Database Security

To safeguard information in a database, security mechanisms must be put in place to limit user access. General security measures involve:

1. Physical security (location of the server in locked room)

2. Network security (limit access to server by IP address etc)

3. Encrypt data on network using tunnelling and encryption protocols

SQL databases incorporate their own security mechanism that allows individual rights to be assigned to database users. Database users are identified using the username and password that they use to connect to the database.

Rights can be granted to users on specific databases. Right are granted with the GRANT command and removed with the REVOKE command. Users can be granted rights to execute each common SQL command on a table e.g. SELECT

e.g. GRANT SELECT ON TABLE Employees

TO USER 'John@localhost' IDENTIFIED

BY 'password';