



Australian Government

CPPSIS4034 Maintain spatial data

Release: 1

CPPSIS4034 Maintain spatial data

Modification History

Release 1.

Replaces superseded equivalent CPPSIS4034A Maintain spatial data.

This version first released with CPP Property Services Training Package Version 3.

Application

This unit of competency specifies the outcomes required to implement a full cycle of spatial data maintenance, including updating, backup, recovery and archiving. The unit covers editing, updating and integrating existing and new spatial data, and problem solving to test and validate data currency and retrieval and backup systems. The unit requires the ability to use computers and software to display and manipulate data and create metadata. It also covers recording information and completing documentation.

The unit supports those who work in support positions in a spatial information services team in areas such as field work coordination, data collection and administration.

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

Pre-requisite Unit

Nil

Unit Sector

Surveying and spatial information services

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.

- | | |
|---|--|
| 1. Confirm reliability of spatial data. | 1.1. Task requirements are clarified with <i>appropriate persons</i> . |
| | 1.2. Equipment is selected, set up and checked to ensure correct operation and functionality. |
| | 1.3. Spatial data updates are accessed and checked to confirm currency and relevance, and recorded in consultation with appropriate persons. |

- 1.4. Spatial data is checked and edited to ensure it is compatible and in acceptable format according to task specifications.
 - 1.5. Entities and attributes are used to display spatial information while maintaining integrity and consistency of data.
2. Edit and update spatial data.
 - 2.1. Spatial data is amended and replaced to meet task requirements in consultation with appropriate persons.
 - 2.2. Existing and new data is edited, prepared and integrated according to task requirements.
 - 2.3. Spatial datasets are tested and validated to ensure integrity and quality according to task requirements.
 - 2.4. Documentation is amended and updated according to organisational requirements.
3. Carry out data backup and recovery.
 - 3.1. Data backups are implemented to ensure data is accessible in contingency situations according to organisational requirements.
 - 3.2. Backup system is tested to ensure that data can be retrieved, and problems are resolved in consultation with appropriate persons.
4. Archive data.
 - 4.1. Spatial dataset to be archived is checked for completeness and manipulated where necessary, in consultation with appropriate persons.
 - 4.2. **Metadata** is created according to organisational requirements.
 - 4.3. Archived spatial data is stored in a secure location, and details are recorded according to organisational requirements.

Foundation Skills

This section describes the language, literacy, numeracy and employment skills essential to performance in this unit but not explicit in the performance criteria.

Skill	Performance feature
Learning skills to:	• conduct research to source spatial data.
Numeracy skills to:	• interpret and compare data version information.
Oral communication skills to:	• ask questions to clarify process and instructions.
Reading skills to:	• interpret graphical and technical information from maps and imagery.
Technology skills to:	• enter data into a database or document using a computer and software.
Problem-solving skills to:	• verify accuracy of data and identify errors.

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

Appropriate persons must include at least one of the following:

- end user
- supervisor or line manager
- technical staff.

Metadata must include at least four of the

- availability
- conditions of use

following:

- coordinate system
- currency
- custodian
- data accuracy
- data description
- date of acquisition
- licence
- quality
- source
- spatial data acquisition methodologies
- version control.

Unit Mapping Information

CPPSIS4034A Maintain spatial data

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPSIS4034 Maintain spatial data

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Performance Evidence

A person demonstrating competency in this unit must satisfy the requirements of the elements, performance criteria, foundation skills and range of conditions of this unit. The person must also work under direction to implement the full cycle of spatial data maintenance for two different tasks, including updating, backup, recovery and archiving of data.

While maintaining the above spatial data, the person must:

- comply with administrative and legal requirements for storing and retrieving spatial data, including data privacy and information copyright
- comply with organisational requirements and manufacturer specifications when using the equipment specified in the assessment conditions
- comply with organisational requirements for recording data, completing documentation, and working safely when using screen-based equipment
- display spatial information using vector and raster data, including:
 - arcs
 - circles
 - colour
 - hatch
 - imagery
 - layer
 - level
 - lines, including type and width
 - text
- manage and manipulate a range of spatial data, including:
 - hard copy
 - text
 - raster
 - vector.

Knowledge Evidence

A person demonstrating competency in this unit must demonstrate knowledge of:

- administrative and legal requirements for accessing, storing, retrieving and archiving digital and hard copy spatial data, including data privacy and information copyright
- methods for validating test results to identify systematic distortions
- querying and browsing techniques for obtaining information from databases
- key features of spatial reference systems
- types of spatial data formats
- types of storage media for a range of spatial data.

Assessment Conditions

The following must be present and available to learners during assessment activities:

- equipment:
 - data storage media, including hard copy and digital
 - computer with software appropriate for spatial data management and retrieval
 - printer
- specifications:
 - organisational policies and procedures relating to:
 - work health and safety
 - data privacy and information copyright
- physical conditions:
 - access to equipped work station
- relationships with team members and supervisor:
 - working in a team.

Timeframe:

- as specified by task and organisational requirements.

Assessor requirements

As a minimum, assessors must satisfy the assessor requirements in the Standards for Registered Training Organisations (RTOs) current at the time of assessment.

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