

The background is a light gray gradient. It is decorated with several realistic water droplets of various sizes, some with highlights and shadows, giving them a 3D appearance. In the upper center, there is a faint, circular logo or watermark that is not clearly legible but appears to contain some text and a central emblem.

RELATIONAL DATABASES

OBJECTIVES

- AWARENESS OF FOUR DIFFERENT FUNCTIONS THAT THE ALTER STATEMENT CAN PERFORM ON CONSTRAINTS.
- AWARENESS OF WHERE IN THE DATA DICTIONARY INFORMATION ON CONSTRAINTS IS HELD.

MANAGING CONSTRAINTS

- THE ALTER TABLE STATEMENT IS USED TO MAKE CHANGES TO CONSTRAINTS ON EXISTING TABLES.
- THESE CHANGES CAN INCLUDE ADDING OR DROPPING CONSTRAINTS, ENABLING OR DISABLING CONSTRAINTS, AND ADDING A NOT NULL CONSTRAINT TO A COLUMN.

MANAGING CONSTRAINTS

- GUIDELINES:
 - YOU CAN ADD, DROP, ENABLE, OR DISABLE A CONSTRAINT BUT YOU CANNOT MODIFY ITS STRUCTURE.
 - YOU CAN ADD A NOT NULL CONSTRAINT TO AN EXISTING COLUMN.
 - YOU CAN DEFINE A NOT NULL CONSTRAINT ONLY IF THE TABLE IS EMPTY OR IF THE COLUMN CONTAINS A VALUE FOR EVERY ROW.

MANAGING CONSTRAINTS

- WHY ENABLE OR DISABLE CONSTRAINTS?
 - TO ENFORCE RULES DEFINED BY INTEGRITY CONSTRAINTS THE CONSTRAINTS SHOULD ALWAYS BE ENABLED.
 - IN CERTAIN SITUATIONS HOWEVER IT IS DESIRABLE TO TEMPORARILY DISABLE THE INTEGRITY CONSTRAINTS OF A TABLE FOR PERFORMANCE SUCH AS:
 - WHEN LOADING LARGE AMOUNTS OF DATA INTO A TABLE.
 - WHEN PERFORMING BATCH OPERATIONS THAT MAKE MASSIVE CHANGES TO A TABLE.

MANAGING CONSTRAINTS

- TO FIND OUT ABOUT CONSTRAINTS YOU CAN QUERY THE DATA DICTIONARY.
 - USER_CONSTRAINTS (P, C, U)
 - USER_CONS_COLUMNS
- YOU CAN DISABLE A CONSTRAINT, BY DEFAULT WHEN CONSTRAINTS ARE DEFINED THEY ARE ENABLED BY ORACLE SERVER UNLESS OTHERWISE SPECIFIED.
- WHEN YOU ENABLE A CONSTRAINT IT APPLIES TO ALL DATA IN THE TABLE, ALL DATA MUST FIT THE CONSTRAINT.
- YOU CAN ONLY SEE THE NOT NULL CONSTRAINTS WHEN YOU VIEW A TABLE USING DESCRIBE (NOT ACCESSIBLE IN APP EXPRESS)
- YOU CAN SEE MORE DETAIL ON CONSTRAINTS IN APPLICATION EXPRESS BY CLICKING ON THE CONSTRAINTS TAB WHEN VIEWING A TABLE IN THE OBJECT BROWSER.