

Role of the Database Administrator (DBA)

Job description

A database administrator (DBA) is responsible for the planning, maintenance and development of a database. The database approach incorporates the following principles:

- data remains consistent across the database;
- data is clearly defined;
- users access data concurrently, in a form that suits their needs;
- there is provision for data security and recovery control (all data is retrievable in an emergency).

For example, an estate agent may be able to view details of properties/clients and branch contact details. However, making local amendments to details and viewing sensitive data on fellow employees will depend on access permissions and privileges.

Typical work activities

The work of a database administrator (DBA) will vary according to the nature of the employing organisation and the level of responsibility associated with the post. Some of the work may involve specialising in database development or pure maintenance.

Typical responsibilities could include some or all of the following:

- establishing the needs of users;
- planning data flows for a new or revised database;
- mapping out the 'conceptual design' for a planned database in outline;
- refining the 'logical design' so that it can be translated into a specific data model;
- further refining the 'physical design' to meet system storage requirements;
- testing new systems;
- maintaining data standards, including adherence to the Data Protection Act;
- writing database documentation, including data standards, procedures and definitions for the data dictionary ('metadata');
- controlling access permissions and privileges;
- training users;
- meeting users' access requirements and resolving their problems;
- ensuring that storage, archiving, backup and recovery procedures are functioning correctly;
- capacity planning;
- working closely with IT project managers, database programmers and web developers;
- providing technical support for outdated 'legacy' systems;
- communicating regularly with technical, applications, and operational staff, to ensure the database integrity and security;
- commissioning and installing new applications.

Because of the increasing levels of hacking and sensitive nature of data stored, security has become an increasingly important aspect of the work.