

Overview

This sub-discipline Network Planning (901) is concerned with the competencies required for network planning in order to ensure that the business has a resilient information systems network infrastructure so that data may be passed in a timely manner to support service provision.

Network infrastructure is comprised of the necessary hardware and software components that are necessary to establish any kind of network over any type of transmission medium which will support the provision of IT services, systems and assets. This requires not only technical knowledge of individual hardware and software network products and services (or any combination of these) but also the architectural principles, standards and protocols that must be applied within the development of the infrastructure.

Individuals working within this area should have a broad knowledge of all aspects of networking in order to develop plans for the development of network infrastructure services that take into consideration all areas that may affect the business.

Working in the associate professional network planning role (9013) is primarily focussed on assisting the creation of overall network plans to support the organisations changing network infrastructure requirements.

Develop Network Infrastructure Service Plans

Performance criteria

You must be able to:

1. undertake network planning activities to identify the key characteristics of a new network service and in line with organisational requirements
2. apply the organisation's defined tools and methods to develop the network plans as required
3. develop and maintain network plans to the required organisational standard
4. develop estimates of the expected traffic intensity and traffic load that the network must support in line with organisational standards
5. determine the minimum network capacity of planned networks to meet network requirements in line with organisational standards
6. develop and maintain network plans in line with organisational procedures
7. produce reports in line with organisational procedures

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Knowledge and understanding

You need to know and understand:

1. the fundamental concepts of network planning
2. the range of approaches that may be used to conduct network infrastructure planning activities
3. the appropriateness of different network planning methodologies to a range of business and organisational contexts
4. the processes tools and techniques that can be used to conduct network infrastructure planning activities in a range of business contexts
5. the different types of network, including wired and wireless
6. the range of typical network hardware components and software that are used in networks (e.g. repeaters, hubs, bridges, switches, routers and interfaces)
7. the organisations strategy and policies to conduct network planning activities
8. the processes, tools and techniques that can be used to monitor the quality and effectiveness of network infrastructure design and planning activities and their effectiveness
9. how to interpret the business case for any changes to the network infrastructure
10. how to estimate network traffic demands
11. the fundamentals of network architecture
12. the range of internal and external facing systems that require network infrastructure services
13. how to produce plans and reports related to network planning
14. what is meant by a network service level agreement

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