Assessment Requirements for ICTPRG554 Manage data persistence using noSQL data stores

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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:

- create at least three different queries, including updating, deleting and creating data types
- create at least two indexes.

In the course of the above, the candidate must:

- specify partition and sort keys
- optimise the data.

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:

- benefits and functions of noSQL database and schema free data persistence, as well as traditional relational data models
- methods and different features and functions between scaling out and scaling up (horizontal and vertical)
- language used in required programming language for noSQL applications
- partitioning in a noSQL environment and its related terms
- functions and features for time-to-live (TTL) requirements
- authorisation and authentications procedures and levels of responsibility according to client access requirements
- distribution of data storage across partitions
- debugging and testing methodologies and techniques
- functions and features of sort keys in noSQL storage
- features of transport encryptions, authentication and authorisation
- different noSQL data store formats, including:
  - key value

- document based
- column based
- graph based
- different noSQL data types, including:
  - numeric
  - string
  - boolean
  - complex
  - date time.

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:

- an open source or commercial NOSQL database
- the internet, including connectivity
- required hardware, software and applications.

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