Australian Government

ICTNWK504 Design and implement an integrated server solution

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 1.0.

Application

This unit describes the skills and knowledge required to design and implement a network authentication model that allows users to log in using the same user credentials between multiple operating system platforms to provide a secure method of sharing files on the same network.

It applies to individuals employed in network or systems engineering roles where they are required to support multiple operating systems in a complex computing environment of medium-to-large organisations.

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

Unit Sector

Networking

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 for the design and installation of an integrated server solution	1.1 Consult with client and key stakeholders to identify server integration requirements
	1.2 Prepare for work, according to site specific safety requirements and enterprise occupational health and safety (OHS) processes and procedures
	1.3 Arrange access to site and advise client of deployment and potential down times
	1.4 Consult appropriate personnel to ensure the task is coordinated effectively with others involved at the worksite

ELEMENT	PERFORMANCE CRITERIA
2. Plan and design integrated server solution	2.1 Research and review authentication methods available for integration of network operating systems
	2.2 Select appropriate authentication methods and protocols
	2.3 Research redundancy and replication requirements for selected authentication model
	2.4 Produce the integrated server design, including authentication, file sharing and security
3. Install and configure the integrated server solution	3.1 Implement integrated authentication solution
	3.2 Implement integrated file sharing solution
	3.3 Configure workstations for integrated environment
	3.4 Implement security for the integrated server environment
4. Test and reconfigure network servers	4.1 Test server for benchmarking against client specification and requirements according to test plan, and record outcomes
	4.2 Analyse error report and make changes as required
	4.3 Use troubleshooting tools and techniques to diagnose and correct integration problems
	4.4 Test required changes or additions
	4.5 Validate changes or additions against specifications
5. Complete and document network design and installation	5.1 Make and document server configuration and operational changes
	5.2 Complete client report and notification of server status
	5.3 Clean up and restore worksite to client's satisfaction
	5.4 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	2.1, 2.3, 4.1, 4.2, 4.5	• Gathers, interprets and analyses enterprise procedures, manuals and specifications to determine requirements

Writing	2.4, 4.1, 5.1, 5.2	• Prepares workplace documentation that incorporates an evaluation of technical information and specialised and cohesive language in a format and style appropriate for a specific audience
Oral Communication	1.1, 1.3, 1.4	• Uses active listening, observational and questioning techniques to identify information and confirm, clarify or revise understanding
Numeracy	4.1, 4.2, 4.4, 4.5	• Analyses numerical information to take measurements, interpret results and evaluate performance and interoperability of network
Navigate the world of work	1.2	• Appreciates the implications of legal and regulatory responsibilities related to own work
Interact with others	5.4	• Actively identifies the requirements of important communication exchanges, selecting appropriate channels, format, tone and content to suit purpose and audience
Get the work done	1.3, 2.1, 2.2, 2.4, 3.1-3.4, 4.1-4.5, 5.1, 5.3	• Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context to plan, prioritise and monitor own work • Understands the key principles and concepts underpinning the design and operation of digital systems and tools, and applies these when troubleshooting existing technology • Initiates standard procedures and contingency management skills when responding to familiar problems to adapt configuration procedures to requirements of network and reconfigure, depending on differing operational contingencies, risk situations and environments • Makes a range of decisions in relatively complex situations, taking a range of constraints into account

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK504 Design and implement an integrated server solution	ICANWK504A Design and implement an integrated server solution	Updated to meet Standards for Training Packages	Equivalent unit

Links

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