

Oracle Enterprise Manager 13.5 on OL8

Oracle Enterprise Manager Cloud Control 13c on Oracle Linux 8

Step 1: Download Required Software

First, ensure you have downloaded the necessary software from Oracle's official website:

- Oracle Linux 8 ISO from [Oracle Linux Download](#)
- Oracle Database 19c (or latest) from [Oracle Database Downloads](#)
- Oracle Enterprise Manager Cloud Control 13c Release 5 (or latest) from [Enterprise Manager Downloads](#)

Step 2: Install Oracle Linux 8

1. **Install Oracle Linux 8:** Boot from the Oracle Linux 8 ISO and follow the installation prompts. If a GUI is needed, make sure to select the "Workstation" or "Server with GUI" base environment during installation.
2. **Set Up Network and Hostname:** Configure your network settings and hostname during or after installation as required.

Step 3: Prepare the Operating System

1. **Update the System:** Ensure your system is up-to-date.

```
dnf update -y
```

2. **Install Required Packages:** The `oracle-database-preinstall-19c` package will automatically install dependencies and configure system parameters.

```
dnf install -y oracle-database-preinstall-19c wget
```

3. **Additional Dependencies:** If there are specific additional dependencies for Oracle Database 19c or the Enterprise Manager, install them as needed.

Step 4: Configure System Settings and Users

1. **Directory Structure:** Create directories for Oracle software and data files.

```
mkdir -p /u01/app/oracle/product/19.0.0/dbhome_1
mkdir -p /u01/app/oracle/middleware
mkdir -p /u01/app/oracle/agent
mkdir -p /u01/tmp
mkdir -p /u01/oradata
chown -R oracle:oinstall /u01
chmod -R 775 /u01
```

2. **Environment Variables:** As the `oracle` user, configure environment variables.

- Create a script `/home/oracle/scripts/setEnv.sh` with the following content:

```
export TMP=/tmp
export TMPDIR=$TMP

export ORACLE_HOSTNAME=<your_hostname>
export ORACLE_UNQNAME=emcdb
export ORACLE_BASE=/u01/app/oracle
export ORACLE_HOME=$ORACLE_BASE/product/19.0.0/dbhome_1
export ORACLE_SID=emcdb

export PATH=/usr/sbin:/usr/local/bin:$PATH
export PATH=$ORACLE_HOME/bin:$PATH

export LD_LIBRARY_PATH=$ORACLE_HOME/lib:/lib:/usr/lib
export CLASSPATH=$ORACLE_HOME/jlib:$ORACLE_HOME/rdbms/jlib

export OMS_HOME=/u01/app/oracle/middleware
export AGENT_HOME=/u01/app/oracle/agent/agent_inst

export MW_HOME=${ORACLE_BASE}/middleware
export OMS_HOME=${MW_HOME}
export GC_INST=${ORACLE_BASE}/gc_inst
export AGENT_BASE=${ORACLE_BASE}/agent
```

- Add the script to the oracle user's `.bash_profile`.

```
echo ". /home/oracle/scripts/setEnv.sh" >> /home/oracle/.bash_profile
```

Step 5: Install Oracle Database

1. **Prepare the Database Installation:** Unzip the Oracle Database software and prepare a response file for a silent installation.

```
mkdir /u01/software/  
cd /u01/software  
unzip <path_to_your_downloaded_db_software>.zip  
cd database
```

2. **Run the Database Installer:** Execute the silent installation using parameters.

```
./runInstaller -ignorePrereq -waitforcompletion -silent \
-responseFile ${ORACLE_HOME}/install/response/db_install.rsp \
oracle.install.option=INSTALL_DB_SWONLY \
ORACLE_HOSTNAME=${ORACLE_HOSTNAME} \
UNIX_GROUP_NAME=oinstall \
INVENTORY_LOCATION=${ORA_INVENTORY} \
SELECTED_LANGUAGES=en,en_US \
ORACLE_HOME=${ORACLE_HOME} \
ORACLE_BASE=${ORACLE_BASE} \
oracle.install.db.InstallEdition=EE \
oracle.install.db.OSDBA_GROUP=dba \
oracle.install.db.OSBACKUPDBA_GROUP=dba \
oracle.install.db.OSDGDBA_GROUP=dba \
oracle.install.db.OSKMDBA_GROUP=dba \
oracle.install.db.OSRACDBA_GROUP=dba \
SECURITY_UPDATES_VIA_MYORACLESUPPORT=false \
DECLINE_SECURITY_UPDATES=true
```

3. **Configure the Listener and Database:** Use the `netca` and `dbca` tools to configure the network and create the database, respectively. These can be automated with response files or command-line options for silent operations.

Start the listener:

```
lsnrctl start
```

Create the database:

```
dbca -silent -createDatabase \
    -templateName General_Purpose.dbc \
    -gdbname ${ORACLE_SID} -sid ${ORACLE_SID} -responseFile NO_VALUE \
    -characterSet AL32UTF8 \
    -sysPassword Som3bTt3rpwd \
    -systemPassword Som3bTt3rpwd \
    -createAsContainerDatabase true \
    -numberOfPDBs 1 \
    -pdbName ${PDB_NAME} \
    -pdbAdminPassword Som3bTt3rpwd \
    -databaseType MULTIPURPOSE \
    -automaticMemoryManagement false \
    -totalMemory 8000 \
    -storageType FS \
    -datafileDestination "${DATA_DIR}" \
    -redoLogFileSize 50 \
    -emConfiguration NONE \
    -ignorePreReqs
```

4. Set the pluggable database to auto-start.

```
sqlplus / as sysdba <<EOF
alter system set db_create_file_dest='/u01/oradata';
alter pluggable database emrep save state;

-- Recommended settings
alter system set "_allow_insert_with_update_check"=true scope=both;
alter system set session_cached_cursors=200 scope=spfile;
alter system set sga_target=800M scope=both;
alter system set pga_aggregate_target=450M scope=both;

EOF
```

Step 6: Install Oracle Enterprise Manager Cloud Control

1. **Prepare for Installation:** Unzip

the Enterprise Manager software to `/u01/software/em` and navigate to the directory.

2. **Enterprise Manager Install Response File:** Similar to the database, prepare a response file for the Enterprise Manager installation.

Setup the environment:

```
export ORA_INVENTORY=/u01/app/oraInventory
export PDB_NAME=emrep
export SYS_PASSWORD=SysAdminpW1
export UNIX_GROUP_NAME=oinstall
export MW_HOME=${ORACLE_BASE}/middleware
export OMS_HOME=${MW_HOME}
export GC_INST=${ORACLE_BASE}/gc_inst
export AGENT_BASE=${ORACLE_BASE}/agent
export WLS_USERNAME=weblogic
export WLS_PASSWORD=SysAdminpW1
export SYSMAN_PASSWORD=${WLS_PASSWORD}
export AGENT_PASSWORD=${WLS_PASSWORD}
export SOFTWARE_LIBRARY=${ORACLE_BASE}/swlib
export DATABASE_HOSTNAME=localhost
export LISTENER_PORT=1521
export SOFTWARE_DIR=/u01/software/em
```

Create the response file:

```
cat > /tmp/install.rsp <<EOF
RESPONSEFILE_VERSION=2.2.1.0.0
UNIX_GROUP_NAME=${UNIX_GROUP_NAME}
INVENTORY_LOCATION=${ORA_INVENTORY}
SECURITY_UPDATES_VIA_MYORACLESUPPORT=false
DECLINE_SECURITY_UPDATES=true
INSTALL_UPDATES_SELECTION=skip
ORACLE_MIDDLEWARE_HOME_LOCATION=${MW_HOME}
ORACLE_HOSTNAME=${ORACLE_HOSTNAME}
AGENT_BASE_DIR=${AGENT_BASE}
WLS_ADMIN_SERVER_USERNAME=${WLS_USERNAME}
WLS_ADMIN_SERVER_PASSWORD=${WLS_PASSWORD}
WLS_ADMIN_SERVER_CONFIRM_PASSWORD=${WLS_PASSWORD}
NODE_MANAGER_PASSWORD=${WLS_PASSWORD}
NODE_MANAGER_CONFIRM_PASSWORD=${WLS_PASSWORD}
ORACLE_INSTANCE_HOME_LOCATION=${GC_INST}
```

```
CONFIGURE_ORACLE_SOFTWARE_LIBRARY=true
SOFTWARE_LIBRARY_LOCATION=${SOFTWARE_LIBRARY}
DATABASE_HOSTNAME=${DATABASE_HOSTNAME}
LISTENER_PORT=${LISTENER_PORT}
SERVICENAME_OR_SID=${PDB_NAME}
SYS_PASSWORD=${SYS_PASSWORD}
SYSMAN_PASSWORD=${SYSMAN_PASSWORD}
SYSMAN_CONFIRM_PASSWORD=${SYSMAN_PASSWORD}
DEPLOYMENT_SIZE=SMALL
AGENT_REGISTRATION_PASSWORD=${AGENT_PASSWORD}
AGENT_REGISTRATION_CONFIRM_PASSWORD=${AGENT_PASSWORD}
PLUGIN_SELECTION={}
b_upgrade=false
EM_INSTALL_TYPE=NOSEED
CONFIGURATION_TYPE=LATER
CONFIGURE_SHARED_LOCATION_BIP=false
EOF
```

3. **Run the Installer:** Execute the silent installation using the response file.

```
./em13500_linux64.bin silent -responseFile /tmp/install.rsp -J-Djava.io.tmpdir=/u01/tmp/
```

4. **Post-Installation Steps:**

At the end of a successful install, run the root script.

As root

```
sh ${MW_HOME}/allroot.sh
```

Return to Oracle user

Create the the configuration response file..

```
cat > /tmp/config.rsp <<EOF
RESPONSEFILE_VERSION=2.2.1.0.0
UNIX_GROUP_NAME=${UNIX_GROUP_NAME}
INVENTORY_LOCATION=${ORA_INVENTORY}
SECURITY_UPDATES_VIA_MYORACLESUPPORT=false
DECLINE_SECURITY_UPDATES=true
INSTALL_UPDATES_SELECTION=skip
ORACLE_MIDDLEWARE_HOME_LOCATION=${MW_HOME}
ORACLE_HOSTNAME=${ORACLE_HOSTNAME}
AGENT_BASE_DIR=${AGENT_BASE}
```

```
WLS_ADMIN_SERVER_USERNAME=${WLS_USERNAME}
WLS_ADMIN_SERVER_PASSWORD=${WLS_PASSWORD}
WLS_ADMIN_SERVER_CONFIRM_PASSWORD=${WLS_PASSWORD}
NODE_MANAGER_PASSWORD=${WLS_PASSWORD}
NODE_MANAGER_CONFIRM_PASSWORD=${WLS_PASSWORD}
ORACLE_INSTANCE_HOME_LOCATION=${GC_INST}
CONFIGURE_ORACLE_SOFTWARE_LIBRARY=true
SOFTWARE_LIBRARY_LOCATION=${SOFTWARE_LIBRARY}
DATABASE_HOSTNAME=${DATABASE_HOSTNAME}
LISTENER_PORT=${LISTENER_PORT}
SERVICENAME_OR_SID=${PDB_NAME}
SYS_PASSWORD=${SYS_PASSWORD}
SYSMAN_PASSWORD=${SYSMAN_PASSWORD}
SYSMAN_CONFIRM_PASSWORD=${SYSMAN_PASSWORD}
DEPLOYMENT_SIZE=SMALL
AGENT_REGISTRATION_PASSWORD=${AGENT_PASSWORD}
AGENT_REGISTRATION_CONFIRM_PASSWORD=${AGENT_PASSWORD}
PLUGIN_SELECTION={}
b_upgrade=false
EM_INSTALL_TYPE=NOSEED
CONFIGURATION_TYPE=ADVANCED
CONFIGURE_SHARED_LOCATION_BIP=false
EOF
```

Run the configuration. This will take a very long time.

```
${MW_HOME}/sysman/install/ConfigureGC.sh -silent -responseFile /tmp/config.rsp
```

At the end of the installation you'll be provided a list of URLs and post-installation steps. Follow any post-installation steps such as deploying agents, as described in the Enterprise Manager documentation.

Step 7: Finalize Installation

- **Start Services:** Ensure that the Oracle database and the Enterprise Manager services are started.
- **Verify Installation:** Access the Enterprise Manager web interface to confirm that the installation was successful.

Notes:

- **Response Files:** The details on what to include in response files for both the database and Enterprise Manager can be found in the official Oracle documentation. These files control installation options, such as directories, components to install, and initial setup parameters.
- **Oracle Documentation:** For detailed options for the `dbca`, `netca`, and Enterprise Manager silent installation parameters, refer to Oracle's official documentation.

This guide outlines a general approach to installing Oracle Database and Oracle Enterprise Manager Cloud Control on Oracle Linux 8. Tailor the response files to your environment's specific needs, referring to Oracle's documentation for the most accurate and detailed instructions.

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