

Draft 0.2

This is a draft update to CPPSIS5043 Design spatial data storage systems:
<https://training.gov.au/Training/Details/CPPSIS5043>.

Code changed to CPPSSI5043.

Changed PCs to active voice.

Reworded Elements 2 and 3

Adjusted wording in PCs

Changed 'person' to 'candidate' in PE.

Range of Conditions added to Knowledge Evidence.

Removed any reference to HARD COPY

Unit of Competency

CPPSI5043 Design spatial data storage systems

Modification history

Release	Comments
1	Replaces superseded equivalent CPPSI5043A Design a spatial data storage system. This version first released with CPP Property Services Training Package Version 3.
	Replaces superseded equivalent CPPSI5043 Design spatial data storage systems

Application

This unit specifies the skills and knowledge required to design spatial data storage systems to meet client requirements. The unit covers analysing client needs and storage requirements and assessing the feasibility of those requirements against budgets, resources and priorities. It also covers planning the system design; scheduling development; and creating and testing prototypes where standard formats are unsuitable.

This unit is suitable for skilled surveying technicians and skilled spatial information system (SIS) technicians who use a broad range of cognitive, technical and communication skills to select and apply methods and technologies to analyse information and provide solutions to sometimes complex surveying/spatial information problems. Surveying and spatial information skills are applied in a range of industry contexts including town planning, civil construction, mining, engineering, health, agriculture and defence.

All work must be carried out to comply with workplace procedures, in accordance with relevant State/Territory regulations that govern surveying work as well as work health and safety, regulations and legislation that apply to the workplace.

Cadastral surveying must be undertaken under the supervision of a registered surveyor. Users must check with the relevant regulatory state/territory authority before delivery.

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

Prerequisite Unit

None

Unit Sector

Surveying and Spatial Information Services

Elements and Performance Criteria

1. Determine spatial data storage requirements.	1.1 Discuss spatial data storage needs with appropriate persons to clarify client needs. 1.2 Conduct audit of existing spatial data formats and sources to determine their suitability and adaptability in meeting storage requirements. 1.3 Evaluate and document feasibility of different storage solutions against budget, resources and priorities to meet client requirements.
2. Design and test data storage system	2.1 Confirm appropriate spatial data storage environment according to data and client requirements.

	<p>2.2 Identify functional requirements and spatial data dependencies and develop a plan of the data storage system.</p> <p>2.3 Create, test and/or adopt prototype, or a standard format, to confirm that design meets functional requirements.</p> <p>2.4 Develop and communicate schedule for introducing data storage system to appropriate persons.</p>
3. Implement storage system design.	<p>3.1 Discuss proposed design of spatial data storage system with appropriate persons and make any adjustments required according to enterprise requirements.</p> <p>3.2 Confirm acceptance of final design and create documentation according to enterprise requirements.</p> <p>3.3 Canvass end users to determine effectiveness of designed spatial data storage system.</p> <p>3.4 Analyse and use feedback to make improvements to storage system according to enterprise requirements.</p> <p>3.5 Record details of storage system and quality improvements according to enterprise requirements.</p>

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to CPPSIS5043 Design spatial data storage systems

Links

The Companion Volume Implementation Guide for the CPP Property Services Training Package is available at <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPSSI5043 Design spatial data storage systems

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Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by designing two spatial data storage systems for two different clients.

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- software applications to access and store data
- types of storage media for a range of spatial data, including cloud technology
- data storage and retrieval methods
- querying and browsing techniques for obtaining information from databases
- graphical information obtained from global navigation satellite systems (GNSS) and GIS
- key features of spatial reference systems
- spatial data formats
- spatial data classification and indexing systems.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting where these skills and knowledge would be performed.

Candidates must have access to:

- computer and appropriate software
- digital data storage media
- enterprise policies and procedures relating to:
 - work health and safety
 - data privacy and information copyright and licensing.

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