Australian Government

ICTTEN511 Administer a data communications network

Release: 1

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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 establish and configure a data communications network, maintain systems and applications, administer user accounts and diagnose and isolate system faults.

It applies to individuals working as technical staff who administer a local area network (LAN) or wide area network (WAN). They may make use of enterprise procedures and flow charts, and third party test routines analysing performance and functionality of a live data communications network.

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. Install and configure network	1.1 Prepare and confirm, with relevant personnel, the physical and logical structure of a LAN design to resolve hardware and software compatibility conflicts 1.2 Prepare file server and install network server software 1.3 Execute workstation boot procedures and verify network and work station functionality 1.4 Document network physical connections and workstation characteristics

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ELEMENT	PERFORMANCE CRITERIA
2. Set up network facilities	2.1 Configure set-up procedures for a network print server, network printer and a shared file system 2.2 Connect a bridge or router between two networks 2.3 Set up a gateway for a network 2.4 Set up a logical disk or volume structure
3. Administer user accounts	3.1 Create a user account and a user log script 3.2 Produce a document of network users for notification of their access rights and privileges 3.3 Add and delete users to maintain an up-to-date user list 3.4 Establish disk quotas for users 3.5 Develop common user security procedures and set up user profiles
4. Install common applications	4.1 Install and configure an application in client-server mode 4.2 Establish security and multiple access to an application 4.3 Set up and configure an email client and browser for the client
5. Install and configure systems applications	5.1 Configure a backup system for redundancy, according to customer policy 5.2 Administer disk fault tolerance and redundancy techniques
6. Maintain system integrity	6.1 Implement system integrity and system monitoring techniques to provide a reliable customer data network 6.2 Use diagnostic software to detect and isolate system faults 6.3 Produce a report on network performance and fault occurrence for the customer, with recommendations for improving the integrity of the data communications network

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	5.1	• Identifies, analyses and evaluates technical

			documentation, such as software and hardware manuals and specifications and relevant enterprise policy and documentation
Writing	1.1, 1.4, 3.1-3.3, 3.5, 6.3	•	Prepares clear and concise written reports and workplace documentation, incorporating technical language, to communicate complex information clearly and effectively
Oral Communications	1.1	•	Establishes and maintains complex and effective communications in a broad range of contexts
Numeracy	1.3, 3.4, 6.1	•	Analyses and synthesises highly embedded mathematical information while testing and analysing results
Get the work done	1.1-1.3, 2.1-2.4, 3.1, 3.4, 3.5, 4.1-4.3, 5.1, 5.2, 6.1, 6.2	•	Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context to organise and implement testing and contingency plans
		•	Uses digital technologies and systems to enter, store and present data, and diagnose faults
		•	Uses intuition, analysis and lateral thinking processes to make decisions about complex issues

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN511 Administer a data communications network	ICTTEN5147A Administer a data communications 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

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