Australian Government

Assessment Requirements for ICTSAD613 Install and configure container orchestration services

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

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:

- configure container orchestration services on at least two host computers or virtual machines
- create and manage at least two containers using at least three different metrics to measure requests and traffic data.

In the course of the above, the candidate must:

- confirm clusters scale out and in required by demand changes and business needs
- document work.

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:

- features and functions of operating systems
- continuous integration and continuous delivery/deployment methodology, processes and principles
- network protocols including:
    - network communications protocol
    - TCP/IP (transmission control)
    - internet protocol
- tools and features of registries, command line interface and text editor
- software development life cycle (SDLC)
- basic principles of container orchestration services:
    - pods/swarms
    - nodes

- services
- virtual machines and containers
- container dependencies
- basic principles of:
  - computer hardware, networking, operating system, database management systems, cloud solutions and components
  - applications
  - database-management systems
  - open-source development tools
  - HTTP
- organisational business needs relating to the use and deployment of containers, including cost constraints
- data flow charts applicable to installing and configuring container orchestration services
- data and metrics of user traffic to sites and applications, including:
  - RAM (random access memory)
  - CPU
  - Network traffic
- different methods of monitoring services, including:
  - manually
  - different organisational levels of responsibility relating to application functions.

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.
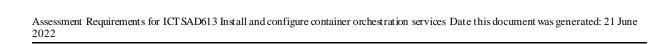
This includes access to:

- the internet, including connectivity
- required hardware, software and applications
- vendor products relating to containerisation technology
- container orchestration service
- load testing application
- text editor
- user command interface (command prompt).

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

Links

Companion Volume Implementation Guide is found on VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2