Australian Government

ICTTEN416 Install, configure and test an internet protocol network

Release: 1

ICTTEN416 Install, configure and test an internet protocol network

Modification History

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

Application

This unit describes the skills and knowledge required to select network elements to meet client business specifications, ensure interoperability within the network, apply network topologies, protocols and security issues, and troubleshoot when required.

It applies to individuals who carry out installation, maintenance and upgrade of information and communications technology (ICT) networks, and are employed by telecommunications or information technology networking provisioning companies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Telecommunications – Telecommunications Networks Engineering

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Prepare to install IP network	1.1 Prepare for given work according to relevant legislation, work health and safety (WHS) regulations, codes and standards
	1.2 Arrange site access according to required procedure
	1.3 Review existing network design documentation to ensure it is current and complete
	1.4 Select components and network elements required to be installed to meet the technical requirements
	1.5 Contact vendors and service suppliers to obtain specifications

PwC's Skills for Australia

ELEMENT	PERFORMANCE CRITERIA
	and availability of identified components
	1.6 Develop plans, with prioritised tasks and contingency arrangements, for installation of components with minimum disruption to client
	1.7 Liaise with appropriate person to obtain approval for the plans, including security clearance and timing
2. Install and configure IP network	2.1 Install and configure server hardware and software according to organisational and industry standards, following plans
	2.2 Install and configure computer, other hardware and software, according to organisational and industry standards and plans
	2.3 Install and configure other software required for the network to operate with security and integrity according to the plan
3. Test and reconfigure IP network	3.1 Test installed software and hardware, utilising available technical tools, to ensure all components are functioning as expected
	3.2 Test the network to ensure it is functioning according to specifications
	3.3 Resolve problems identified in the modified network
4. Complete documentation and clean worksite	4.1 Complete hardware and asset recording document in line with organisational requirements
	4.2 Document installation, boot-up and configuration procedures according to organisational requirements
	4.3 Tabulate test results and complete all user reports
	4.4 Complete client report and notify of network status
	4.5 Clean up and restore worksite to client's satisfaction
	4.6 Secure sign-off from appropriate person

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.3, 3.2, 4.1, 4.2	• Recognises and interprets technical, legislative and operational documentation to determine job

		requirements
Writing	1.5-1.7, 4.1-4.4	• Uses clear, specific and industry-related terminology to produce and update workplace documentation in predetermined formats
Oral Communication	1.5, 1.7, 4.4	• Clearly liaises with internal and external personnel on technical, operational and business related matters • Uses listening and questioning skills to confirm understanding for requirements
Numeracy	3.1-3.3	• Makes calculations required to take test measurements, interpret results and evaluate performance and interoperability of network
Navigate the world of work	1.1, 4.5	• Takes personal responsibility for adherence to legal and regulatory responsibilities relevant to own work context • Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	4.5, 4.6	• Cooperates with others as part of familiar routine activities and contributes to specific activities requiring joint responsibility and accountability
Get the work done	1.2, 1.4, 1.6, 2.1-2.3, 3.1-3.3, 4.5	• Understands key principles and concepts underpinning design and operation of digital systems and tools, and applies these as required • Works logically and systematically to monitor, analyse and action job priorities • Implements actions according to a predetermined plan, making adjustments if necessary • Makes decisions quickly and intuitively in familiar situations requiring immediate attention, drawing on past experience to identify key variables and determine the best course of action • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, depending on differing operational contingencies, risk situations and environments

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

PwC's Skills for Australia

| Code and title
current version | Code and title
previous version | Comments | Equivalence status |
|---|---|---|---|
| ICTTEN416 Install, configure and test an internet protocol network | ICTTEN4198A Install, configure and test an internet protocol network | Updated to meet Standards for Training Packages. | Equivalent unit |

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2