



**Australian Government**

# **CPPSEC4018 Program and configure networked security systems**

**Release: 1**

# CPPSEC4018 Program and configure networked security systems

## Modification History

Release 1 This version first released with CPP Property Services Training Package Release 9.0.

Supersedes and is equivalent to CPPSEC4018A Configure security devices on IT networks. Updated to meet the Standards for Training Packages.

## Application

This unit specifies the skills and knowledge required to program and configure a range of security systems and networks. It includes identifying configuration requirements and parameters for the type of security system and network, and conducting programming, configurations and testing to ensure the system operates correctly and meets client requirements.

This unit is suitable for those using specialised knowledge to complete routine and non-routine tasks and using their own judgement to deal with predictable and sometimes unpredictable problems.

Legislative, regulatory or certification requirements apply in some states and territories to the provision of advice on security solutions, strategies, protocols and procedures. For further information, check with the relevant regulatory authority.

## Pre-requisite Unit

Nil.

## Unit Sector

Security/Risk management

## Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

1 Confirm security system and network requirements.

1.1 Access and interpret key requirements of legislation, regulations and workplace policies and procedures, including work health and safety (WHS), and apply to work instructions to ensure compliance.

1.2 Review work instructions to confirm client requirements

- and work timeframes.
- 1.3 Obtain and confirm security system installation specifications and network configurations.
  - 1.4 Review installation documentation to confirm equipment, cabling and connection requirements.
  - 1.5 Check proposed configurations against operational parameters and specifications for security system and type of network.
- 2 Plan and organise work tasks.
- 2.1 Plan and prioritise work tasks allowing sufficient time to meet work instructions.
  - 2.2 Select and organise required materials, tools, testing devices and equipment including personal protective equipment and check for safe and correct operation.
  - 2.3 Arrange access to security system and network in consultation with relevant persons.
  - 2.4 Identify hazards in the work area and apply risk control measures.
- 3 Conduct system and network programming and configuration.
- 3.1 Access networked security system with minimal disruption to services and others in the work area.
  - 3.2 Use safe work practices when working with electronic equipment and cables according to WHS requirements.
  - 3.3 Assess security system design and existing infrastructure to identify and verify program parameters.
  - 3.4 Install and program system software according to manufacturers' instructions.
  - 3.5 Configure and secure networked security system according to work instructions.
- 4 Inspect and test network configurations.
- 4.1 Test networked security system to confirm correct configuration, operation and connections.
  - 4.2 Inspect networked security system configuration and

|     |                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |                                                |     |                                                                                                                                            |     |                                                                                      |     |                                                                                |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------|
|     |                                                                                                                                            | confirm compliance with regulatory and client requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |                                                |     |                                                                                                                                            |     |                                                                                      |     |                                                                                |
|     | 4.3                                                                                                                                        | Identify and rectify or report configuration faults or deficiencies.                                                                                                                                                                                                                                                                                                                                                                                                                              |     |                                                |     |                                                                                                                                            |     |                                                                                      |     |                                                                                |
| 5   | Finalise work tasks and complete documentation.                                                                                            | <table><tr><td>5.1</td><td>Notify completion of work to relevant persons.</td></tr><tr><td>5.2</td><td>Complete documentation detailing work undertaken and identified faults or deficiencies according to workplace and regulatory requirements.</td></tr><tr><td>5.3</td><td>Check tools and equipment for faults, wear or damage and rectify or report problems.</td></tr><tr><td>5.4</td><td>Restore work area to original condition and remove waste caused by work tasks.</td></tr></table> | 5.1 | Notify completion of work to relevant persons. | 5.2 | Complete documentation detailing work undertaken and identified faults or deficiencies according to workplace and regulatory requirements. | 5.3 | Check tools and equipment for faults, wear or damage and rectify or report problems. | 5.4 | Restore work area to original condition and remove waste caused by work tasks. |
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| 5.2 | Complete documentation detailing work undertaken and identified faults or deficiencies according to workplace and regulatory requirements. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |                                                |     |                                                                                                                                            |     |                                                                                      |     |                                                                                |
| 5.3 | Check tools and equipment for faults, wear or damage and rectify or report problems.                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |                                                |     |                                                                                                                                            |     |                                                                                      |     |                                                                                |
| 5.4 | Restore work area to original condition and remove waste caused by work tasks.                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |                                                |     |                                                                                                                                            |     |                                                                                      |     |                                                                                |

## Foundation Skills

As well as the foundation skills explicit in the performance criteria of this unit, candidates require:

- reading skills to interpret key requirements of:
  - specifications for networked system architecture and configuration
  - system installation plans and specifications
  - manufacturers' instructions
- numeracy skills to interpret multimeter readings when installing and programming networked security system.

## Unit Mapping Information

Supersedes and equivalent to CPPSEC4018A Configure security devices on IT networks.

## Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

# Assessment Requirements for CPPSEC4018 Program and configure networked security systems

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## Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by programming and configuring three different internet protocol (IP) networked security systems.

## Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- workplace policies and procedures that ensure compliance with legislative and regulatory requirements when programming and configuring networked security systems:
  - licensing requirements and limits of own authority
  - requirements for complying with Australian Communications and Media Authority cabling rules
  - work health and safety
- cable identification methods and techniques
- common computer commands used to verify and manage internet protocol and network performance
- difference between programming and configuration of security equipment and systems
- documentation to be completed when programming and configuring networked security systems to ensure compliance with licensing and warranty requirements
- fundamentals of routers, switches, firewalls and wireless access points
- fundamentals of scripting language
- keypad and control panel types and functions for a range of security equipment and systems
- local area network and wide area network capabilities
- meaning of multiple form factor authentication
- methods for ensuring IP networked systems and equipment are properly secured
- principles of security system networking and integration including IP addresses and devices

- tests to confirm correct configurations, operation and connections for networked security systems
- tools and equipment including personal protective equipment (PPE) used when programming and configuring networked security systems at client sites
- types, functions and features of computerised, electronic and manual security equipment and systems that require programming and configuration:
  - access control systems
  - audible and visual warning devices
  - cameras and monitors
  - commercial and residential alarm systems
  - detection devices
  - electronic and mechanical fire safety and fire locking systems
  - electronic locks and locking systems
  - electronic readers
  - electronic screen equipment
  - intercoms and control panels
  - security doors and door controls
- types of earthing systems used in electrical installations
- typical hazards encountered when programming and configuring networked security systems and the control measures for each:
  - confined spaces
  - electrical
  - hazardous materials and chemicals
  - hidden utilities
  - people in the work area
  - power tools
  - vermin.

## Assessment Conditions

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