

A modern conference room with large windows and a blue tint. The room features a long wooden table, several black office chairs, and a laptop on the table. The windows offer a view of a cityscape. The text "Transaction Control Language (DCL)" is overlaid in the center.

Transaction Control Language (DCL)

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 - not every change you make to a database is saved automatically

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 - not every change you make to a database is saved automatically
- the COMMIT statement
 - related to INSERT, DELETE, UPDATE
 - will save the changes you've made
 - will let other users have access to the modified version of the database

Transaction Control Language

DB administrator

Customers				
customer_id	first_name	last_name	email_address	number_of_complaints
1	John	McKinley	john.mackinley@365careers.com	0
2	Elizabeth	McFarlane	e.mcfarlane@365careers.com	2
3	Kevin	Lawrence	kevin.lawrence@365careers.com	1
4	Catherine	Winnfield	c.winnfield@365careers.com	0

Transaction Control Language

DB administrator

- Change the last name of the 4th customer from 'Winnfield' to 'Johnson'

Customers				
customer_id	first_name	last_name	email_address	number_of_complaints
1	John	McKinley	john.mackinley@365careers.com	0
2	Elizabeth	McFarlane	e.mcfarlane@365careers.com	2
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Transaction Control Language

DB administrator

- Change the last name of the 4th customer from 'Winnfield' to 'Johnson'

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customer_id	first_name	last_name	email_address	number_of_complaints
1	John	McKinley	john.mackinley@365careers.com	0
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Transaction Control Language

DB administrator

- Change the last name of the 4th customer from 'Winnfield' to 'Johnson'

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Transaction Control Language

DB administrator



SQL

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Transaction Control Language

DB administrator



SQL

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UPDATE customers  
SET last_name = 'Johnson'  
WHERE customer_id = 4;
```

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Problem:

users

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the clause that will let you make a step back

- allows you to undo any changes you have made but don't want to be saved permanently

Transaction Control Language

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Transaction Control Language

- the COMMIT statement

- saves the transaction in the database
- changes cannot be undone

- the ROLLBACK clause

- allows you to take a step back
- the last change(s) made will not count
- reverts to the last non-committed state

SQL Syntax

- DDL – Data Definition Language
- DML – Data Manipulation Language
- DCL – Data Control Language
- TCL – Transaction Control Language

SQL Syntax

- DDL – Data Definition Language

creation of data

- DML – Data Manipulation Language

manipulation of data

- DCL – Data Control Language

assignment and removal of permissions to use this data

- TCL – Transaction Control Language

saving and restoring changes to a database

Next:

Next:

More about Database Theory