XE.
        Database Information:
        Global Database Name:XE
        System Identifier(SID):XE
        Look at the log file "/opt/oracle/cfgtoollogs/dbca/XE/XE.log" for further details.

        Connect to Oracle Database using one of the connect strings:
            Pluggable database: centos-00/XEPDB1
            Multitenant container database: centos-00
        Use https://localhost:5500/em to access Oracle Enterprise Manager for Oracle Database
        XE

    -At this point we can stop being root.

        # exit


Step 3. Connecting to the database
  1. First up, we need to make sure that the appropriate environment variables are set.

    $ . oraenv

        ORACLE_SID = [instructor] ? XE
        ORACLE_BASE environment variable is not being set since this
        information is not available for the current user ID gerald.
        You can set ORACLE_BASE manually if it is required.
        Resetting ORACLE_BASE to its previous value or ORACLE_HOME
        The Oracle base has been set to /opt/oracle/product/18c/dbhomeXE

  2. Now we should be able to connect to the database via sqlplus :

        $ sqlplus /nolog

        SQL*Plus: Release 18.0.0.0.0 - Production on Sat Mar 21 17:33:05 2020
        Version 18.4.0.0.0

        Copyright (c) 1982, 2018, Oracle.  All rights reserved.

        SQL>conn sys as sysdba
        Enter password : javaoracle
        Connected
        SQL>select instance_name, version, status from v$instance;

```

```
INSTANCE_NAME    VERSION         STATUS
---------------- ----------------- ------------
XE                    18.0.0.0.0       OPEN
```

3. One significant new feature of 18c XE as compared with it's predecessor is the capability to use the database as a container (CDB) for zero or more Pluggable Databases (PDBs).

1)In the case of XE, you can have up to three PDBs and we can see that one has already been created as part of the installation :

```
SQL> select con_id, name from v$containers;

 CON_ID         NAME
----------      --------------
  1             CDB$ROOT
  2             PDB$SEED
  3             XEPDB1
```

2)In this case :

CDB$ROOT is the Container Database
PDB$SEED is a read-only template for creating PDBS
XEPDB1 is a PDB

3)In the CDB, we can see details of the PDB seed database and the PDB itself :

```
SQL>select con_id, name, open_mode from v$pdbs;

 CON_ID  NAME           OPEN_MODE
---------- ---------------   ----------
  2         PDB$SEED       READ ONLY
  3         XEPDB1         READ WRITE
```

4)However, if we switch to the PDB…

```
SQL>alter session set container = XEPDB1;

Session altered.
```

5)The same query returns information only about the current PDB…

```
SQL>select con_id, name, open_mode from v$pdbs;

 CON_ID  NAME           OPEN_MODE
---------- -----------       ----------
  3         XEPDB1         READ WRITE
```

6)If you want to check which PDB you are in you can use :

```
SQL>select sys_context('userenv', 'con_name') from dual;

SYS_CONTEXT('USERENV', 'CON_NAME')
----------------------------------------------------
XEPDB1
```

-In the CDB this should return :

```
CDB$ROOT
```

-in our PDB however, we should get :

XEPDB1

Step 4. Chcking Service

1. Checking the Listener

1)For ongoing administration operations from the OS, you'll need to add your user to a couple of groups.

```
# usermod -a -G dba instructor
# usermod -a -G oinstall instructor
```

-Once you've added these groups to your user you need to log off and log on again for them to take effect.

-You should now be able to check the status of the Net Listener by means of the lsnrctl utility.

2)Having first run oraenv as before to set your environment…

```
# lsnrctl status

LSNRCTL for Linux: Version 18.0.0.0.0 - Production on 21-MAR-2020 17:42:08

Copyright (c) 1991, 2018, Oracle.  All rights reserved.

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=centos-00)(PORT=1521)))
STATUS of the LISTENER
------------------------
Alias                     LISTENER
Version                   TNSLSNR for Linux: Version 18.0.0.0.0 - Production
Start Date                21-MAR-2020 15:17:01
Uptime                    0 days 2 hr. 25 min. 8 sec
Trace Level               off
Security                  ON: Local OS Authentication
SNMP                      OFF
Default Service           XE
Listener Parameter File   /opt/oracle/product/18c/dbhomeXE/network/admin/listener.ora
Listener Log File         /opt/oracle/diag/tnslsnr/centos-00/listener/alert/log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=centos-00)(PORT=1521)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1521)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcps)(HOST=127.0.0.1)(PORT=5500))(Security=(my_wallet_directory=/opt/oracle/admin/XE/xdb_wallet))(Presentation=HTTP)(Session=RAW))
Services Summary...
Service "XE" has 1 instance(s).
  Instance "XE", status READY, has 1 handler(s) for this service...
Service "XEXDB" has 1 instance(s).
  Instance "XE", status READY, has 1 handler(s) for this service...
Service "a158e00ad9c5324ae0530438a8c084c4" has 1 instance(s).
  Instance "XE", status READY, has 1 handler(s) for this service...
Service "xepdb1" has 1 instance(s).
  Instance "XE", status READY, has 1 handler(s) for this service...
The command completed successfully
```

2. Starting and Stopping Oracle
-The first time you restart the server after the installation, you will find that neither the database nor the TNS Listener are running.
1)To start them up from the command line you can run :

```
# /etc/init.d/oracle-xe-18c start
```

2)To shut them down, it's :

```
# /etc/init.d/oracle-xe-18c stop
```

3)Set the oracle-xe-18c service to start on boot…

```
# systemctl daemon-reload
# systemctl enable oracle-xe-18c

  oracle-xe-18c.service is not a native service, redirecting to /sbin/chkconfig.
  Executing /sbin/chkconfig oracle-xe-18c on

# systemctl status oracle-xe-18c
   oracle-xe-18c.service - SYSV: This script is responsible for taking care of configuring the RPM Oracle XE Database and its associated services.
     Loaded: loaded (/etc/rc.d/init.d/oracle-xe-18c; bad; vendor preset: disabled)
     Active: inactive (dead)
      Docs: man:systemd-sysv-generator(8)
```

4)If you then reboot the server, you should be able to confirm that the service is up by running…

```
# systemctl status -l oracle-xe-18c

● oracle-xe-18c.service - SYSV: This script is responsible for taking care of configuring the RPM Oracle XE Database and its associated services.
     Loaded: loaded (/etc/rc.d/init.d/oracle-xe-18c; bad; vendor preset: disabled)
     Active: active (exited) since Sat 2020-03-21 17:47:01 KST; 26s ago
       Docs: man:systemd-sysv-generator(8)
    Process: 1283 ExecStart=/etc/rc.d/init.d/oracle-xe-18c start (code=exited, status=0/SUCCESS)
      Tasks: 0

  Mar 21 17:45:52 centos-00 systemd[1]: Starting SYSV: This script is responsible for taking care of configuring the RPM Oracle XE Database and its associated services....
  Mar 21 17:45:54 centos-00 oracle-xe-18c[1283]: Starting Oracle Net Listener.
  Mar 21 17:45:54 centos-00 su[1330]: (to oracle) root on none
  Mar 21 17:45:58 centos-00 oracle-xe-18c[1283]: Oracle Net Listener started.
  Mar 21 17:45:58 centos-00 oracle-xe-18c[1283]: Starting Oracle Database instance XE.
  Mar 21 17:45:59 centos-00 su[1492]: (to oracle) root on none
  Mar 21 17:47:01 centos-00 oracle-xe-18c[1283]: Oracle Database instance XE started.
  Mar 21 17:47:01 centos-00 systemd[1]: Started SYSV: This script is responsible for taking care of configuring the RPM Oracle XE Database and its associated services..
```

Step 5. Setting Oracle Environment Variables
1. Setting the ENVIRONMENT Variables Automatically

```
    # nano /etc/profile.d/set_oraenv.sh

      export ORACLE_SID=XE
      export ORACLE_HOME=/opt/oracle/product/18c/dbhomeXE
      export ORACLE_BASE=/opt/oracle
      export PATH=$PATH:/opt/oracle/product/18c/dbhomeXE/bin


Step 6. Enterprise Manager Express
  1. You just open a web browser (Firefox being the default on CentOS) and point it at the
  address specified in the output from our configuration run earlier.

    https://localhost:5500/em

  2. However, you may be ever so slightly disappointed.

    1)Click [Advanced...]
    2)Click [Accept the Risk and Continue]
    3)Click [Get Flash]
    4)Download [.tar.gz for Linux]

  3. In short, we need to follow the link to the Adobe download site and select the .tar.gz
  option for the Flash Download :

    $ ls /Downloads *.tar.gz
    flash_player_npapi_linux.x86_64.tar.gz

  4. Next, we extract the libflashplayer.so file from the archive…

    $ tar -xf flash_player_npapi_linux.x86_64.tar.gz *libflashplayer.so
    $ ls  libflashplayer.so
    libflashplayer.so

  5. Copy it to the location that Firefox expects it to be…

    # cp libflashplayer.so /usr/lib64/mozilla/plugins/.

  6. Before finally setting the file ownership and permissions…

    # cd /usr/lib64/mozilla/plugins
    # chmod 755 libflashplayer.so
    # chgrp root libflashplayer.so
    # chown root libflashplayer.so

    # ls -l libflashplayer.so
    -rwxr-xr-x. 1 root root 16644072 libflashplayer.so


  7. If we go to the EM page now. Activate the plugin and login as sys (as sysdba)
    1)Click [Run Adobe Flash]
    2)Do you want to ... Click [Allow]
    3)User Name : sys
    4)Password : javaoracle
    5)Check [as sysdba]
    6)Click [Login]


Step 7. Installing the HR demo application
```

1. Unlike it’s predecessor, 18cXE does not come with the HR demo application pre-installed.
2. However, it does include the scripts that enable us to perform this installation ourselves.
3. As this is an application as opposed to a system-wide utility, we’re going to install it in the PDB rather than the main CDB.
4. We’ll need to switch to the oracle OS user so that we have permissions to write to the log file that we’re going to specify.
5. Then we connect to the database…

```
# su oracle
# sqlplus system

SQL*Plus: Release 18.0.0.0.0 - Production on Sat Mar 21 17:33:05 2020
Version 18.4.0.0.0

Copyright (c) 1982, 2018, Oracle.  All rights reserved.

Enter password : javaoracle
Last Successful login time: Sat Mar 21 2020 18:01:46 +09:00

Connected to:
Oracle Database 18c Express Edition Release 18.0.0.0.0 - Production
Version 18.4.0.0.0

Once connected :

SQL>alter session set container = XEPDB1;

Session altered.

SQL>select sys_context('userenv', 'con_name') from dual;

  SYS_CONTEXT('USERENV','CON_NAME')
  ----------------------------------------------------
  XEPDB1
```

6. Now we’ve confirmed that we’re in the PDB, simply run :

```
SQL>@$ORACLE_HOME/demo/schema/human_resources/hr_main.sql
```

7. This script will prompt for :

-the password for the HR user – enter an appropriate password and remember it as you will need it to access the new HR schema
-the default tablespace to use for the HR user – enter USERS
-the temporary tablespace to use for the HR user – enter TEMP
-the path of the log file written by this installation script – enter

```
  $ORACLE_HOME/demo/schema/log
```

NOTE – the script does not obfuscate the password you enter but echos it to the screen. In any case, you may consider that changing it shortly after installation is a wise move.

8. The output will look something like this :

```
specify password for HR as parameter 1:
Enter value for 1: hr

specify default tablespeace for HR as parameter 2:
```

```
Enter value for 2: USERS

specify temporary tablespace for HR as parameter 3:
Enter value for 3: TEMP

specify log path as parameter 4:
Enter value for 4: $ORACLE_HOME/demo/schema/log


PL/SQL procedure successfully completed.

User created.

User altered.

User altered.

Grant succeeded.

Grant succeeded.

Session altered.

...snip...
Comment created.

Comment created.

Comment created.

Commit complete.


PL/SQL procedure successfully completed.
```

9. We should now see that we have a “local” user called HR :

```
SQL>select account_status, default_tablespace, temporary_tablespace, common
     from dba_users
     where username = 'HR';

  ACCOUNT_STATUS   DEFAULT_TABLESPACE   TEMPORARY_TABLESPACE    COM
  -------------------- ------------------------- ------------------------------ ---
  OPEN                 USERS                     TEMP                           NO

  1 row selected.
```

10. As the account is not locked, we can connect to it from SQL*Plus. Note that we’ll have to use the connect string for the PDB (as specified in the installation feedback earlier) as the schema does not exist in the CDB :

```
$ sqlplus /nolog

SQL*Plus: Release 18.0.0.0.0 - Production on Sat Mar 21 17:33:05 2020
Version 18.4.0.0.0

Copyright (c) 1982, 2018, Oracle.  All rights reserved.
```

```
SQL> conn hr/hr@192.168.56.4:1521/xepdb1
Connected.
SQL>
```

Step 8. Accessing the database from remote machines

1. If you want to be able to access it remotely, you'll need to configure the firewall to allow remote access to specific ports.

2. Our objectives here are :

1)to allow access to the database from a client machine via TNS
2)to allow access to the Enterprise Manager Express site.

3. For CentOS 7 the default firewall is firewalld :

```
# systemctl status firewalld

● firewalld.service - firewalld - dynamic firewall daemon
   Loaded: loaded (/usr/lib/systemd/system/firewalld.service; enabled; vendor preset:
   enabled)
   Active: active (running) since Sat 2020-03-21 17:45:41 KST; 30min ago
     Docs: man:firewalld(1)
 Main PID: 840 (firewalld)
    Tasks: 2
   CGroup: /system.slice/firewalld.service
           └─840 /usr/bin/python2 -Es /usr/sbin/firewalld --nofork --nopid

Mar 21 17:45:37 centos-00 systemd[1]: Starting firewalld - dynamic firewall.....
Mar 21 17:45:41 centos-00 systemd[1]: Started firewalld - dynamic firewall ...n.
Hint: Some lines were ellipsized, use -l to show in full.
```

4. On my client machine, I've added the following entries to the $ORACLE_HOME/network/admin/tnsnames.ora file :

```
# Generated by Oracle configuration tools.

XE =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = centos-00)(PORT = 1521))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = XE)
    )
  )

LISTENER_XE =
  (ADDRESS = (PROTOCOL = TCP)(HOST = centos-00)(PORT = 1521))
```

5. XE will allow me to connect to the CDB and xepdb1 will let me connect to the PDB.
6. By the following command, We can open the port that the TNS Listener is listening on.

```
# firewall-cmd --permanent --add-port=1521/tcp
success
# systemctl restart firewalld
```

7. Verify with :

637
638 # firewall-cmd --list-ports
639 1521/tcp
640
641 8. As for EM Express, we need to do the same for the port it’s running on (5500 in this case)
:
642
643 # firewall-cmd --permanent --add-port=5500/tcp
644 # systemctl restart firewalld
645
646 9. However, we also need to connect to the database as SYSTEM and allow remote access by
running:
647
648 SQL>exec dbms_xdb_config.SetListenerLocalAccess(false);
649
650 10. Once this is done we should now be able to access the EM Express home page remotely.