



Australian Government

Assessment Requirements for ICTNWK601 Design and implement a security system

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- evaluate network security system threats and requirements
- mitigate attacks and configure firewalls
- design and implement network security systems
- implement a virtual private network (VPN) using security device management tool.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise access control lists, configuration and troubleshooting
- outline authentication protocols
- explain encryption techniques
- explain intrusion detection system (IDS) and intrusion prevention system (IPS)
- clarify internet protocol (IP) and networking models
- explain current wireless regulations, standards and certifications
- describe local area network (LAN) or wide area network (WAN) implementations
- summarise malicious attacks and prevention techniques
- outline network management tools
- explain network security prevention methods
- explain procedures to configure, verify and troubleshoot:
 - switch with virtual local area networks (VLANs) and inter-switching communications
 - router
- outline procedures to set up virtual private networks (VPNs)
- explain routing protocols

- explain threat and attack mitigation techniques
- outline the use of command line interface to configure and test network elements
- describe the common features of Terminal Access Controller Access-Control System Plus(TACACS+) and Remote Authentication Dial In User Service (RADIUS) authentication, authorisation and accounting (AAA) protocols.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a site where network security may be evaluated and tightened
- hardware and software
- organisational guidelines, procedures and policies
- computers
- LAN or WLAN internet work technologies (hardware and software)
- security technologies (hardware and software).

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>