



Australian Government

ICTPRG434 Automate processes

Release: 1

ICTPRG434 Automate processes

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 write scripts to automate solutions by using basic scripting processes and application-specific scripting options.

It applies to those who work in Information and Communications Technology (ICT) support roles and who are required to automate tasks.

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

Unit Sector

Programming and software development

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. Establish problem and applicable guidelines	1.1 Identify process requiring automation 1.2 Identify automation guidelines and instructions 1.3 Discuss and establish potential solutions and process ideas and requirements with team members
2. Develop algorithms and solutions to given problem	2.1 Develop an algorithm matching solution descriptions 2.2 Develop algorithm that takes all possible situations into account and is guaranteed to terminate 2.3 Describe algorithmic solutions in identified problem using structures of sequence, selection and iteration
3. Design and write script	3.1 Create required abstract design 3.2 Review abstract design and amend any omissions and errors

	3.3 Translate abstract design using chosen language according to organisational guidelines 3.4 Create and write script and code according to design and process requirements 3.5 Create internal documentation according to organisational guidelines and policies
4. Verify and review and document script and code	4.1 Check script and code and amend syntax and semantic errors 4.2 Identify any areas that are not covered and any areas that have been covered incorrectly in script and code 4.3 Confirm identified problems with team members and resolve as required 4.4 Create and finalise user-level and technical level documentation 4.5 Seek feedback and obtain sign-off from 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
Numeracy	Interprets and manipulates, complex formulae and numerical information
Reading	Analyses complex technical documentation and amends any inconsistencies and errors
Writing	Completes code and workplace documentation using vocabulary and form applicable to context and audience
Teamwork	Collaborates with required personnel, gathers more perspectives and increases quality of final outcome
Problem solving	Uses systematic analytical processes and reviews and identifies coding errors
Technology	Uses a range of digital technologies and systems to access information, search and enter data, code and presents information and communicates with others, cognisant of data security and safety

Unit Mapping Information

Supersedes and is not equivalent to ICTPRG405 Automate processes.

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 ICTPRG434 Automate processes

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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:

- develop at least one algorithmic statement of a solution for a set process according to organisational guidelines.

In the course of the above, the candidate must:

- produce a functional script to automate a set process
- document script for internal and external stakeholders.

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:

- debugging methods that may be used to automate processes
- principles of algorithms and their application in programming
- scripting language syntax and scripting techniques that may be used to automate processes
- script documentation methods at a user and technical level
- organisational guidelines and policies applicable in automating processes.

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:

- applications capable of being scripted, or having their own scripting language
- templates for automating processes
- executable scripts
- debugging tools
- required hardware and its components.

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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