



Accredited

OCR LEVEL 2 CAMBRIDGE TECHNICALS IN IT

LEVEL 2 UNIT 2
WORKING IN THE IT INDUSTRY

SAMPLE LEARNER STYLE WORK

VERSION 1

MARCH 2014



INDEX

Introduction	Page 3
Scenario One - Pass Criteria	Page 4
Scenario One - Merit Criteria	Page 10
Scenario One - Distinction Criteria	Page 22
Scenario Three - Pass Criteria	Page 26

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OCR Resources: the small print

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INTRODUCTION

This work has been developed to provide examples of the content and standard of work required to evidence the identified assessment criteria of just one learning outcome (Level 2, Unit 2, Learning Outcome 2). This is one approach that could be used but it **must** not be directly replicated or any part plagiarised by learners.

Teachers may choose to identify their own approach for learners to follow but evidence submitted must clearly meet the assessment criteria.

This is not real learner work and has not been standardised in line with OCR procedures; its purpose is to provide ideas and approaches.

The following pages provide examples of how learners may provide evidence for the following:

Level: 2

Unit Number: 2

Unit Title: Working in the IT Industry

Learning Outcome: 2

Assessment Criteria: P2, M1, D1, P3

Pass criteria P2 – Describe common IT industry job roles

Merit criteria M1 – Explain the main job role categories within the IT industry

Distinction criterion D1 – Explain the skills required for an identified job role within the IT industry

Pass criterion P3 – Explain the characteristics required for a specific job role in IT.

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STYLE WORK

SCENARIO ONE

You are required to research one job role from five of the following job categories:

- Communication and Networking
- Business Applications
- Operating Systems
- System Software
- Programming Languages
- Database and Business Intelligence
- Process and Methodologies
- Management Information Systems
- Digital Media
- Cloud Computing

You are required to describe the IT job roles that you have researched and include referencing to the sources you have used. Your research should show that you have looked at websites, newspaper articles and journals.

You may produce your evidence as a presentation where you will be videoed delivering the presentation to the rest of the class, or you can produce a leaflet or a report.

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PASS CRITERIA - P2

Common IT Industry Job Roles

I am going to describe five job roles from five different job categories within the IT industry. I have researched the roles by using the Internet, IT magazines and newspaper articles.

IT Support Technician (job category – Operating Systems)

If a person enjoys solving problems and likes working with computers, then they would enjoy a job as an IT support technician. IT support technicians help to identify and rectify hardware and software problems for computer users. It is important that they have good communication skills as they need to be able to clearly explain problems and solutions to people who may be non-technical users. This is especially important if the IT support technician role requires you to work remotely by phone, email or the web. An IT support technician may work on site or remotely depending on the particular organisation they are working for eg in a school or college, the IT support technician works on site, if you work on a help desk eg technical support for Microsoft then you would be working remotely when dealing with people who have problems with their Microsoft software.

Depending on the size and type of organisation, an IT support technician may work as part of a team, on their own, supporting only internal customers or supporting internal and external customers. The job role may include:

- Fault finding and diagnosis – this may involve talking to the customers, reading emails, fault logs etc to establish what has happened. This would then require you to identify reasons why the fault has occurred and then working out a solution. You may need to explain the problem and potential solution to the customer which may require you to talk them through how to rectify the problem.
- Setting up new systems and upgrading systems
- Conducting regular maintenance on systems to include servicing and testing
- Keeping records of problems and their solutions for future reference and trend analysis
- Carrying out training on new systems or software
- Creating disaster recovery plans
- Equipment location eg cable routes and patching details
- Assist in IT infrastructure projects

In order to become an IT support technician a person needs to have a good working knowledge of networks, hardware and software. You could start out as a trainee and work your way up until you are fully qualified. As IT is forever changing and at a fast rate, it is important that an IT support technician keeps up to date and continues to develop their skills and knowledge. This can include taking industry standard qualifications such as CompTIA, CISCO or Microsoft.

Research:

www.londonjobs.co.uk; Big Ambition Careers Leaflet; Microsoft Learning; www.sfia.org.uk; www.CompTIA.org; www.Cisco.com/cisco/web/uk; Computer Science Journal Nov 2013.

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Network Manager (job category – Communication and Networking)

A network manager needs to be technically minded with good IT skills. They also need to be able to solve problems. A network manager is responsible for designing, implementing and administering computer network systems. This can be across different organisations or within one organisation. A network manager has to be able to negotiate as there may be occasions when the network has to go down in order to upgrade, repair etc. They therefore need to be able to negotiate with the people using the network appropriate timescales for being “offline”. They therefore also have to be good at working under pressure and keeping to tight deadlines in order to ensure that the network is back up and running when they agreed it would be. In order to be a good negotiator they need to have good written and verbal communication skills as they may have to communicate with people at all levels within an organisation. A network manager usually leads a team of technicians and they have to have good leadership skills so that they can make decisions on behalf of the team and manage any network projects that they are working on.

A network manager could be responsible for an in-house network support team or work as an IT consultant and therefore deal with lots of different customers. The main role of the network manager is to make sure that the network is up and functioning for their customer and that it is secure. There are four main networks that a network manager could be working on and they are:

- LANs (Local Area Networks) – this is when computers are connected in an office, in different departments within the same organisation in the same building
- MANs (Metropolitan Area Networks) – this is when LANs are connected across a city
- WANs (Wide Area Networks) – this is where network systems are linked across national boundaries eg in different countries
- GANs (Global Area Networks) – this is combining networks over an unlimited geographical area. This is usually achieved through using wireless and satellite technology.

The job role of a network manager may include:

- Establishing a customer’s network requirements and then designing the network to include test plans
- Ensuring the network plans are compatible with other computer systems
- Leading a team of technical staff
- Identifying and implementing network security measures
- Planning preventative maintenance schedules
- Monitoring and reporting network performance and usage
- Managing network growth, development and deployment

In order to become a network manager you need to have the relevant experience and qualifications. Network managers tend to start as trainees if they have qualifications such as HNCs/HNDs foundation degree or degree in:

- Computer networks
- Networks and communication systems
- Computer science
- Digital communication and networks

As with the IT support technician, a network manager must ensure that they keep up to date with their sector. This may include training on Linux operating systems as well as Windows. The industry standard qualifications available include Cisco Certificate Network Associate; Microsoft Certified Systems Associate; CompTIA Network+, Certified Novell Engineer.

Research:

www.bcs.org.uk; e-skills Professional Programme; www.CWjobs.co.uk

Web Developer (job category – Digital Media)

Web developers design, build and maintain websites and website applications to meet the needs of their customers. A web developer may work for one organisation or a number of different organisations. The types of projects that a web developer could work on are:

- Developing a VLE (Virtual Learning Environment) for a school or college
- Creating an Intranet for an organisation that can be accessed by their staff
- Creating a secure online shopping website

This would require a web developer to have good communication skills as they need to discuss different test sites with their customer so that they can make sure that they design a website that will meet their needs. Once a design idea has been agreed, the web designer will build the architecture of the site and add things such as command buttons, video, sound and/or animation, email links, payments systems etc. They need to ensure that whatever they design and create, will be able to be integrated into the customer's existing network system eg linking with the databases containing the organisation's customer records. A web developer does not usually work on their own; they will work with web designer who will work on the appearance of the site with them. They will implement measures to ensure that the site is secure and that users have the appropriate level of access. Finally, they will test the website as it is being constructed and solve any problems before it is uploaded and goes live. A web developer may be required to continue making minor changes to the website once it has been built to ensure that it is working properly, this may be through a maintenance contract with the customer.

To become a web developer a person needs to have appropriate qualifications such as a degree or HND in subjects such:

- Web development or web design
- Multimedia design
- Web content management
- Business information systems
- Web content management

In addition to this, a web developer will need to have a working knowledge of one or more of the following: Java, Python, C++, PHP, HTML, CSS.

Research:

Guardian Newspaper (jobs section); www.bcs.org.uk; Computer Weekly; BSC Recruit; www.webdeveloperjobs.co.uk

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Information Security Analyst (job category – Management Information Systems)

The job role entails planning and implementing security measures that will protect the information and data of organisations from unauthorised access. This also includes preventing deliberate attack eg changing information and data, destroying information and data, copying information and data as well as prevention of theft and corruption. An information security analyst would deal with a wide range of threats to management information systems through:

- Hacking (unauthorised access)
- Viruses, worms, spyware and Trojans
- Computer misuse (where a system is abused by authorised system users)
- Phishing – attempting to persuade people to leave confidential and sensitive information on suspect websites
- Pharming – this is redirecting users to fake websites.
- Denial of service attacks – this is when a system is overloaded with useless data so that it can no longer function and stops working.

An information security analyst will analyse the risks to a system and then develop plans so that the threats to the system are minimised. This can involve designing new security systems as well as upgrading old systems. This is particularly important as there are new ways of “breaking in” to IT systems on a daily basis. They will also trial and evaluate different security products that become available and identify how and when they could be used. In case a security breach occurs, an information security analyst must plan for what is called “disaster recovery” so that there is a minimum effect on the organisation concerned. This can require them to test procedures by simulating breaches that could occur (penetration testing) as well as investigate breaches and conduct any corrective actions than may be required. Testing of systems is a main function of the information security analyst and this will involve testing systems to identify any weak areas (vulnerability scanning) and then offer solutions to reduce the weaknesses. The information systems analyst requires good analytical skills and communication skills (written and verbal). They will be required to write reports and technical documentation for organisations as a whole to include their managers and users. Depending on the level of the job role, they may be responsible for supervising and training staff which could be their own team or others within the organisation.

Depending on whether someone is employed directly by an organisation or self-employed will depend on whether they work for one organisation which is primarily office-based or travel to visit numerous clients.

To become an information security analyst, a person must have experience of working with different operating systems eg Windows, Unix and Linux as well as a range of security technologies eg firewalls, antivirus, IDS (intrusion detection systems), encryption techniques, authentication, penetration testing and vulnerability scanning. In order to maintain competence, it is important that an information security analyst keeps up to date and continues to develop their skills. This may include achieving industry qualifications offered by Microsoft, CISCO and CompTIA.

Research:

Guardian Newspaper (jobs section); Computing Careers

SAMPLE LEARNER
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Database Administrator (job category Database and Business Intelligence)

The job role entails planning and creating databases ensuring that they are secure and work as required. It is important that a database administrator has a thorough understanding of information systems as well as database systems. They must have a high level of accuracy and pay attention to detail. It is also important that the database administrator is able to tackle problems and have good organisational skills.

A database administrator may work on a variety of databases and could involve the upgrading of systems and well as creating new ones. This may involve the following activities:

- Discussing with the organisation or customer the purpose of the database, what it will contain, who will use it and whether it is linked to other systems
- Planning the structure of the database to include how it will be organised, how the information will be processed, how the data is displayed and how someone can search and print data
- Building a test version so that any issues can be identified and rectified
- Populate the database with information transferred from another system or with new information
- Plan and implement processes for updating information as well as creating back-ups and error reporting
- Adding security measures to ensure that the information and subsequent data is secure.

Database administrators may also supervise other people such as technical support staff, train users on how to use the system and produce performance reports for IT managers. The database administrator may also work with other IT professionals such as programmers, IT Project Managers, Software Developers, and Analysts.

Database administrators should have knowledge of SQL (structures query language) and DBMS (database management systems). This involves the following:

- XML database management systems
- DBMS (relational database management systems)
- OODBMS (object-oriented database management systems)

Research:

www.ibm.com/uk; www.oracle.com; www.sfia.org.uk; www.imis.org.uk; IT Jobs Watch; www.computing.co.uk; Computer Weekly

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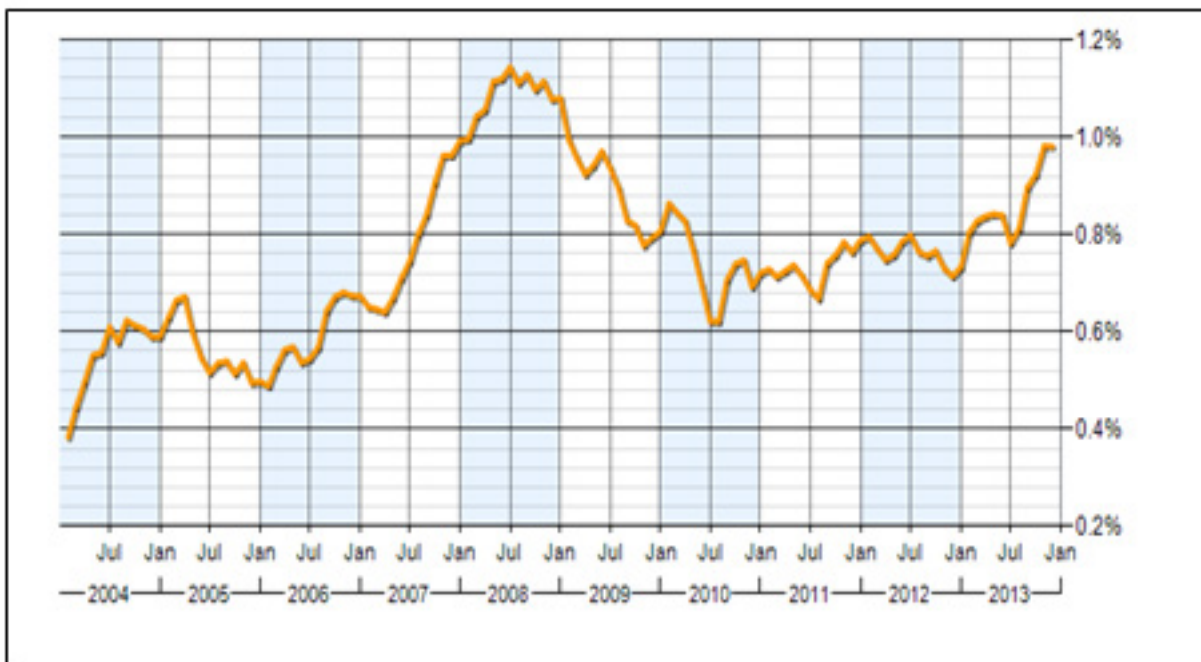
SCENARIO ONE

You are required to explain the job role categories that you selected for P2. You need to explain the position of each category within the overarching IT industry. You should provide evidence of the availability of the job roles you selected including salary, geographical influences, frequency of vacancies, entry requirements and any additional information as appropriate. You may wish to use statistics or graphs but ensure that you clearly reference your sources.

MERIT CRITERIA - M1

IT Support Technician – Operating Systems Category

The following graph shows the total of IT Support jobs within the UK as a proportion of the total demand for IT jobs.

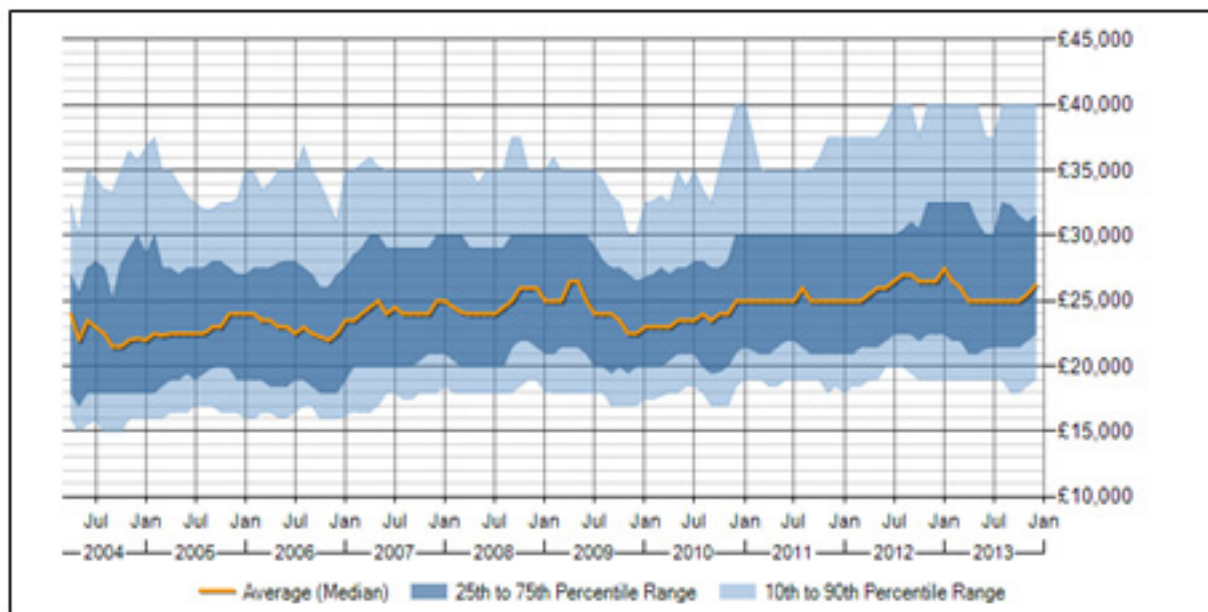


IT Support Technician Demand Trend

www.itjobswatch.co.uk

It can be seen that from the period 2004-2005 the demand for IT support technicians produced an overall increase in demand, this went on to decline between July 2005 to Jan/Feb 2006. There has then been an overall increase in demand peaking in July 2008 at around 1.15% of total demand. There has then been an overall decrease up to 2010 where the percentage of total demand reduced to around 0.6%. It can be seen from the graph that the demand is slowly increasing and up to the end of December 2013 was just under 1% of total demand.

According to the National Careers Service website (www.nationalcareersservice.direct.gov.uk) the starting salary is between £18,000 and £22,000. More experienced technicians can earn up to £30,000 and senior staff with management responsibilities over £30,000. Below is a graph showing the average salary for IT support technicians over the last 10 years.

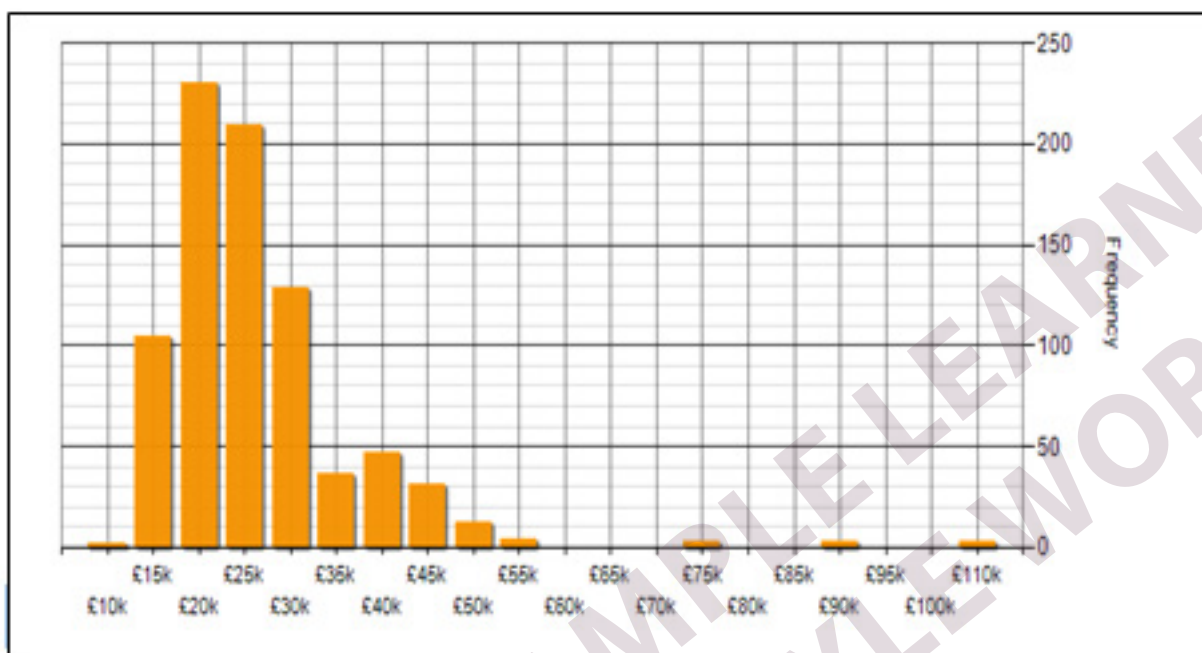


IT Support Technician Average Salary Trend

www.itjobswatch.co.uk

It can be seen from the graph the average salary has remained fairly constant. It did peak to above £25,000 between January and July of 2009 and July 2012 to January 2013. Between January 2013 and July 2013 the average salary value decreased to £25,000 and plateaued until it start to rise again before the end of 2013. From the graph there does not appear to be a lot of demand for trainee IT support technicians based on the salary indicator provided by the National Careers Service. It implies that the vast majority of positions are for more experienced technicians.

In the chart below it can be seen that there is an indication that the demand for trainee technicians has now increased as for the three months to 3rd January 2014 it can be seen that there is a high percentage of jobs advertised under £25,000.



Salary for 3 months to January 2014

www.itjobswatch.co.uk

The table below provides an indication as to the current demand for IT Support Technicians with the average salary compared with the previous two years. The statistics are based on the percentage values of all IT job roles advertised.

IT Support Technician	3 months to 7 Jan 2014	Same period 2013	Same period 2012
Rank	765	807	744
Rank change year – on - year	Up 42 places	Down 63 places	-
No of jobs requiring IT Support Technicians	70	53	114
As % of all IT jobs located in the UK	0.073%	0.052%	0.10%
As % of the Category “Operating Systems”	0.077%	0.054%	0.11%
Average Salary	£23,500	£25,000	£22,500
Average salary % change year – on – year	Down 6%	Up 11.11%	-

It can be seen that the requirement for IT Support Technicians has increased since 2013 but is still a relatively small requirement within the category of Operating Systems. The average salary has decreased, but this could be due to the requirement for “trainee” technicians increasing.

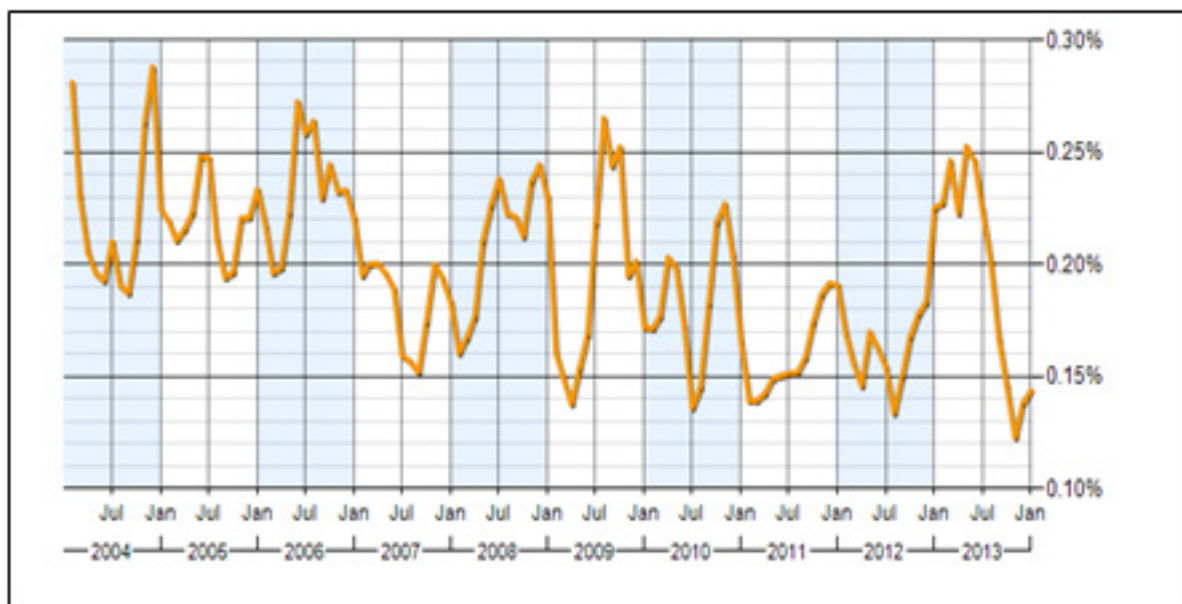
Entry Requirements:

In order to become an IT Support Technician you need to have a good working knowledge of computer systems, By having this knowledge, you could get a job as a trainee technician and receiving training from the company. If you do not have sufficient knowledge, you could study appropriate IT qualifications by going to college or applying to become an apprentice.

SAMPLE LEARNER
STYLE WORK

Network Manager – Communications & Networking Category

The following graph shows the total of Network Manager jobs within the UK as a proportion of the total demand for IT jobs.

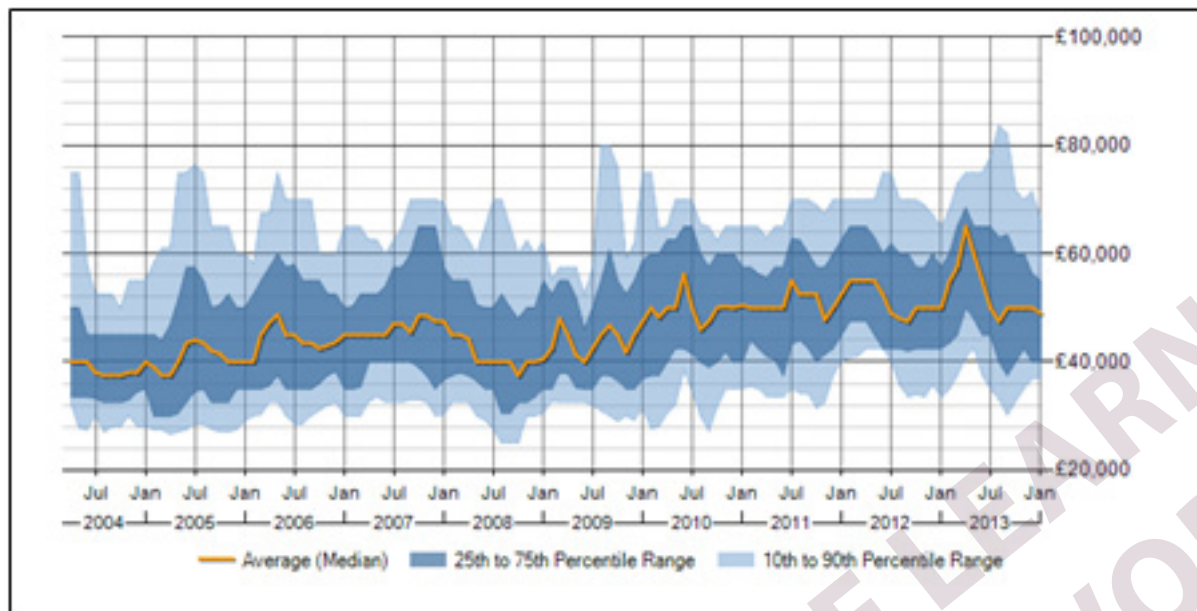


Network Manager Demand Trend

www.itjobswatch.co.uk

It can be seen that there has been a steady overall decline in the demand for Network Managers with the demand showing a range of peaks and troughs throughout each year. For the last 6 months of 2013 there has been a steep decline with demand being at its lowest. It does appear, however to be slowly rising again.

The graph below shows the average salary offered to Network Managers over the last 10 years.

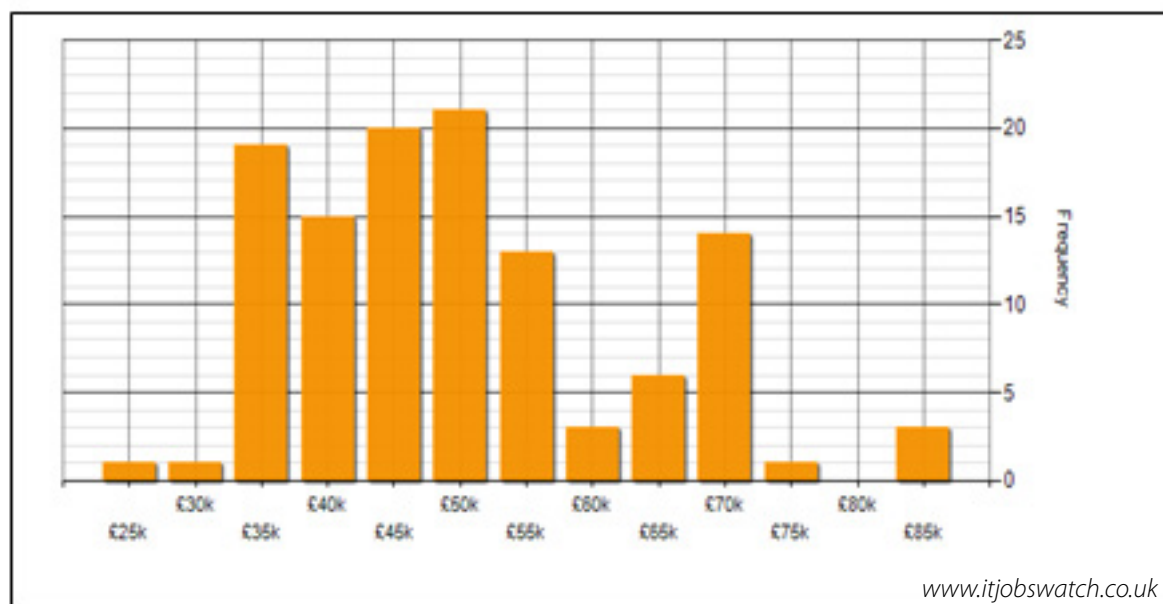


Network Managers Average Salary Trend

www.itjobswatch.co.uk

It can be seen that the salary has steadily increased over the last 10 years but has taken an overall dip from around March 2013 to August 2013. It then appears to slowly rise again and possibly levelling off up to the beginning of January 2014.

The Chart below shows the salaries offered over the three months to 7th January 2014 for Network Managers.



Advertisd Salaries for Network Managers for three months to 7th January 2014

From the chart it would appear that the lower salaries are for the less experienced Network Managers where the salary is between £35,000 and £50,000.

The table below provides an indication as to the current demand for Network Managers with the average salary compared with the previous two years. The statistics are based on the percentage of all IT job roles advertised.

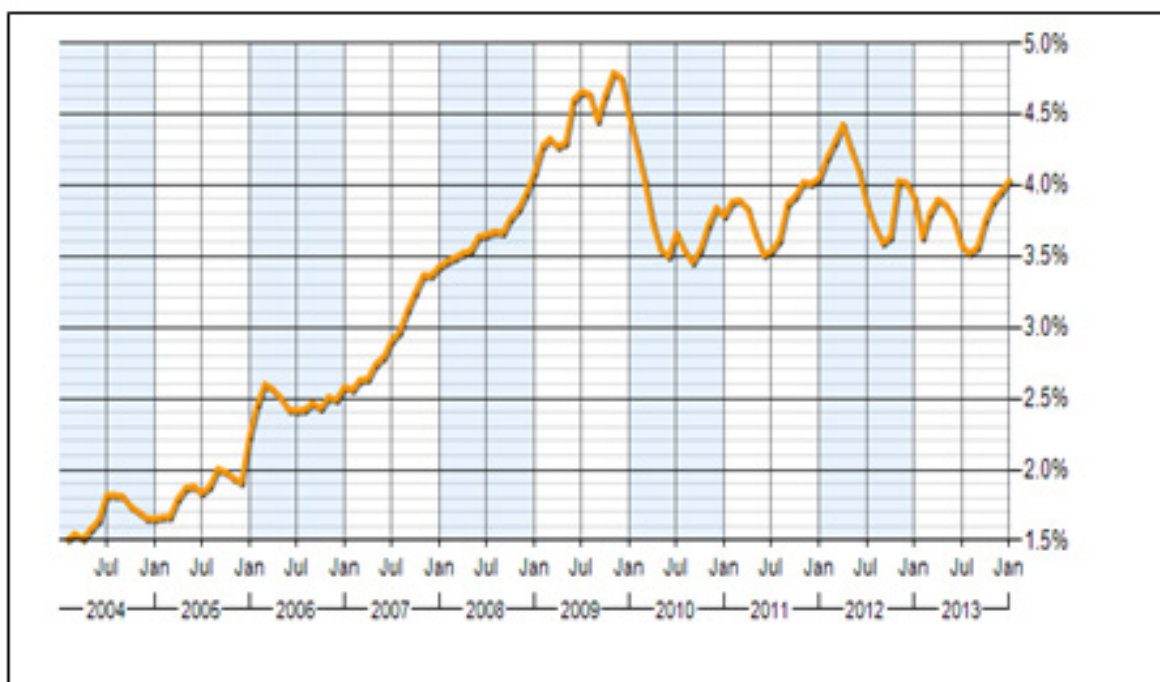
Network Manager	3 months to 7 Jan 2014	Same period 2013	Same period 2012
Rank	710	672	658
Rank change year – on - year	Down 38 places	Down 14 places	-
No of jobs requiring Network Managers	125	191	200
As % of all IT jobs located in the UK	0.13%	0.19%	0.18%
As % of the Category "Communication & Networks"	0.14%	0.19%	0.19%
Average Salary	£50,000	£50,000	£50,000
Average salary % change year – on – year	-	-	-

Entry Requirements:

In order to become a network manager, you usually need to have worked as a network engineer, IT manager or IT support technician. If you do not have this experience, you would need to achieve an HNC/D, foundation degree or degree in subjects such as computer networks, networks and communication systems, computer science or digital communication and networks and then apply for a position of trainee network manager.

Web Developer – Digital Media Category

The following graph shows the total of Web Developer jobs within the UK as a proportion of the total demand for IT jobs.

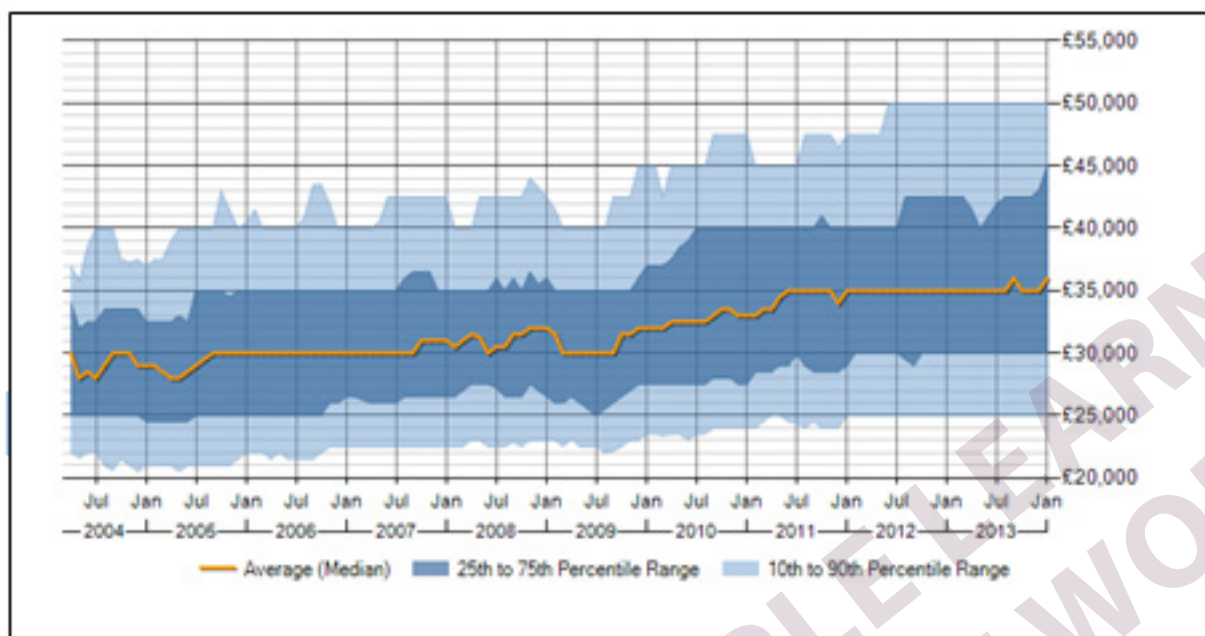


Web Developer Demand Trend

www.itjobswatch.co.uk

You can see from the graph that there was a steep increase in the demand for Web Developers which is probably due to more and more businesses wanting to advertise through the Internet or delve into E-Commerce. After January 2010 the demand decreased and then increased to nearly 4.5% of the demand between January and July 2011. It is a very fluid market with respect to the demand for Web Developers. It is now on the increase again in January 2014.

The graph below shows the average salary offered to Web Developers over the last 10 years.

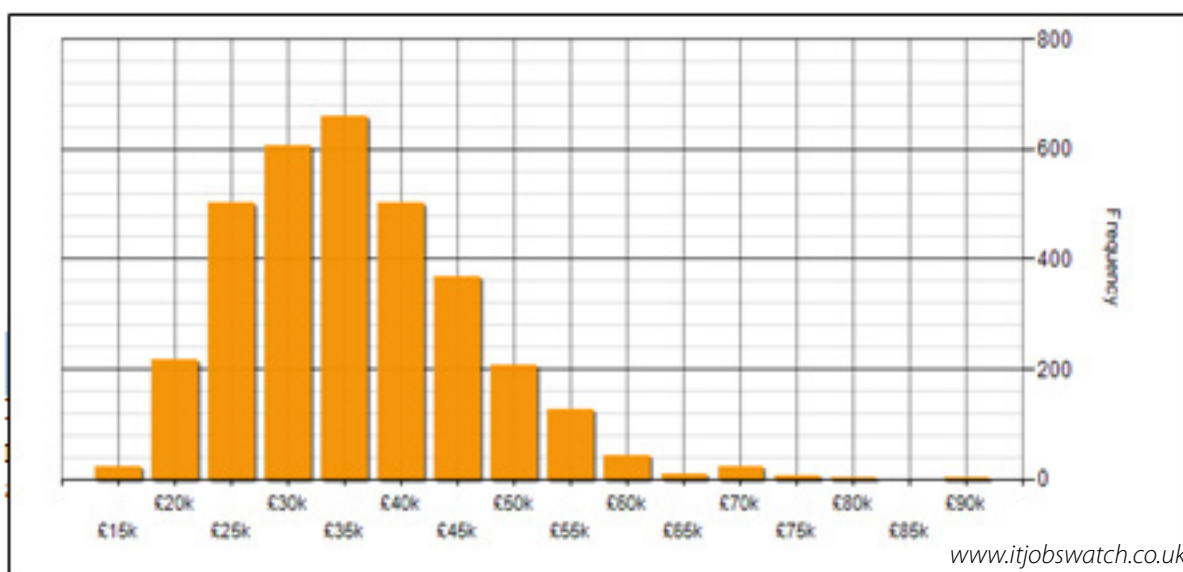


Web Developers Average Salary Trend

www.itjobswatch.co.uk

It can be seen from the graph that the salaries have very slowly increased and has tended to remain stagnant for long periods eg from July 2006 to approximately August 2007. It would appear that the average salary for a web developer is now approximately £35,000.

The Chart below shows the salaries offered over the three months to 7th January 2014 for Web Developers.



Advertisd Salaries for Web Developers for the three month period to 7th January 2014

The table below provides an indication as to the current demand for Web Developers with the average salary compared with the previous two years. The statistics are based on the percentage of all IT job roles advertised.

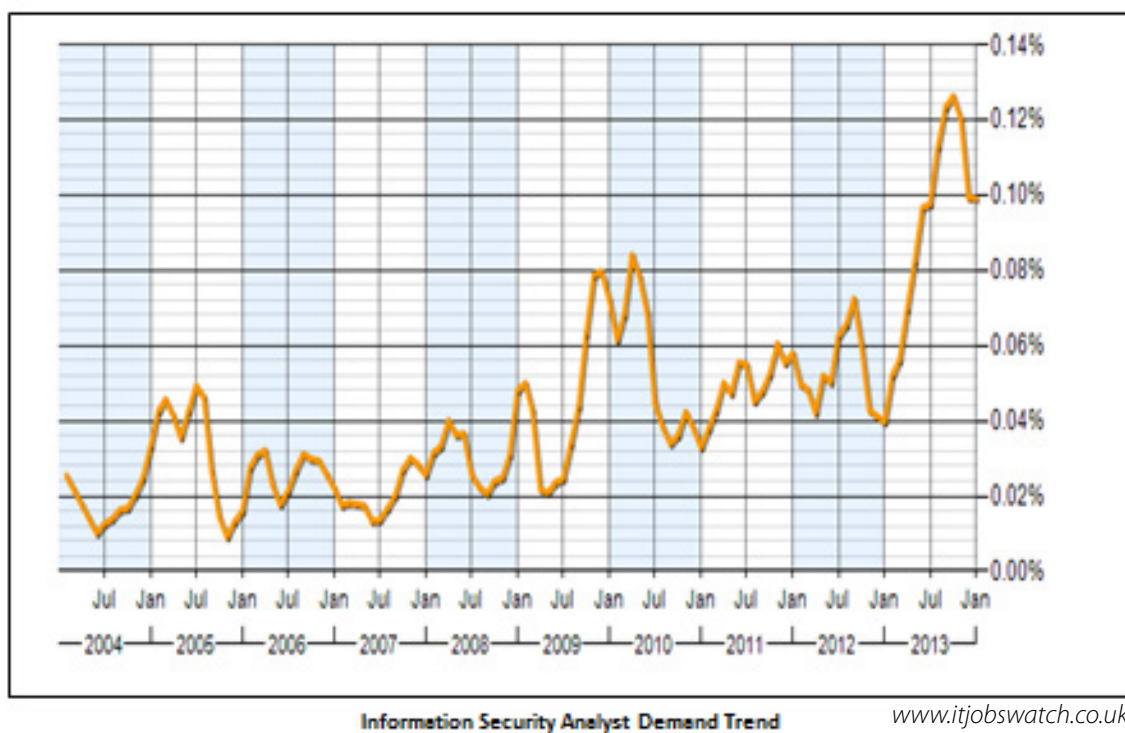
Web Developer	3 months to 7 Jan 2014	Same period 2013	Same period 2012
Rank	72	64	61
Rank change year – on - year	Down 8 places	Down 3 places	-
No of jobs requiring Web Developers	3844	4168	4430
As % of all IT jobs located in the UK	3.75%	3.83%	3.80%
As % of the Category "Digital Media"	3.97%	4.02%	4.01%
Average Salary	£35,000	£35,000	£34,000
Average salary % change year – on – year	No change	Up 2.94%	-

Entry Requirements:

This position usually requires someone to have an HND, foundation degree or degree in an IT-related subject eg web development or web design, multimedia design, digital media development, web content management, business information systems, computer programming. You may be able to start in a junior position if you have lower IT qualifications as long as you demonstrate that you have excellent skills with respect to web development technologies. You would need to be familiar with at least one of the following: operating systems and servers, databases and web programming, networking and security, graphics and web design.

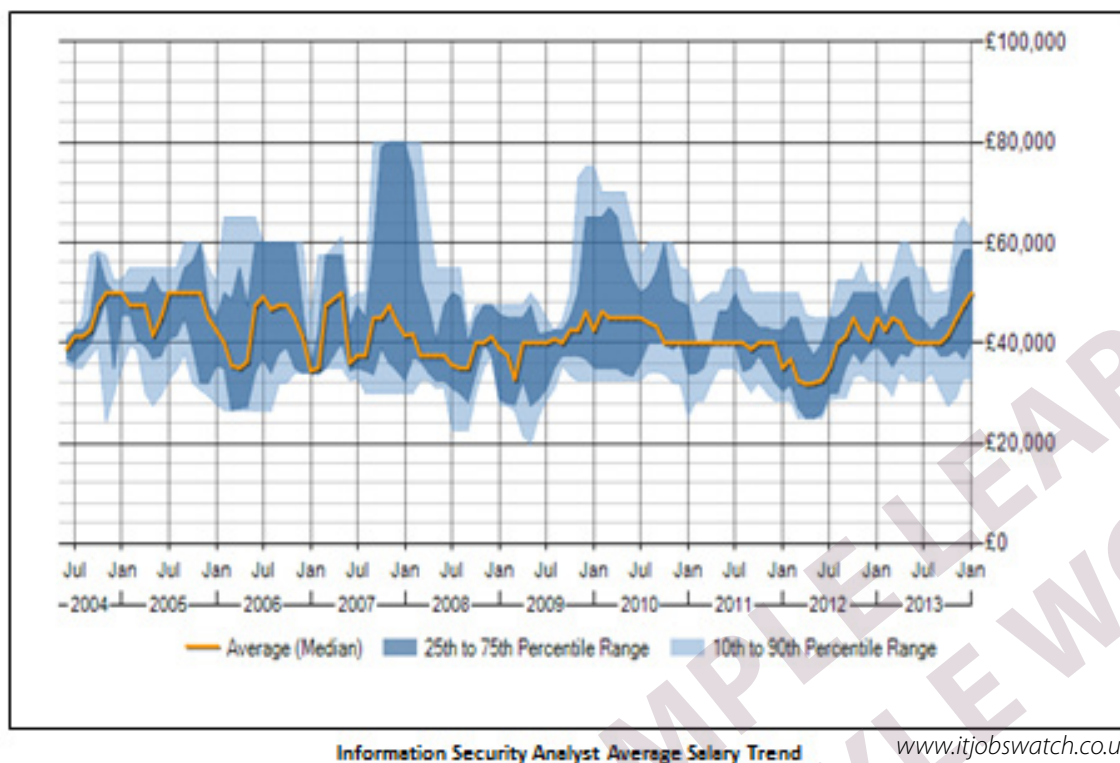
Information Security Analyst (Management Information Systems)

The following graph shows the total of Information Security Analysts jobs within the UK as a proportion of the total demand for IT jobs.



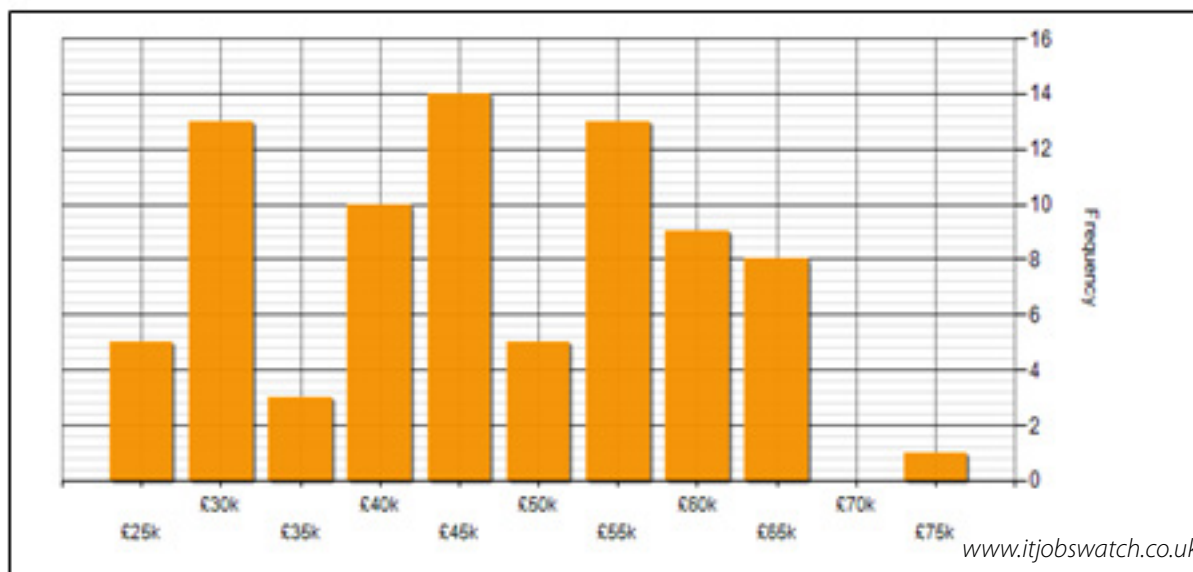
It can be seen from the graph that in the last 12 months there has been a large increase in the number of jobs advertised for Information Security Analysts. This could be because the risk of computer fraud and hacking has increased radically over the last 12 months or so or that businesses are becoming more aware of the issues surrounding secure systems.

The graph below shows the average salary that can be expected by someone applying for the position of Information Security Analyst.



It can be seen from the graph that the average salary has fluctuated between approximately £32,000 and £48,000. It would appear from the graph that the salary offered for this position is now at its highest for the last 10 years.

The chart below shows the salaries offered over the three month period to 7th January 2014



Advertised Salaries for Information Security Analysts for the three month period to 7th January 2014

It can be seen that the salaries for Information Security Analysts are showing an increase in the last three months with a number of positions being offered with salaries of £45,000, £55,000, £60,000 and even £65,000.

The table below provides an indication as to the current demand for Information Security Analysts with the average salary compared with the previous two years. The statistics are based on the percentage of all IT job roles advertised.

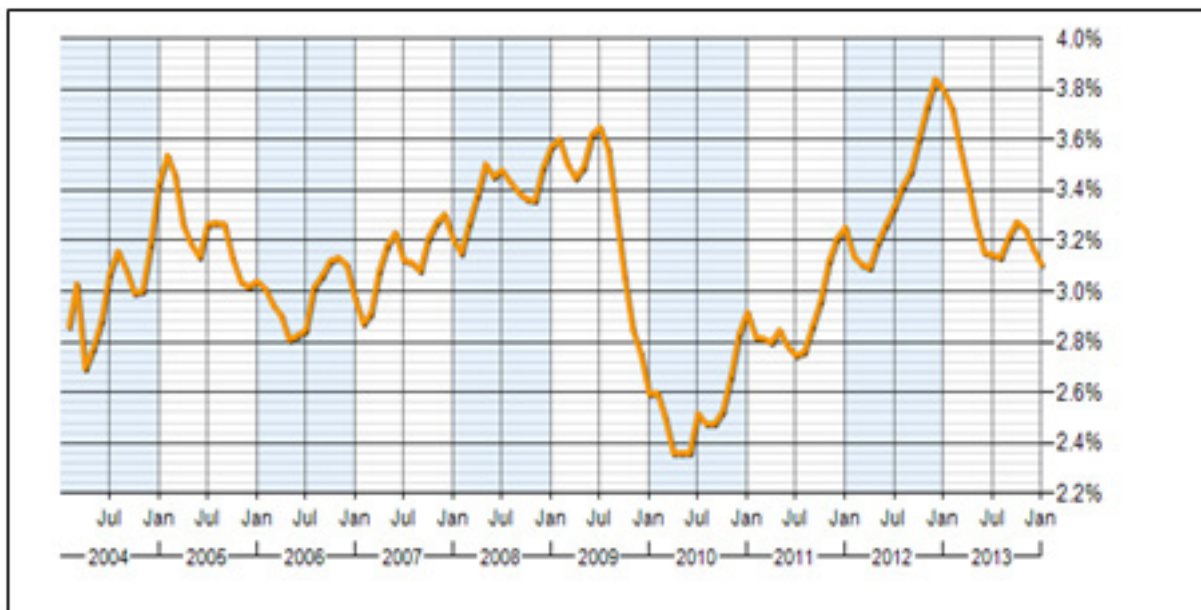
Information Security Analysts	3 months to 7 Jan 2014	Same period 2013	Same period 2012
Rank	762	825	822
Rank change year – on - year	Up 63 places	Down 3 places	-
No of jobs requiring Information Security Analysts	94	45	61
As % of all IT jobs located in the UK	0.092%	0.041%	0.052%
As % of the Category "Management Information Systems"	0.097%	0.043%	0.055%
Average Salary	£47,500	£40,500	£40,000
Average salary % change year – on – year	Up 17.38%	Up 1.75%	-

Entry Requirements:

If you follow the university route, you would need to achieve a degree or postgraduate award in subjects such as computer science (with security options), network security or computer forensics. You could then apply to a company under a graduate training scheme. If you are already employed in the IT industry as a systems analyst, network engineer or database administrator, you could apply for positions based on your skills and knowledge.

Database Administrator – Database and Business Intelligence Category

The following graph shows the total of Database Administrator jobs within the UK as a proportion of the total demand for IT jobs.

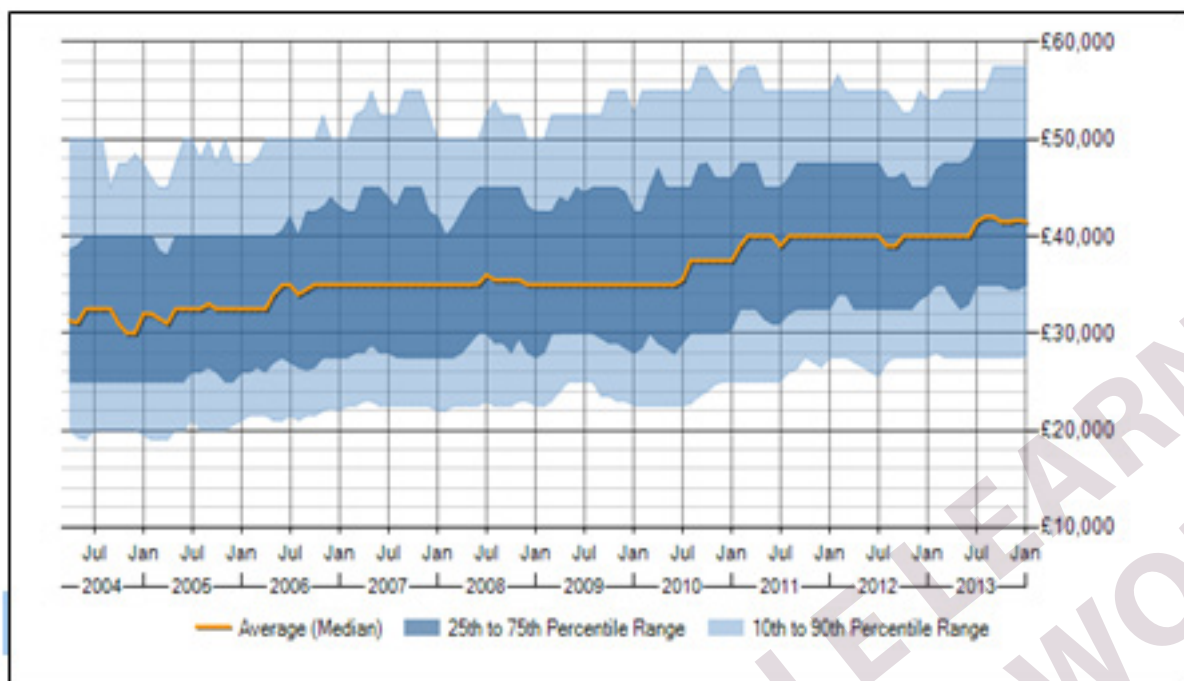


Database Administrator Demand Trend

www.itjobswatch.co.uk

It can be seen from the graph that the demand for database administrators dipped very low between January and July 2010. The demand then increased to its highest position in January 2013 and then dipped again by July 2012. There was a small increase in demand between July 2012 and January 2013, but this appears to be dipping again.

The graph below shows the average salary that can be expected by someone applying for the position of Database Administrator.

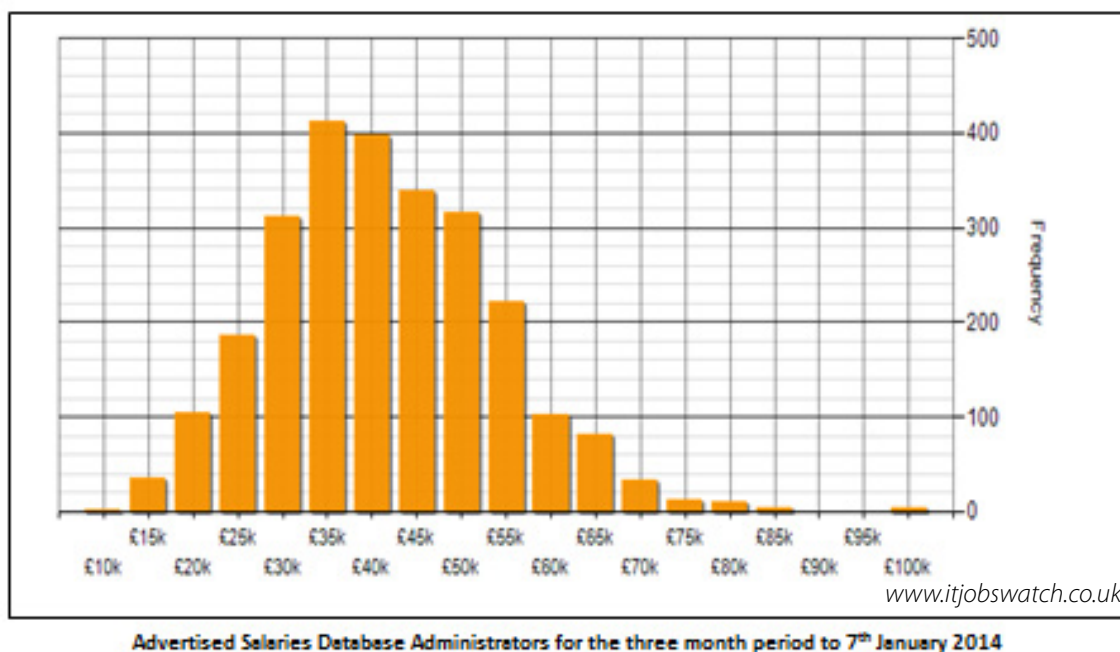


Database Administrator Average Salary Trend

www.itjobswatch.co.uk

It can be seen from the graph that there has been a very slow and steady increase in the salary rates for database administrators but most of the time it has remained static.

The chart below shows the salaries offered over the three month period to 7th January 2014



It can be seen from the chart that the majority of jobs advertise offers a salary between £25,000 and £56,000. The lower salaries are probably for less senior positions.

The table below provides an indication as to the current demand for Database Administrators with the average salary compared with the previous two years. The statistics are based on the percentage of all IT job roles advertised.

Database Administrators	3 months to 7 Jan 2014	Same period 2013	Same period 2012
Rank	93	69	83
Rank change year – on - year	Down 24 places	Up 14 places	-
No of jobs requiring Database Administrators	3076	3987	3547
As % of all IT jobs located in the UK	3.00%	3.66%	3.04%
As % of the Category "Database & Business Intelligence"	3.18%	3.84%	3.21%
Average Salary	£42,000	£40,000	£40,000
Average salary % change year – on – year	Up 5 %	Static	-

Entry Requirements:

In order to apply for this position, someone would have to have a good working knowledge of SQL (structured query language) and DBMA (database management systems) which include the following:

- DBMS – relational database management systems
- XML – database management systems
- OODBMS – object-oriented database management systems

This statistical information was available on www.itjobswatch.co.uk and the information relating to the entry requirements for each of the job roles is available on National Careers Service website www.nationalcareersservice.direct.gov.uk.

It would appear from the statistics available that the five job categories that I have been researching have the following position within the overall IT job market.

Job Category	Rank	No of Jobs Advertised	% of all IT Jobs offered in the UK
Digital Media	72	3844	3.75%
Database & Business Intelligence	93	3076	3.00%
Communications & Networking	710	125	0.013%
Management Information Systems	762	63	0.092%
Operating Systems	765	70	0.73%

It can be seen that currently the majority of jobs available are within digital media and database & business intelligence. Roles within the category of operating systems and management information systems are close together and advertise very few jobs. The higher ranking of the digital media and database & business intelligence categories could be due to there being a higher demand for these particular areas of expertise due to changing technologies and the ways business work.

SCENARIO ONE

For D1, you are required to select an IT job role that you are interested in and explain the skills required for that job. You should also provide information about your own skills and qualifications so that you can identify how you could progress to this job role. Make sure that you include any references to the sources you have used.

DISTINCTION CRITERIA - D1

A skill is something that you acquire through training and repetition. There are different types of skills that we learn such as:

- Technical skills
- Communication skills
- Organisational skills
- Health & Safety
- Working procedures and practices

An IT support technician needs to have a thorough knowledge of computers systems to include operating systems (and not necessarily just Microsoft Windows), hardware, software and networking. These are important technical skills as an IT support technician needs to be able to:

- build and upgrade computers,
- set up network systems
- identify and solve problems with computer systems
- carry out equipment testing

An IT support technician also needs to have a thorough knowledge of health and safety legislation and potential risks associated with the job role. They need to know how to minimise the risk to themselves and to others. This can be things such as using cleaning equipment eg solvents and compressed air. They should ensure that the people in the close proximity of where they are working are not allergic to anything that they are using. They need to be aware of the risks associated with electricity and the limitations of what they can and cannot do eg they should not open up monitors or power supplies unless they have had specific training.

Working procedures and practices are what organisations put in place to ensure the smooth running of their business. This can be general working procedures and practices as well as safe working procedures and practices. It is important that an IT support technician adheres to the working practices stipulated by the organisation to ensure that they work efficiently and safely. It is important that an IT support technician has good communication skills as they need to be able to explain problems and solutions to other people who may or may not have technical expertise and knowledge. If they work on a help desk, they would need to be able to communicate with people over the telephone and ensure that they clearly explain what they want people to tell them or need them to do. This may require them to use very simple language and not use a lot of jargon. An IT support technician may also be required to train other staff or customers on how to use new systems, hardware or software. Their written communication skills must also be good as they have to document the work that they do and this can include the recording of equipment testing, fault finding and diagnosis. This information must be available for relevant people who may need it and therefore be accurate and clearly understood. IT support technicians may also be required to produce user guides or instructional guides for others to use.

Organisational skills are key skills to the IT support technician as they need to be able to prioritise their work to ensure that jobs are completed to schedule as this can have an effect on their organisation and/or customers. The job role of an IT support technician can be very pressurised with tight timescales and therefore it is important that they are able to work methodically and carefully without getting flustered.

Below I have produced a table of my strengths and weaknesses with respect to the skills that I have explained as being part of the requirements for an IT support technician.

Strengths	Weaknesses
I am able to build and upgrade computers systems and have built my own computer	I need to increase my knowledge of different operating systems and software packages
I am good at identifying what tests are required to test equipment and what the expected outcomes should be	I do not have any knowledge of setting up or using network servers for large networks
I am not too bad at identifying problems and solving them. Some problems I find more difficult and have to spend a lot of time researching what the problem is and what the cause could be	I need to have more knowledge of a wider range of common computer system problems so that I can solve the problems more quickly
I have a reasonable knowledge of Microsoft Windows and the more common packages used by people eg Microsoft Office	I need to concentrate on my written communication skills so that I can ensure that I document the work that I do such as testing equipment and solving problems. I also need to practice talking on the telephone to people I don't know so that I can help people who phone up with a problem with their computer. I tend to get tongue tied and sometimes use too much jargon so people cannot understand what I am saying.
I am good at keeping up-to-date with the latest hardware that is available for computer systems	I do not have any IT qualifications
I am able to create a small home wireless network and network desktops, laptops, iPads, phones and printers	
I follow very good health and safety working practices ensuring that I do not harm myself, others or the equipment or data I am working on	
I am a good verbal communicator when talking to people face to face, but I am not so good with my written communication skills. This is because I like to talk to people and show them things as opposed to writing it down	
I am a good organiser and always ensure that I meet any deadlines I have been given at school to get work in for marking. When studying for my exams I produce a revision planner so that I can keep a track of what I am doing.	

On the next page is my personal development plan identifying what I need to do in order to become an IT support technician.

PERSONAL DEVELOPMENT PLAN - IT SUPPORT TECHNICIAN

Development Objectives	Activities to achieve objectives	Support/Resources required	Target date	Actual date
Improve written communication skills	<p>Document my activities when I am upgrading, repairing or testing computers</p> <p>Create simple user guides for people on how to create an email account and install a printer</p>	<p>Research different forms of recording documentation that could be used from the Internet and ask the school technician what he uses</p> <p>I will need to give this to people who do not have a lot of technical knowledge of computers to see if they can follow it</p>	<p>31st July 2014</p> <p>31st July 2014</p>	
To improve my technical knowledge of computer systems	Attend an evening class at the local college for IT Support Technician Training (PC Configuration CompTIA Strata)	College facilities and lecturers	31st July 2014	
Apply for apprenticeship with local college for apprenticeship as IT Support Technician	Research local college website and attend open evening to find about the entry requirements, the course content and being an apprentice	Local college	Open evening 24th February 2014	Attended open evening 24th February 2014 – found out entry requirements so updated PDP
Achieve 4 GCSEs including Maths and English at grade C or above	<ul style="list-style-type: none"> Discuss my progress with my teachers Improve grades by doing additional exercise/revision 	Teachers and text books	May/June 2014	

I have decided to work towards getting an apprenticeship programme as this will enable me to get experience by working in a real job whilst earning money. I will be with an employer where I will learn skills via “on the job” training as well as attending College on a weekly basis for classroom based sessions.

Although my academic abilities are pretty good, I prefer to go to work than study at university and therefore will be able to apply for an apprenticeship. The apprenticeship programme will help me further improve my skills such as communicating with people in writing and verbally, fault diagnosis and rectification and enhance my general problems solving skills. In order to be successful at being an apprentice I will need to be conscientious, reliable, self-motivated, committed and enthusiastic. I will have the opportunity to achieve further relevant qualifications as part of the apprenticeship programme. The qualifications will be as follows:

- Level 3 Diploma in ICT Professional Competence (PROCOM)
- Level 3 ICT Systems and Principles for IT Professionals (Technical – PROCOM)
- Level 2 Functional Skills in English, Maths and ICT (if required – these may not be required if my grades are C or above when I leave school. If my grades are weaker for say maths, they college may still accept me but I would need to achieve the maths functional skill)

I will also learn about my rights and responsibilities as an employee of an organisation as well as any legislation relevant to the workplace and the IT industry as a whole.

The “on the job” training will be delivered by my employer where I will work under the supervision and guidance of the IT support manager. I will be working on “live” jobs belonging to customers of the organisation. Whilst at college I will work be taught in a formal teaching environment where I will be required to take notes and hand in assignments.

As I will be an apprentice, I will be allocated an assessor who will provide me with guidance during my apprenticeship. They will visit me in the workplace and carry out assessments on my work. I will need to put together a “portfolio of evidence” to provide evidence for the units that I am working towards. The units will be agreed between my employer, me and my assessor. Once the assessor agrees that I have provided sufficient competency and knowledge for a particular unit, they will “sign it off” on the evidence record sheet. The assessor will visit me on a monthly basis in the workplace.

As well as being assessed, I will have reviews with my manager and assessor where we will discuss my progress and how I am getting on.

Once my apprenticeship is complete, I will be able to move on to a Higher Apprenticeship or even study for a degree.

Sources:

www.nationalcareersservices.direct.gov.uk; www.e-skills.com

SAMPLE LEARNER
STYLE WORK

SCENARIO THREE

You are required to explain the characteristics required for the job that you selected for D1. Do not just give a definition of the characteristics; explain why they are required for the job role you have chosen.

PASS CRITERIA - P3

Characteristics Required for the Job of IT Support Technician

An IT support technician must have good interpersonal skills. These include the following skills:

- Verbal and written communication
- Listening skills
- Negotiation
- Problem solving
- Decision making

I am going to take each one in turn and explain why they are required for the job of IT Support Technician.

Verbal communication – when talking to people the first few minutes are extremely important as this gives people a first impression of you and can have an impact on the success of any further communication. IT support technicians need to be good communicators as they need to be clearly understood and have the ability to talk to people regardless of who they are or whether they have any IT technical skills or not. People must feel that you are approachable and not made to feel stupid if they ask questions.

Written communication – IT support technicians are required to write reports, complete documentation and possibly produce guidance material or instructions for people. It is important that they have good written communication skills so that they can write clearly and legibly.

Within both verbal and written communication it is important that the message is communicated well and this can mean not using too much jargon which will confuse the non-technical people.

Listening skills – an IT support technician must have good listening skills as they need to focus on what someone is saying to them, especially if it is a customer who has a problem with their computer system. They need to listen carefully so that they can understand what someone is saying to them and ask relevant questions to ensure that they have understood correctly. They also need to have good listening skills if they are being given instructions from say their manager on a job that needs to be done or advice on how to solve a problem.

Negotiation – it is important that an IT support technician is a good negotiator as they may have to negotiate solutions and or timescales with their customers or work colleagues. In order to negotiate they may have to compromise in order to reach a mutual agreement with people.

Problem solving – an IT support technician must have good problem solving skills. They need to be able to analyse problems, identify the severity of the problem as well as identify a solution. There may be a number of solutions and they will need to assess the impact of these solutions on the customer and/or organisation. Problem solving skills enables the IT support technician to work more efficiently and use resources to resolve problems in a constructive manner. They must have a methodical and disciplined approach to problem-solving in order to select solutions which will have the minimum effect on others.

Decision making – it is important for IT support technicians to be able to make decisions. They need to be able to identify and choose appropriate solutions to problems, upgrades of systems or even the build of a new system which will meet the requirements of their customers.

Other characteristics which are required for the role of IT support technician includes:

- Time management
- Flexible
- Team working
- Self-motivated
- Patient
- Dependable
- Determined

Time management – an IT support technician must be able to manage their time effectively which can include working under pressure in order to meet deadlines. In order to achieve this, they must be able to prioritise their work. It is also important that a technician does not allow themselves to be interrupted from what they are doing as scheduled work should always take priority over unscheduled work unless an emergency occurs. In order to have an effective time management strategy, it is important that they allocate sufficient time for the various jobs they have to carry out building in additional time in case of problems.

Flexible – Flexibility is also linked to time management. A technician may have to show some flexibility and stop what they are doing to address an issue for a customer or work colleague which could have detrimental effects on their business if the issue is not resolved. Flexibility can also include accepting that their hours of working may not always be 9am to 5pm and could involve travelling to different sites or locations.

Team working – not all IT support technicians work alone, they may work for larger organisations involving a team of support technicians. It is therefore important that an IT support technician is able to work as part of a team. It may be that the team are working on a large network installation and each team member has been given a particular job to carry out. Each team member is relying on the other team members to complete their jobs on time and accurately. Failure to do so, could create friction and cause the project to over-run the intended deadlines. Another example could be where a colleague is working on a system and they are having difficulty in finding a solution to a problem, by working as a part of a team, they could get support in the form of advice from other team members.

Self-motivated – if someone is self-motivated they do not need someone to constantly watch them and tell them to get the work done. An IT support technician must have self-motivation in order to meet their timescales when providing technical support to their customers. An employer would not want to employ someone who they constantly had to supervise. An IT support technician often has to “think on their feet” or “go the extra mile” when dealing with their customers. In order to do this they would need to be self-motivated. IT is forever changing and therefore an IT support technician would need to be self-motivated in carrying out research in their own time to ensure that they remain up-to-date so that they can remain effective within their job role.

Patient – patience can be difficult, especially if you are trying to solve an IT problem or work colleagues are not participating in work-related activities as they should do. Having patience enables an IT support technician to take time to think. They can think about what they are doing and take time to consider the best options. It may be that they are mentoring a new person to the role and therefore they need to have patience when dealing with them as they may be nervous or unsure.

Dependable – being dependable means that people can trust you to do the things you say you are going to do and that they can rely on you when you are needed. If an IT support technician has been given a job to do eg upgrade the network, and they have said that they will get it done by a certain time, then it is important that they keep to this timescale. The organisation and/or customer may be relying on the technician meeting their deadline so that they can carry on with their own work. The employer needs to know that the IT support technician can be trusted to arrive on time, get the work done as agreed and support the business and/or customers as per the organisational procedures and practices.

Determined – being able to effectively solve IT problems can require a lot of determination from the IT support technician. Determination can counteract the effect of frustration. People expect an IT support technician to solve any problem that they may have. In a lot of cases this may be true, but there are instances where a technician could try every potential solution they know, only to discover that nothing that they have tried has solved the problem. They therefore need to be determined to find an appropriate solution which could mean conducting further tests, carrying out further research into possible causes and solutions and/or asking colleagues or managers for advice.



CONTACT US

Staff at the OCR Customer Contact Centre are available to take your call between 8am and 5.30pm, Monday to Friday.

We're always delighted to answer questions and give advice.

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