



Australian Government

ICTNWK628 Design and build integrated VoIP networks

Release: 1

ICTNWK628 Design and build integrated VoIP networks

Modification History

Release	Comments
Release 1	This version first released with the Information and Communications Technology Training Package Version 8.0. • Supersedes and is equivalent to ICTNWK610 Design and build integrated VoIP networks. • Supersedes and is not equivalent to ICTNWK611 Configure call processing network elements for secure VoIP networks.

Application

This unit describes the skills and knowledge required to operate specialised tools, hardware, software and networking components to design and build internet protocol (IP)-based integrated voice over network into small-to-medium organisations.

The unit applies to individuals who may be voice over internet protocol (VoIP) network support specialists, VoIP network engineers and installers who are independently responsible for VoIP network management, using specialised information and communications technology (ICT) skills and knowledge.

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

Unit Sector

Networking

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. Prepare for VoIP network deployment	1.1 Confirm work brief and tasks according to organisational policies and procedures 1.2 Assess current state network architecture and VoIP call flow 1.3 Analyse existing operating systems, networked devices, endpoints and limitations 1.4 Create VoIP network deployment plan according to analysis

ELEMENT	PERFORMANCE CRITERIA
	1.5 Create site numbering plan and assign calling privileges 1.6 Select and source configuration hardware, software and tools
2. Produce pilot VoIP network components	2.1 Design VoIP network layout according to work brief 2.2 Create VoIP network architecture 2.3 Configure pilot VoIP network with gatekeeper 2.4 Test pilot VoIP network and rectify any issues 2.5 Confirm interoperation of gatekeepers in network 2.6 Confirm IP-to-IP gateway functionality
3. Deploy VoIP network and test functionality	3.1 Configure final VoIP according to VoIP network deployment plan 3.2 Implement address hiding, media interworking, and call admission controls into VoIP network 3.3 Conduct post-deployment testing and rectify any issues according to organisational procedures and technical guidelines 3.4 Conduct security assessment of VoIP network and implement security controls 3.5 Develop and securely file documentation on completed work tasks according to organisational policies and procedures

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
Numeracy	Interprets numerical data in the planning phase and undertakes measurements to evaluate network interoperability
Reading	Interprets complex technical information to determine and adhere to business requirements and deployment plans
Planning and organising	Uses a mix of intuitive and formal processes to identify key information and issues, evaluate alternative strategies, anticipate consequences and consider implementation issues and contingencies
Problem solving	Uses formal analytical and lateral problem-solving techniques to identify issues and implement solutions

Skill	Description
Technology	• Uses a broad range of strategies to store, access and organise virtual information, recognising that design choices will influence what information is retrieved and how it may be interpreted and used • Monitors and controls access to digitally stored and transmitted information

Unit Mapping Information

Supersedes and is equivalent to ICTNWK610 Design and build integrated VoIP networks.

Supersedes and is not equivalent to ICTNWK611 Configure call processing network elements for secure VoIP networks.

Links

Companion Volume Implementation Guide is found on VETNet - -

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