

Lab - Investigate BIOS or UEFI Settings

Introduction

In this lab, you will boot the computer, explore the firmware setup utility program, and change the boot order sequence.

Recommended Equipment

- Computer with or without operating system
- Motherboard manual

Instructions

Part 1: Enter BIOS or UEFI.

Step 1: Power on the computer.

- a. Plug the power supply cable into an AC wall outlet.
- b. If there is a power switch on the power supply, set the switch to “1” or “on”.
- c. Turn on the computer with the power button on the front panel.

Note: If the computer beeps more than once, or if the power does not come on, notify your instructor.

Step 2: Enter the firmware setup program.

During POST, press the firmware setup key or key combination. The firmware setup utility program screen will appear.

Questions:

What is the key or combination of keys used to enter the firmware setup utility program?

- *As a dell laptop user I used F2 key pressing it multiple times to open it.*

Who manufactures the BIOS or UEFI system for your computer?

- *It's dell who manufactures the laptop but for BIOS it's InsydeH20 Setup Utility.*

What is the BIOS or UEFI version?

- My BIOS version is 1.29.0

Part 2: **Explore the Settings.**

Step 1: **List the main menu options.**

Question:

List the main menu options and describe what is monitored in each menu?

- *Mine has five menus. Its parts are Main, Advanced, Security, Boot and Exit. The main tab is for details like Bios version, cpu type or speed, etc..., advance for hardware device,, Security is for passwords, Boot is for Control start up order or boot option, and the last is Exit to save and leave or to discard and leave the BIOS.*
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Step 2: **Find the security settings.**

Navigate through each screen to find the security settings.

Question:

What security settings and features are available?

-it's main features are about passwords, how to change it, overall to make your computer more secure.

Step 3: Find the CPU settings.

Navigate through each screen to find the CPU settings.

Questions:

What is the CPU speed?

- *My CPU speed is 2100 MHz.*

What other information is listed for the CPU?

- *It also states that my CPU type is AMD Ryzen 5 3500U, It also has CPU ID, L1 L2 L3 Cache.*

Step 4: Find the RAM settings.

Navigate through each screen to find the RAM settings.

Questions:

What is the RAM speed?

- *My Ram speed is 2400 MHz DDR4.*

What other information is listed for the RAM?

- *It also has the System Memory, type and memory speed;.*
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Step 5: Find the hard drive settings.

Navigate through each screen to find the hard drive settings.

Questions:

What information is listed for the hard drive?

- *It has my primary storage which is M.2 PCIe SSD: KBG4ZNS512G NVMe KIOXIA 512GB,also the model of ssd and storage total capacity.*

Step 6: Find the boot order sequence.

Navigate through each screen to find the boot order sequence.

Questions:

What is the first boot device in the boot order sequence?

- *The first boot device is Windows boot manager.*

How many additional devices can be assigned in the boot order sequence?

- *I have 4 boot order lists.*

Step 7: Set the device boot order settings.

- Ensure that the first boot order device is the optical drive.
- Ensure that the second boot order device is the hard disk drive.

Questions:

Why would you change the first boot device to the optical drive?

- *You should if you have a disk drive but if you don't have any it will take longer to start.*

What happens when the computer boots and the optical drive does not contain bootable media?

- *When you boot an optical drive that doesn't exist the computer will simply skip it.*

Step 8: Find the power management setup or ACPI screen.

Navigate through each screen to find the power management setup screen, or ACPI screen.

Question:

What power management settings are available?

- *It has USB wake support, wake on AC, Lip open Resume, Battery Charge Configuration.*

Step 9: Find the PnP settings.

Navigate through each screen to find the PnP settings.

Question:

What PnP settings are available?

- *It has Enabled and Disabled PnP.*

Step 10: Find the splash screen settings.

Navigate through each screen to find the splash screen settings.

Question:

What splash screen settings are available?

- *It has a Full screen logo to display which has two options to disable or enable.*

Step 11: Save and exit the setup utility program.

Save the new BIOS/UEFI settings and exit the setup utility program. The computer should restart automatically.

Note: An error message stating that an OS cannot be found (or a similar error) will appear on the screen after the computer boots. An operating system must now be installed to prevent this error. It is safe to turn off the computer at this time.

This lab is complete. Please have the instructor verify your work.

Proof :



