



Australian Government

ICTNWK629 Configure and manage storage area networks

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with the Information and Communications Technology Training Package Version 8.0. Supersedes and is equivalent to ICTNWK617 Configure and manage a storage area network.

Application

This unit describes the skills and knowledge required to implement secure and scalable storage area networks (SANs) into organisations to enable centrally managed systems.

The unit applies to individuals who may work as senior networkers, network technicians and storage engineers who are independently responsible for maintaining high-speed storage in networking environments.

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
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assemble SAN components	1.1 Confirm work brief and tasks according to organisational policies and procedures 1.2 Assess and compare SAN topology 1.3 Select SAN model according to work brief 1.4 Create SAN implementation plan 1.5 Select and source configuration tools and components
2. Connect SAN components	2.1 Cable SAN hardware according to implementation plan 2.2 Install SAN software according to implementation plan 2.3 Configure management and logical interface to endpoint devices

ELEMENT	PERFORMANCE CRITERIA
	2.4 Test network-attached storage (NAS) and SAN compatibility and rectify any issues 2.5 Update virtual local area network (VLAN) configuration settings 2.6 Take volume snapshot of host operating system and file point-in-time copy under internet small computer systems interface (iSCSI) qualified name
3. Install provisioning services	3.1 Create aggregate using redundant array of independent disk (RAID) levels 3.2 Create logical volumes according to work brief 3.3 Create logical unit numbers (LUN) according to work brief 3.4 Use NAS protocols and create shared folders 3.5 Connect client and server to shared SAN protocols 3.6 Test server interconnection and rectify any issues
4. Monitor disaster recovery	4.1 Compare point-in-time volume with end state host operating system 4.2 Install volume shadow copy service (VSS) hardware provider and confirm automatic copy functionality of host operating system 4.3 Test SAN-based data deduplication and replication operations 4.4 Test SAN-based backup and restore operations and alerts 4.5 Create and document SAN review process and present SAN management plan to enterprise administrators

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Oral communication	• Uses clear spoken communication in a broad range of contexts • Presents ideas and answers questions using logical processes
Reading	• Uses technical and organisational processes to determine and confirm job requirements
Writing	• Uses clear and detailed language in documentation to convey explicit information and technical requirements
Initiative and enterprise	• Identifies and responds to protocols in complex work contexts and in various situations
Technology	• Actively identifies systems, devices and applications with potential

Skill	Description
	to meet current and/or future needs Identifies anomalies in a virtualised machine environments

Unit Mapping Information

Supersedes and is equivalent to ICTNWK617 Configure and manage a storage area network.

Links

Companion Volume Implementation Guide is found on VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>