



**Australian Government**

# **ICTNWK406 Install, configure and test network security**

**Release: 1**

# ICTNWK406 Install, configure and test network security

## 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 install, configure and test network security in an information and communications technology (ICT) network.

It applies to individuals working as ICT professionals who install, configure and test secure networks of any size.

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. Assess network security threats and vulnerabilities to identify risk	1.1 Assess and report on current system security, according to required asset security level 1.2 Determine additional network, software, hardware and system security threats and vulnerabilities 1.3 Use identified threats and vulnerability information to identify security risks 1.4 Make recommendations to management to address security deficiencies, according to current and future commercial and business requirements
2. Implement countermeasures for identified vulnerabilities	2.1 Implement required level of perimeter security based on current and future business needs

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
and threats	<p>2.2 Assess and implement best practice server and network hardening techniques and measures</p> <p>2.3 Implement secure authentication and user account controls</p> <p>2.4 Secure data integrity and transmission</p>
3. Test and verify functionality and performance of security system implemented	<p>3.1 Design test items to verify key function and performance measures against criteria</p> <p>3.2 Conduct function and performance tests recording results</p> <p>3.3 Modify and debug security system as necessary</p> <p>3.4 Develop documentation on current system settings and file for future reference</p>
4. Provide systems for monitoring and maintaining security	<p>4.1 Monitor current network security, including physical aspects, using appropriate third party testing software where applicable</p> <p>4.2 Review logs and audit reports to identify and record security incidents, intrusions or attempts</p> <p>4.3 Carry out spot checks and audits to ensure that procedures are not being bypassed</p> <p>4.4 Document newly discovered security threats, vulnerabilities and risks in a report for presentation to appropriate person to gain approval for changes to be made</p>

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

<b>Skill</b>	<b>Performance Criteria</b>	<b>Description</b>
Reading	4.2	<ul style="list-style-type: none"> <li>Recognises and interprets textual information to determine specific information about security incidents</li> </ul>
Writing	1.1, 1.4, 3.2, 3.4, 4.4	<ul style="list-style-type: none"> <li>Accurately records test results and develops material for a specific audience, using clear and detailed language in order to convey explicit information</li> </ul>
Oral	1.1, 1.4, 4.4	<ul style="list-style-type: none"> <li>Articulates information clearly, using specific and relevant language suitable to audience to convey</li> </ul>

Communication		<ul style="list-style-type: none"> <li>recommendations and provide verbal reports</li> <li>Uses listening and questioning techniques to confirm understanding</li> </ul>
Numeracy	1.4	<ul style="list-style-type: none"> <li>Extracts and evaluates the mathematical information embedded in a range of tasks and texts</li> </ul>
Get the work done	1.1-1.4, 2.1, 2.3, 2.4, 3.1-3.3, 4.1, 4.3	<ul style="list-style-type: none"> <li>Determines job priorities, resources and equipment, and works logically and systematically to undertake clearly defined and familiar tasks</li> <li>Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks</li> <li>Recognises and responds to predictable routine problems related to own role in the immediate work context, including detecting intrusion and debugging the system when required</li> <li>Automatically implements standard procedures for routine decisions</li> </ul>

## Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTNWK406 Install, configure and test network security	ICANWK406A Install, configure and test network security	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>