

A modern conference room with large windows and a long table. The room is empty, with several black office chairs arranged around a long, dark wooden table. The windows offer a view of a cityscape. The image has a blue tint and a stylized, torn-paper-like border.

Data Control Language (DCL)

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- Data Control Language (DCL)
- the GRANT and REVOKE statements

Data Control Language

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- the GRANT and REVOKE statements
allow us to manage the rights users have in a database

Data Control Language



Data Control Language



Data Control Language



Data Control Language

- The GRANT statement

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gives (or grants) certain permissions to users

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SQL

Data Control Language

- The GRANT statement
gives (or grants) certain permissions to users



SQL

```
GRANT type_of_permission ON database_name.table_name TO  
'username'@'localhost'
```

Data Control Language

- The **GRANT** statement
gives (or grants) certain permissions to users
- one can grant a *specific* type of permission, like *complete* or *partial access*



SQL

```
GRANT type_of_permission ON database_name.table_name TO  
'username'@'localhost'
```

Data Control Language

- these rights will be assigned to a person who has a *username* registered at the *local server* ('localhost': IP 127.0.0.1)



SQL

```
GRANT type_of_permission ON database_name.table_name TO  
'username'@'localhost'
```

Data Control Language

- these rights will be assigned to a person who has a *username* registered at the *local server* ('localhost': IP 127.0.0.1)
- big companies and corporations don't use this type of server, and their databases lay on *external*, more powerful servers



SQL

```
GRANT type_of_permission ON database_name.table_name TO  
'username'@'localhost'
```

Data Control Language

- Database administrators

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people who have *complete* rights to a database

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people who have *complete* rights to a database

- they can grant access to users and can revoke it

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- the REVOKE clause

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- the REVOKE clause

used to revoke permissions and privileges of database users

Data Control Language

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people who have *complete* rights to a database

- they can grant access to users and can revoke it

- the REVOKE clause

used to revoke permissions and privileges of database users

- the exact opposite of GRANT

Data Control Language

- the REVOKE clause
used to revoke permissions and privileges of database users



SQL

Data Control Language

- the REVOKE clause

used to revoke permissions and privileges of database users



SQL

```
REVOKE type_of_permission ON database_name.table_name FROM  
'username'@'localhost'
```

Data Control Language

Next:

Data Control Language

Next:

Transaction Control Language (TCL)