



Australian Government

ICTNWK531 Configure an internet gateway

Release: 1

ICTNWK531 Configure an internet gateway

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 connect network hardware devices, mainly personal computers (PCs), to an internet gateway.

It applies to individuals who are middle managers, network engineers, technical specialists or security analysts with excellent information communications and technology (ICT) skills who plan and implement networks, determine security threats and are involved in business budgeting.

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. Confirm client requirements and network equipment	1.1 Confirm and validate client requirements 1.2 Determine scope of internet services with reference to client requirements 1.3 Identify and install both hardware and software components 1.4 Verify equipment specifications and availability of components
2. Review security issues	2.1 Assess security features of internet gateways with reference to architecture and security plan 2.2 Review security measures with the internet service provider

ELEMENT	PERFORMANCE CRITERIA
	(ISP) with reference to firewalls and other measures as required 2.3 Brief users on the security plan with reference to internet use and hazard possibilities
3. Install and configure gateway products and equipment	3.1 Identify and select installation and configuration options 3.2 Install and configure gateway products and equipment as required by technical guidelines 3.3 Plan and execute tests with reference to client requirements and network impact 3.4 Analyse error reports and make changes as required
4. Configure and test node	4.1 Assign node to specific gateway as required by network architecture and client requirements 4.2 Determine connection type and configure with reference to network architecture and client requirements 4.3 Ensure node software and hardware are configured as required according to vendor specifications and client requirements

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	1.2, 1.4, 2.1, 3.2-3.4, 4.1-4.3	Recognises and interprets technical documentation, equipment manuals and specifications to determine and confirm job requirements
Oral Communication	1.1, 1.2, 2.2, 2.3, 3.3, 4.1-4.3	- Uses highly developed listening, observational and questioning skills to understand others' perspectives and clarify, explore and extend meaning - Establishes and maintains complex and effective spoken communication to convey and clarify a range of complex information to relevant personnel
Navigate the world of work	2.3, 3.2	Monitors adherence to legal and regulatory rights and responsibilities for self and possibly others

Get the work done	1.2-1.4, 2.1, 2.2, 3.1-3.3, 4.1-4.3	• Considers the strategic and operational potential of digital trends to achieve work goals, enhance work processes, create opportunities and enhance or reduce risks • Uses a broad range of strategies to store, access and organise virtual information, recognising that design choices will influence what information is retrieved and how it may be interpreted and used • Is acutely aware of the importance of understanding, monitoring and controlling access to digitally stored and transmitted information • May operate from a broad conceptual plan, developing the operational detail in stages, regularly reviewing priorities and performance during implementation, and identifying and addressing issues • Uses nuanced understanding of context to recognise anomalies in a network environment and subtle deviations to normal expectations, focussing attention and solving problems as they arise
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK531 Configure an internet gateway	ICANWK531A Configure an internet gateway	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>

Assessment Requirements for ICTNWK531 Configure an internet gateway

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Performance Evidence

Evidence of the ability to:

- determine client requirements and network specifications
- determine security measures and brief users
- connect network hardware devices to an internet gateway
- configure and test gateway products
- configure and test node according to vendor specifications and client requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and describe current browser software
- explain domain name server (DNS) resolution
- outline the features and functions of:
 - network architecture
 - bridges as required
 - desktop operating systems
 - hubs
 - network gateways
 - network operating systems:
 - routers
 - switches
- describe the security issues that may impact on an internet gateway
- describe common security solutions and strategies
- identify and describe the principle function of current gateway software.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the network industry, and include access to:

- a network and internet where gateway products may be installed and configured
- use of hardware and software currently used in industry
- client requirements documentation
- vendor specifications.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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