



Australian Government

Department of Education, Employment and Workplace Relations

ICANWK411A Deploy software to networked computers

Release: 1

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Modification History

Version	Comments
ICANWK411A	This version first released with <i>ICAI1 Information and Communications Technology Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to plan, manage and support the installation of new or upgraded software to networked computers according to vendor and organisation specifications.

Application of the Unit

This unit applies to those involved in installing, configuring, maintaining and supporting software, such as network administrators and network support staff.

Licensing/Regulatory Information

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.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>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.</i>

Elements and Performance Criteria

<p>1. Determine operating system and software and hardware requirements</p>	<p>1.1 Assess <i>client</i> software and licensing requirements, considering compatibility with existing application software and operating system</p> <p>1.2 Assess <i>hardware</i> requirements</p> <p>1.3 Analyse requirements against local area network (LAN), wide area network (WAN), and wireless networks within organisational guidelines</p> <p>1.4 Evaluate client requirements according to organisational guidelines, corporate purchasing procedures and budget</p>
<p>2. Obtain deployment software to automate deployment</p>	<p>2.1 Evaluate <i>deployment software</i> according to client requirements and organisational guidelines</p> <p>2.2 Contact <i>vendors</i> and obtain technical specifications, including support arrangements and licensing</p> <p>2.3 Acquire software and licences, according to organisational procedures</p> <p>2.4 Store software licences and manuals, according to organisational guidelines</p>
<p>3. Automate installation of operating system via network</p>	<p>3.1 Plan and deploy <i>operating system</i> according to appropriate vendor installation procedures with minimal disruption to network and clients</p> <p>3.2 Configure and test installation to ensure that it meets client needs and vendor specifications</p> <p>3.3 Install updates and patches</p>
<p>4. Automate installation of software packages via network</p>	<p>4.1 Plan and deploy <i>software packages</i> according to appropriate vendor installation procedures with minimal disruption to network and clients</p> <p>4.2 Configure and test installation to ensure that it meets client needs and vendor specifications</p> <p>4.3 Install updates and patches</p>
<p>5. Test and sign off</p>	<p>5.1 Test installed operating system and software for error-free performance, identifying and resolving problems</p> <p>5.2 Determine and document security and licensing issues</p> <p>5.3 Obtain client evaluation and feedback, to ensure that client requirements have been met</p>

Required Skills and Knowledge

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

Required skills

- communication skills to liaise with a client to determine functional requirements of network
- literacy skills to document client requirements
- problem-solving skills to troubleshoot and debug:
 - deployment issues
 - configuration issues
- research skills to determine most suitable solution for client
- technical skills to:
 - implement LANs
 - implement various software deployment solutions.

Required knowledge

- overview knowledge of:
 - network protocols and operating systems
 - organisational contracting procedures and responsibilities
 - software licensing requirements and documentation
 - transmission control protocols or internet protocols (TCPs/IPs) and applications
- detailed knowledge of:
 - current industry standards related to software deployment
 - deployment software configuration
 - configuration of automated deployment processes
 - operating system deployment
 - software package deployment
 - troubleshooting deployment processes.

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	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> • identify client software requirements • plan and deploy automatic installation of operating system and software • configure and test installation, ensuring client needs are met.
Context of and specific resources for assessment	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> • site or prototype where deployment processes may be implemented • live network • software tools to support implementation of deployment processes • technical documentation and installation manuals • organisational guidelines • appropriate learning and assessment support when required. <p>Where applicable, physical resources should include equipment modified for people with special needs.</p>
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • verbal or written questioning to assess candidate's knowledge of underpinning knowledge and skills • direct observation of candidate performing the tasks required to successfully implement automated deployment processes • documentation produced in a small project environment that reflects the understanding of client and technical skills required.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, where appropriate.</p> <p>Assessment processes and techniques must be culturally appropriate, and suitable to the communication skill</p>

	<p>level, language, literacy and numeracy capacity of the candidate and the work being performed.</p> <p>Indigenous people and other people from a non-English speaking background may need additional support.</p> <p>In cases where practical assessment is used it should be combined with targeted questioning to assess required knowledge.</p>
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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.

<i>Client</i> may include:	<ul style="list-style-type: none"> • external organisations • individuals • internal departments • internal employees.
<i>Hardware</i> may include:	<ul style="list-style-type: none"> • networks • network interface card (NIC) • personal computers • servers • workstations.
<i>Deployment software</i> may include:	<ul style="list-style-type: none"> • Acronis • Altiris • Ghost • remote installation services (RIS) and wireless distribution system (WDS) • Windows Server tools.
<i>Vendors</i> may include:	<ul style="list-style-type: none"> • Adobe • Apple • Citrix • Linux or Unix • Microsoft • Novell • open source.
<i>Operating system</i> may include:	<ul style="list-style-type: none"> • Linux • Mac • Unix • Windows.
<i>Software packages</i> may include:	<ul style="list-style-type: none"> • office applications • utilities.

Unit Sector(s)

Networking