



**Australian Government**

**Assessment Requirements for ICTNWK507  
Install, operate and troubleshoot medium  
enterprise routers**

**Release: 1**

# Assessment Requirements for ICTNWK507 Install, operate and troubleshoot medium enterprise routers

## 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:

- plan and prepare for the installation of an enterprise router
- design a classless internet protocol (IP) addressing scheme, to suit requirements
- install, configure and test the network elements, to ensure interoperability within the network
- apply network topologies, routing and security protocols
- apply solutions, and troubleshoot any defined network 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:

- explain the basic routing concepts for small enterprise network switches and routers
- outline classless routing protocols, including:
  - enhanced interior gateway routing protocol (EIGRP)
  - open shortest path first (OSPF)
  - routing information protocol (RIPv2)
- summarise debug commands
- explain internet protocol version 4 (IPv4)
- summarise the purpose, and basic operation, of protocols in the open system interconnection (OSI) and transmission control protocol, or internet protocol (TCP/IP), models
- explain the router calling line identification (CLI) configuration.

## 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 installation may be conducted
- enterprise routers and operating systems
- hardware and software
- the organisational guidelines
- computers.

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>