



Australian Government

Department of Education, Employment and Workplace Relations

ICTTEN4051A Install configuration programs on PC based customer equipment

Release: 1

ICTTEN4051A Install configuration programs on PC based customer equipment

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to install software on customer equipment, including telecommunications, data communications and security networks. The activity may be for a new installation, upgrade of capacity or technology for existing network or subsystem for convergence to Next Generation Networks (NGN). No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.
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Application of the Unit

Application of the unit	Field officers, technicians or technical supervisors from telecommunications carriers, contractors or other service providers or private providers apply the skills and knowledge in this unit. It involves configuration of specialist PC based customer equipment to allow access to telecommunications services. Customer equipment includes digital home integration, security, voice over IP (VoIP), internet protocol television (IPTV), radio frequency identification (RFID), wireless networking and home automation.
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to install software	1.1. Arrange access to the site according to required procedure 1.2. Determine the type of customer equipment from the installation plan to prepare the software requirements to provide functionality required 1.3. Prepare equipment software configuration specifications to include enhancements in customer requirements and confirm with customer 1.4. Notify customers on proposed software installation 1.5. Confirm software compatibility with existing system if required 1.6. Document job software specification
2. Install the program and provide secure remote access	2.1. Configure customer specific data according to system specifications 2.2. Install and test system functionality to verify system operational performance following occupational health and safety (OHS), manufacturer's specifications and industry standards 2.3. Develop and configure security arrangements and codes for remote access systems in consultation with customer 2.4. Conduct tests to validate security arrangements
3. Undertake administrative tasks	3.1. Save and record configuration program and provide program backup for contingency use by customer 3.2. Complete administrative tasks and provide a copy of job specification to be securely stored on site following enterprise policy 3.3. Notify customer of job completion and obtain sign off

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- analytical skills to interpret required software and hardware settings
- communication skills to liaise with customers and technical staff to ensure requirements are known and can be met within timeframes

REQUIRED SKILLS AND KNOWLEDGE

- literacy skills to interpret technical specifications and related documentation
- numeracy skills to make calculations and take readings for necessary configuration changes
- planning and organisation skills to make site access and equipment delivery arrangements
- problem solving to account for unexpected faults or equipment configuration anomalies
- technical skills to:
 - handle, connect and calibrate test equipment
 - manage transfer of data, installation and configuration of software
 - use networking skills

Required knowledge

- channels allocations
- common operating systems and their impact on the configuration of, or version of software to be installed
- frequency
- IP addressing
- logon procedures
- numbering formats
- product or service functions to ensure correct operation of completed installation
- relevant regulatory and industry requirements

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the ability to:

- prepare software configuration
- load software into customer equipment
- install security programs agreed with customer
- test program and program features including:
 - system facilities
 - product features
 - required peripherals associated with the product
 - system functionality.

Context of and specific resources for assessment

Assessment must ensure:

- suitable site for installation of system programs
- use of equipment currently used in industry
- relevant regulatory and enterprise documentation that impacts on testing and installation.

Method of assessment

The following assessment methods are appropriate for this unit:

- direct observation of the candidate performing installation and configuration of software into equipment
- review of written documentation prepared by the candidate outlining activity conducted, specific installation details and job completion records
- written and oral questioning of the candidate on procedures and considerations for a range of installation situations.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICTTEN4072A Effect changes to existing customer premises equipment systems and equipment.

Aboriginal people and other people from a non-English

EVIDENCE GUIDE

	speaking background may have second language issues. Access must be provided to appropriate learning and assessment support when required. Assessment processes and techniques must be culturally appropriate, and appropriate to the oral communication skill level, and language and literacy capacity of the candidate and the work being performed. In all cases where practical assessment is used it will be combined with targeted questioning to assess required knowledge. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. Where applicable, physical resources should include equipment modified for people with special needs.
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Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Customer equipment may include:

- cable modem
- digital home integration
- digital subscriber line (DSL) router modem
- fire alarm
- IPTV
- media entertainment centre
- private branch exchange (PBX)
- retail point of sale (POS) equipment
- RFID
- security alarm panel
- set-top box
- telemetry devices used by utilities:

RANGE STATEMENT	
	• electricity • gas • water • VoIP • Worldwide interoperability for microwave access (WiMAX) customer premises equipment (CPE) • wireless broadband modem.
Functionality may include:	• product features • required peripherals associated with product • system facilities • system functionality: • call detail recording • local area network (LAN) or wide area network (WAN) • night service • permissions • security • station priorities • xDSL facilities.
Software configuration specifications may include:	• billing details • customer port configurations • customised installation • network management • patch • software functionality • toll details • upgrade.
Customer specific data may include:	• access and authorisation permissions • equipment configuration • location • service provider access codes.
Security arrangements and codes may include:	• account names • passwords • PINs • usernames • remote access provisions: • logical ports • physical access lines.

Unit Sector(s)

Unit sector	Telecommunications
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Co-requisite units

Co-requisite units		

Competency field

Competency field	Telecommunications networks engineering
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