



**Australian Government**

# **Assessment Requirements for ICTTEN417 Install, configure and test a router**

**Release: 1**

# Assessment Requirements for ICTTEN417 Install, configure and test a router

## 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:

- plan and prepare for router installation task
- select router to meet client's business specifications
- install and test the router ensuring interoperability within the network, and applying router principles and technologies
- report on status of completed installation and seek sign-off and customer satisfaction
- use routers
- apply solutions to defined routing problems.

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:

- identify and outline codes of practice for computing
- explain the effect of a router on delimiting broadcast traffic and on conserving bandwidth
- explain how dynamic routing algorithms or protocols create and maintain routing tables
- explain how to provide the network with redundant paths for reliability, and the way routers manage these paths
- summarise the following aspects of routers including:
  - basic router commands
  - configuration
  - clock rate
  - password protection of router
  - routing protocol
  - dynamic routing

- firewalls
- functions
- routing protocols and how they operate
- tables
- describe router-based network architectures
- explain the use of routing tables in intelligent packet routing and switching.

## 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:

- a site where router installation may be conducted
- field measurement equipment currently used in industry
- relevant router specifications
- technical requirements for a network
- router
- cabling
- networked (LAN) computers
- wide area network (WAN) service point of presence
- relevant equipment and organisational documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

## Links

Companion Volume implementation guides are found in VETNet -

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