Install Oracle

This chapter provides information about installing and setting up an Oracle database.

Install Oracle Database

Before you begin

- Cisco recommends that an Oracle DBA install the Oracle server.

- You need to update the patch for the known Oracle defect: ORA-22275. If this is not done persistent chat rooms will not work properly.

- Read the security recommendations for the Oracle database in your Oracle documentation.

- For information on supported versions, see External Database Setup Requirements.

- To install the Oracle database, refer to your Oracle documentation.

Note In compliance with XMPP specifications, the IM and Presence Service node uses UTF8 character encoding. This allows the node to operate using many languages simultaneously and to display special language characters correctly in the client interface. If you want to use Oracle with the node, you must configure it to support UTF8.

To create tablespace and a database user, connect to the Oracle database as sysdba:

```
sqlplus / as sysdba
```

Procedure

Step 1 Create tablespace.

Note The `DATAFILE` keyword of the `CREATE TABLESPACE` command tells Oracle where to put the tablespace's datafile.

a) Enter the following command:

```
CREATE TABLESPACE tablespace_name DATAFILE
'absolute_path_to_oracle_installation\oradata\database_name\datafile.dbf' SIZE 100M
AUTOEXTEND ON NEXT 1M MAXSIZE UNLIMITED LOGGING EXTENT MANAGEMENT LOCAL SEGMENT SPACE
MANAGEMENT AUTO;
```

- Replace *tablespace_name* with the tablespace name.
- Replace *absolute_path_to_oracle_installation* with the absolute path to where Oracle is installed. The entire path, including *datafile*.dbf, is enclosed in single quotation marks.
- Replace *database_name* with the name of your database folder.
- The *datafile*.dbf must be created in a folder under **\oradata**, in this case the *database_name* folder.
- Replace *datafile*.dbf with the datafile name you want to create.

Step 2   Create a database user.

```
CREATE USER user_name IDENTIFIED BY "new_user's_password" DEFAULT TABLESPACE tablespace_name
TEMPORARY TABLESPACE "TEMP" QUOTA UNLIMITED ON tablespace_name ACCOUNT UNLOCK;
```

- Replace *user_name* with the new user's user name.

    Note   The command **CREATE USER user_name** without double quotes will default to upper case and with quotes it will maintain the case

- Replace "*new_user's_password*" with the new user's password.

    Important   Enclosing the *new_user's_password* within double quotation marks makes the variable case-sensitive. By default SQL identifiers are not case-sensitive.

- Replace *tablespace_name* with the tablespace name.

Step 3   Grant permissions to the database user.

The following example grants all permissions to a database user:

```
GRANT DBA TO user_name;
```

The following examples grant limited permissions to the database user:

- **GRANT CREATE ANY VIEW TO** *user_name*;
- **GRANT "CONNECT" TO** *user_name*;
- **GRANT "RESOURCE" TO** *user_name*;

Related Topics

Oracle Documentation

Create New Database Instance

Procedure

Step 1   Enter the command **dbca**
The **Database Configuration Assistant** wizard opens.

Step 2	Click **Next**. The **Operations** window appears.
Step 3	Click the **Create a Database** radio button and then click **Next**. The **Database Templates** window appears.
Step 4	Click the **General Purpose or Transaction Processing** radio button and then click **Next**. The **Database Identification** window appears.
Step 5	Enter a unique Global Database Name on this screen and also a unique Oracle System Identifier (SID) for the database and click **Next**. **Note** Take note of the SID because it is needed in Step 15. The **Management Options** window appears.
Step 6	Under the Enterprise Manager tab the required settings are enabled by default but you can configure optional backups and alert notifications. Click **Next**. The **Database Credentials** window appears.
Step 7	The window has two options to set up password authentication for database users, choose one and click **Next**. The **Database File Locations** window appears.
Step 8	The Storage Type drop-down list should be the same as your Oracle Installation. Click the **Use Oracle-Managed Files** radio button and click **Next**. **Note** This creates the new database instance in the same folder as your other database instances. The **Recovery Configuration** window appears.
Step 9	Leave the default values and click **Next**. The **Database Content** window appears.
Step 10	[Optional] Check the check box if you want to enable Sample Schemas and click **Next**. The **Initialization Parameters** window appears.
Step 11	Under the Memory tab the default value is for a database instance with 4GB of memory. This can be set higher or lower as needed. **Note** The amount of memory used should not be configured too high as this starves other database instances of memory.
Step 12	Under the Character Sets tab click the **Use Unicode** radio button and click **Next**. The **Database Storage** window appears.
Step 13	Leave the default settings as they are and click **Next**. The **Create Options** window appears.
Step 14	Check the Create Database check box and click **Finish**.
Step 15	Once a new database instance is created, you must temporarily change the ORACLE_SID environment variable (from Step 5) on your Unix system by running the command: `export ORACLE_SID=`*new_oracle_db_instance_sid*. This will change the SID so when you login using sqlplus, it will use the new instance and not the old one; you can then repeat the steps in .

Once these steps are completed you can change the ORACLE_SID environment variable by sourcing the bash profile(assuming the old SID is in the bash profile) or by running the export command (Step 15) but changing the SID back to its original value.