



Australian Government

ICTNWK428 Create scripts for networking

Release: 1

ICTNWK428 Create scripts for networking

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 undertake scripted programming tasks for networking related activities.

It applies to individuals with competent technical skills who are employed in network or systems administration roles.

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. Prepare to write networking scripts	1.1 Determine and document problem and script solution requirements according to organisational requirements 1.2 Employ abbreviated software development cycle to script creation according to task requirements 1.3 Develop pre-emptive downtime solution algorithm according to task requirements 1.4 Develop a guaranteed to end algorithm according to task requirements
2. Create and implement code	2.1 Select and create clear and concise code according to task requirements 2.2 Implement selection, iteration and sequence to control script execution flow according to task requirements 2.3 Implement sequential file input and output and retrieve and

ELEMENT	PERFORMANCE CRITERIA
	store information 2.4 Seek and respond to script operation from user input according to task requirements
3. Implement operating system tools	3.1 Use searching and sorting tools to select information from logging output of operating system (OS) 3.2 Implement controls and demonstrate capability of script to maintain a log of operations 3.3 Register and run scripts with OS scheduling facility
4. Test and finalise script activities	4.1 Test script against design specification and task requirements 4.2 Identify and resolve scripting language bugs, syntactical, logical and design errors 4.3 Store unused materials and ICT equipment according to manufacturing specifications and organisational procedures 4.4 File documentation in required location according to organisational procedures

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 listening and questioning techniques to confirm information and requirements, communicate ideas and solutions, and gather feedback
Reading	• Identifies and interprets technical material, organisational policy and regulatory information to determine job requirements
Writing	• Prepares user and technical documentation detailing process according to organisational procedures • Writes and edits code and technical data in a logical manner using required syntax

Unit Mapping Information

Supersedes and is equivalent to ICTNWK409 Create scripts for networking.

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 ICTNWK428 Create scripts for networking

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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:

- design, document, construct and test a small single purpose operating system (OS) utility application in response to a problem description
- create a scripted program that access information stored in files on system and use system utility programs to sort and find information within files for one operating system (OS)
- document process.

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:

- principles of algorithm design
- operating system components and processes, including:
 - command line interface
 - log files
 - program scheduling utilities
 - data types
 - operations and expressions
 - development methodologies
- tools, utilities and testing methods that may be used to create scripts for networking
- debugging for a variety of scripting scenarios
- programming structured control constructs: sequence, selection and iteration
- scripting techniques and language syntax that may be used to create scripts for networking.

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:

- OS scheduling software
- storage guidelines for ICT equipment
- work health and safety requirements
- technical requirements
- software development environment
- software testing environment.

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

Links

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