Installation, Implementation and Handover of Network Infrastructure Services

Overview

This sub-discipline Network Support (903) is concerned with the competencies required for network operations and support to ensure the ongoing availability of IT services, systems and assets. It includes the primary installation, implementation and optimisation of Network hardware and software.

Network support can expect to support not only the users of the systems but also to the service delivery functions. Support normally takes the form of investigation and resolution of incidents for the network infrastructure. It may also include monitoring of performance and security. Solutions to incidents and problems may be provided through advice, training, provision of new services, fault correction and other work around or modifications to the infrastructure.

Working in the associate professional network design role (9033) is primarily focussed on the installation, implementation and handover of network infrastructure including support to staff, users and suppliers.

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Performance criteria

You must be able to:

1. install and configure network components, including switches, routers and firewalls in line with organisational standards
2. follow organisational transition and deployment plans in order to deliver upgrades to network infrastructure
3. undertake systems upgrades to network hardware, software and operating systems in line with organisational standards
4. document network infrastructure upgrades and changes in accordance with organisational procedures
5. integrate network related software into an existing network environment with the minimum amount of disruption to the organisation
6. measure, monitor and report on quality of the new agreed network services within required timescales and to meet service level agreements
7. provide support to staff and users of the network infrastructure in line with organisational procedures
8. undertake network fault investigations and remediation in a range of network environments in line with organisational procedures
9. document network fault investigations and remediation activities in line with organisational procedures
10. communicate the results of network fault investigations and remediation activities to managers and other stakeholders within required timescales in line with organisational procedures

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Knowledge and understanding

You need to know and understand:

1. the different types of networks for data, voice and other services
2. the range of industry standard network layouts and software
3. how to install and configure a basic network
4. the principles of networking, protocols and associated technologies (this should include the latest published versions of the OSI layer model, IP, TCP/IP, routing and switching, WANs and LANs)
5. the techniques for ensuring the staff and users' needs are realised in the delivery of network infrastructure services
6. the procedures, tools and techniques that can be used to conduct systems installation, implementation and handover activities
7. how to optimise network performance following installation
8. the potential implications of systems installation, implementing and handover deliverable being incorrect
9. the importance of systems installation, implementation and handover deliverables in supporting the business needs
10. the importance of ensuring that agreed network integrity, security and disaster recovery requirements are in place during systems installation, implementation and handover activities
11. how to undertake network fault investigations and remediation activities on a range of network types
12. how to document and report network fault investigations and remediation solutions
13. different types of network hardware systems upgrades required and how to carry them out
14. different types and levels of support of the network infrastructure required by users

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