



Australian Government

UEECS0014 Develop computer network services

Release: 1

UEECS0014 Develop computer network services

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to develop computer network services.

It includes applying safe working practices, planning network services, installing and configuring network infrastructure components update services, monitoring performance and documenting development activities.

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

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Computer Systems

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to develop network services

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) processes and workplace procedures for a given work area are identified, obtained and applied
- 1.2** WHS/OHS risk control measures and workplace procedures are followed in preparation for the work

- 1.3 Scope of network services for development is determined from network performance specifications and in consultation with relevant person/s
 - 1.4 Activities are planned in accordance with workplace procedures for timelines and in consultation with others involved
 - 1.5 Development tools and software are selected based on specified requirements and performance standards
 - 1.6 Strategies are implemented to ensure network development is carried out efficiently
- 2 **Install, configure and manage network services**
 - 2.1 WHS/OHS risk control measures and workplace procedures for carrying out the work are followed
 - 2.2 Complexities of network infrastructure are applied to developing network services
 - 2.3 Network infrastructure components in use and installed are configured and variants specified for the network in accordance with relevant industry standards
 - 2.4 Management components of network services are configured and requirements specified for the network are in accordance with relevant industry standards
 - 2.5 Security components of network services are created and requirements specified for the network are in accordance with relevant industry standards
 - 2.6 Network malfunctions are identified and rectified using techniques in accordance with relevant industry standards
 - 2.7 Network is monitored and solutions developed to optimise network performance and reliability in accordance with workplace procedures
 - 2.8 Approaches to issues/problems are analysed to provide effective solutions
 - 2.9 Quality of work is monitored in accordance with workplace procedures and relevant industry standards
- 3 **Report network administration activities**
 - 3.1 Written justification is produced for network services development activities and relevant person/s notified in accordance with workplace procedures

- 3.2** Network service development records are maintained in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEENEED116A Develop computer network services.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEECS0014 Develop computer network services

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- analysing approaches to issues/problems to provide effective solutions
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including
 - using risk control measures
- configuring management components of network services
- consulting with relevant person/s and planning activities to meet scheduled timelines
- creating security components of network services
- determining the scope of network services for development
- developing solutions to optimise network performance
- documenting justification and network services development activities
- identifying and rectifying network malfunctions
- implementing strategies to ensure network development is carried out effectively
- installing and configuring network infrastructure components
- monitoring quality of work
- preparing to develop network services
- selecting development tools and software based on specified requirements and performance standards.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- remote access
- file and print services
- configure routing and firewalls
- domain name service (DNS) encompassing
- dynamic host configuration protocol (DHCP)
- internet protocol (IP) version 4 (IPv4) and IP version 6 (IPv6) addresses

- monitoring and maintaining of network services
- problem-solving techniques
- relevant components, development tools and software
- relevant industry standards
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications and installation instructions
- relevant network services and infrastructure
- relevant rectifying malfunctions techniques
- relevant WHS/OHS legislated requirements
- relevant workplace documentation, including
 - network service development records
- relevant workplace instructions, quality, policies and procedures.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- resources that reflect current industry practices in relation to developing network services
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>