ICTTEN205 Build and maintain a secure network

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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 build a simple and secure wired local area network (LAN) or wide area network (WAN) using a range of client server applications and services.

It applies to individuals who may work in job roles such as an installer of internet protocol (IP) networks, a WAN and LAN network technician or a WAN and LAN network support person.

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 build LAN or WAN	1.1 Prepare for given work confirming site-specific work health and safety (WHS) and environmental requirements, with appropriate personnel
	1.2 Identify safety hazards and implement risk control measures in consultation with appropriate personnel
	1.3 Determine network design specification from job briefs or appropriate personnel
	1.4 Determine network addressing scheme for network connectivity and confirm using calculations

ELEMENT	PERFORMANCE CRITERIA
	1.5 Select and obtain network hardware according to established procedures
	1.6 Obtain operating instructions, manuals, hardware and software testing methodologies
	1.7 Consult appropriate personnel to ensure the task is coordinated effectively with others involved at the worksite
2. Build and verify network	2.1 Establish connections between network hardware according to manufacturer's specifications and established procedures
	2.2 Verify network routing and switching to conform to network design specification
	2.3 Set up, configure and share network resources between network devices
3. Monitor network performance and troubleshoot network	3.1 Monitor network traffic and assess performance metrics against manufacturer's specifications and established procedures
	3.2 Identify security threats and initiate control measures according to enterprise procedures
	3.3 Troubleshoot network and internet connectivity according to manufacturer's specifications and enterprise procedures
4. Complete and document network build	4.1 Restore worksite to safe condition according to established safety procedures
	4.2 Record and store network schematics and network addressing scheme
	4.3 Notify appropriate personnel of completion of the task
	4.4 Notify customer and obtain sign-off

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	1.3, 2.1	• Identifies and interprets scope of job and relevant procedures
Writing	4.2, 4.4	• Completes workplace documentation accurately using appropriate form and vocabulary for intended audience

Oral Communication	4.3, 4.4	• Articulates specific messages in a tone and manner appropriate for intended audience
Numeracy	1.4, 3.1	• Confirms and checks decisions using basic calculations and predictions
Navigate the world of work	1.1, 1.2, 1.4, 1.5, 2.1, 3.1-3.3, 4.1	• Follows legislative requirements and organisational protocols, policies and procedures relevant to own role
Interact with others	1.1-1.3, 1.7,	• Collaborates and cooperates with others to achieve specific outcomes
Get the work done	1.5, 1.6, 2.1, 2.2, 3.1-3.3, 4.2	• Plans and prioritises tasks, developing and implementing a work program in line with organisational expectations, legislative requirements and work role • Recognises and anticipates a range of problems, actively looking for early warning signs and implementing contingency plans when appropriate • Uses digital technologies and systems to complete required tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN205 Build and maintain a secure network	ICTTEN2209A Build and maintain a secure 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