



Install Oracle

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

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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](#).
- For Oracle version 11 and earlier, you must configure your Oracle database to use UTF8 character encoding.
- As of Oracle version 12, you must configure the Oracle database to use AL32UTF8 character encoding, as UTF8 may lead to unexpected behavior. For example, if you use UTF8 with Oracle 12, chat rooms may be deleted when you restart the Cisco XCP Text Conference Manager service.
- To install the Oracle database, refer to your Oracle documentation.

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

```
sqlplus / as sysdba
```

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 the required permissions and privileges to a database user, which are needed to create or upgrade the schema:

Note Prior to an upgrade, you must ensure that these permissions and privileges are granted, so that all IM and Presence Service services continue to operate as normal following the upgrade.

- `GRANT CREATE SESSION TO user_name;`
- `GRANT CREATE TABLE TO user_name;`
- `GRANT CREATE PROCEDURE TO user_name;`
- `GRANT CREATE TRIGGER TO user_name;`

After you have created or upgraded the schema, the following privileges can be revoked if greater access control is required:

Note Ensure that revoked privileges are granted again before upgrading.

- `REVOKE CREATE TABLE FROM user_name;`
- `REVOKE CREATE PROCEDURE FROM user_name;`
- `REVOKE CREATE TRIGGER FROM user_name;`

Note IM and Presence Service only requires the `CREATE SESSION` privilege for regular operation.

Related Topics

[Oracle Documentation](#)

Create New Database Instance

- 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 [Install Oracle Database, on page 1](#).

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.