



INFORMATION TECHNOLOGY SUPPORT SERVICE

Level - I

LEARNING GUIDE – 31

Unit of Competence:	Install Software Application
Module Title:	Installing Software Application
LG Code:	ICT ITS1 L031 08
TTLM Code:	ICT ITS1 TTLM 0919

LO2: Obtain Software or Software Upgrade



Instruction Sheet	Learning Guide – 31
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This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Software that conform to the organization needs
- Licensing requirements

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Investigate application program that best conforms to requirements and organizational policies
- Obtain application program under instruction from appropriate person
- Determine licensing requirements and record in line with organizational guidelines
- Ensure target computer to conform with the minimum hardware and operating system requirements of the application program

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described here.
3. Read the information written in the information “Sheet 1 and Sheet 2” in page -3- and -8- respectively.
4. Accomplish the “Self-check 1 and Self-check 2” in page -6- and -13- respectively
5. If you earned a satisfactory evaluation from the “Self-check 1” proceed to “Information Sheet 2 in page -8- and If you earned a satisfactory evaluation from the “Self-check 2” that is good.



1.1. OBTAINING SOFTWARE

Once a need for software has been identified a requirement specification should be created to specify what software is required.

For example a business identifies that they need some office productivity software that will do word processing and spreadsheets. The requirements specification will detail all relevant information as to how word processing and spreadsheets need to work for the business. Once you have this information you can then start looking for software.

Once your supervisor has checked and approved the client's software requirements you will need to obtain the software.

1.1.1. Where to Look for Software

Information available on software products can be accessed from many sources. These sources have varying degrees of objectivity ranging from the authoritative to the informal. Some of common sources of information for searching a product are:

- Computer magazines
- Newspapers
- The Internet
- IT consultants
- IT department
- Computer suppliers

Other sources of information may include industry colleagues, contacts and organisations similar to your own.

Depending on the size and the type of your organization, you will choose one of several different ways of collecting the software. For example, large organizations usually have a section or a department which controls purchases and deals only with a selected number of suppliers. In such cases, you will be provided with a catalogue of available products from which to choose.

Such organizations also use a Purchase Requisition document (usually called a PR book) provided by the administrative department. You will need to fill in and submit a Purchase Order which also needs to be signed by your supervisor.

If an organization allows purchases to be made from any supplier, then you will be expected to obtain two quotations from different suppliers and attach them to your purchase order.

Smaller organizations may require some additional tasks. For example, you may be asked to create a Purchase Order form using a word processor and then submit it to a supplier. Therefore, it is essential that you know the organizational guidelines regarding the purchase of software.

Every piece of software installed in a computer has clearly specified system requirements. These requirements define an environment for correct operation of



the software. In general, features which describe such an environment may include:

- Operating system requirements (whether Windows or Macintosh or Unix or other)
- Minimum size of RAM required
- Minimum size of free disk space on a hard disk required
- Depending on the type of software, there could be a list of additional requirements such as CDROM, sound card, specified screen resolution and so forth.

Note: Before you proceed with software installation, you need to ensure that the client's computer satisfies all system requirements.

1.1.2. Verification of Technical Specifications

To help determine if the new software is suitable we will need to research the technical specifications and functionality.

1.1.2.1. Software Prerequisites

Prerequisites are conditions that will ensure the correct running of a software application.

Software prerequisites may include:

- Specific system requirements such as hardware or operating systems [but these are listed as system requirements]
- The prior installation of another software package
- Services such as security and access systems, networks, Internet connections, and so on.

Here are some examples of software prerequisites:

'To browse the World Wide Web using Netscape or other Web browsers, you must have a connection to an ISP (Internet service provider).'

1.1.2.2. System Requirements

To ensure the correct operation of their software, most software manufacturers will specify preconditions to the functioning of their software by recommending a minimum system configuration. The system requirements may include:

- The hardware platform
- The operating system
- Resource requirements (CPU, memory)
- Storage capacity for the software and data
- Hardware devices such as a mouse, CD ROM drive, printer, backup device, modem.
- Minimum specifications for hardware such as screen resolution

These system requirements ensure that software is installed and run in an appropriate environment. Many software applications can run in many



different environments, but usually software manufacturers will only guarantee their software in a limited range of environments.

1.1.2.3. System Incompatibilities

System incompatibilities are mismatches between the software and the system configuration and or other installed software. System incompatibilities may prevent the software being installed or prevent the software from operating as expected.

For example, many applications are only available for a single operating system. Some of the powerful graphic design tools can only be run on the Macintosh platform, whilst many Windows based applications that you are familiar with do not have versions that can be run on Macintosh or Linux systems.

Another example is programs that have been written for a specific computer chip. For example Windows programs are designed and built to run on Intel processors. In order to run on alternative processors like the Power PC or Alpha processors, the software needs to be ported and compiled for that machine.

During your investigation of minimum system requirements and prerequisites, it is important to recognize any incompatibilities with your target systems.

1.1.3. Contacting Vendors

The information collected on vendors and products can be extensive. To reduce the information to something manageable, it is assessed against the business requirements specification for software. This process identifies those products that are suitable to the business. The aim is to discard any products that are irrelevant and leave a smaller selection of products for further investigation. This usually results in two or three vendors and products that best meet the software requirements.

Information required from vendors will include:

- A list of prerequisites for installation and operation of the product
- A list of system requirements
- Support and maintenance services, requirements or arrangements
- Vendor details including history and client list for references
- Licensing details and options
- Product pricing and costs (including ongoing)
- Any conditions regarding evaluation of the software (installation restrictions etc)

It is also good practice to send your requirements specifications to the vendor and have them respond with how their software product addresses each requirement.



Self-Check – 1	Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

- _____ 1. _____ are conditions that will ensure the correct running of a software application.
- A. Prerequisites B. Software condition C. Software Control D. All
- _____ 2. To ensure the correct operation of their software, most software manufacturers will specify preconditions to the functioning of their software by recommending _____.
- A. Business Requirement B. minimum system configuration
C. Feasibility Requirement D. All
- _____ 3. _____ are mismatches between the software and the system configuration and or other installed software.
- A. Business Requirement B. Minimum system configuration
C. Feasibility Requirement D. System incompatibilities
- _____ 4. Information required from vendors will include
- A. A list of prerequisites for installation and operation of the product
B. A list of system requirements
C. Support and maintenance services, requirements or arrangements
D. All

Note: Satisfactory rating - __ points Unsatisfactory - below __ points

You can ask your teacher for the copy of the correct answers.



Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____



2.1 Verification of Licensing Requirements

Whenever you install a piece of software on a computer you must ensure that you comply with the legal obligations outlined in its license agreement. Since a particular piece of software can be installed in many different environments and used by several users, licensing rules may also vary to accommodate each environment.

Caution: Remember - using or installing unlicensed software is illegal.

Software Licensing

- Is a legal instrument (by way of contract law) governing the usage or redistribution of software
- Allowing an individual or group to use a piece of software. Nearly all applications are licensed
- Some are based on the number machines on which the licensed program can run whereas others are based on the number of users that can use the program
- An agreement to operate software, to operate a certain number of copies and to make one backup copy

License Key

- A software license key is a pattern of numbers and/or letters provided to licensed users of a software program.
- License keys are typically created and delivered via a license generator once a software user has paid for the software and has agreed to the conditions of use and distribution as legally specified in the software license.

Software Piracy

- The illegal copying of software.
- Refers to ways of obtaining software without the permission of the software holder

Illegal copying of software is done in order to:

- Use more copies on more computers
- Make the software available on a network
- Use a copy for personal use
- Distribute copies to friends
- Sell copies to others
- Use parts of the program in another program

Copies are made legally for the following reasons:

- One backup copy to be used only if the original gets damaged
- Targets – Games & Application packages



Copyright and Intellectual Property

Copyright – the exclusive right given by law for a certain number of years to people (authors) to print, publishes, and sells copies of their original work. This original work is their **intellectual property**.

2.1.1 Types of Software License

- **Registerware:**

Refers to computer software which requires the user to give personal information through registration in order to download or use the program.

- **Shareware/Demoware**

Refers to copyrighted commercial software that is distributed without payment on a trial basis and is limited by any combination of functionality, availability, or convenience.

- **Freeware**

Computer software that is available for use with no cost or for an optional fee.

Freeware is different from shareware, where the user is obliged to pay.

- **Open Source Software (OSS)**

OSS is also free software.

OSS can be defined as computer software for which the human-readable source code is made available under a copyright license (or arrangement such as the public domain) that meets the Open Source Definition.

This permits users to use, change, and improve the software, and to redistribute it in modified or unmodified form.

- **Abandonware**

It refers to software that is no longer available for purchase or that is at least a certain amount of years old.

2.1.2 Licensing Rules for Commercial Software Applications

All commercial software comes with licensing agreements which are displayed before you install the software. Although it is a lengthy document full of legal terms and statements, you should read it carefully to know your own or your customer's rights and obligations in regard to the software.

If you install shrink-wrapped software, you will find licensing rules printed on the envelope containing the software, or on an additional page provided with the package. You should read these rules before breaking the seal of the package containing the software.

In addition, the same rules are repeated and displayed on the screen at the beginning of the installation process. You usually have to *read and accept* these rules if you wish *to complete the installation*.



If you purchased your software online and have downloaded it to a computer, its licensing agreement will be included and displayed at the beginning of the installation.

More recently, software developers have begun including the license agreement as part of the installation of the program. When you go to install the program, the license agreement appears on your screen and you are asked to accept the terms and conditions before you are allowed to proceed with the installation of the program. Because you have to click on the accept button to proceed with the installation, these types of license agreements have become known as *click-wrap licenses*.

Usually, commercial software allows installation on one computer only, unless you have a site license.

Use of Site License:

- **To make a limited number of copies for use at a single location**
- **To run the program on a LAN**

You should read the licensing rules carefully because there could be some variations. For example, a licensing rule may allow installation of the same software on three different computers. That is, one copy on a user's computer at work, one on a user's computer at home and one on a user's laptop computer. Such installation typically requires that only one copy of the software will be used at a time.

2.1.3 Licensing Rules for Organization Specific Software (In-House Developed Software)

Many large organizations develop their own software. Such software is usually not licensed to outside organizations because it was developed to match the organization's specific environment and would not operate correctly elsewhere. However, it does not mean that in-house developed software can be copied and installed freely on any computer within an organization.

Although licensing rules for such software may be less strict than rules for commercial software, the same installation procedure as for any other software must be followed.

2.2 DOCUMENTING LICENSING DETAILS

Whenever you install any type of software on a client computer you must record details of the installation according to organizational policy.

Depending on the organizational guidelines used, required details to be recorded may vary, but at least the following should be included:

- Name of the software installed
- Version number
- Information whether it is up grade or original software
- License number
- License details



- Vendor name and contact phone number
- Date of installation
- Asset/serial number of the computer on which it is installed
- Name and contact phone number of a person installing the software

Some organizations may require additional details such as location of a computer, a name of the computer user, information, whether the software is a network application and so forth. You need to check organization policy regarding documentation of software installation to complete this task correctly.

Licensing details may be recorded in a database or register on inventory designed for that purpose. Usually it is stored on a computer (or server) designated to store all information related to the organization's IT activity.

Documenting licensing details also provides the following benefits:

- It is evidence that the installation was completed correctly
- It simplifies troubleshooting and maintenance tasks
- It proves that your customer is a legal user of the software

2.3 Role of Software Installation Instructions and Manuals

A wizard - is a user friendly interactive program designed to simplify and control software installation.

Before you attempt to install any software you must carefully read the installation instructions provided with the software. Information included in the installation instructions always lists a detailed description of steps required for correct installation.

It may also contain a list of parameters you will need to supply during installation. For example, you may be asked to provide an alternative name for a folder where you wish to install the software or which currently installed programs you would like to link with the new software.

Knowing what is expected from you during installation always simplifies and speeds up the actual installation process. Installation instructions now are being replaced by installation "wizards".

A wizard is capable of checking technical features of a computer on which it is installed, and making appropriate changes without user intervention. It is also able to inform you about detected limitations of the computer system which may cause problems during the installation or operation of the software. Its interactivity is very basic. That is, it uses simple dialogue boxes where the user can make a selection, type text or just click a button.

Dialog boxes demonstrate the type of interactivity provided by installation wizards. It is not a full sequence of an installation wizard but a set of selected screens with options typically provided by an installation wizard.

Well designed software also has attached a readme file.

Readme file - contains additional information about the software. (Usually it is saved as Readme or Readme.txt).



It is recommended that you be familiar with the content of this file because it usually contains information about non standard features of the software and the latest information not available when software was developed; that is, changes implemented in the very late stage of the software development.

The software developer should also provide a user manual. A manual can be provided in printed or in electronic form. To reduce software cost and speed up software availability, many software developers offer only an electronic version. However, a printed version can be purchased for some additional cost. You can also create your own manual by printing out the content of an electronic version.

2.4 POLICIES AND OBLIGATIONS OF SOFTWARE SUPPLIERS

Help Desk Staff: Provide timely advice to users (over the phone).

All software developers provide some kind of support for users of their product. The levels of support vary; some suppliers offer free support, and others may charge some fee for their service. Also, the same software developers may offer different level of support for each product they sell.

If the software requested by your client is a commercial product, it is recommended that you check the level of provided support prior to purchasing the software.

To be entitled to any form of support you need to register the software with its developer. To do this, you can fill in the registration form provided with the software or you can do it online. Online registration is much faster and much more convenient. However, your customer must have connection to the Internet. Online registration is often a part of the installation process.

You also have to be aware that whenever you accept conditions specified in the software user's policy you also agree with the software developer's indemnity. It means that the software developer is not liable for any damages which could be caused by the software.

It also means that known problems with the software can very likely be resolved by appropriate advice from the user support section. However, if some unknown problems appear (and that can happen any time), it is best to report them to the user support team (or Help Desk Staff) and hope that they will find a solution.



Self-Check – 2	Test
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Directions: Answer all the questions.

Matching

Column A

- _____ 1. Registerware
- _____ 2. Shareware/Demoware
- _____ 3. Freeware
- _____ 4. Open Source Software (OSS)
- _____ 5. Abandonware

Column B

- A. Computer software that is available for use with no cost or for an optional fee.
- B. Computer software for which the human-readable source code is made available under a copyright license.
- C. Copyrighted commercial software that is distributed without payment on a trial basis and is limited by any combination of functionality, availability, or convenience.
- D. Software that is no longer available for purchase or that is at least a certain amount of years old.
- E. Computer software which requires the user to give personal information through registration in order to download or use the program.

Note: Satisfactory rating - ___ points Unsatisfactory – below ___ points

You can ask your teacher for the copy of the correct answers.



Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____



List of Reference Materials

Reference

<https://www.quora.com/What-is-the-difference-between-upgrade-and-update>

<https://www.intowindows.com/how-to-upgrade-office-2007-to-office-2010/>

Posted by [Synopsys Editorial Team](#) on Friday, October 7th, 2016

<https://www.synopsys.com/blogs/software-security/5-types-of-software-licenses-you-need-to-understand/>

Experts

The development of this Learning Guide for the TVET Program Information technology support service Level I.

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