



Australian Government

ICTCYS404 Run vulnerability assessments for an organisation

Release: 1

ICTCYS404 Run vulnerability assessments for an organisation

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Application

This unit describes the skills and knowledge required to run vulnerability assessments and basic penetration tests to identify potential threats to an organisation. It includes the ability to minimise risk and remediate vulnerabilities to confirm that the security of an organisation is maintained.

It applies to individuals who work as penetration tester and security consultants in any business environment.

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

Unit Sector

Cyber security

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. Prepare to run vulnerability assessment	1.1 Obtain work details and scope from required personnel and arrange for site access in compliance with required security arrangements, legislation, codes, regulations and standards 1.2 Discuss and evaluate scanning tools and select according to vulnerability assessment requirements 1.3 Establish testing regime and schedule, and documentation requirements according to organisational needs
2. Run vulnerability assessment and penetration test	2.1 Perform vulnerability assessment according to organisational procedures 2.2 Identify and document vulnerabilities arising from vulnerability assessment according to organisational procedures

	2.3 Run a simple penetration test according to organisational procedures 2.4 Identify and document potential threats arising from penetration test according to organisational procedures 2.5 Contribute and develop ideas in addressing vulnerabilities
3. Finalise vulnerability assessment process	3.1 Discuss vulnerabilities identified in vulnerability assessment and penetration testing with required personnel 3.2 Contribute ideas with required personnel and remediate vulnerabilities identified according to organisational procedures 3.3 Escalate unresolved vulnerabilities to required personnel 3.4 Document identified vulnerabilities and work performed according to organisational procedures 3.5 Report to management and confirm vulnerability assessment with required personnel

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
Learning	Identifies and gathers information applicable to business, systems and network
Numeracy	Measure and record data and interpret testing results using tools
Reading	Interprets information from a range of sources when establishing vulnerability assessment procedures
Writing	Prepares documentation detailing vulnerability assessments according to organisational requirements using concise industry specific terminology applicable to cyber security
Planning and organising	Prepares and manages vulnerability assessment process logically and sequentially
Problem solving	Uses problem solving skills when interpreting the nature and threat of vulnerabilities identified
Technology	Uses required technological tools and software in identifying potential threats in an organisation

Unit Mapping Information

No equivalent unit. New unit.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for ICTCYS404 Run vulnerability assessments for an organisation

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- perform at least one vulnerability test assessment
- define and run at least one basic penetration test.

In the course of the above, the candidate must:

- assess web based, network based and hardware-based vulnerabilities
- adhere to organisational procedures
- document and report activities.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- security risks and vulnerabilities in software systems
- tools used in testing a network for vulnerabilities including scanning tools
- basic level penetration testing of a system
- methods and tools used to protect data in an organisation
- risk mitigation strategies that may be used running vulnerability assessments for an organisation
- organisational procedures applicable to running vulnerability assessments, including:
 - establishing goals and objectives of vulnerability assessments
 - defining scope of testing and establishment of testing regime
 - documenting established requirements
 - establishing penetration testing procedures
 - documenting findings, threats and work performed
- key organisational environments, systems and networks required to run vulnerability assessments.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- required software testing packages
- required hardware and its components
- vulnerability scanning tools
- a server
- text-editing software
- information applicable to organisational environment, systems and network
- required organisation network, systems or applications.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

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