



Australian Government

Assessment Requirements for ICTNWK418 Implement backbone technologies in a local area network

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:

- define, design and document the structure of the network and subnets required for the network
- build and test an asynchronous transfer mode (ATM) local area network (LAN) that provides the required services at the required communication standards
- document resource requirements and network performance.

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:

- outline current and emerging industry practice associated with:
 - bandwidth limitations, measuring and testing
 - LAN and wide area network (WAN) network topologies (three-layer LAN hierarchy: core distribution and access)
 - MAC addresses, network layer protocols
 - open systems interconnect (OSI) layer modelling
 - routers
 - virtual LANs
- identify and describe network interface cards (NICs) and switches, including:
 - fast Ethernet
 - gigabit
 - 10-gigabit Ethernet
 - store-and-forward
 - fast-forward

- fragment-free
- identify and describe internetworking protocol suites, including:
 - TCP/IP
 - IPX
 - DECnet
 - AppleTalk
 - IPv6.

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:

- local area network infrastructure
- switches with various interfaces.

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>