ICTDBS402 Complete database backup and restore

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to establish backup and recovery procedures, in accordance with organisational requirements, and consistent with the database architecture.

It applies to individuals who are technical support personnel, such as help-desk supervisors, information and communications technology (ICT) support technicians, database support technicians and user-support specialists.

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

Unit Sector

Database

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Review the database architecture to plan backup and recovery	1.1 Examine the architecture of a database file system 1.2 Determine the most appropriate methods for backup and recovery 1.3 Identify and examine the likely or possible risk and failure scenarios 1.4 Prepare a backup maintenance schedule 1.5 Prepare a contingency plan
2. Determine backup methods appropriate to database requirements	2.1 Evaluate the range of backup and restoration methods, based on organisational and security standards, and on the assessment of likely, or possible, failure scenarios 2.2 Complete full off-line backups according to organisational and security standards, with minimal down time 2.3 Complete online file backups, as determined by organisational and security standards, with minimal down time 2.4 Employ disk mirroring and redundant array of inexpensive disks (RAID) hard disk configurations to keep copies of files 2.5 Arrange off-site copies of backup files
3. Establish recovery points and disaster-recovery procedures	3.1 Determine database recovery points based on the backup arrangements, according to organisational guidelines 3.2 Test the restore process to ensure that the database can be restored to a given recovery point, with minimal down time 3.3 Complete the restoration of the database to the point of failure, without loss of committed transactions
4. Create and deploy a standby database	4.1 Create or set up a standby database, in order to meet organisational guidelines 4.2 Implement a standby database to support critical business functions 4.3 Prepare the documentation for a standby database

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 2.1	• Analyses complex textual information in order to evaluate a range of backup and restoration methods
Writing	1.4, 1.5, 4.3	• Uses technically specific language in developing plans and documentation • Articulates information, and presents this information, in a clear, concise, sequential and grammatically-correct manner, and in a writing style that is appropriate to the audience
Oral Communication	1.2, 1.3, 1.4, 2.1	• Facilitates successful discussions by employing effective listening, questioning and summarising skills to ensure that appropriate information is gathered
Navigate the world of work	2.2, 2.3, 3.1, 4.1	• Recognises and follows, both explicit and implicit protocols, and meets expectations associated with own role when complying with organisational and security standards, and guidelines
Get the work done	All	• Takes responsibility for planning, sequencing and prioritising tasks, and own workload for efficiency, and for effective outcomes • Makes routine decisions, and implements standard procedures, for routine tasks, using formal decision-making processes for more complex and non-routine situations • Addresses less predictable problems and initiates standard procedures in response to these, applying problem-solving processes in determining a solution • Uses familiar digital technologies and systems to access information, search and enter data, and code, present information. and communicate with others, cognisant of data security and safety

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTDBS402 Complete database backup and restore	ICADBS402A Complete database backup and restore	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion volumes available from the IBSA website:
http://www.ibsa.org.au/companion_volumes -
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2

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