

Example of report on operating systems

[Technology](#), [Development](#)



32 bit and 64 bit Operating System

The 64 bit operating system allows a machine to process instructions with a maximum length of 64 bits per second. The 32 bit operating system allows machines to process instructions that are 32 bit length. The 64 bit operating system will handle longer instructions than the 32 bit operating system.

The applications developed for 64 bit operating system are not compatible in the 32 bit operating system. Applications developed in the 32 bit platform works well but slow in the 64 bit operating system because the 64 bit platform is developed with backward compatibility features. Some applications are developed to work in only one operating system platform such as windows or Linux. These applications once deployed in an operating system like Linux do not work or install properly in another type of platform. Problems arise where programmers develop software using the . Net framework that is only supported in windows operating system.

Desktop operating systems

Desktop operating system is a software installed in computers to allow for management of applications and the hardware devices like speakers and universal serial bus ports. The windows 2008 is supported by machines that can run 64 bit operating systems. The operating OS is built with similar architecture to windows vista. It is built to support IPV6 which is the current internet protocol upgrade from the previous IPV4. The windows 2008 is developed in two forms, which include windows 2008 server and windows 2008 desktop. The windows 2008 server was developed with advanced capability that allowed for partitioning of memories without restarting servers. The operating system had advanced security features that allowed

the creation of a read only active directory. Security measures are observed by integrating features to create multiple accounts for users. The operating system has been built to support 128 bit and 256 bit encryption of passwords and data.

Determining minimum requirements

Installation of operating systems in computers requires the minimum hardware requirements to be met. One of the requirements to be checked is the random access memory (RAM) which stores instructions before execution. The processor minimum requirements should be observed to make sure the computer executes instructions with the required speed. Installation of operating systems in machines with slow processors leads to problems such as crashing. The minimum hard disk requirements should be observed to make sure enough space is available to store the operating system files together with applications. To check on the minimum requirement one can click on the start button and then the run button and type the command DXDIAG in the field and a window will appear with all the system characteristics (Naghizadeh, 2005).

Operating system installation

There are different ways of installing operating systems in desktop machines. Some operating systems are bootable while others can only work while the computer is running. The bootable operating system requires restarting the machine while the operating system disk is inside the ROM. Once the machine restarts, one has to change the boot order of the computer from the internal hard disk to the CD ROM. Some machines require

pressing F8 to get the boot menu while others requires continuous pressing of F2 or F10. Situations where the boot order does not appear, the person must read the instruction manual of the machine to identify which key will display the boot order menu. The machine will start with a statement requesting the user to click on any key to start from CD. Pressing any keyboard key initiates operating system installation where the user will be required to follow instructions to complete the installation.

Recovery CD

The recovery CD is created to restore the machine to its initial stage in case things go wrong. The recovery CD is bootable, and the technician has to restart the machine while the CD is inserted in the CD ROM. The machine will start with an option of installing the recovery file from the multiple recovery disks. Completion of the installation will require reinstallation of the rest of the applications.

Factory recovery partition

Restart the machine without any disc in the ROM. The technician should press F11 and choose the factory recovery option to restore the installation. The factory recovery partition will load windows files to the C partition of the machine.

Network install

Plug in the machines over the network to avoid conflict in the IP address. Restart the target machine without any operating disc. Presses F12 so that the boot menu can appear, then choose the network boot option. Insert the CD in the CD ROM of the other machine making sure it is shared between the

two machines. In the target machines CMD type the name of the other machine, eventually filling the username and password, the installation will start immediately (Stallings, 2009).

Creation of user accounts

Manipulating operating system files

The CHMOD command can be used to create privileges on usage of different files. MKDIR request can be used to create folders in the operating system.

The file_MOVE instruction can remove files from one location in the hard disk to another. The file_COPY instruction can copy files in multiple locations.

Install and Uninstall software

Click on the control panel from the start button of the computers. Click on the program install and uninstall button option. The list of all the applications in the machine will appear. One can double click on the application they want to remove.

Preventive and maintenance measures

One has to install antivirus to make sure malwares are detected early enough within the machine. Continuous update of windows files should be carried to ensure security is enhanced. Users should scan their machine regularly to remove any malware.

Troubleshoot operating system

Slow computer speed (execution of instructions) requires one to look at the free space in the hard disk together with the number of applications running. A slow machine requires increasing the size of the RAM to allow for the

buffering in the running of the application. One should check for malware by carrying continuous scanning to remove any viruses that might be using the random access memory RAM.

Problems and solutions

The appearance of a blue screen while one is using the computers means the operating system files have crashed. The solution would be to repair the operating system files or total removal of the operating system. Unexpected shut down of the machine means there is a problem with the operating system or hardware malfunction. One should check the power cables and hard disks to make sure they are intact. A slow machine speed requires restarting the computer to shut down unnecessary services.

References

Naghizadeh, M. (2005). Operating system : concepts and techniques. New York: iUniverse.

Stallings, W. (2009). Operating systems : internals and design principles. Upper Saddle River, N. J: Pearson/Prentice Hall.