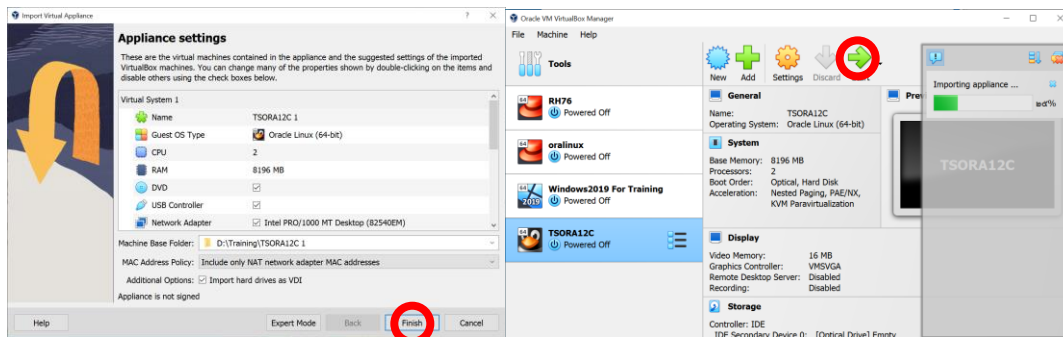


ขั้นตอนการติดตั้ง Oracle และสร้าง Database

1. เปิดไฟล์ชื่อ **TSORA12C** จากนั้นเลือก**Finish** เมื่อเสร็จแล้ว กดเริ่มโปรแกรม



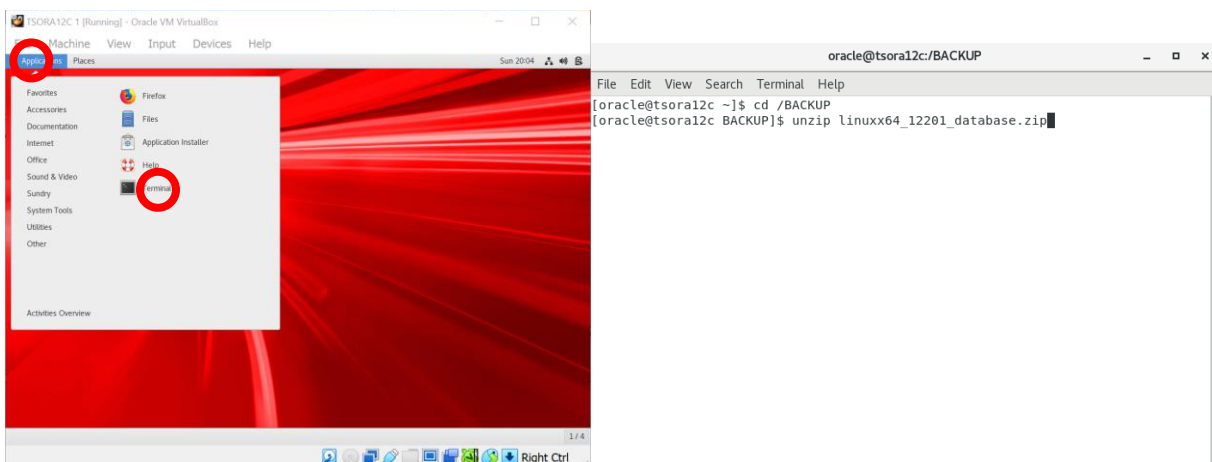
2. Sign In user **Oracle** โดยใช้รหัสผ่านเป็น **welcome1**

ขั้นตอนการติดตั้ง Oracle

1. เปิด Terminal ขึ้นมา ใช้คำสั่งข้างล่างเพื่อแตกไฟล์

`cd /BACKUP`

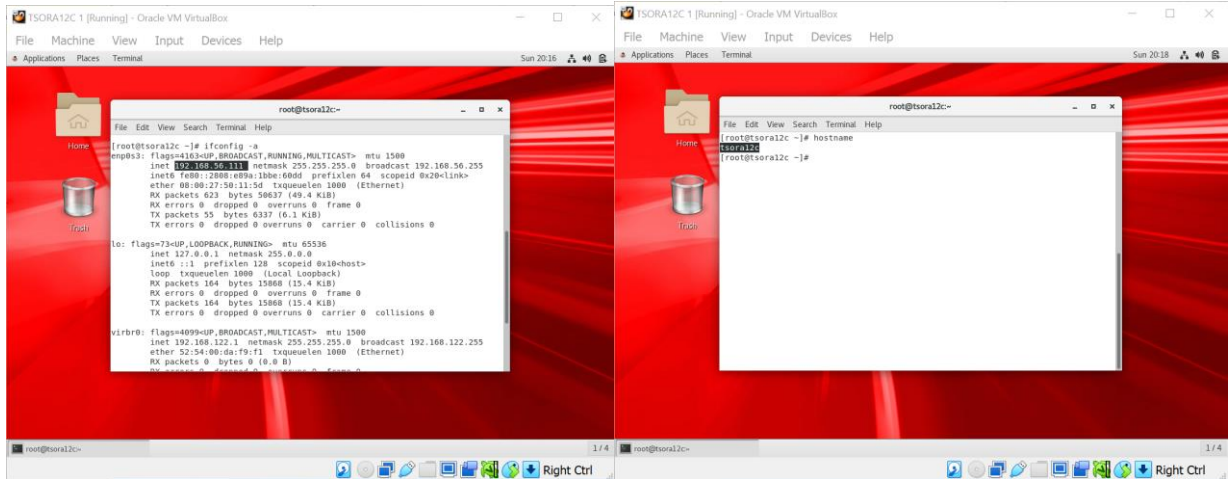
`unzip linuxx64_12201_database.zip`



2. ใช้คำสั่งข้างล่างเพื่อเพิ่ม IP address เข้าไปที่ไฟล์ Hosts

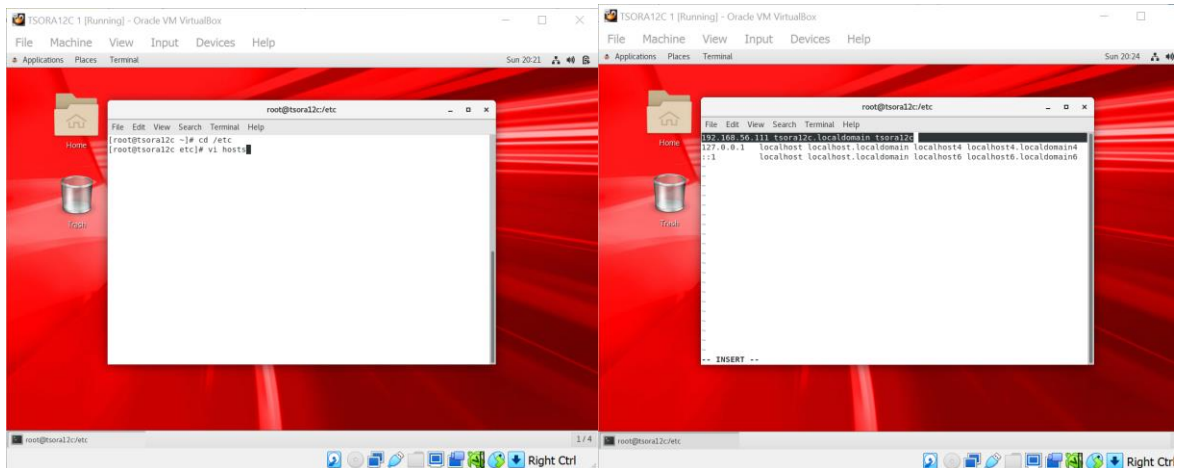
ifconfig -a

hostname



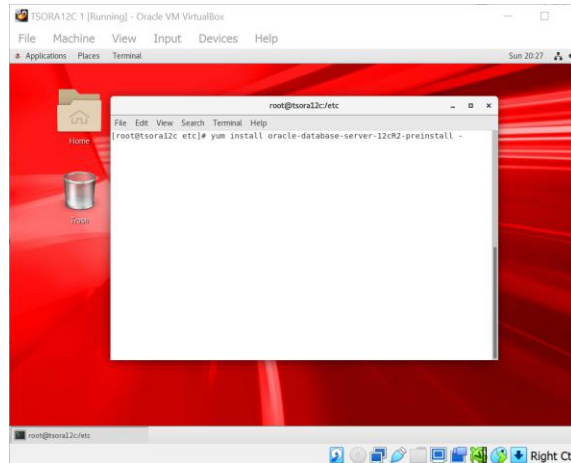
cd /etc

vi host และ กด **a** เพื่อเพิ่มข้อมูล และเพิ่มข้อมูลตาม ip และ host ที่ได้ check ก่อนหน้านี้ และกด **esc** ตามด้วย **shift + ;** และพิมพ์ **wq!** เพื่อบันทึกและออก



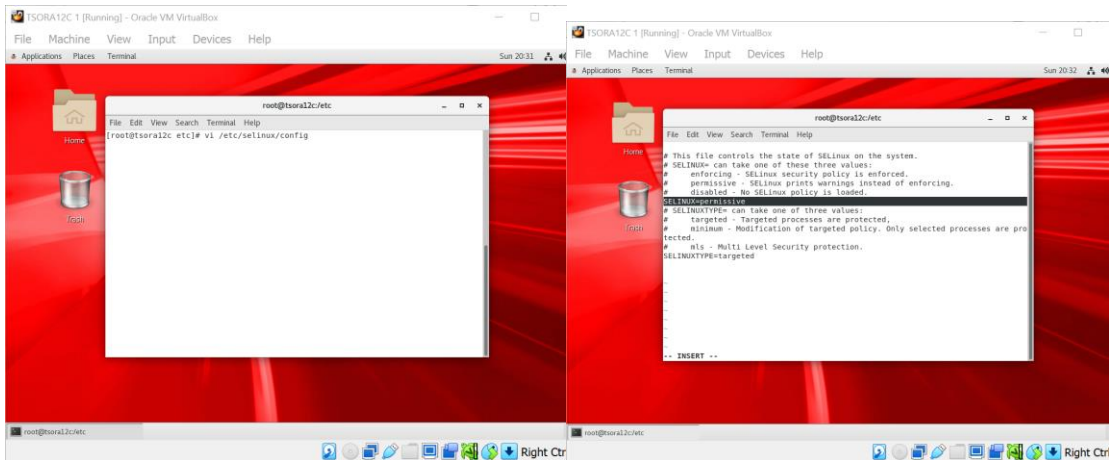
3. ทำการติดตั้ง Package โดยการใส่คำสั่ง

yum install oracle-database-server-12cR2-preinstall -y



4. Set secure Linux to permissive และ ทำการปิด firewall

vi /etc/selinux/config และ กด a เพื่อเพิ่มข้อมูล และเปลี่ยนข้อมูลเป็น **SELINUX=permissive** และกด **esc** ตามด้วย **shift + ;** และพิมพ์ **wq!** เพื่อบันทึกและออก

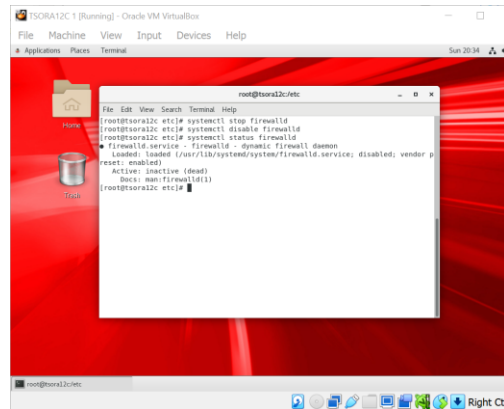


ปิด firewall โดยใช้คำสั่ง

systemctl stop firewalld

systemctl disable firewalld

และ **systemctl status firewalld** เพื่อตรวจสอบว่า firewall ยังทำงานอยู่หรือไม่



5. สร้าง Directorie เพื่อรองรับโปรแกรม Oracle

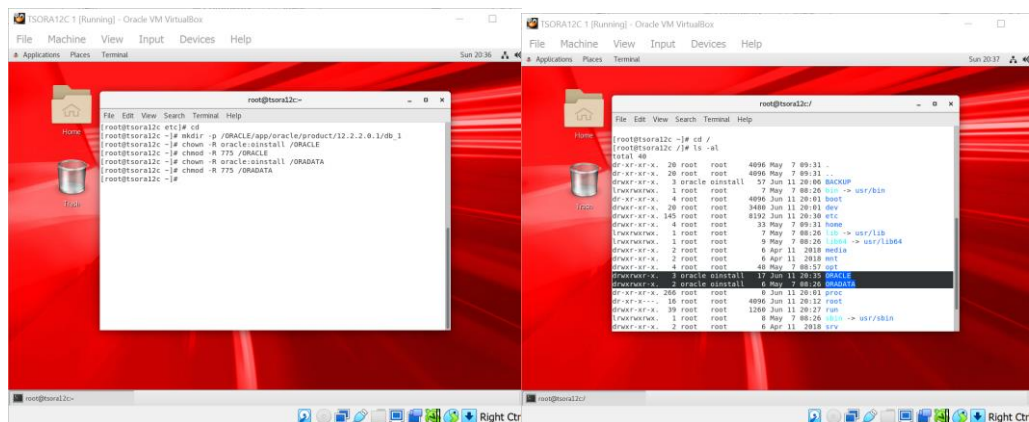
mkdir -p /ORACLE/app/oracle/product/12.2.2.0.1/db_1

chown -R oracle:oinstall /ORACLE

chmod -R 775 /ORACLE

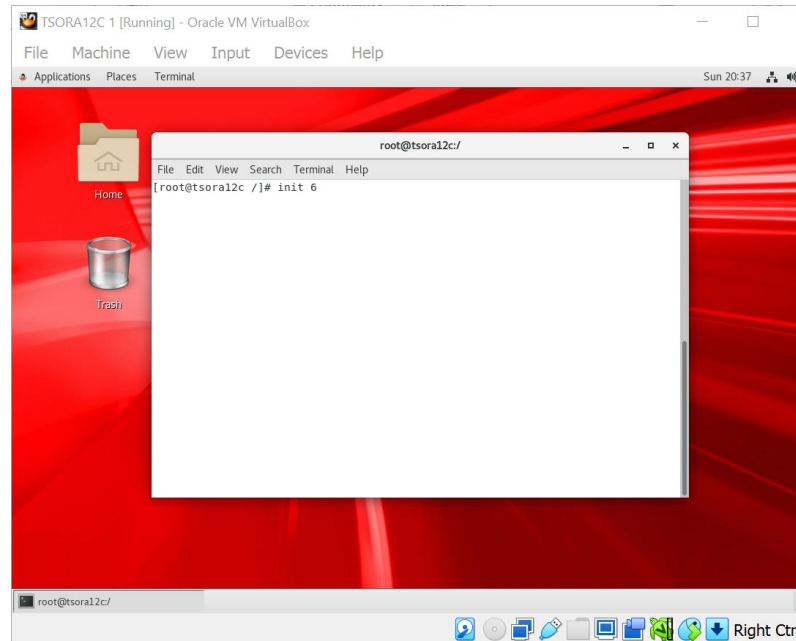
chown -R oracle:oinstall /ORADATA

chmod -R 775 /ORADATA และ cd / กับ ls -al



Restart OS โดยใช้คำสั่ง

INIT 6



6. สร้างไฟล์ที่มีชื่อว่า .menuORA โดยใช้คำสั่ง

Vi .menuORA และเพิ่มข้อมูลต่อไปนี้ลงไปไฟล์

```
#
```

```
# menu
```

```
#
```

```
trap "" 2
```

```
while true ; do
```

```
#
```

```
# In case no argument input into script
```

```
if [ "$1" = "" ] ; then
```

```
    clear
```

```
    echo "-----"
```

```
    echo "Please select database to login          "
```

```
    echo "1) TSDB12C                               "
```

```
    echo "-----"
```

```
    echo "choose (1,2) :lc"
```

```

        read CHOICE
        echo

#

# In case have argument input

else

if [ "$1" = "1" ] || [ "$1" = "2" ] ; then
    CHOICE=$1
#
# if argument isn't " 1/2 " then script'll show menu for choose
else
    CHOICE=""
    while [ "$CHOICE" != "1" ] && [ "$CHOICE" != "2" ]; do
        clear
        echo "-----"
        echo "Please select database to login          "
        echo "1) TSDB12C                                "
        echo "-----"
        echo "choose (1,2) :\c"

        read CHOICE
    done
fi
fi

case $CHOICE in

1) ORACLE_BASE=/ORACLE
    ORACLE_HOME=/ORACLE/app/oracle/product/12.2.0.1/db_1

```

```

ORACLE_SID=TSDB12C
ORACLE_UNQNAME=TSDB12C
NLS_LANG=AMERICAN_AMERICA.TH8TISASCII
EDITOR=vi
PATH=$PATH:$ORACLE_HOME/OPatch:$ORACLE_HOME/bin
export ORACLE_BASE ORACLE_HOME ORACLE_SID NLS_LANG PATH EDITOR
ORACLE_UNQNAME

break ;;

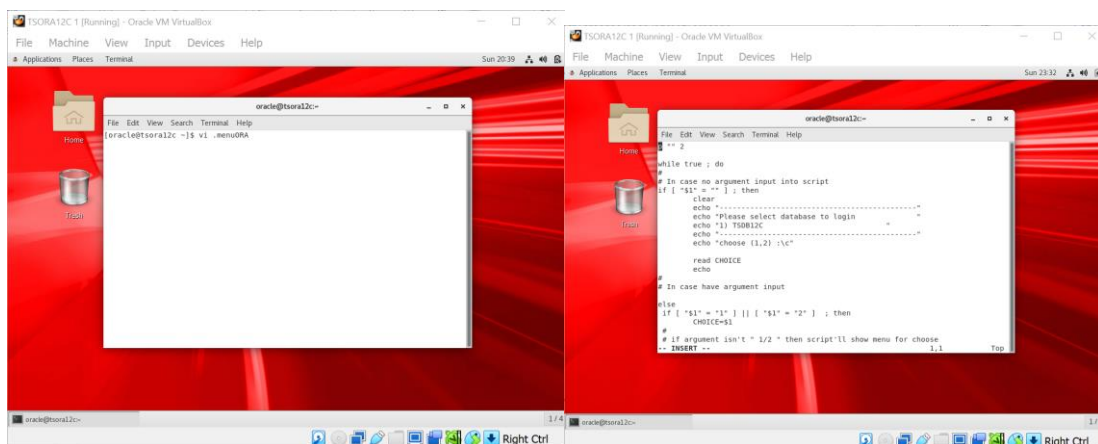
esac

done

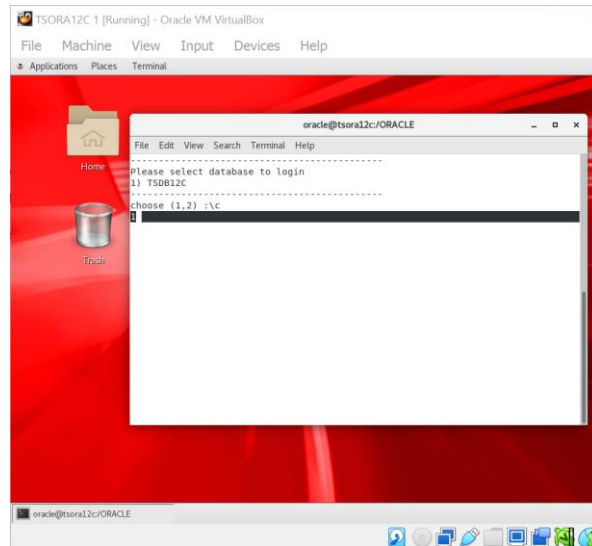
echo "Change ORACLE_SID run $. .menuORA"
echo "-----"

```

จากนั้น ใช้คำสั่ง **chmod 775 .menuORA**



7. ใช้งาน .menuORA เพื่อเปลี่ยน Environment ด้วยคำสั่ง
.**menuORA** โดยเลือก 1 แล้วกด ENTER



และใช้คำสั่งต่อไปนี้

cd /ORACLE

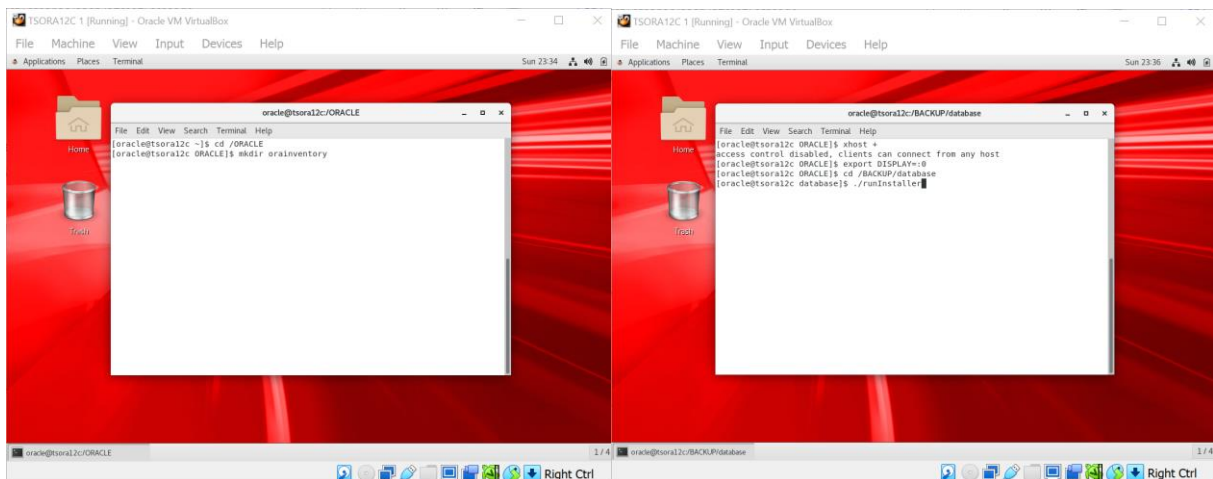
mkdir orainventory

xhost +

export DISPLAY=:0

cd /BACKUP/database

./runInstaller



Oracle Database 12c Release 2 Installer - Step 1 of 10

Configure Security Updates

Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details](#)

Email:

Easier for you if you use your My Oracle Support email address/username

☐ I wish to receive security updates via My Oracle Support.

My Oracle Support Password:

Help < Back Next > Install Cancel

Oracle Database 12c Release 2 Installer - Step 2 of 10

Select Installation Option

Select any of the following install options.

☐ Create and configure a database

☒ Install database software only

☐ Upgrade an existing database

Help < Back Next > Install Cancel

Oracle Database 12c Release 2 Installer - Step 4 of 10

Select Database Edition

Which database edition do you want to install?

☒ Enterprise Edition (7.5GB)

Oracle Database 12c 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 (7.5GB)

Oracle Database 12c Standard Edition 2 is a full-featured data management solution ideally suited to the needs of medium-sized businesses. It includes Oracle Real Application Clusters for enterprise-class availability and comes complete with its own Oracle Clusterware and storage management capabilities.

Help < Back Next > Install Cancel

Oracle Database 12c Release 2 Installer - Step 6 of 10

Create Inventory

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: Browse...

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

orainventory Group Name:

Help < Back Next > Install Cancel

Oracle Database 12c Release 2 Installer - Step 1 of 10

Configure Security Updates

Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details](#)

Email:

Easier for you if you use your My Oracle Support email address/username

My Oracle Support Username/Email Address Not Specified

You have not provided an email address.

Do you wish to remain uninformed of critical security issues in your configuration?

Yes No

Help < Back Next > Install Cancel

Oracle Database 12c Release 2 Installer - Step 3 of 10

Select Database Installation Option

Select the type of database installation you want to perform.

☒ Single instance database installation

☐ Oracle Real Application Clusters database installation

☐ Oracle RAC Onq Node database installation

Help < Back Next > Install Cancel

Oracle Database 12c Release 2 Installer - Step 5 of 10

Specify Installation Location

Specify a path to place all Oracle software and configuration-related files installed by this installation owner. This location is the Oracle base directory for the installation owner.

Oracle base: Browse...

Specify a location for storing Oracle database software files separate from database configuration files in the Oracle base directory. This software directory is the Oracle database home directory.

Software location: Browse...

Help < Back Next > Install Cancel

Oracle Database 12c Release 2 Installer - Step 7 of 11

Privileged Operating System groups

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 Administrator (OSDBA) group:

Database Operator (OSOPER) group (Optional):

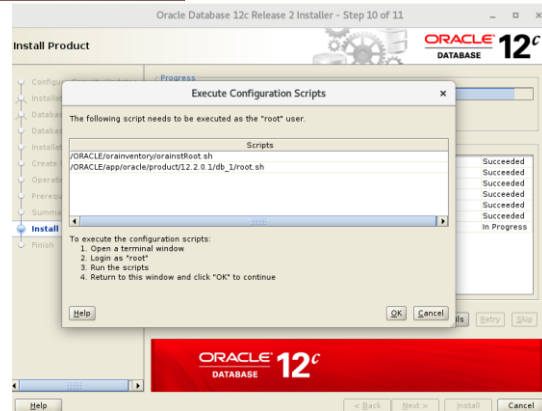
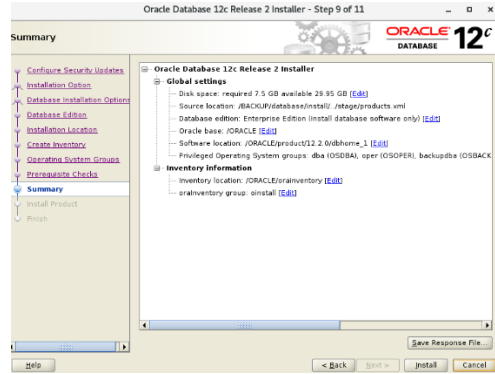
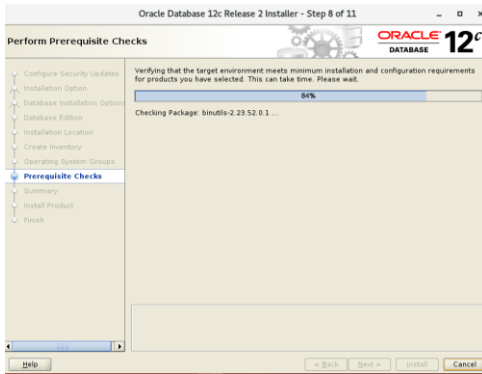
Database Backup and Recovery (OSBACKUPDBA) group:

Data Guard administrative (OSDGDBA) group:

Encryption Key Management administrative (OSKMDBA) group:

Real Application Cluster administrative (OSRACDBA) group:

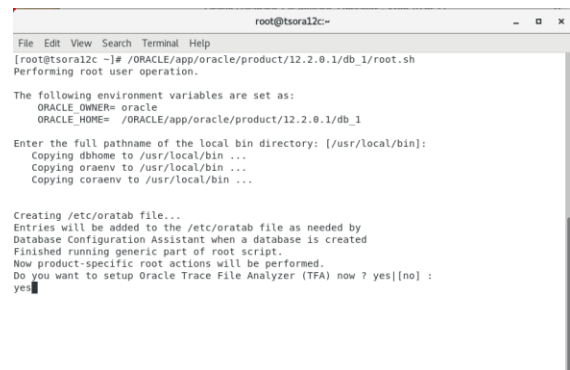
Help < Back Next > Install Cancel



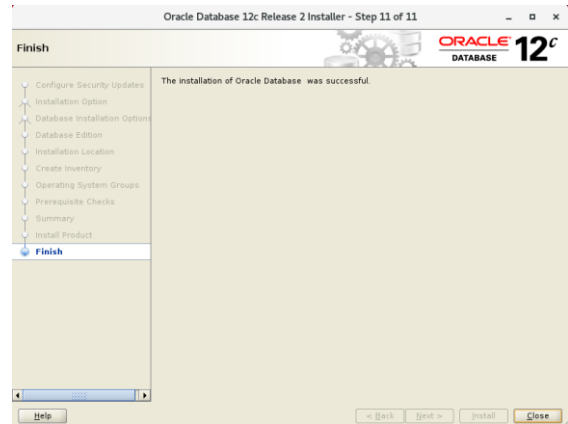
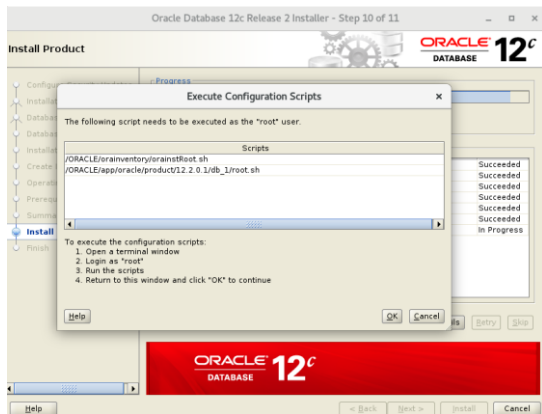
8. เปิด Terminal แล้วรัน Scripts สองตัวตามที่หน้าต่างแจ้งเตือน

/ORACLE/orainventory/orainstRoot.sh

/ORACLE/product/12.2.0/dbhome_1/root.sh



กลับไปหน้าจอ Installer และปิด

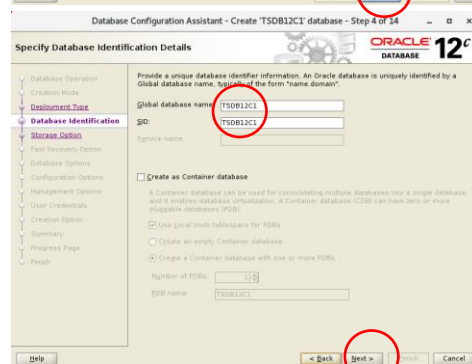
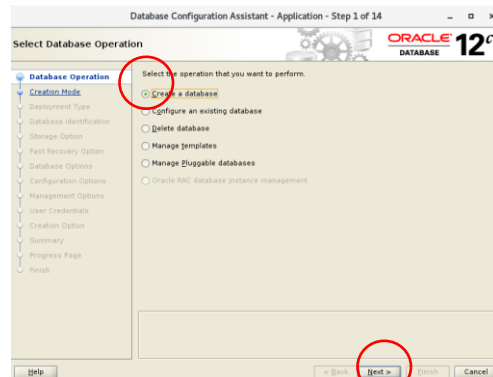
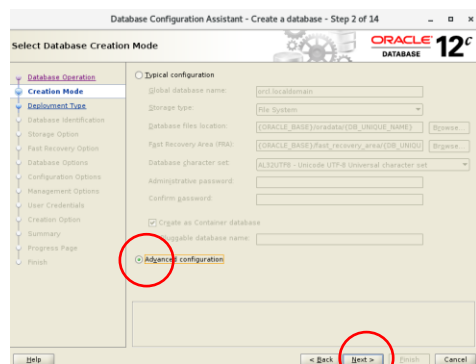
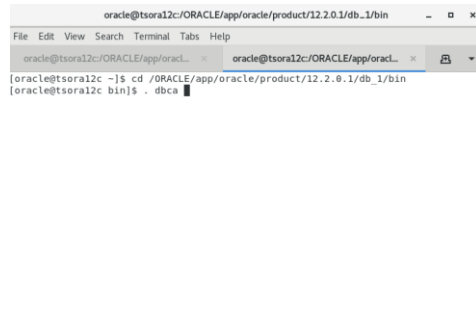


9. เปิด Terminal แล้วใส่คำสั่ง

`cd /ORACLE/app/oracle/product/12.2.0.1/db_1/bin`

`. dbca`

เพื่อเปิด Database Configuration Assistant



Database Configuration Assistant - Create a database - Step 3 of 14

Select Database Deployment Type

Select the type of database you want to create.

Database type: **Oracle Single Instance database**

Configuration type: **Admin Managed**

Select a template for your database.

Templates that include datafiles contain pre-created databases. They allow you to create a new database quickly. Use templates without datafiles only when necessary, such as when you need to change attributes like block size that cannot be altered after database creation.

Template name	Include datafiles	Details
<input type="radio"/> Custom Database	No	View details
<input checked="" type="radio"/> General Purpose or Transaction Processing	Yes	View details
<input type="radio"/> Data Warehouse	Yes	View details

Template location: /ORACLE/app/oracle/product/12.2.0.1/db_1/assistants/dbca/templates [Change...](#)

[Help](#) [Back](#) [Next >](#) [Finish](#) [Cancel](#)

Database Configuration Assistant - Create 'TSDB12C1' database - Step 6 of 14

Select Fast Recovery Option

Choose the recovery options for the database.

☐ Specify Fast Recovery Area

Recovery files storage type: **File System**

Fast Recovery Area: **[ORACLE_BASE]/fast_recovery_area/[DB_UNIQUE]** [Browse...](#)

Fast Recovery Area size: **8016** MB

☐ Enable archiving [Edit archive mode parameters...](#)

[Help](#) [Back](#) [Next >](#) [Finish](#) [Cancel](#)

Database Configuration Assistant - Create 'TSDB12C1' database - Step 5 of 14

Select Database Storage Option

☐ Use template file for database storage attributes
Storage type and location for database files will be picked up from the specified template (General Purpose or Transaction Processing).

☒ Use following for the database storage attributes
All the database files will be put at the specified location below. You can customize the name and location of each datafile in the subsequent screen.

Database files storage type: **File System**

Database files location: **/ORADATA** [Browse...](#)

Oracle Managed files option will enable Oracle to automatically generate the names of the datafiles for simplified database management.

☐ Use Oracle-Managed Files (OMF) [Multiple redo logs and control files...](#)

[File location variables...](#)

[Help](#) [Back](#) [Next >](#) [Finish](#) [Cancel](#)

Database Configuration Assistant - Create 'TSDB12C1' database - Step 7 of 14

Specify Network Configuration Details

Listener selection

Listeners from current Oracle home are listed below. Specify the listener name and port to create a new listener in current Oracle home.

Name	Port	Oracle home	Status
<input checked="" type="checkbox"/> LISTENER	1521	/ORACLE/app/oracle/product/12.2.0.1/db_1	Down

☒ Create a new listener

Listener name: **Listener1**

Listener port: **1521**

Oracle home: **/ORACLE/app/oracle/product/12.2.0.1/db_1**

[Help](#) [Back](#) [Next >](#) [Finish](#) [Cancel](#)

Database Configuration Assistant - Create 'TSDB12C1' database - Step 9 of 15

Select Oracle Data Vault Config Option

☐ Configure Oracle Database Vault

Database Vault owner: **DBV** Password: **DBV** Confirm password: **DBV**

☐ Create a separate account manager

Account manager: **DBV** Password: **DBV** Confirm password: **DBV**

☐ Configure Oracle Label Security

☐ Configure Oracle Label Security with ODP

[Help](#) [Back](#) [Next >](#) [Finish](#) [Cancel](#)

Database Configuration Assistant - Create 'TSDB12C1' database - Step 9 of 15

Specify Configuration Options

Memory **Character sets** **Connection mode** **Sample schemas**

The database character set determines how character data is stored in the database.

☐ Use Unicode (AL32UTF8)

Setting character set to Unicode (AL32UTF8) enables you to store multiple language groups.

☐ Use OS character set (NCHAR_CS)

Character set is based on the language setting of this operating system.

☒ Choose from the list of character sets

Database character set: **TH8TISASCS Thai Industrial Standard 620-2533 - ASCII 8-bit**

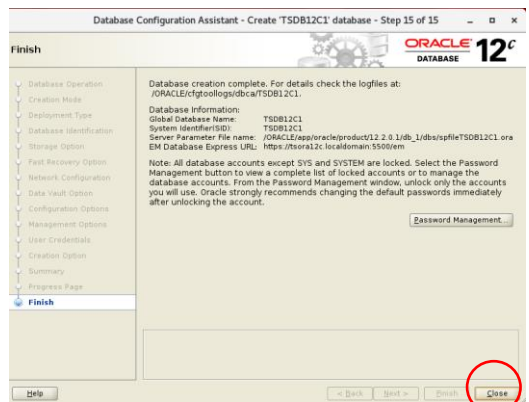
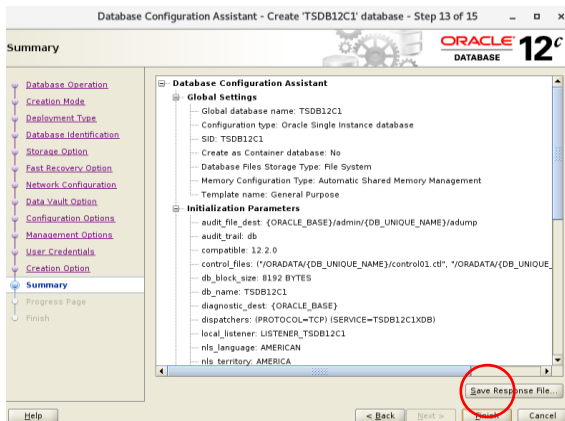
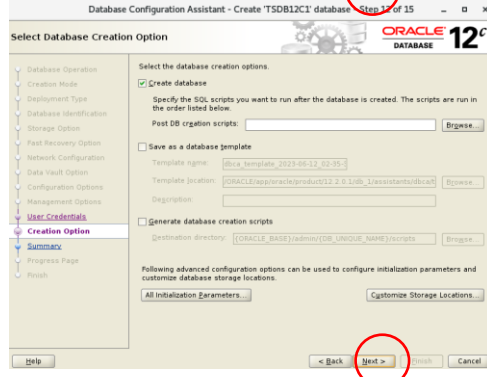
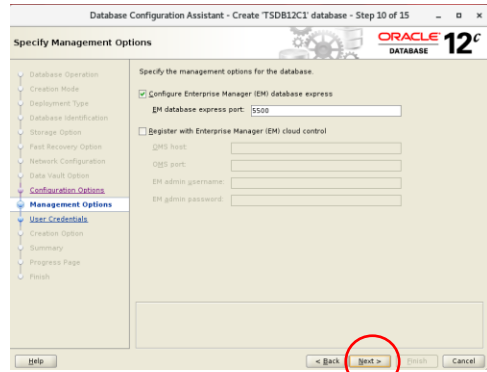
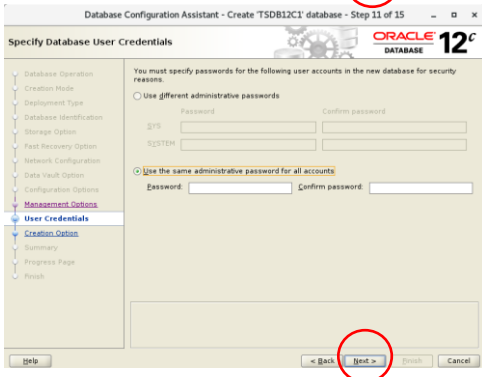
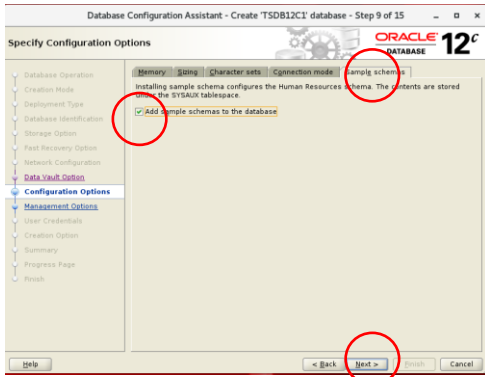
[Show recommended character sets only](#)

National character set: **AL32UTF16 - Unicode UTF-16 Universal character set**

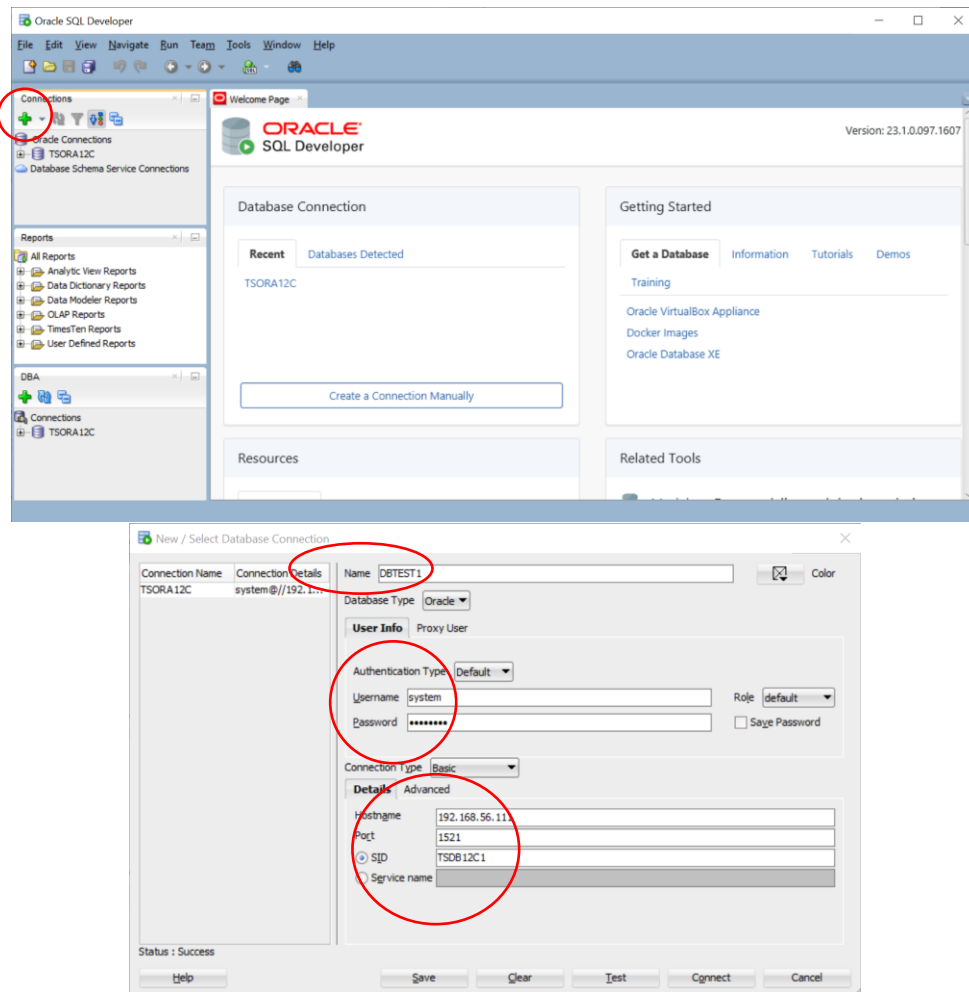
Default language: **American**

Default territory: **United States**

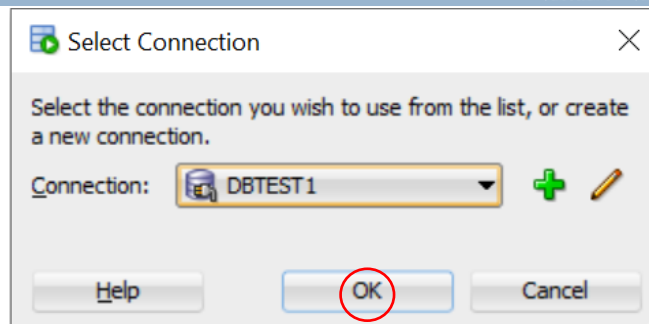
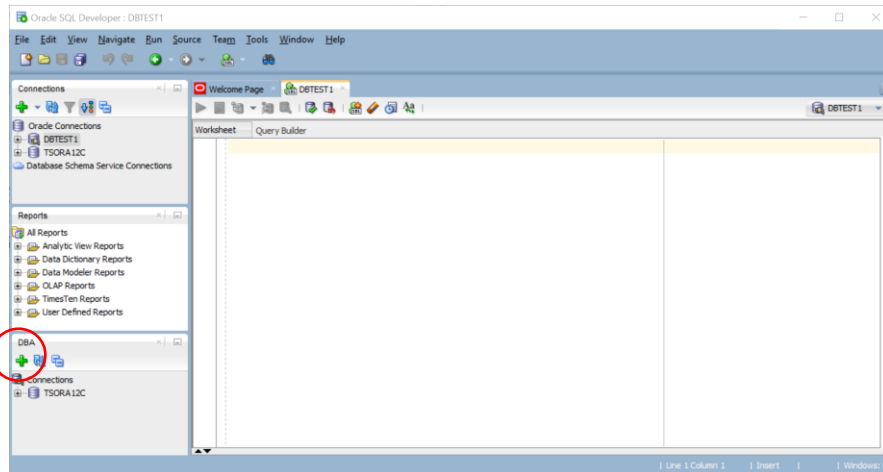
[Help](#) [Back](#) [Next >](#) [Finish](#) [Cancel](#)



วิธีการเข้า Database



Test และ Connect หาก Success



Success

