



Australian Government

Assessment Requirements for ICTTEN517 Plan a wireless mesh network

Release: 1

Assessment Requirements for ICTTEN517 Plan a wireless mesh network

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Performance Evidence

Evidence of ability to:

- evaluate and select wireless technology and mesh routing protocol
- plan a wireless mesh network from a project brief
- produce an internet protocol (IP) addressing scheme
- prepare an installation plan.

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:

- evaluate antenna gain and polarisation
- outline cable loss
- conduct calculations for effective isotropic radiated power (EIRP)
- calculate line of site radio range
- explain decibels and related units
- summarise IP addressing and subnet masks
- explain network security and firewalls
- outline a range of network topologies
- summarise radio frequency (RF) bands
- explain routing protocols
- clarify transmission control protocol (TCP)-IP protocols
- explain wireless networking hardware, access points, wireless routers and gateway
- explain wireless 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 should be typical of those experienced in the telecommunications networks engineering field of work and include access to:

- sites where planning a wireless mesh network may be conducted
- design criteria and other site-related documentation
- equipment specifications and technical documentation.

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 guides are found in VETNet -

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