Title	Apply essential IT technical knowledge and concepts to provide support of a computer's hardware, software and network		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: disassemble and assemble a single-user computer system to/from components; install and configure an operating system and application software on a single-user computer system; and configure network, security and storage options for a computer system; in accordance with provided specifications and good practice.
	This unit standard has been developed primarily for assessment within programmes leading to the New Zealand Certificate in Information Technology Essentials (Level 4) [Ref: 2594].

Classification	Computing > Computer Support

Available grade	Achieved

Guidance Information

1   Assessment, where applicable, will be conducted in and for the context of real or realistic situations and/or settings, and be relevant to current and/or emerging practice. The assessor may gather evidence over time from a range of scenarios rather than using one assessment where the learner has to demonstrate all of the required skills. The assessment context for this unit standard must be suitable to meet the criteria for level 4 in the NZQF Level Descriptors, which are available by searching for "level descriptors" at www.nzqa.govt.nz.

2   Performance of all outcomes is to be carried out in accordance with organisation standards and procedures and good practice. Organisation standards and procedures may include – quality assurance, documentation, security, communication, timeframes, cost or cost estimate, health and safety, professional behaviour.

3   A *plan* or *specifications* outlining how the requirements will be realised will be supplied to the learner, and will provide a clear description of both the desirable outcomes sought, any constraints, and a testing requirements. It will contain specifications against which the success or otherwise of the outcomes can be evaluated. Good practice must be applied consistently to meet the requirements.

4 Definitions
Good practice in this context refers to selecting and assembling the appropriate components according to the manufacturers' instructions to ensure the computer system works as it should. It also refers to safe working practices, anti-static precautions, procedures, cleaning and handling of components.
Information Technology (IT) is the common term for the entire spectrum of technologies for information processing and related to computing technology, such as networking, hardware, software, the internet or the people that work with these technologies.
Local area network (LAN) is a computer network that interconnects computers within a limited area such as a home, school, or office.
Malware refers to a type of malicious code that includes viruses, Trojans, worms, backdoor, spyware and other harmful programs.
Operating system refers to the software that manages the computer's memory, processes, hardware and software resources.
Performance refers to how software performs according to normal operating standards.
Peripherals refer to input, output, and storage devices that are external to a computer's system unit, such as monitors, keyboards, printers, modems, scanners, external hard drives and optical drives.
Single-user computer system means a computing system that is only usable by one person at a time.

5 Legislation relevant to this unit standard includes but is not limited to:
Consumer Guarantees Act 1993
Copyright Act 1994
Copyright (New Technologies) Amendment Act 2008
Harmful Digital Communications Act 2015
Health and Safety at Work Act 2015
Privacy Act 1993
and any subsequent amendments.
Current legislation and regulations can be accessed at http://legislation.govt.nz.

6 References
ACC5637 Guidelines for Using Computers - Preventing and managing discomfort, pain and injury. Accident Compensation Corporation - Department of Labour, 2010; available from Worksafe New Zealand, at http://www.business.govt.nz/worksafe/information-guidance/all-guidance-items/guidelines-for-using-computers.

Outcomes and performance criteria

Outcome 1

Disassemble and assemble a single-user computer system to/from components in accordance with provided specifications and good practice.

Range components may include but are not limited to motherboard, RAM, CPU, PSU (power supply), interface cards, storage devices, peripherals.

Performance criteria

1.1   A single-user computer system is disassembled into component parts in accordance with good practice.

1.2   Components of a single-user computer system are inter-connected in accordance with assembly specifications and good practice.

1.3   The assembled single-user computer system passes a Power-On-Self-Test (POST).

Outcome 2

Install and configure an operating system and application software on a single-user computer system in accordance with provided specifications and good practice.

Performance criteria

2.1   The installation of software follows specifications in accordance with good practice.

   Range   software includes – operating system, application(s), and may include device driver(s).

2.2   The software operates according to the software publisher's specifications.

   Range   specifications may include but are not limited to – compatibility, configuration, access, performance;
   software includes – operating system, application(s), and may include device driver(s).

2.3   The software is configured and customised according to the user's requirements in the provided specifications.

   Range   may include but not limited to – language packs, default folders, security and sharing settings.

Outcome 3

Configure network, security and storage options for a computer system in accordance with provided specifications and good practice.

Range   includes – connecting a computer to a local area network with internet access; customising end-user security settings; configuring storage options.

Performance criteria

3.1   The computer system can create, retrieve, and update a file from a local and remote storage location on a wired or wireless LAN.

3.2   The computer system can access an external internet web site.

3.3   Security options are activated in accordance with good practice.

        Range   includes but not limited to – browser settings, anti-malware
                    configuration, firewall settings, file-sharing settings.

Replacement information	This unit standard replaced unit standards 6869, 6870, 6871 and 6872.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	**Version**	**Date**	**Last Date for Assessment**
Registration	1	19 January 2017	31 December 2024
Review	2	28 April 2022	31 December 2024

Consent and Moderation Requirements (CMR) reference	0113

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.