Australian Government

ICTTEN822 Manage application layer solutions

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 7.0.

Application

This unit describes the skills and knowledge required to develop, evaluate, manage, deploy and maintain application layer solutions for new solutions or existing network service.

It applies to individuals with highly developed technical skills working as network engineering staff or senior technical officers with relevant project management roles and authority to direct activities of installation staff, manufacturers and vendors.

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

Unit Sector

Telecommunications networks engineering

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. Develop application layer solutions	1.1 Produce requirements for applications layer solutions for delivery of new applications layer solutions to customers using forecasting demand data
	1.2 Prepare a plan for an organisational change control process and integration of new solutions within a complete network infrastructure
	1.3 Produce a test management schedule for the testing process of application product
	1.4 Translate complex design and architecture requirements to traceable application characteristics according to design requirements
	1.5 Develop application architecture solution specifications using an

ELEMENT	PERFORMANCE CRITERIA
	industry process according to design requirements
	1.6 Develop application software resource profiling and select suitable vendor for negotiations
	1.7 Translate complex requirements into software packaging
	1.8 Produce software deployment mapping and version control to confirm complete integration and compatibility of application solution with existing system
	1.9 Complete configuration management and provide complex input network design requirements
2. Analyse test results of application layer solutions	2.1 Use design document and integration document software to replicate issues exhibited in test environment
	2.2 Certify software solution compatibility and compliance to requirements using a web-based test management tool (quality centre) to conduct performance evaluation tests
	2.3 Analyse test reports to evaluate load balancing and network security issues in test environment
	2.4 Resolve complex issues in interface to isolate defects
3. Manage deployment of application layer solutions	3.1 Plan and prepare evidence for customer acceptance and certification
	3.2 Plan and manage transition to operation activities required for transition to operation of integrated application layer solution
	3.3 Prepare installation failures procedure to make changes while maintaining service levels
	3.4 Manage change implementation plan to maintain system stability
4. Maintain currency of application layer solutions	4.1 Manage ongoing monitoring activities to prolong new applications layer solution life cycle for cost-effective business reasons
	4.2 Produce tuning activities to make efficient use of resources
	4.3 Analyse current demands for resources to derive forecasts and future requirements
	4.4 Produce a capacity plan predicting infrastructure resource needs to achieve agreed service levels

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION

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Numeracy	• Analyses and synthesises highly embedded mathematical information in a broad range of tasks and texts
Reading	• Organises, evaluates and interprets a range of complex technical documentation including software and hardware manuals
Writing	• Prepares workplace documentation including complex plans incorporating technical language to communicate complex information clearly and effectively
Planning and organising	• Operates from a broad conceptual plan, developing operational detail in stages, regularly reviewing priorities and performance during implementation, and identifying and addressing issues • Takes responsibility for high-impact decisions in complex situations involving many variables and constraints • Monitors outcomes of decisions, considering results from a range of perspectives and identifying key concepts and principles and their impact on customers and enterprise
Problem solving	• Uses formal analytical and lateral thinking techniques to resolve logistics problems
Technology	• Uses a broad range of strategies to store, access and organise virtual information, recognising design choices will influence what information is retrieved and how it may be interpreted and used • Demonstrates a sophisticated understanding of principles, concepts, language and practices associated with the digital world and uses this to devise solutions

Unit Mapping Information

Supersedes and is equivalent to ICTTEN806 Manage application layer solutions.

Links

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