



**Australian Government**

# **Assessment Requirements for ICTSAS521 Perform integration tests**

**Release: 1**

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## Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 4.0.

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit; including evidence of the ability to:

- On two occasions using one or more system:
  - prepare and initialise a test environment
  - construct integration tests addressing memory leakage, global name-space pollution and static variables
  - conduct static tests of integration points including the use of arguments, positional parameters and return values
  - adjust test scripts according to results of earlier component testing
  - conduct tests according to test scripts using appropriate test tools, integration standards and quality benchmarks
  - determine whether components operate according to specifications
  - analyse and classify test results
  - prepare and finalise test results report including gaining approval from superior

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements and performance criteria of this unit. This includes:

- Key features of two programming languages
- Features and processes of automated test tools
- Systems specifications analysis
- Features and common problems relating to the system being tested
- Key features and processes of integration testing techniques and tools, and associated advantages and disadvantages

## Assessment Conditions

Skills must be demonstrated in a workplace or simulated environment where conditions are typical of those experienced in an ICT workplace or working environment. This includes access to:

- Automated testing tools
- Acceptance and test criteria
- Test plan
- Individual contact in operations in the organisation
- Software life cycle model
- Integration standards
- System specifications
- Results of component testing
- System suitable for testing
- Organisational testing procedures including quality benchmarks and integration standards

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

## Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>