



INFORMATION TECHNOLOGY SUPPORT SERVICE

Level I

LEARNING GUIDE #36

**Unit of Competence : Maintain Equipment and Software
Inventory and Documentation**

**Module Title : Maintaining Equipment and Software
Inventory and Documentation**

LG Code : ICT ITS1 M05 LO1-LG-36

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LO1: Document and Update Inventory



Instruction sheet 1

Learning Guide # 36

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Maintaining Hardware inventory
- Maintaining and updating licenses and Software inventory
- Recording and organizing storage of user documentation or technical manuals

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 –

- Maintain hardware inventory that creates a profile or description of each piece of equipment
- Maintain and update software inventory and licenses as required, particularly when upgrading software
- Record and organize storage of user documentation or technical manuals

Learning Activities

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, Sheet 2 and Sheet 3” in page 3, 6 and 9 respectively.
4. Accomplish the “Self-check 1, Self-check 2 and Self-check 3” in page 5, 8 and 11 respectively
5. If you earned a satisfactory evaluation from the “Self-check” proceed to “Operation Sheet 1 for 3 information sheet ” in page 12
6. Do the “LAP test” in page 13

- Your teacher will evaluate your output either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advice you on additional work. But if satisfactory you can proceed to the next topic.



1.1 Defining asset and inventory items

An inventory is basically a detailed list of items. How assets and inventory items of a company should be treated will ordinarily form part of the organizational guidelines.

A company item will be defined as either an asset or inventory item, that is, not all items will be recorded in an inventory. For example, an expensive laser printer would not be placed in the inventory but will be placed in the asset register of the organization.

Consumables, such as printer cartridges, would be placed in the inventory as 'consumables'. Some inventories allow for asset numbers to be recorded with the data of an inventory item to allow that item to be associated with a specific asset

1.2 Maintaining a hardware inventory

There is a very large array of hardware that can be used in a computer network. There are CPUs, hard drives, network cards, printers, routers, monitors, video cards and cables, just to mention a few. There are also many options within each of these broad categories.

Depending upon the organisational decisions that are made regarding the variety of devices that will be used on the network, the detail of inventory items can be simplified or become extremely complex.

It is not your job to choose the method of inventory but to maintain the inventory. The amount of detail you put into the descriptors of individual items may well be your choice.

It is critical that enough detail be included to clearly identify the class and capacity of items, but not too much detail to slow the inventory search devices and increase the storage capacity required.



1.3 Viewing Computer Details

The Computers view is the details of the computers and their operating systems.

The below provides the following details of the computers:

- **Computer Name:** The /DNS/ The *Domain Name System* is a hierarchical distributed naming system for computers/
- **Hardware Name:** Name of the hardware device.
- **Hardware Type:** Type of the hardware like processor, keyboard, port, etc.
- **Manufacturer:** Name of the manufacturer of that hardware device.
- **Operating system:** The operating system of the computer
- **Service Pack:** The service pack version of the operating system
- **Version:** The operating system version.
- **Virtual Memory:** Total virtual memory in kilobytes.
- **Free Virtual Memory:** Total virtual memory in kilobytes that is currently unused and available.
- **Visible Virtual Memory:** Total physical memory that is available to the operating system.
- **Free Visible Memory:** Total physical memory that is currently unused and available.

1.4 Hardware Inventory Reports

- **Computers by OS**
Is the details of the computers by their operating system.
- **Computers by Manufacturer**
Is the details of the computers by their manufacturer.
- **Computers by Memory**
Is the details of the computers by their RAM size.
- **Computers by Age**
Is the details of the computers by their year of manufacturing.
- **Computers by Device Type**
Is the details of the computers based on their type like, Laptop, Portable, Desktop etc.
- **Computer by Disk Usage**
Is the details of the computers along with their total and free hard disk spa



Self Check 1

Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

I. Choice the correct answer

1. One of the following is not consider hardware inventories
 - A. Hard drives
 - B. Network cards
 - C. Printers
 - D. Routers
 - E. Softcopy
 - F. All
3. **Inventory is segregated by platform.**
 - A. True
 - B. False

II. Say true or false

1. An inventory is basically a detailed list of items.
2. Hardware is not a visible part.
3. Hardware inventory is important for It department.

Note: Satisfactory rating - 3 and 5 points Unsatisfactory - below 3 and 5 points
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Short Answer Questions



2.1 Maintaining a software inventory

Software is classified into two broad classes: **operating system software** and **application software**. Application software is further broken down into sub-classes such as office, database, software development and so forth.

Many types of application software are written to run on specific operating system platforms. Microsoft Office XP will not run on a Linux platform unless you have installed a Windows emulator. Therefore the inventory might need to be segregated by platform. This is not your problem as you are only required to maintain an inventory not create one. However, you should be aware of the ramifications of accurately maintaining an inventory.

Detailed definition of the types of application software may need to be sought from a supervisor. For example, are database and spreadsheet application software going to be placed in the same categories or are the various packages of Microsoft Office, eg Word, Excel, PowerPoint, going to be placed in the same sections because they are part of the Office suite? On the other hand, application software may be classified by the process it performs.

Different versions of application software offer different or improved features; in most cases they are designed to work with a particular operating system. Are these versions going to be separated or not? Depending on the organisational guidelines, you may or may not be required to make these decisions.

2.2 Viewing Software Details

The Software Inventory provides the details of the software detected in the systems. You can filter the view by Software Type, Access Type, or License. It provides the following details:

- **Software Name:** Name of the software.
- **Version:** The version of the software.



- **Software Type:** Can be either commercial or non-commercial. Use the **Move To** option to specify the software type.
- **Vendor:** The software vendor/seller.
- **Licensed To:** Refers to the person or the company to whom the software is licensed.
- **License Expiry Date:** Date of license expiry.
- **Remarks:** Remarks, if any.

2.3 Software Inventory Reports

- **Software by Manufacturer**
Is the details of the software installed in the scanned systems based on their vendors along with the total number of copies installed.
- **Recently Installed Software**
Is the list of software installed recently.
- **Software Usage by Computer**
Is the list of software and their usage statistics in individual computers.
- **Software Product Keys**
Is the list of Product Keys that were used for installing the software.

2.4 Software License Compliance Reports

- **Software Licenses to be renewed**
Is the list of software whose licenses have to be renewed? Shortly, based on the Software the usage statistics, you can decide whether to renew the licenses or not.



Self Check 2

Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

I. Choice the correct answer

1. Which one of the following is not parts of Software Inventory Reports.

- A. Recently Installed Software
- B. Software Usage by Computer
- C. Software Product Keys
- D. Software by Manufacturer
- E. None

2. Give at least three (3) Software Inventory Reports(3pts)

- ---
- ---
- ---

II. Say true or false

1. Software is a programs or commands.
2. Application software is uses to run specific tasks.
3. Software inventory is not necessary.

Note: Satisfactory rating - 4 and 7 points

Unsatisfactory - below 4 and 7 points

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

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Short Answer Question



Information Sheet 3	Recording and organizing storage of user documentation or technical manuals
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1.1. User and Technical documentation

1.1.1. User documentation is an important and necessary resource for the productive use of a software application package. The amount of user documentation will depend upon the nature of the user licensing. Some years ago, commercial entities complained to software developers that too much user documentation was distributed to a business when multiple copies of the software were purchased. The concept of site licensing was introduced.

1.1.2. Technical manuals form an integral part of the management of the hardware devices and should, therefore, be a main part of the inventory entry. For example, with modern hardware devices the manuals are often placed on an accompanying CD in perhaps a PDF file. Details and location of the CD may form part of the inventory item data.

A decision might be made to print a hardcopy of the manual or in another instance a manual might be supplied. The locations of these hard copies should also appear as part of the inventory item data.

1.2. The many uses of IT documentation

An IT organization or department will accumulate many technical papers, records and books. Some documents and manuals may be easy to find, while others can be misplaced, lost or damaged. To avoid the latter, methods similar to the inventory of hardware and software can be applied to documentation.

In an IT support role, you may be called upon to provide a friendly information resource for clients. You should be able to easily find and use the information they need.

You may otherwise need to advise clients on:

- what information is available and where it might be
- How it can be found and retrieved (different media and formats)
- How the information can be searched, stored or printed
- How it can be sent to them.

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Think about the types of IT documentation and when it may be needed or requested. You will need to answer requests quickly and effectively.

A customer may ask for:

- a software manual, so to install a program
- a manual to check compatibility with other hardware or software
- Instructions to perform a specific task.

A colleague may ask for work instructions such as how to:

- reset a mainframe password
- check a local area network (LAN) printer queue
- Set a computer for remote access.

A manager or auditor may ask for computer inventory records or software licensing records.

1.3. Types and attributes of documentation

A document is information and the supporting medium that carries the information. The medium can be paper (hard copy), a magnetic, electronic, or optical computer disc, a photograph or master sample, or a combination thereof. A set of documents, such as specifications, records, manuals or plans is frequently called 'documentation'.

1.4. Reference collections

If your organization or department has a reference collection (and it should have) it could include books, CDs, DVDs, technical manuals and online resources that staff and clients use to find particular information.

Reference items that may be kept on open shelving (but must still be accounted for), include:

- procedural and technical manuals
- technical reference books and textbooks
- catalogues
- directories
- manufacturer's specifications
- technical magazines, journals
- case histories
- Training guides.

Software manuals on paper or CD ROM for a particular software program may be kept at the workstation running the application.



Self Check 3

Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

I. Choice the correct answer

1. Which one of the following are information and the supporting medium that carries the information.
A. Data B. Information C. Manuals D. Documents
2. Which one of the following is not show Reference items?
A. catalogues
B. directories
C. manufacturer's specifications
D. Training guides.
E. All

II. Say true or false

- A. Inventory of hardware and software use to search any document easily.
- B. User documentation is an important and necessary resource for the productive use of a software application package.
- C. Reference collections are not contain procedural and technical manuals

Note: Satisfactory rating - 3 and 5 points Unsatisfactory - below 3 and 5 points
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____

Date: _____

Question Answer



Techniques for maintaining hardware and software technical documentation

1. Select Physical storage
2. Adjust Different formats and location control
3. Adjust Electronic storage
4. Formats for storing IT documentation



LAP TEST

Practical Demonstration

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: You are required to perform the following individually with the presence of your teacher.

Task 1. Stock and control safely the following Hardware components.

1. Mouse
2. Keyboard
3. Screen
4. System unit
5. CPU/ Central Processing Unit/
6. RAM
7. Power Supply
8. VG and power cables.

Task 2. Store safely Software Equipments

1. CDs
2. DVDs
3. External Hard disk
4. Flash
5. Technical manuals and online resources



Reference

Samuel P. Harbison III & Guy L. Steele Jr, **C: A Reference Manual**, Fifth Edition, Prentice Hall, 2002, <http://www.CAReferenceManual.com>,

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

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



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

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