



Australian Government

**Assessment Requirements for ICTNWK433
Install 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 6.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, and to:

- install and configure backbone connectivity in a LAN on at least one occasion.
- build and test one asynchronous transfer mode (ATM) local area network (LAN) that provides the required services at the required communication standards
- document resource requirements and network performance.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- current and emerging industry standard 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
 - network interface cards (NICs) and switches, including:
 - fast Ethernet
 - gigabit and 10-gigabit Ethernet store-and-forward
 - fast-forward
 - fragment-free
 - internetworking protocol suites, including:
 - TCP/IP, IPX, DECnet, AppleTalk, IPv6.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- a site at which installation of backbone and ICT activities may be carried out
- required web and technical applications
- documented installation guidelines on vendor products
- local area network infrastructure
- switches with various interfaces
- network administration tools.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

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