



Australian Government

ICTTEN411 Monitor, analyse and action telecommunications network alarms

Release: 1

ICTTEN411 Monitor, analyse and action telecommunications network alarms

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to diagnose problems, restore a network, normalise an alarm system and examine the impact on a network.

It applies to individuals who are proficient communicators, excellent trouble-shooters and who have a clear understanding of network alarm systems.

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

Unit Sector

Telecommunications – 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. Plan response to network alarm	1.1 Determine alarm severity and specific network elements affected from presentation of alarm 1.2 Assess likely impact to client and network of the alarm 1.3 Notify the network operating centre (NOC) and other relevant parties of alarm condition 1.4 Prioritise actioning of alarms according to existing service level agreement obligations and enterprise policy 1.5 Assess impact of any outage issues and major customers affected 1.6 Provide information to and seek advice from other relevant

ELEMENT	PERFORMANCE CRITERIA
	parties in identifying the problem and cause of the alarm condition 1.7 Diagnose likely cause of alarm condition using established methodical strategies 1.8 Escalate diagnosis to higher level fault clearance unit according to enterprise policy where necessary
2. Arrange rectification of network problem	2.1 Implement enterprise policy relating to outages as required 2.2 Rectify network problems when appropriate capability and time constraints can be met 2.3 Enact escalation procedures according to enterprise policy 2.4 Make all alarm data and diagnosis available to other areas with responsibility and jurisdiction for network restoration 2.5 Provide clear and concise instructions to field staff to facilitate all repair efforts 2.6 Monitor progress of the network repair effort 2.7 Apply enterprise policy in relation to alarms requiring no further action
3. Complete alarm clearance tasks	3.1 Reset alarms following network restoration 3.2 Notify all relevant parties of problem rectification 3.3 Undertake appropriate cause and effect studies to prevent re-occurrence of problem 3.4 Complete administrative tasks and recommend any changes required by the enterprise quality assurance system

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	1.4, 1.8, 2.1, 2.3, 2.7, 3.4	Recognises and interprets complex technical data and procedures to determine job requirements
Writing	1.3, 2.5, 3.2, 3.4	Uses clear, specific and industry-related terminology to produce and update workplace documentation

Oral Communication	1.3, 2.5, 3.2	• Articulates requirements clearly and concisely to provide advice and guidance to others and to liaise with technical personnel working across different levels and in different contexts • Uses well-developed listening and questioning techniques to confirm understanding
Numeracy	1.1	• Uses mathematical formulae to interpret numerical data
Interact with others	1.6, 2.4	• Actively identifies requirements of important communication exchanges, selecting appropriate channels, format, tone and content to suit purpose and audience
Get the work done	1.1, 1.2, 1.4, 1.5, 1.7, 1.8, 2.1, 2.2, 2.6, 3.1, 3.3, 3.4	• Understands key principles and concepts underpinning the design and operation of digital systems and tools, and applies these when troubleshooting existing technology and when seeking to understand the potential of new technology • Works logically and systematically to monitor, analyse and action job priorities • Implements actions according to a predetermined plan, making adjustments if necessary • Makes decisions quickly and intuitively in familiar situations requiring immediate attention, drawing on past experience to identify key variables and determine the best course of action • Uses analytical processes to decide on a course of action, establishing criteria for deciding between options and seeking input and advice from others when necessary

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN411 Monitor, analyse and action telecommunications network alarms	ICTTEN4085A Monitor, analyse and action telecommunications network alarms	Updated to meet Standards for Training Packages.	Equivalent unit

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 ICTTEN411 Monitor, analyse and action telecommunications network alarms

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Performance Evidence

Evidence of ability to:

- monitor and analyse a range of network alarms including use of fault history and ranking of likely causes
- ensure customers and relevant personnel are appropriately notified of network status
- undertake and monitor network repairs
- plan and coordinate actioning of network alarms.

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:

- define purpose of escalation policies and procedures for network alarm systems
- describe installed telecommunications systems and equipment
- explain principles and use of path protection
- outline key components of a telecommunications network
- evaluate commonly used test equipment and test procedures
- outline typical problems and challenges that arise in Network Operations Centres (NOCs) and in the field
- describe typical systems and procedures for monitoring alarms.

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 networks engineering field of work and include access to:

- sites on which local and remote monitoring and analysis of network alarms may be conducted
- manufacturer's technical documentation.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

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