

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 professional network support role (9034) is primarily focussed on the delivery of network infrastructure solutions and support services.

Performance criteria

You must be able to:

1. identify the activities that need to take place for effective network infrastructure installation, implementation and handover
2. ensure that network infrastructure implementation and handover is signed off by appropriate customer representatives
3. monitor network infrastructure services using network management tools to ensure that they continue to meet organisational standards for performance and service levels
4. apply diagnostic tools and techniques to identify the causes of network service and performance issues
5. apply structured approaches to troubleshooting network issues in hardware and software in line with organisational procedures
6. undertake appropriate remediation activities to repair faults in network infrastructure hardware and software components
7. install and configure enterprise network hardware, including switches, routers, bridges and interfaces in line with organisational procedures
8. install and configure enterprise network software, including operating systems, firewalls and performance monitoring tools in line with organisational procedures
9. optimise the performance of network systems and services in line with organisational standards
10. maintain a network issues log to record all network events in line with organisational requirements
11. document the remediation work undertaken to resolve network issues in line with organisational procedures
12. produce standard and ad hoc network management reports on network traffic load and performance against targets to meet organisational needs
13. assist in policy and operating procedure development where required and in line with organisational procedures
14. engage with organisational departments to understand and support their network support requirements in line with their needs

Knowledge and understanding

You need to know and understand:

1. the different business processes that utilise network infrastructure services
2. the range of tools and techniques used for network management and support
3. the range of tools and techniques used for network diagnostics
4. how to maintain a network issues log
5. enterprise network topology including wired, wireless communications media and the wide range of industry standard network products including; network interface controllers (NICs), repeaters, hubs, bridges, switches, routers, modems, and firewalls.
6. network protocol standards that enable communication between networked devices
7. the causes and consequences of systems failure including load balance and storage protocols and respond appropriately
8. the need to monitor and report network issues on a timely basis
9. the range of different architectures used across the organisation for a typical business IT system and how to use them
10. how to respond to security threats, firewalls and vulnerabilities
11. how to operate effectively in the business environment and responds to business issues related to network engineering
12. the range of different data architectures used across the organisation and how to use these

Deliver Network Infrastructure Services Support

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