



# Installing and Configuring Oracle 11g on Windows for Use with the ETM<sup>®</sup> System

v7.0.0 or Later



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# Installing the Oracle 11g Software

## Installing and Configuring Oracle 11g for the ETM<sup>®</sup> System

This document explains how to install the Oracle 11g software on Windows and then run the Perl scripts to prepare the database for use with the ETM<sup>®</sup> System v7.0 or later. Enterprise Edition, Standard Edition, Standard Edition One, and XE are supported.

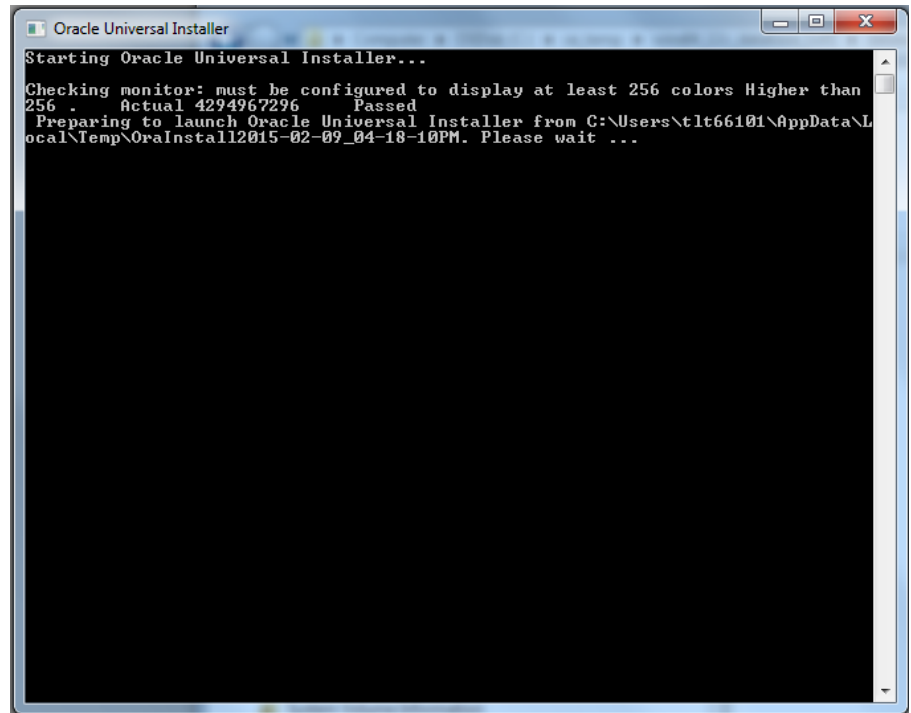
**IMPORTANT:** If you are installing XE, a different set of instructions and script apply. See “Installing and Configuring Oracle 11gXE for the ETM<sup>®</sup> System” available from the SecureLogix Knowledge Base.

This document describes Enterprise Edition installation. Minor variations may occur when installing other editions.

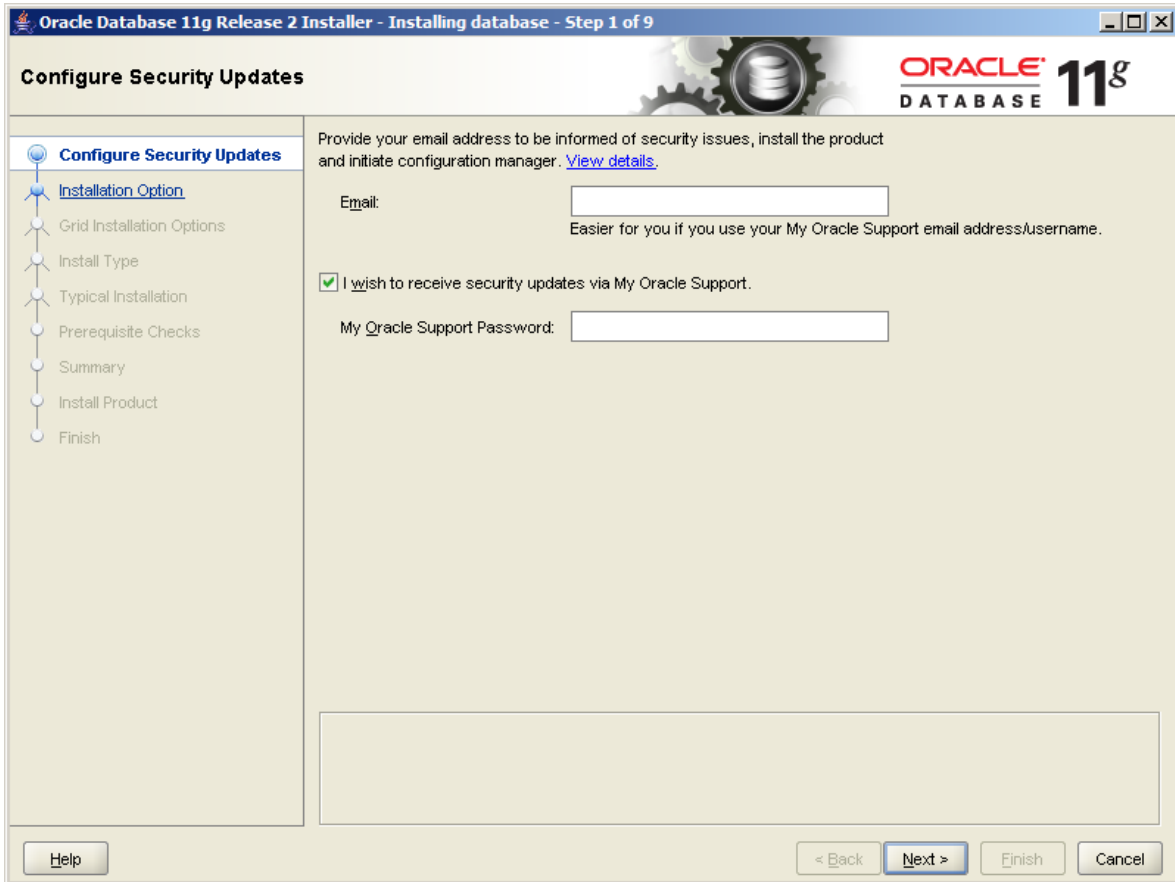
### Installing Oracle 11g Enterprise Edition

#### To install the software

1. From the Oracle installation media or the directory in which you unzipped the download files, execute **setup.exe** as Administrator to start the Oracle 11g Universal Installer:

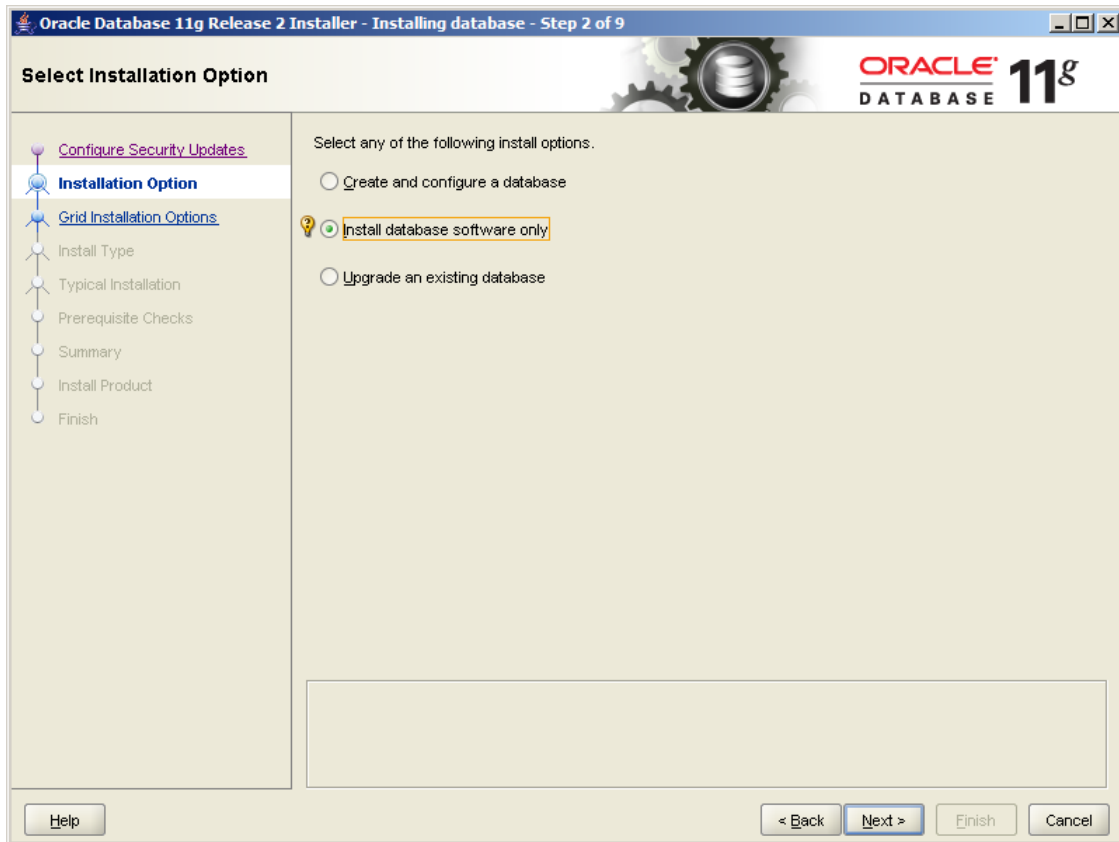


2. The **Configure Security Updates** dialog box appears.



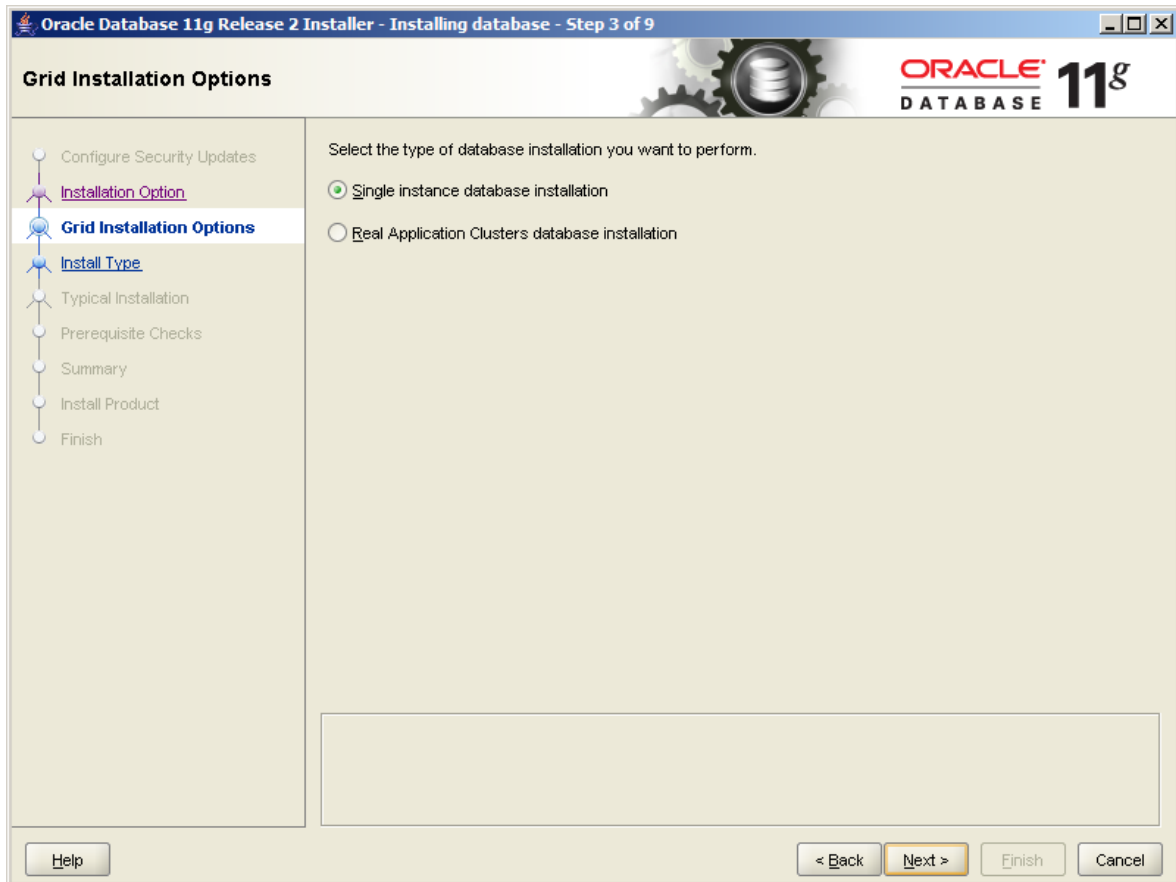
3. Optionally, type the email address to which security updates are to be sent, or provide your Oracle support information, and then click **Next**.

The **Select Installation Option** dialog box appears.



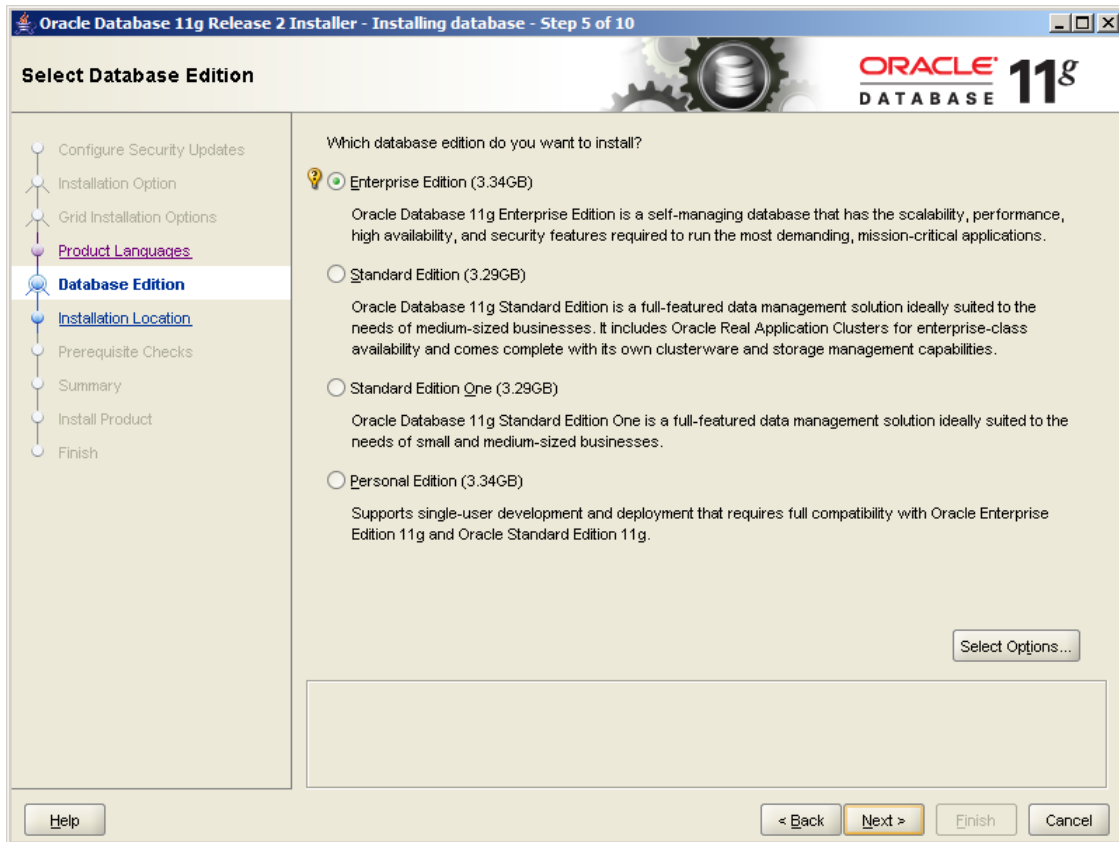
4. Select **Install database software only** and then click **Next**.  
The **Grid Installation Options** dialog box appears.



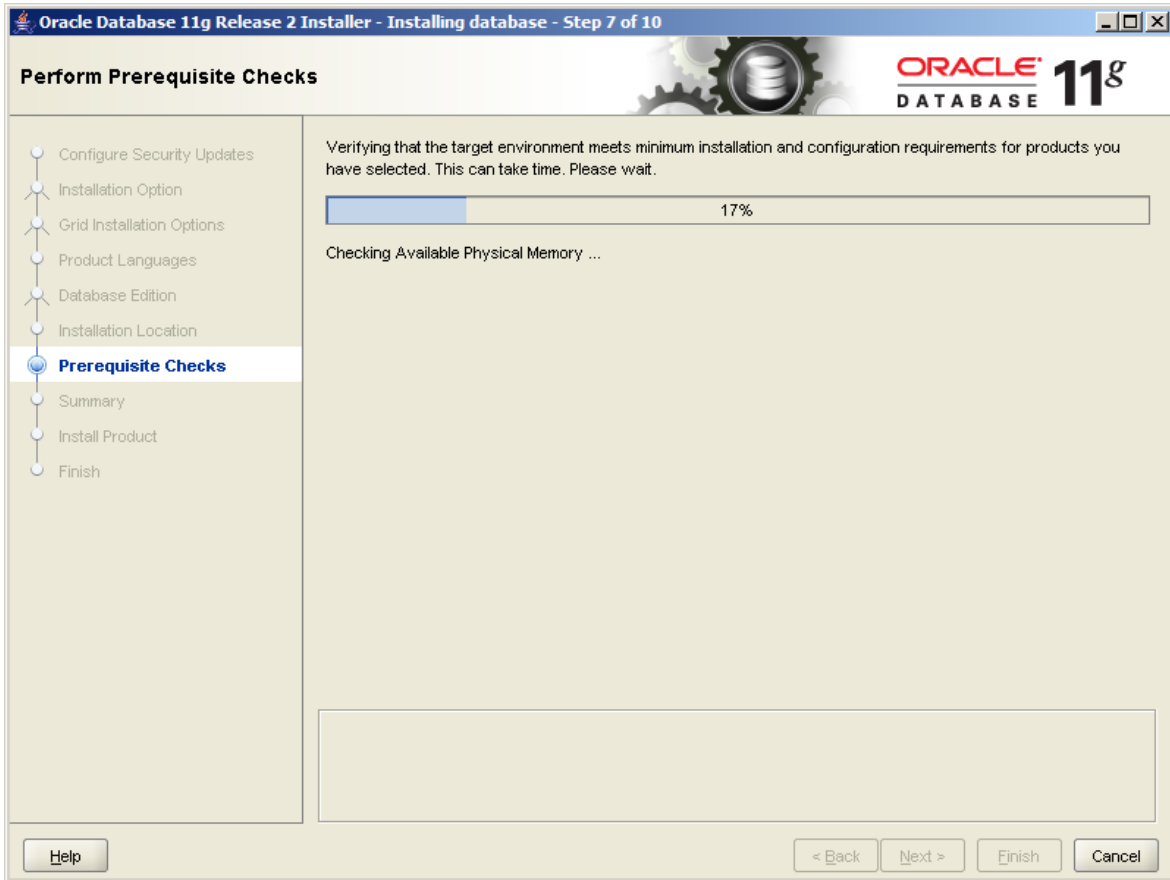


5. Select **Single instance database installation** and then click **Next**.
6. If you are prompted to set a language option, leave the default of English and click **Next**.

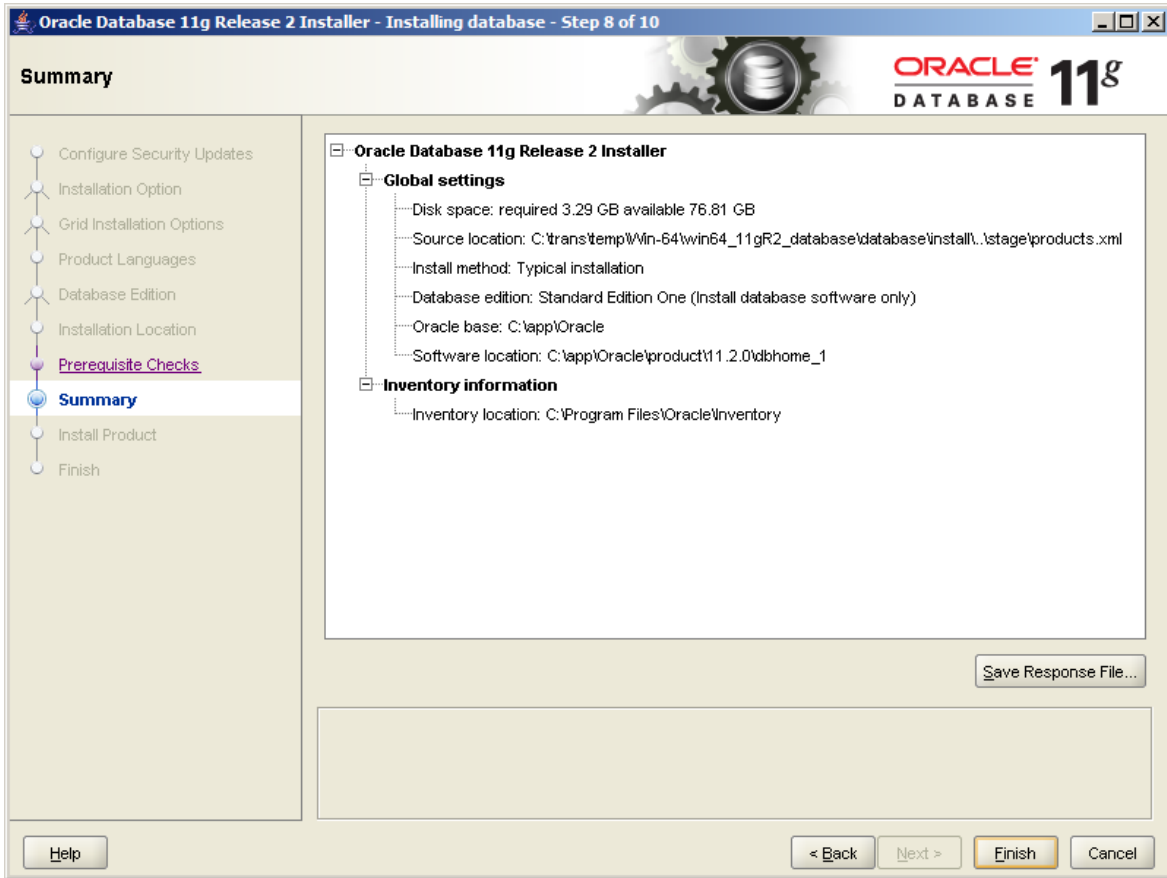
The **Select Database Edition** dialog box appears.



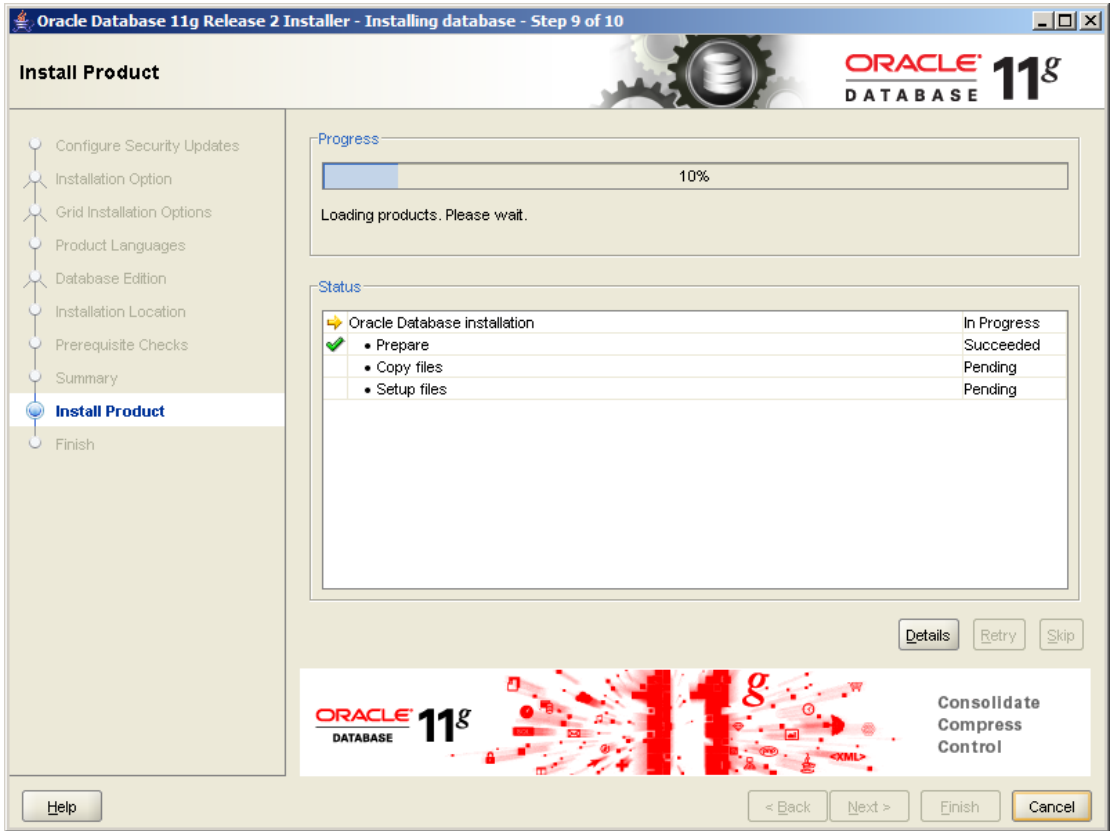
7. Select the edition you have licensed and click **Next**. In this document, **Enterprise** is selected. Minor variations to the screens may occur if you are using a different edition.
8. The **Specify Installation Location** dialog box appears. Modify the paths or accept the defaults, and then click **Next**.  
The **Product-Specific Prerequisite Checks** dialog box appears.



9. The **Summary** dialog box appears reflecting the settings you chose.



10. Click **Install**. The **Install Product** dialog box appears.



11. When installation is complete, click **Next**.  
The **Finish** dialog box appears.



12. Click **Close**.

### ***Verifying ActivePerl is in Your System PATH***

Active Perl is used to run the database creation and configuration scripts. Oracle 11g (Enterprise and Standard) includes a version of ActivePerl with the installation.

**IMPORTANT** Be sure that the ActivePerl "bin" directory is in your system PATH variable.

## Running the Oracle Database Configuration Script

### To run the database creation and configuration script

1. Open a command prompt as Administrator in the ETM scripts directory: **<INSTALL\_DIR>\scripts\Oracle**.
2. At the prompt, type: **oracle\_install.pl**
3. Follow the onscreen prompts.
  - Some prompts provide default values that you can accept by pressing ENTER. These are denoted by square brackets.
  - Example input is denoted by parentheses. You must type a value for these items; no default values are provided.

Sample output of running the script is provided below.

After you run the script, continue with “Configure the TNS Listener” on page 21.

### *Sample output of running oracle\_install.pl*

```
C:\Program Files\SecureLogix\ETM\scripts\Oracle> perl
oracle_install.pl

Please enter your OS Type (DOS/UNIX) [DOS]:
Please enter your Domain Name (securelogix.com): securelogix.com
securelogix.com - Is this correct? (y/n) [n]: y
Please enter your Host Address [10.1.25.149]:
10.1.25.149 - Is this correct? (y/n) [n]: y
Please Enter the value for ORACLE_BASE (C:\app\oracle\): c:\app\
oracle\
Are you sure you want to set ORACLE_BASE to c:\app\oracle\? (y/n): y
Please Specify the Oracle version. (10 or 11): 11
Found directory c:\app\oracle\product\11.2.0\dbhome_1\
Set ORACLE_HOME to: 'c:\app\oracle\product\11.2.0\dbhome_1\'? (y/n)
[y]:
Set ORACLE_DATA to: 'c:\app\oracle\oradata\'? (y/n) [y]:
```

```
Please Enter the value for ORACLE SID: ETMDB
ETMDB - Is this correct? (y/n) [Y]:
Please enter the listener port for Oracle [1521]:
1521 - Is this correct? (y/n) [y]:
Creating Data Directories for SID: ETMDB
Attempting to create directory: c:\app\oracle\admin\ETMDB\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\adhoc\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\arch\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\bdump\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\cdump\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\create\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\exp\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\pfile\
...Success.
Attempting to create directory: c:\app\oracle\admin\ETMDB\udump\
...Success.
Attempting to create directory: c:\app\oracle\oradata\ETMDB\
...Success.
Would you like the script to create the orapwd file? (y/n) [y]:
Would you like the script to modify the listener.ora file? (y/n)
[y]:
Would you like the script to modify the tnsnames.ora file? (y/n)
[y]:
Would you like to create the init.ora file for this database? (y/n)
[y]:
Would you like the script to create the Database Service for
Windows? (y/n) [y]:

Enter password for Oracle service user:
Instance created.
```



Would you like to generate the Oracle scripts to generate the database? (y/n) [y]:

Please enter the preferred Tablespace name [ETM]:

Please enter the ETM User name [etmuser]:

Please specify the password for the ETM User: <password>

Please re-enter the password for the ETM User: <password>

Would you like to generate the Oracle scripts to generate a non-owner ETM application user? (y/n) [n]:

Create Database Sql script written to:  
C:\app\oracle\product\11.2.0\dbhome\_1\admin\ETMDB\create\create\_db\_ETMDB.sql

These scripts contain the details of how the database will be created. If you would like to configure the tablespaces, redo files, rollback segments, or other parameters, please modify this file before running it.

Would you like to run the Oracle scripts to generate the database? (y/n) [y]:

Please enter the password for database user 'sys' [change\_on\_install]:

```
C:\app\oracle\product\11.2.0\dbhome_1\bin\sqlplus
"sys/change_on_install AS SYS
DBA"
@C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB\create\create_db_ETMDB.sql
```

SQL\*Plus: Release 11.2.0.1.0 Production on Thu Feb 19 15:52:00 2015

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Connected to an idle instance.

```
SQL>
SQL> REM * Actually starts the database instance
SQL> startup nomount
pfile="C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB\pfile\init.ora"
ORACLE instance started.
```

```
Total System Global Area 534462464 bytes
Fixed Size                2177456 bytes
Variable Size             163579472 bytes
Database Buffers         360710144 bytes
Redo Buffers              7995392 bytes
```

```
SQL>
```

```
SQL> REM * Creates the physical database.  Feel free to customize
the redo logs
```

```
here.
```

```
SQL> CREATE DATABASE ETMDB
```

```
 2  MAXLOGFILES 32
 3  MAXLOGMEMBERS 2
 4  MAXLOGHISTORY 1
 5  MAXDATAFILES 254
 6  MAXINSTANCES 1
 7  MAXLOGHISTORY 5000
 8  DATAFILE
'C:\app\oracle\product\11.2.0\dbhome_1\oradata\ETMDB\system01.dbf'
SIZE 150M REUSE AUTOEXTEND ON NEXT      10240K MAXSIZE UNLIMITED
 9  EXTENT MANAGEMENT LOCAL
10  SYSAUX DATAFILE
'C:\app\oracle\product\11.2.0\dbhome_1\oradata\ETMDB\sysaux01.dbf'
SIZE 120M REUSE AUTOEXTEND ON NEXT 10240K MAXSIZE UNLIMITED
11  SMALLFILE DEFAULT TEMPORARY TABLESPACE TEMP TEMPFILE
'C:\app\oracle\product
\11.2.0\dbhome_1\oradata\ETMDB\temp01.dbf' SIZE 500M REUSE
AUTOEXTEND ON
12  SMALLFILE UNDO TABLESPACE "UNDOTBS1" DATAFILE
'C:\app\oracle\product\11.2.0
\dbhome_1\oradata\ETMDB\undotbs01.dbf' SIZE 500M REUSE AUTOEXTEND ON
13  LOGFILE
'C:\app\oracle\product\11.2.0\dbhome_1\oradata\ETMDB\redo01.log'
SIZE 10M,
```

```
14
'C:\app\oracle\product\11.2.0\dbhome_1\oradata\ETMDB\redo02.log'
SIZE 1
0M,
15
'C:\app\oracle\product\11.2.0\dbhome_1\oradata\ETMDB\redo03.log'
SIZE 10M;
```

Database created.

```
SQL>
```

```
SQL> CREATE TABLESPACE "ETM" LOGGING
2     DATAFILE
'C:\app\oracle\product\11.2.0\dbhome_1\oradata\ETMDB\ETM01.dbf' SIZE
100M
3     AUTOEXTEND ON NEXT 10M
4     EXTENT MANAGEMENT LOCAL;
```

Tablespace created.

```
SQL>
```

```
SQL> REM * Create the default user for use with the system.
SQL> CREATE USER etmuser PROFILE "DEFAULT" IDENTIFIED BY "etmuser"
2     DEFAULT
3     TABLESPACE "ETM" TEMPORARY
4     TABLESPACE "TEMP" ACCOUNT UNLOCK;
```

User created.

```
SQL>
```

```
SQL> REM * Explicitly grant the required system privileges. We
explicitly grant
SQL> REM * the privileges as opposed to granting them via roles due
to the fact
SQL> REM * that when running jobs via DBMS_JOB.RUN() roles are
ignored. Since
```

```
SQL> REM * we use DBMS_JOB to run various maintenance procedures, we  
go ahead
```

```
SQL> REM * and explicitly grant the privileges to cover all our  
bases. (For more
```

```
SQL> REM * information refer to the Oracle Database documentation  
sets for the
```

```
SQL> REM * corresponding Oracle version regarding the DBMS_JOB  
package).
```

```
SQL> GRANT ALTER SESSION TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE PROCEDURE TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE SEQUENCE TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE SESSION TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE MATERIALIZED VIEW TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE TABLE TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE TRIGGER TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE VIEW TO etmuser;
```

Grant succeeded.

```
SQL> GRANT CREATE ANY SYNONYM TO etmuser;
```

Grant succeeded.

```
SQL> GRANT DROP ANY SYNONYM TO etmuser;
```

Grant succeeded.

```
SQL> GRANT SELECT ANY DICTIONARY TO etmuser;
```

Grant succeeded.

```
SQL>
```

```
SQL> REM * By default, just grant the user unlimited use of the  
tablespaces.
```

```
SQL> REM * DBAs may optionally revoke this grant and set up specific  
quotas
```

```
SQL> REM * for the various tablespaces.
```

```
SQL> GRANT UNLIMITED TABLESPACE TO etmuser;
```

Grant succeeded.

```
SQL>
```

```
SQL>
```

```
SQL>
```

```
SQL> spool off
```

```

SQL> EXIT

Disconnected from Oracle Database 11g Release 11.2.0.1.0 - 64bit
Production

Database creation script executed.  Verify output and press 'y' to
continue (y/n) [y]:

Would you like to generate the initialization script that needs to
be run by sys? (y/n) [y]:

Sys Init Sql script written to:
C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB

B\create\sys_init_ETMDB.sql

Would you like to run the 'sys db init' scripts to initialize the
database? (y/n) [y]:

Depending on the system, this script may require up to 30 minutes to
complete.

Please be patient.  To verify script is running, you can check the
log file at:

C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB\create\sys_init_ET
MDB.log and make sure data is being written to file.

C:\app\oracle\product\11.2.0\dbhome_1\bin\sqlplus
"sys/change_on_install AS SYS
DBA"
@C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB\create\sys_init_E
TMDB.sql
1 > NUL

Sys Init Sql script executed.  Check sys_init_ETMDB.log to verify
status

Would you like to generate the initialization script that needs to
be run by system? (y/n) [y]:

System Init Sql script written to:
C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB\create\system_init
_ETMDB.sql

Would you like to run the 'system db init' scripts to initialize the
database? (y/n) [y]:

Please enter the password for database user 'system' [manager]:

C:\app\oracle\product\11.2.0\dbhome_1\bin\sqlplus "system/manager "
@C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB\create\system_ini
t_ETMDB.sql > NUL

```

```
System Init Sql script executed.  Check system_init_ETMDB.log to
verify status

C:\app\oracle\product\11.2.0\dbhome_1\bin\sqlplus
"sys/change_on_install AS SYS
DBA"
@C:\app\oracle\product\11.2.0\dbhome_1\admin\ETMDB\create\post_creat
e_grants.sql
```

SQL\*Plus: Release 11.2.0.1.0 Production on Thu Feb 19 16:05:40 2015

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Connected to:

Oracle Database 11g Release 11.2.0.1.0 - 64bit Production

Grant succeeded.

Disconnected from Oracle Database 11g Release 11.2.0.1.0 - 64bit
Production

Would you like the script to update the Database Service for Windows
to restart automatically? (y/n) [y]:

End of SecureLogix Corporation's DB Creation Utility

**Note:** If you see the error, "Unable to start service, OS Error 1056," disregard.
You can start the instance after you configure the TNS Listener, as described below.

## Configure the TNS Listener

A listener with a default name of LISTENER is created when you install the
Oracle software, but it must be started or restarted to update it with the
configuration for the ETM Database.

### To configure the TNS Listener

1. Open a command prompt as Administrator.
2. Type: `lsnrctl status`
3. If a message similar to the following appears, the listener is not
running.

```
Connecting to (ADDRESS=(PROTOCOL=TCP) (HOST=127.0.0.1) (PORT=1521))
TNS-12541: TNS: no listener
TNS-12560: TNS: protocol adapter error
TNS-00511: No listener
64-bit Windows Error: 61: Unknown error
```

4. If the listener is not running, type: `lsnrctl start`
5. If the listener is running, stop it by typing: `lsnrctl stop`
6. When it stops, restart it by typing: `lsnrctl start`
7. When it restarts, output should appear showing that it is listening for the ETM instance.

### **Copy the Database Driver to Required Locations**

After installing and configuring the database, copy the database driver, **ojdbc6.jar**, from **<ORACLE\_HOME>\jdbc\lib** in your Oracle 11g database installation to each of the following ETM System installation directories:

- The ETM Server.
- Any remote Report Server.
- Any remote ETM Database Maintenance Tool.

Remote ETM System Clients and standalone Usage Managers do not require the driver file.

**IMPORTANT:** This is necessary even if an existing driver from an earlier version and the new driver have the same name.

### **Where to Go From Here**

The Oracle 11g Enterprise Edition database is now installed, running, and configured with the ETM System user and necessary permissions and privileges. If the ETM Management Server is installed on a different computer from the database, see "Install the Oracle Client" below. If the ETM Server is on the same computer as the database, continue with "Connect with the ETM<sup>®</sup> Database Maintenance Tool" on page 29.

See the *ETM<sup>®</sup> System Installation Guide* for complete ETM Software installation and configuration instructions.

### **Install the Oracle Client**

If the ETM<sup>®</sup> Management Server is installed on the same computer as Oracle, you do not need to install the Oracle Client separately, since they are installed as part of the database software. Continue with the next topic. However, if the ETM Management Server is installed on a different computer from the database, you need to install the Oracle Client on the computer on which the ETM Management Server is installed. The Client is used for CCMI and Directory imports.

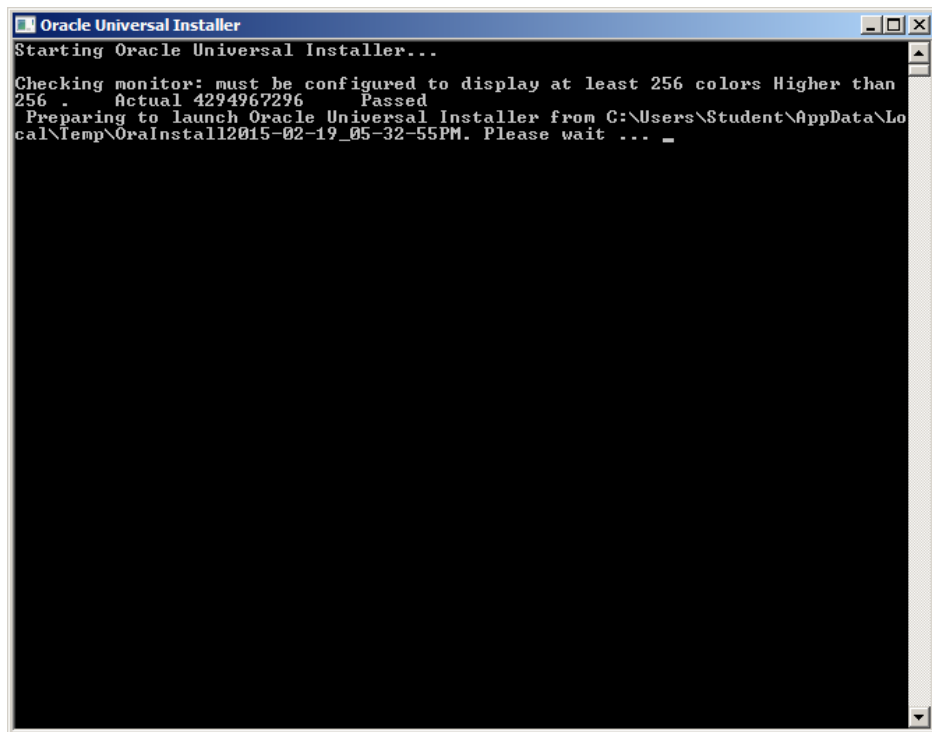


### Notes:

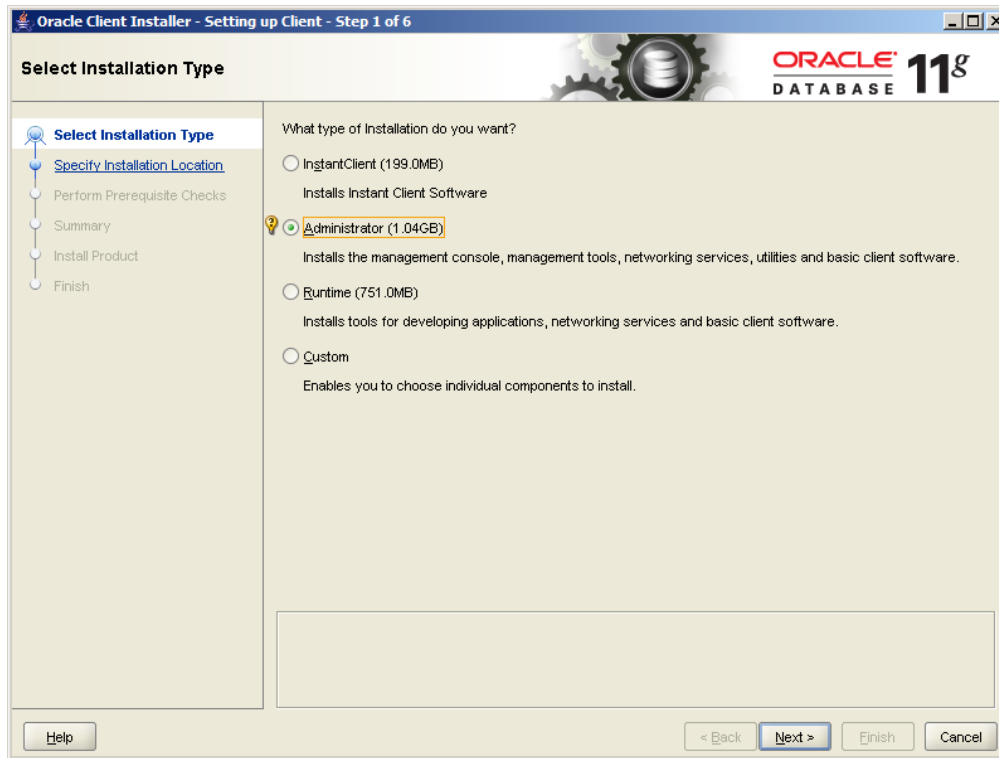
- Ensure you log on as a member of the Administrators group to install the software
- The Oracle Database Client software is available on installation media or you can download it from the Oracle Technology Network (OTN) website, or Oracle Software Delivery Cloud Web site.

### To install the Oracle Client

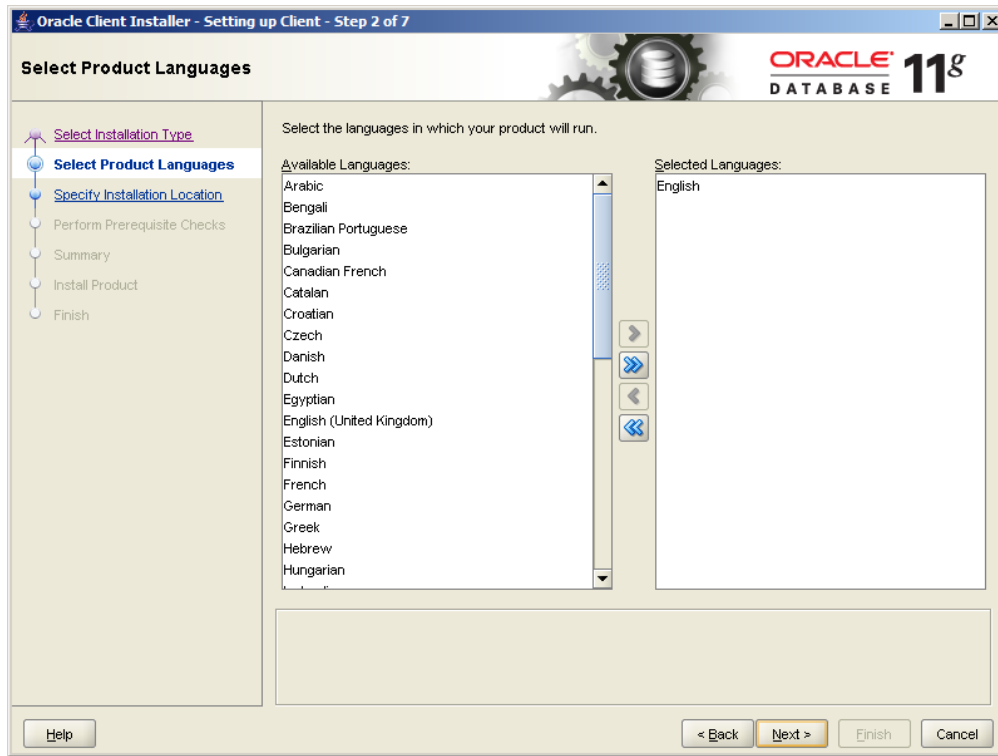
1. Insert the Oracle Database Client installation media and navigate to the **client** directory. Alternatively, navigate to the directory where you downloaded and unzipped the installation files.
2. Right-click **setup.exe** and select Run as Administrator to start the Oracle UI.



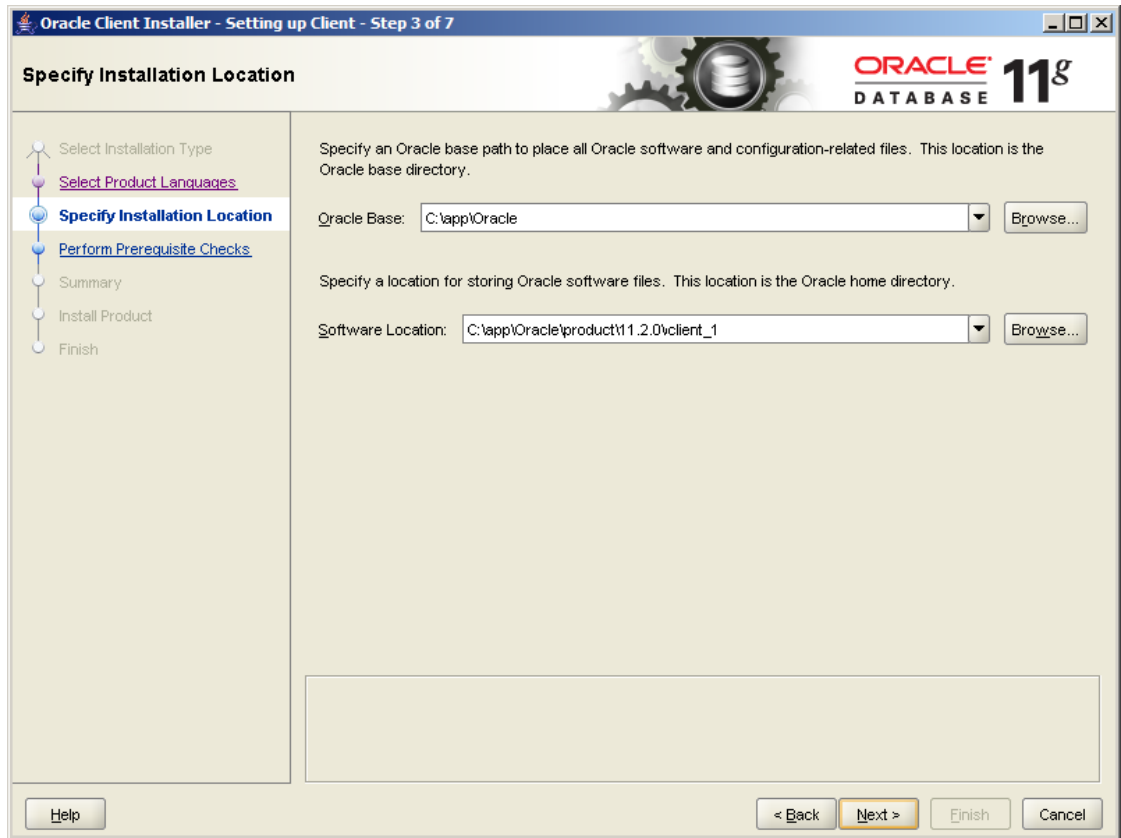
3. The **Select Installation Type** dialog box appears.



4. Select **Administrator** and click **Next**.  
The **Select Product Languages** dialog box appears.
5. Leave it set to English and click **Next**.

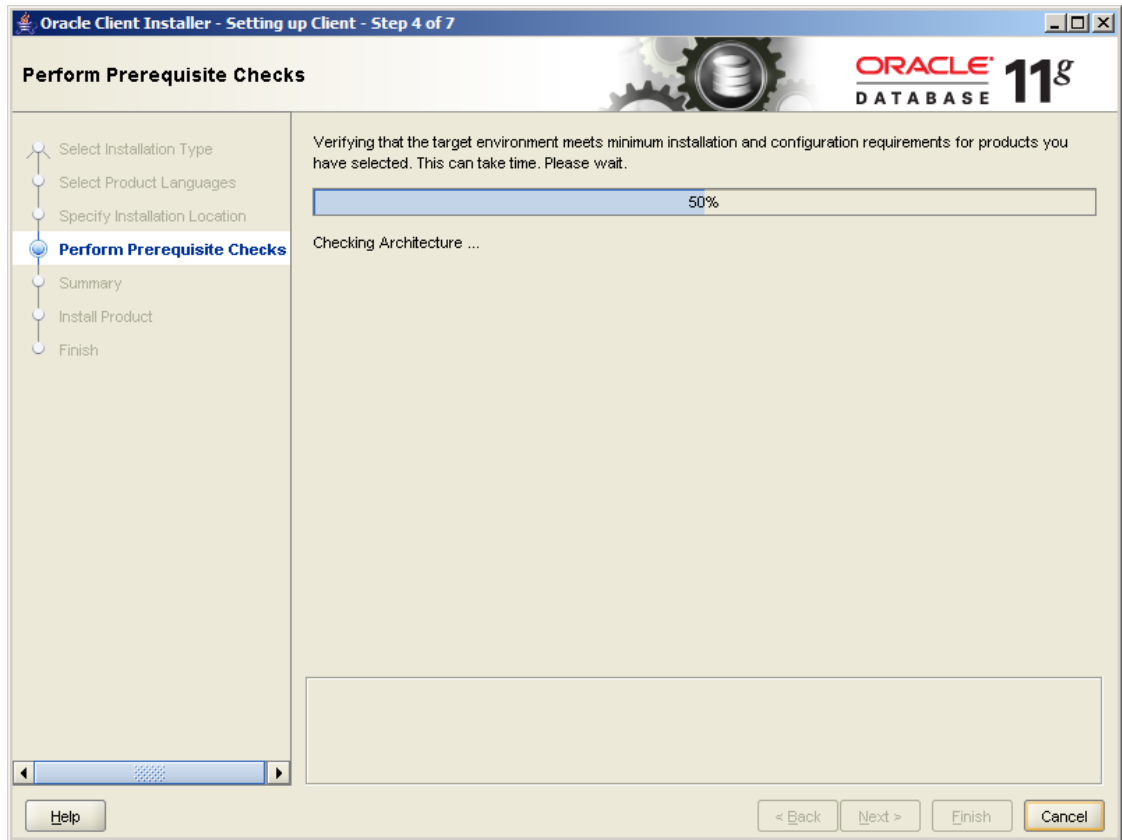


The **Specify Installation Location** dialog box appears.

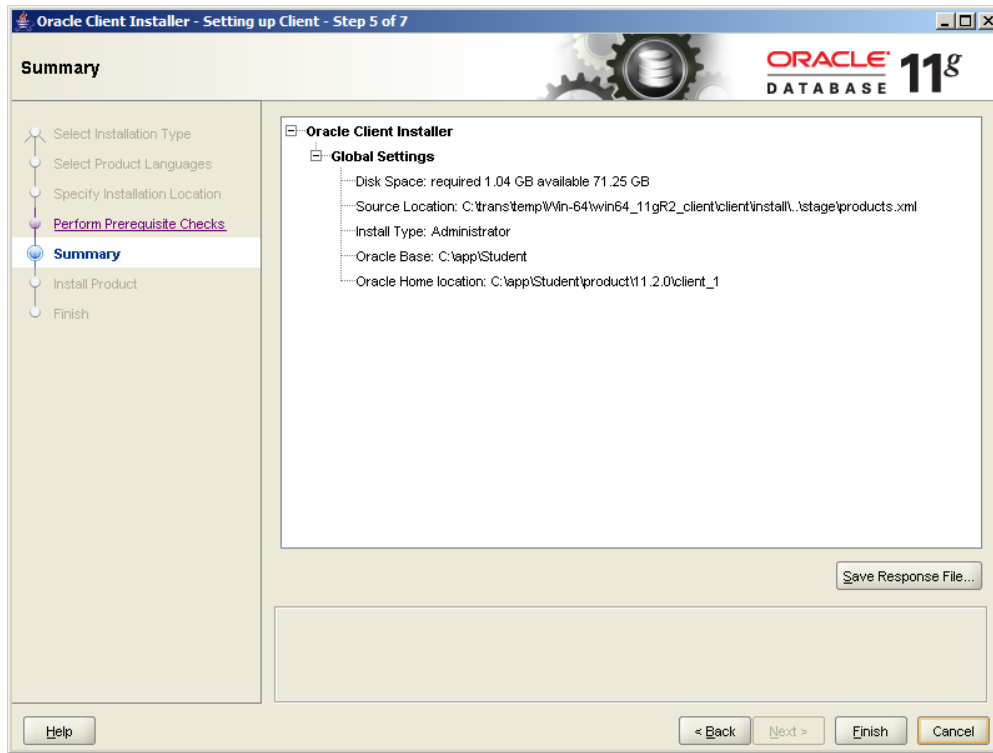


6. Specify paths or leave the defaults and click **Next**.

The **Perform Prerequisite Checks** dialog box appears showing a summary of your installation selections.



When the prerequisite checks complete, the **Summary** dialog box appears showing a summary of your installation choices.



7. Verify the information is correct and then click **Install**. The **Install** dialog box appears and shows progress of the installation. Installation begins and may take some time.
8. When installation completes, click **Finish**.
9. Continue with "Edit the **tnsnames.ora** File" below.

### **Edit the tnsnames.ora File**

The **tnsnames.ora** file tells the ETM<sup>®</sup> Server where to find the ETM Database. The **tnsnames.ora** file is in the directory **<ORACLE\_HOME>network\admin** and can be edited in a text editor such as Notepad. When the Database is on the same system as the Management Server, the script edits this file. When they are on separate systems, the file must be edited after you install the Oracle Client.

The **tnsnames.ora** file appears similar to the following:

```
Jackson_10.1.1.173 =
  (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = TCP) (HOST =
        10.1.1.173) (PORT = 1521))
    )
  )
(CONNECT_DATA = (SID = Jackson) (SERVER = DEDICATED))
```

where `Jackson` is the database SID, `10.1.1.173` is the IP address of the database host computer, and `1521` is the TCP/IP port used by the Listener.

#### To edit the `tnsnames.ora` file

- Edit the database instance name, IP address, and port number to reflect your database configuration.

### **Connect with the ETM<sup>®</sup> Database Maintenance Tool**

You connect to the database with the ETM Database Maintenance Tool to complete database configuration. See the *ETM<sup>®</sup> System Installation Guide* for instructions. The instructions vary depending on whether you are creating a standalone database or a database repository for managed databases.