**Database Administrator**

As a database administrator, you'll be responsible for the performance, integrity and security of a database. However, depending on the organisation and your level of responsibility, the role can vary from inputting information through to total management of data.  
  
Different businesses will have different database needs and diverse requirements. In hospitals for example, databases will record patient information, whilst private companies are more likely to store customer details, sales records and more. This information is used to structure and organise the business, deliver target marketing and services and design business strategies.  
  
Depending on your level of responsibility, typical tasks may include:

* Assisting in database design
* Updating and amending existing databases
* Setting up and testing new database and data handling systems
* Monitoring database efficiency
* Sustaining the security and integrity of data
* Creating complex query definitions that allow data to be extracted
* Training colleagues in how to input and extract data

Increasingly, the role of a database administrator is defined by the particular processes and capabilities of the database management system in place.  
  
However, the work you do will greatly assist other members of the organisation, including analysts, programmers and IT managers who all require reports to collate information for planning, reference and communications purposes.  
  
When it comes to what sector to work in, there is a huge range of choice. You could work as a database administrator for schools and universities, the National Health Service (NHS), central and local government departments, financial institutions, retail businesses, manufacturing firms, and IT and computer companies offering database solutions. As the vast majority of organisations depend heavily on data and information collated through business activities, your role will be critical to its success in any field or sector.

Opportunities   
  
Unlike many areas in the IT industry, there isn’t a particular path of career progression within database administration. It will depend largely on the size and type of organisation you choose to work for.   
  
In many cases, you can become a database specialist. This is becoming increasingly common due to the popularity of interactive, web-based databases. An advantage of being a specialist is being able to move towards freelance, self-employed or consultancy work, which can offer more variety, freedom and diversity.  
  
It is also possible to progress from a junior role as a network administrator to become a manager, or branch into another area of IT, like systems development, network management or project management.

Required skills

* For a role in database management, employers will be looking for you to have the following:
* Strong analytical and organisational skills
* Eye for detail and accuracy
* Understanding of structured query language (SQL)
* Knowledge of 'relational database management systems' (RDBMS), 'object oriented database management systems' (OODBMS) and XML database management systems
* Experience with their database software/web applications
* The ability to work quickly, under pressure and to deadlines
* Up-to-date knowledge of technology and the Data Protection Act
* Ability to work well in a fast paced environment, where the technology is constantly changing