

CS422 Principles of Database Systems Introduction to Oracle

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Oracle on the CS Server

- ◆ Oracle 10g Enterprise Edition
 - Release 10.0.1.3
- ◆ Database
 - Service name: `orc.cs.calstatela.edu`
 - SID: `orc`
- ◆ Connect to the database
 - iSQL*Plus: <http://cs.calstatela.edu:5560/isqlplus/>
 - SQL*Plus
 - Download `tnsnames.ora` from the class home page

Data Dictionary

- ◆ A collection of tables and views that contain the information about the *schema objects* in the database
- ◆ USER_*: objects in user's schema
 - E.g. `USER_TABLES`, `USER_VIEWS`, ...
- ◆ ALL_*: objects in the schemas that the user can access
 - E.g. `ALL_USERS`, `ALL_TABLES`, ...
- ◆ DBA_*: objects in all schemas

Using Data Dictionary

- ◆ Show tables
 - `select table_name from user_tables;`
- ◆ Show table schema
 - `describe table;`
- ◆ Show the tables in a different schema
 - `select table_name from all_tables where owner = schema;`

Common Tasks

- ◆ Change password
 - `alter user username identified by new_password;`
- ◆ Get current time
 - `select sysdate from dual;`

Common SQL*Plus Tasks

- ◆ Quit the client
 - `exit` or `quit`
- ◆ Run script
 - `@path/to/script`
- ◆ Format columns
 - `column colname format [a/9];`

Common Types

- ◆ char(n), varchar(n), varchar2(n)
- ◆ number(precision, scale)
 - _n int, integer, smallint
 - _n real, double, float
- ◆ binary_float, binary_double
- ◆ date, timestamp
- ◆ clob, blob