



**Australian Government**

# **ICTSAS402 Implement configuration management strategies**

**Release: 1**

# ICTSAS402 Implement configuration management strategies

## 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 implement administrative and technical procedures throughout the software development and documentation life cycle.

It applies to individuals working in a range of information and communications technology (ICT) development environments who have responsibility to ensure work is completed to quality standards and technical requirements.

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

## Unit Sector

Systems administration and support

## 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. Identify and clarify configuration management requirements | 1.1 Develop and assemble identification standards for the naming and version control of software and documentation, and provide to stakeholders<br>1.2 Identify software configuration tools and procedures for the required level of integration into the programming environment<br>1.3 Identify responsibilities for configuration management within the project and for ongoing support, including approval of changes<br>1.4 Take action to ensure that stakeholders are aware of their roles<br>1.5 Identify point at which items are subjected to configuration control with stakeholders |

| ELEMENT                                  | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Employ appropriate control mechanisms | <p>2.1 Identify and document method for identification and recording of change requests in line with organisational requirements, and ensure this is maintained during development process</p> <p>2.2 Take action to ensure evaluation criteria and process for approval of change requests are employed according to organisational requirements</p> <p>2.3 Take action to ensure other management, security and access control criteria are employed according to organisational requirements</p> <p>2.4 Implement controls to ensure that necessary audit trails and alerts for variations or non-conformance are continuously maintained during development</p>                                                                                                                          |
| 3. Implement monitoring mechanisms       | <p>3.1 Implement controls to ensure mechanisms to identify software status throughout the software development life cycle are continuously maintained</p> <p>3.2 Document development and maintenance of records and status reports required to show the history of baselines and their links to backups</p> <p>3.3 Take action to ensure level of detail required in status reports, and identification of target audiences, meet the configuration management procedures, International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) and Australian Standards (AS) and organisational requirements</p> <p>3.4 Integrate configuration management into general project management processes for monitoring and control purposes and document</p> |
| 4. Manage release of product             | <p>4.1 Take action to ensure physical and functional completeness of items for release to all stakeholders</p> <p>4.2 Identify and implement requirements for formal control of software products</p> <p>4.3 Determine and document policies for retention of baseline or master copies, taking into account safety and security, legislative requirements and organisational guidelines</p>                                                                                                                                                                                                                                                                                                                                                                                                 |

## 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                    | 1.1, 1.2, 3.3, 4.2                 | <ul style="list-style-type: none"> <li>Researches and analyses technical textual information and numerical data from a range of sources to determine requirements and complete necessary actions</li> </ul>                                                                                                                                                                                                                               |
| Writing                    | 1.1, 1.4, 2.1, 3.2, 3.4, 4.3       | <ul style="list-style-type: none"> <li>Uses clear and accurate language and documentation formats appropriate to the audience/purpose to convey complex technical information</li> </ul>                                                                                                                                                                                                                                                  |
| Oral Communication         | 1.1, 1.4                           | <ul style="list-style-type: none"> <li>Uses active questioning and listening techniques to confirm understanding, gain consensus on concepts and liaise with stakeholders</li> </ul>                                                                                                                                                                                                                                                      |
| Numeracy                   | 1.1, 2.1, 2.4, 3.2-3.4, 4.3        | <ul style="list-style-type: none"> <li>Uses mathematical equations to calculate and compare numerical data for a range of technical and planning reports, and to determine required actions</li> </ul>                                                                                                                                                                                                                                    |
| Navigate the world of work | 1.4, 2.1-2.3, 3.3                  | <ul style="list-style-type: none"> <li>Takes personal responsibility for following explicit and implicit policies and procedures, and ensures that necessary standards and legislative requirements are met</li> </ul>                                                                                                                                                                                                                    |
| Interact with others       | 1.1                                | <ul style="list-style-type: none"> <li>Selects and uses appropriate conventions and protocols when communicating with co-workers and others in a range of work contexts</li> </ul>                                                                                                                                                                                                                                                        |
| Get the work done          | 1.1-1.5, 2.1-2.4, 3.1-3.4, 4.1-4.3 | <ul style="list-style-type: none"> <li>Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes</li> <li>Makes routine decisions and implements standard procedures for routine tasks, using formal decision making processes for more complex and non-routine situations</li> <li>Uses main features and functions of digital tools to complete work tasks</li> </ul> |

## Unit Mapping Information

| Code and title<br>current<br>version                                | Code and title<br>previous<br>version                                | Comments                                                    | Equivalence<br>status |
|---------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------|-----------------------|
| ICTSAS402<br>Implement<br>configuration<br>management<br>strategies | ICASAS402A<br>Implement<br>configuration<br>management<br>strategies | Updated to<br>meet<br>Standards<br>for Training<br>Packages | Equivalent<br>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 ICTSAS402 Implement configuration management strategies

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## Performance Evidence

Evidence of the ability to:

- identify and clarify configuration management requirements
- identify and action control mechanisms
- implement administrative and technical procedures
- maintain reliable and valid technical and administrative procedures
- use quality processes, audit trails and version control.

Note: Evidence must be provided for at least TWO situations or organisations.

## Knowledge Evidence

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

- compare and contrast project planning methodologies and tools
- explain benchmarking methodologies when implementing monitoring mechanisms
- describe how to formulate software size models and size estimates when employing control mechanisms
- discuss quality assurance and quality processes when implementing monitoring mechanisms
- describe software development methodologies when identifying and clarifying configuration management requirements
- identify and summarise relevant organisational guidelines, legislation and codes of practice.

## 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 systems administration and support field of work and include access to:

- special purpose tools, equipment and materials
- industry software packages
- configuration tools
- evaluation criteria
- process for approval of change requests
- templates for status reports.

Assessors must satisfy NVR/AQTF assessor requirements.

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