



Australian Government

ICTTEN805 Manage solution architecture and impacts in line with organisational processes

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 1.0.

Application

This unit describes the skills and knowledge required to analyse business options to plan, develop and manage solution architecture systems integration across multiple architectures for a telecommunications service provider.

It applies to individuals with excellent technical, communication and planning skills working in project management roles with authority to direct installation activities.

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
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop plan to support architectural design process	1.1 Prepare a plan with techniques to support the architectural design process and communicate the solution to different stakeholder groups 1.2 Critically analyse business options to support architectural design trade-offs for optimal design solution 1.3 Evaluate strengths and weaknesses of relevant technologies in context of the requirement 1.4 Assess a range of interdisciplinary concept ideas and effect their attributes would have on the design requirements

ELEMENT	PERFORMANCE CRITERIA
	1.5 Prepare a solutions architecture plan detailing all possible solutions
2. Develop interface requirements for effective solutions across multiple architectures	2.1 Evaluate system element interfaces and sources of complexity for interface management of the system across multiple architectures 2.2 Develop a process and appropriate techniques to be adopted for interface management of system elements for solution architecture 2.3 Produce a control process of system element interfaces of the management system 2.4 Liaise and arbitrate between stakeholders where there are conflicts in definition of interfaces
3. Manage solution architecture systems integration	3.1 Evaluate suitability of system integration, verification and validation plans for solution architecture from requirements 3.2 Develop systems integration, verification and validation plans for complex systems to ensure viable integration process 3.3 Manage system integration plan and diagnose complex faults 3.4 Document fault conditions, report to appropriate person and follow up corrective actions 3.5 Prepare evidence for customer acceptance and certification of system integration management plan 3.6 Plan and manage a transition to operational activity for the solution architecture
4. Manage solution implementation and notify stakeholder groups	4.1 Produce final project management requirements against solution architecture plan and notify stakeholder groups of impending implementation 4.2 Evaluate impact of proposed project solutions on customers and enterprise 4.3 Manage solution architecture activities as part of overall project plan and monitor solution architecture risks 4.4 Manage amendments to solution architecture processes to meet needs of the project and apply necessary corrective actions

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	3.1	Organises, evaluates and interprets a range of complex documentation such as software and hardware manuals
Writing	1.1, 1.5, 3.2, 3.4, 3.5, 4.1	Prepares clear and concise workplace documentation, including recommendations, incorporating technical language to communicate complex information clearly and effectively
Oral Communication	2.4	Participates in verbal exchanges using tone and language appropriate to audience and environment
Interact with others	2.4, 3.4, 4.1	- Selects and uses appropriate conventions and protocols when communicating with stakeholders in a range of work contexts - Collaborates and negotiates to achieve agreeable outcomes in potentially contentious situations
Get the work done	1.2-1.4, 2.1-2.3, 3.1, 3.3, 3.4, 3.6, 4.2-4.4	- Operates from a broad conceptual plan, developing operational detail in stages, regularly reviewing priorities and performance during implementation, identifying and addressing issues - Demonstrates a sophisticated understanding of principles, concepts, language and practices associated with the digital world and uses this to prepare proposals - Takes responsibility for high-impact decisions in complex situations involving many variables and constraints - Uses formal analytical and lateral thinking techniques to resolve domain, technology and logistics problems - Monitors outcomes of decisions, considering results from a range of perspectives and identifying key concepts and principles and their impact on customers and enterprise

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN805 Manage solution	ICTTEN7222 A Manage solution	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
architecture and impacts in line with organisational processes	architecture and impacts in line with organisational processes	Training Packages. Recoded and minor changes to PCs to meet AQF requirements.	

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for ICTTEN805 Manage solution architecture and impacts in line with organisational processes

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Performance Evidence

Evidence of the ability to:

- prepare an architecture plan exploring a range of alternative solutions
- develop interface requirements for effective solutions across multiple architectures
- manage solution architecture systems integration
- analyse impact of proposed project solutions on customers and enterprise
- prepare evidence for customer acceptance and certification of system integration management plan
- produce final project management requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify and define features and operating requirements of complex systems, key performance indicators (KPIs) and service level agreements
- outline information required to define solution architecture and impacts in line with organisational processes
- summarise interdisciplinary concepts across multiple architectures
- outline issues and challenges occurring with system changes
- explain legislation, codes of practice and other formal agreements directly impacting system integration
- summarise manufacturer's requirements for operation of systems equipment
- identify and critique relevant organisational policies and procedures
- outline performance and integration requirements
- summarise solutions architecture alternatives

- summarise specific work health and safety (WHS) requirements that impact activity in terms of safety of self and the public
- outline system element interfaces for solution architecture
- explain system integration plans
- explain validation plans.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances should be typical of those experienced in the Telecommunications – Telecommunications Networks Engineering field of work and include access to:

- a site where development and management of solution architecture systems integration across multiple architectures may be conducted
- software tools currently used in industry
- vendor products, specifications, equipment and enterprise policy required for the activity.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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