

COURSE-EPC-3 (1.4 EPC3)

CRITICAL UNDERSTANDING OF ICT

Engagement with Field

1

PRACTICUM-01

TOPIC-01

INSTALLATION OF OPERATING SYSTEMS (WINDOWS-7)

Presented By:-NAME OF THE STUDENT TEACHER

Registration No:-

Roll No:-

NAME OF THE INSTITUTE:-PURNADISHA JOYCHANDI TEACHER TRAINING COLLEGE

Session:-2023-2025

Preparing and Installing Operating System



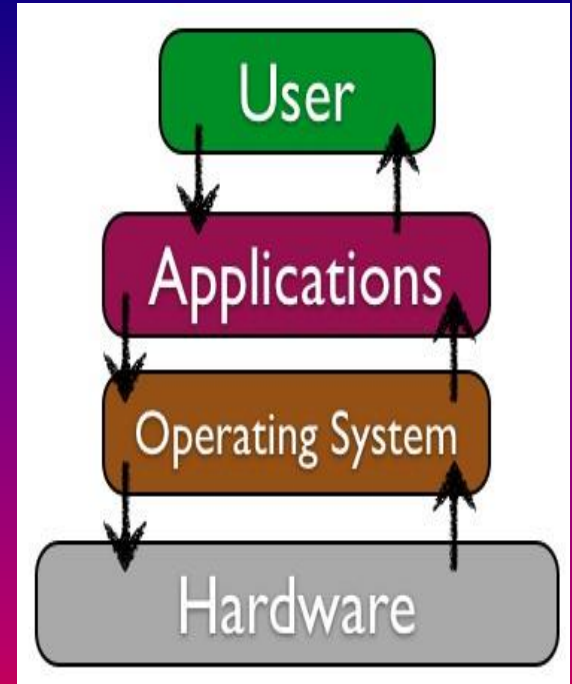
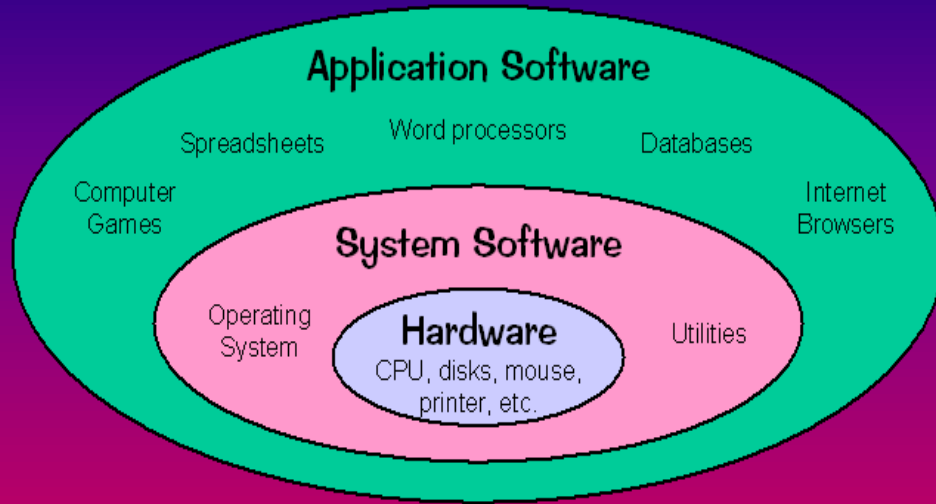
OBJECTIVES

- ❑ To understand the process of installing an operating system (Windows).
- ❑ To gain practical skills in installing and configuring essential software.
- ❑ To learn how to install utilities that enhance the usability of a computer.
- ❑ To develop confidence in handling basic ICT-related tasks independently.

❖ Contents

- 1. Introduction about operating system.**
- 2. Minimum requirement for Windows 7 operating system.**
- 3. Procedure to install Window 7 operating system.**
- 4. Basic Applications needed to be installed.**

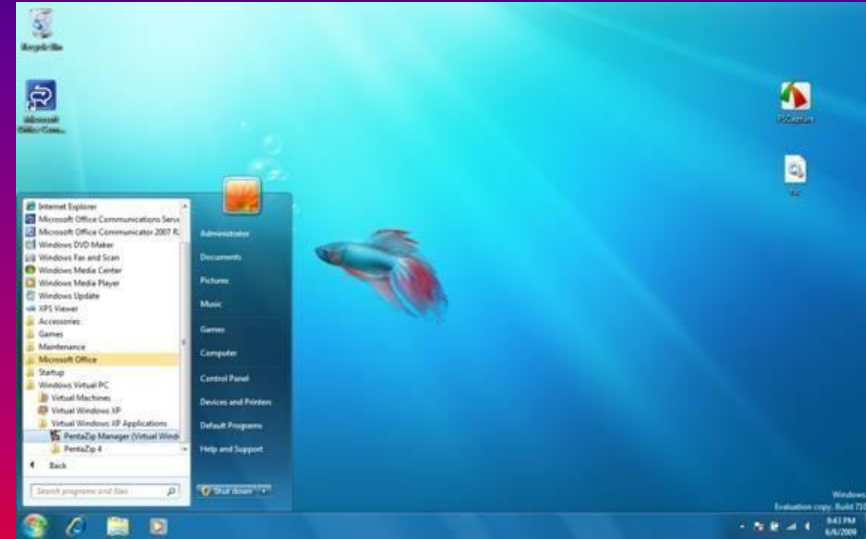
The Operating System



- ❑ The Operating System provides for the user to utilize the functions of a computer by managing the hardware and software in it. The image Above depicts how the system software and application software interact with the hardware.

OPERATING SYSTEM

Modern Operating System uses Graphical User Interface or GUI (pronounced as gooey). GUI lets us use the mouse to click icons, buttons, and menus. Everything is clearly displayed on the screen using combination of graphics and text.



What is the Booting

1. When the user powers up the computer the CPU (Central Processing Unit) activates the BIOS (Basic Input Output System).
2. The first program activated is POST (Power On Self-Test). Using the CMOS (Complementary Metal Oxide Semiconductor) memory this checks all the hardware and confirms that all are functioning properly.
3. After that it reads the MBR (Master Boot Record) in boot drive in accordance with the firmware 'bootstrap loader' which is Provided by the computer manufacturer.
4. Then the computer loads in the Operating System in boot drive to the RAM (Random Access Memory). This whole process is called booting which means that an Operating System is loaded into the RAM (main memory)



Minimum System Requirements for

Part	Minimum Requirement
Processor (CPU)	1 GHz or faster CPU
Memory (RAM)	1 GB RAM (32-bit) or 2 GB RAM (64-bit)
Hard drive free space	16 GB available disk space (32-bit) or 20 GB (64-bit)
Disc drive	DVD drive
Graphics memory	128 MB or more

How to prepare your installer and program

1st – Check your system requirements

Confirm that your computer meets the minimum system requirements for that product.

Note: If you're running Windows, make sure to download/install the version that matches your operating system (32-bit or 64-bit).

2nd – Make sure about legitimacy

In some operating system activation is usually automatic. However, if you are

prompted for your serial number and product key before you can run the product, you can find the information you need in your CD case or package.

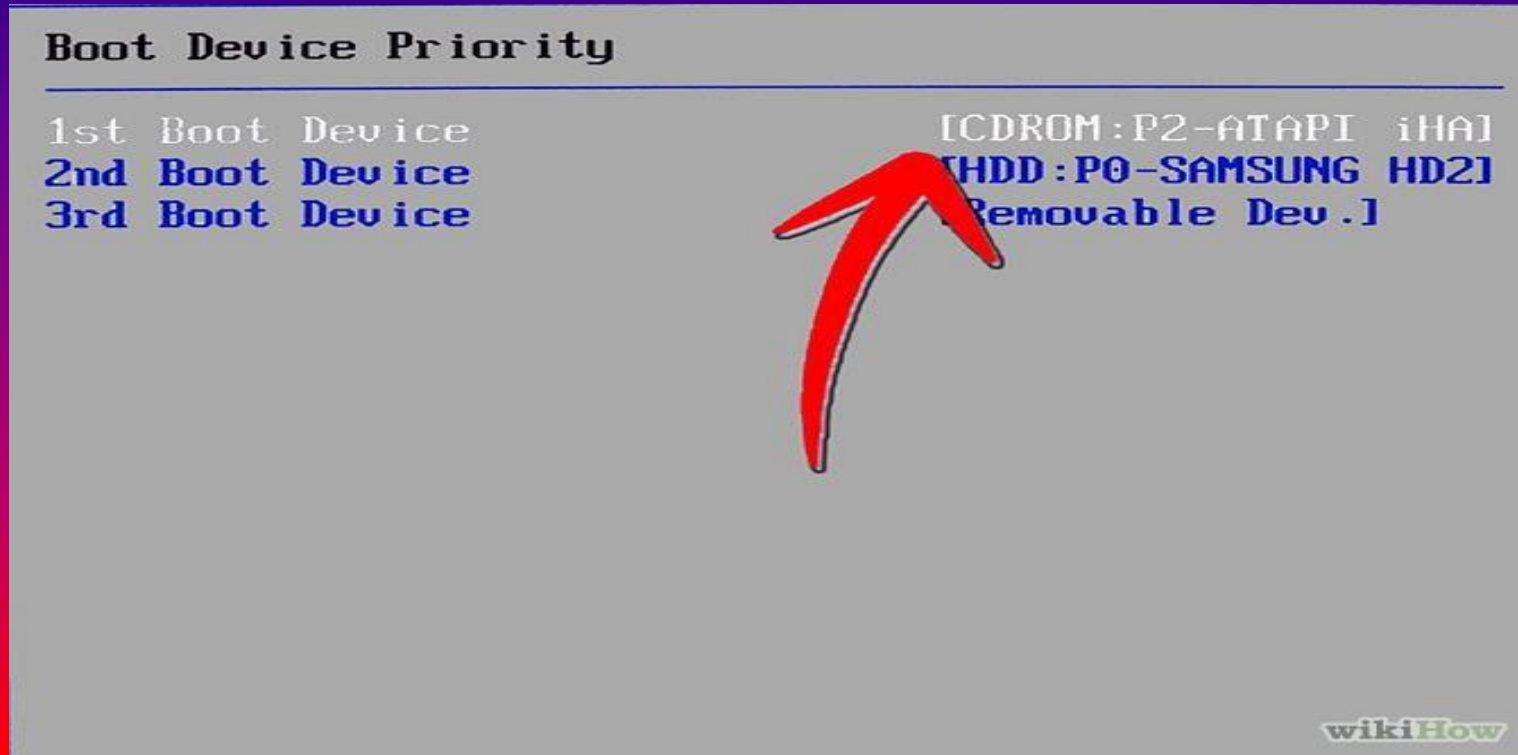
NOTE: Product key and serial number is important so make sure you that you keep it.

How to Install Windows 7 operating system step by step procedure.

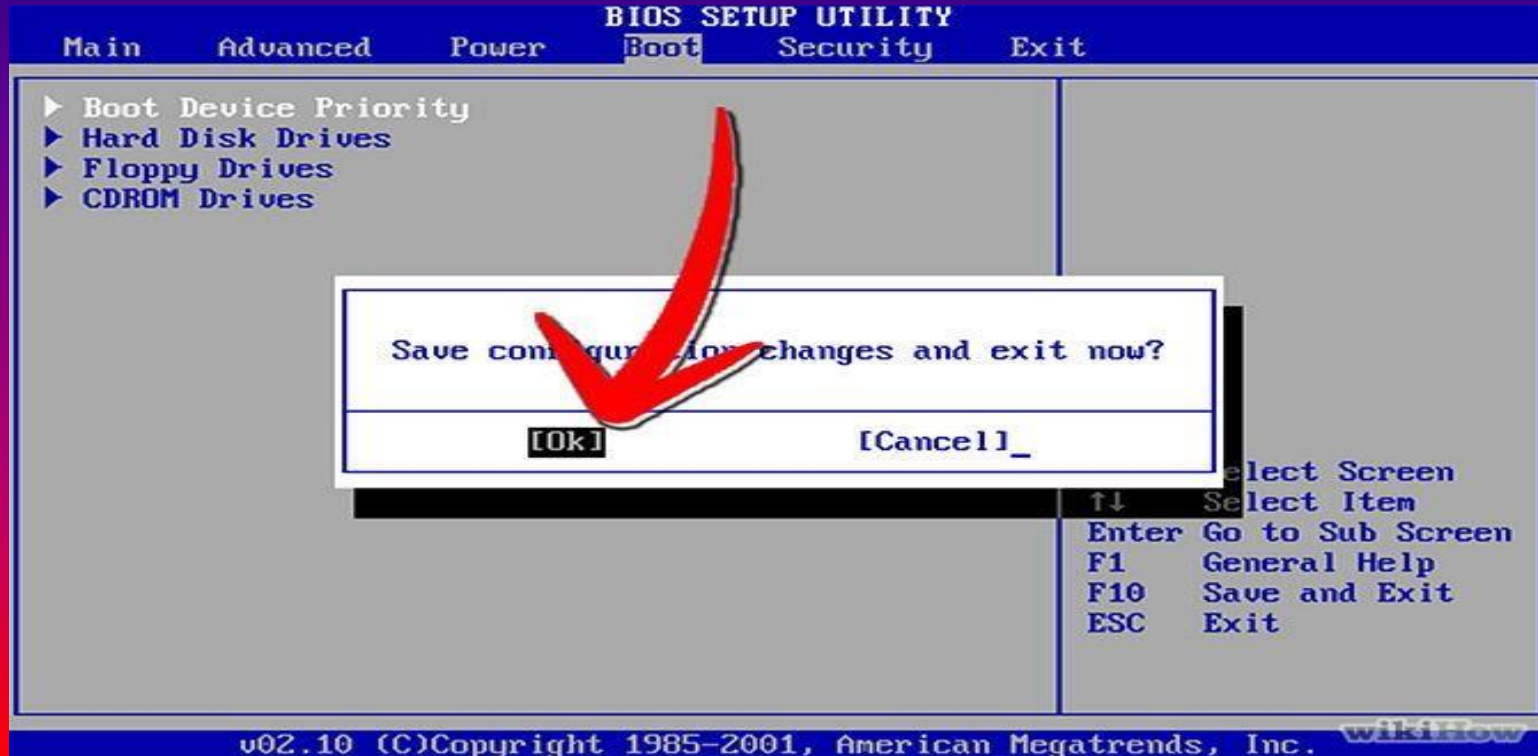
Operating system boot by

1. Flash Drive (Bootable Pen Drive)
2. Bootable CD/DVD
3. Hard Disk

Turn your computer on and then press Del or F2 (depend on your computer's mainboard) to enter the system BIOS



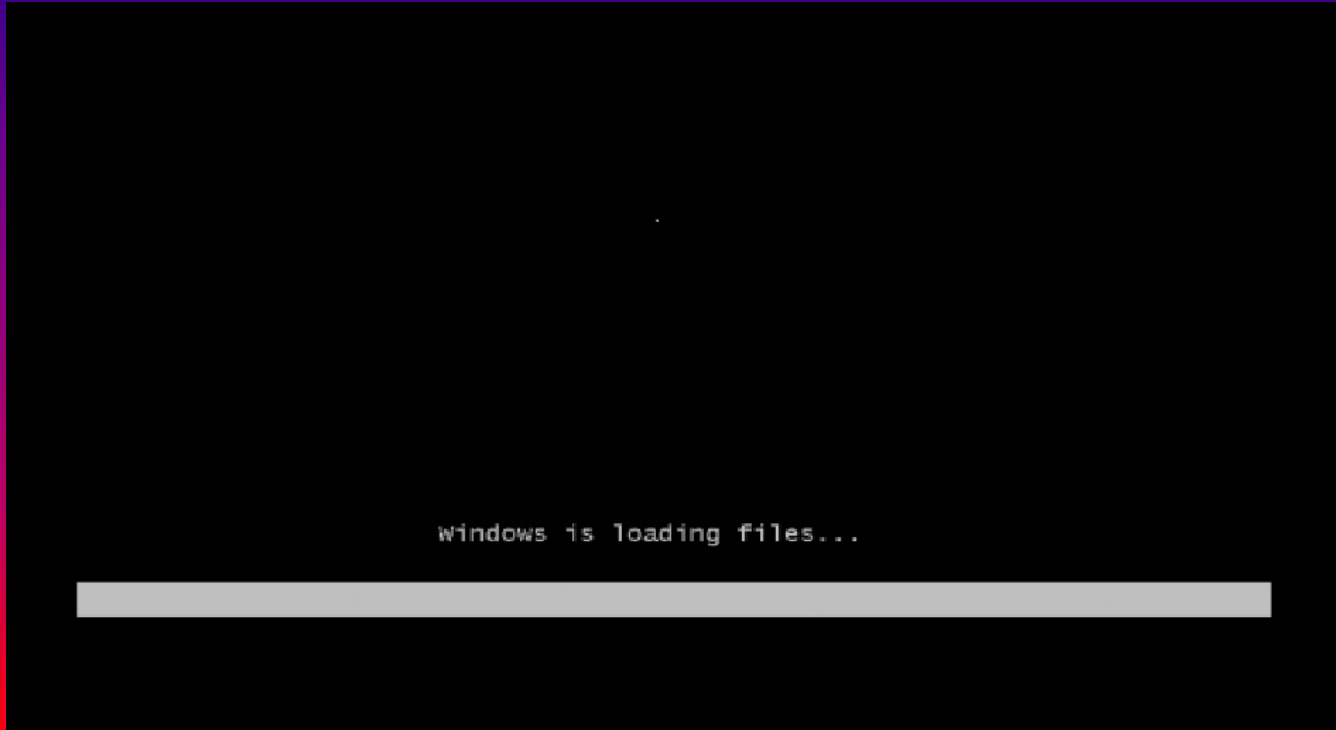
Go to Boot menu and choose Boot From CD/DVD.



Load your Windows 7 DVD and boot it. It will now load the setup files.

A screenshot of a black screen with white text that reads "Press any key to boot from CD or DVD." The text is in a monospaced font and is positioned in the upper left corner of the screen. The rest of the screen is black.

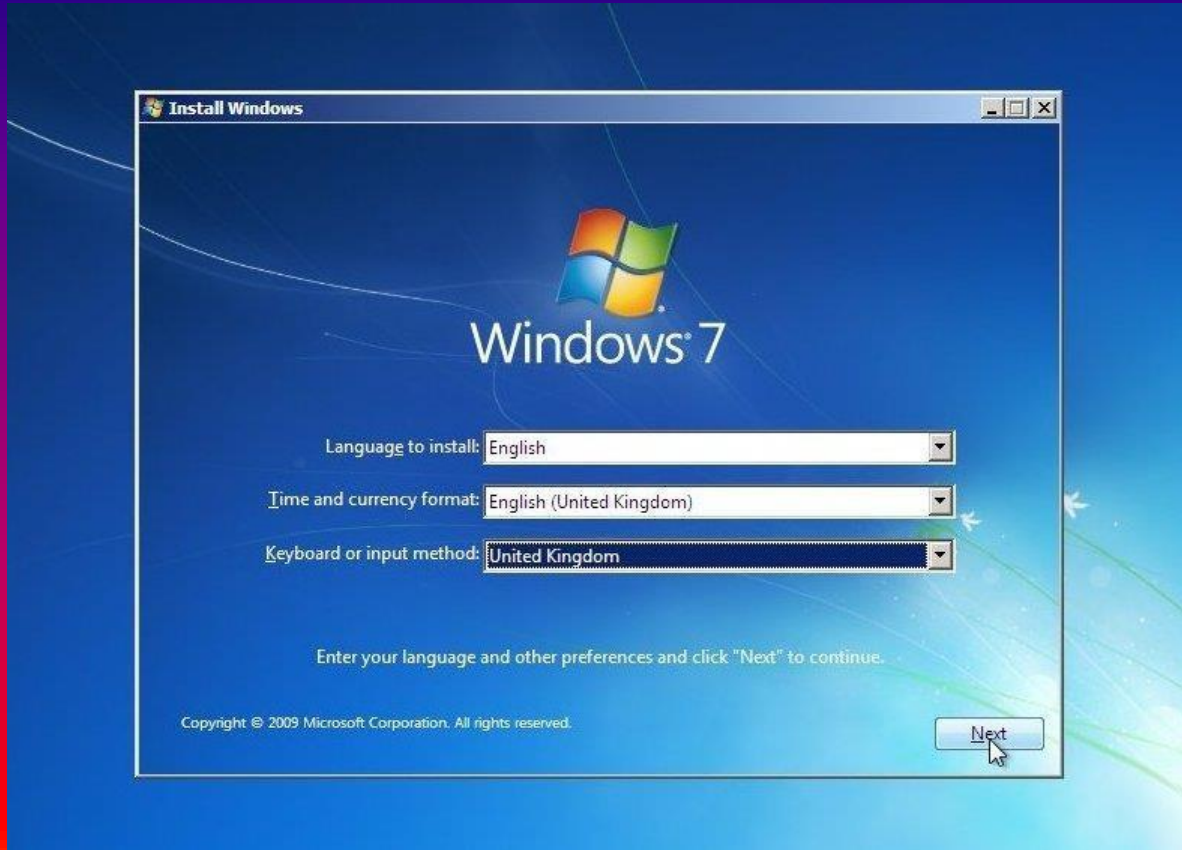
Loading process



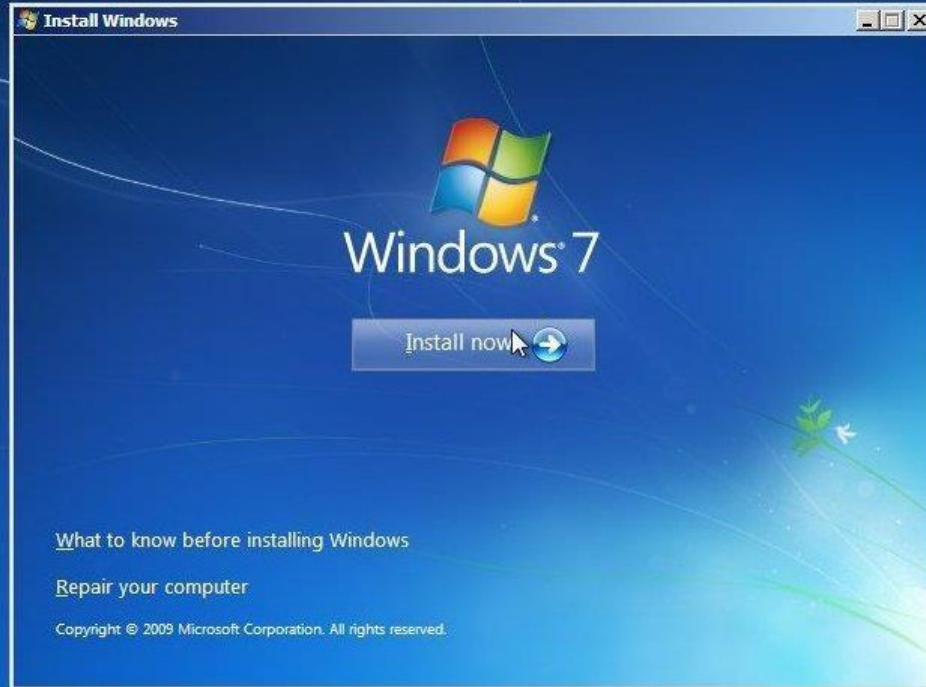
BOOTING PROCESS IS IN PROGRESS



SELECT YOUR LANGUAGE, TIME & CURRENCY FORMAT, KEYBOARD OR INPUT METHOD AND CLICK NEXT.

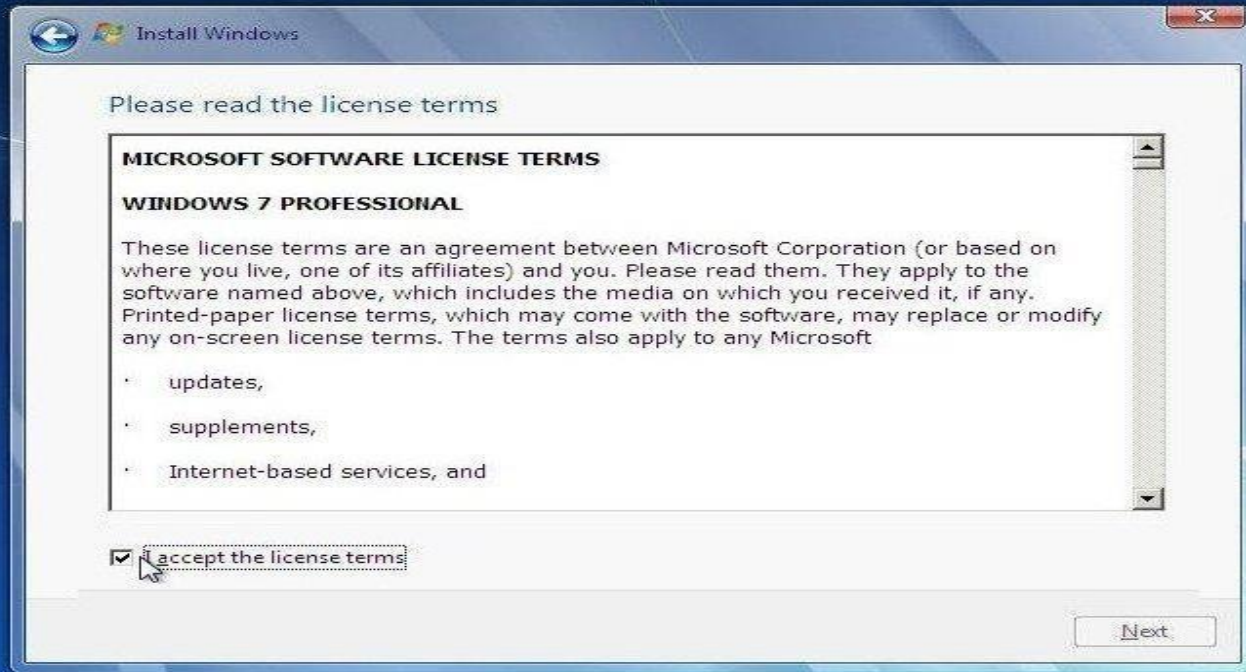


CLICK INSTALL NOW.





Check **I accept the license terms** and click **Next**.



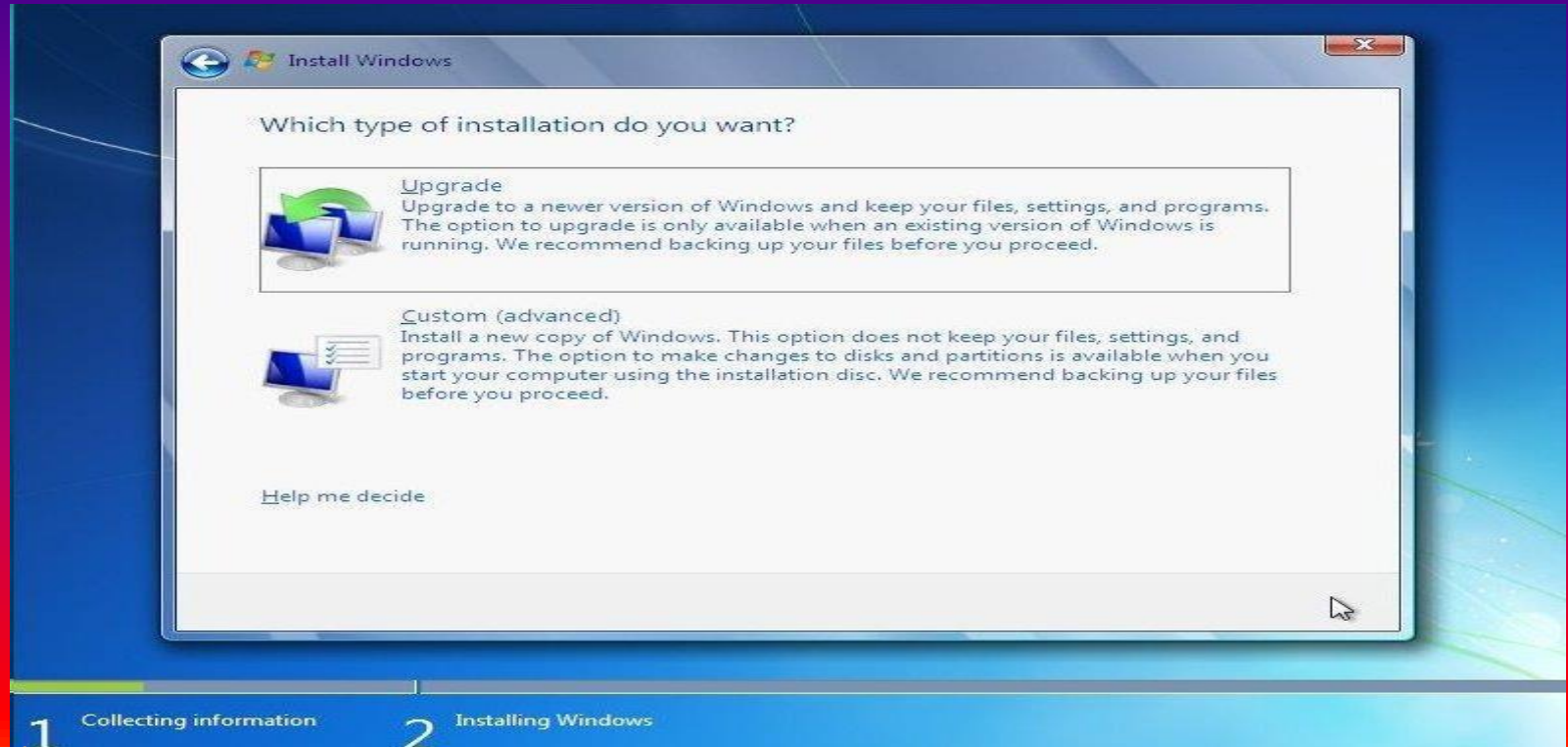
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Collecting information

2

Installing Windows

Click **Upgrade** if you already have a previous Windows version or **Custom (advanced)** if you don't have a previous Windows version or want to install a fresh copy of **Windows 7**.



Select the drive where you want to install **Windows 7** and click **Next**. If you want to make any partitions, click **Drive options (advanced)**, make the partitions and then click **Next**.

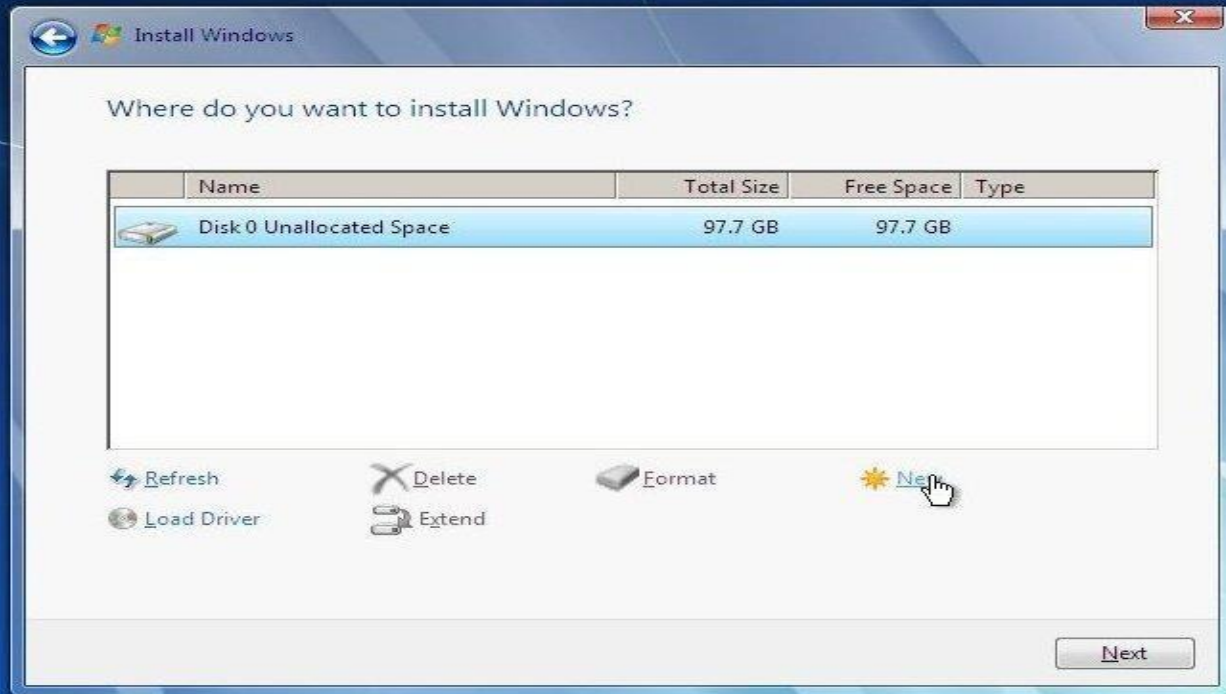


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Collecting information

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Installing Windows

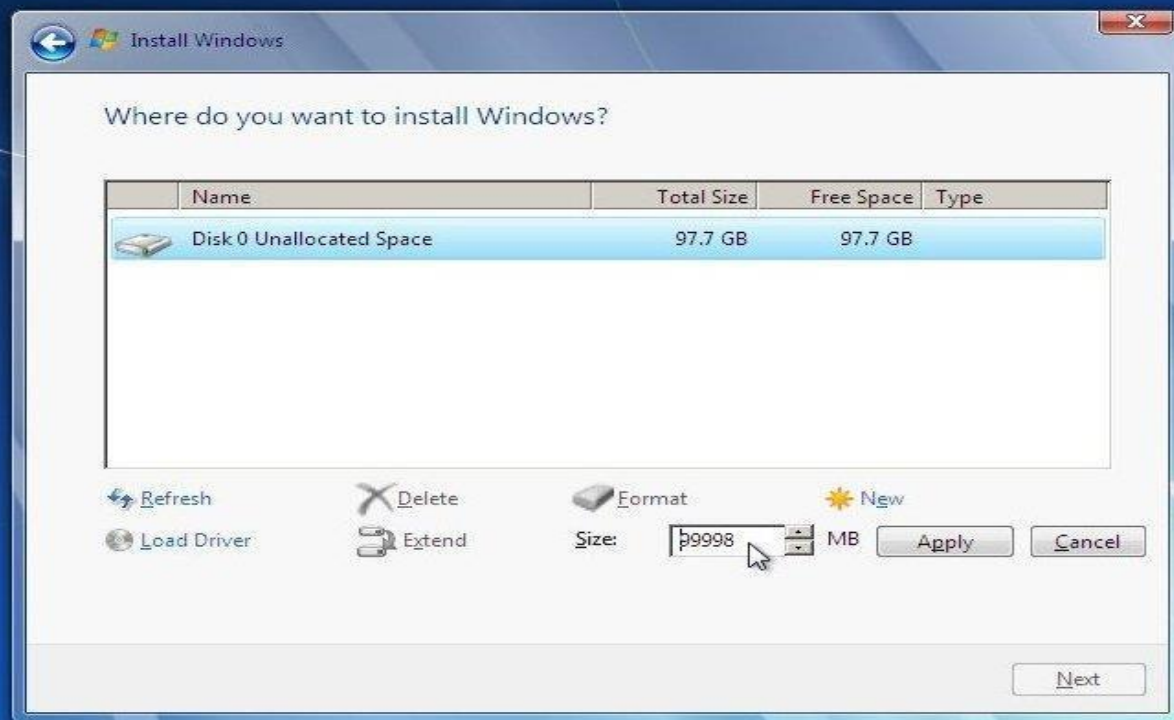


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Collecting information

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Installing Windows



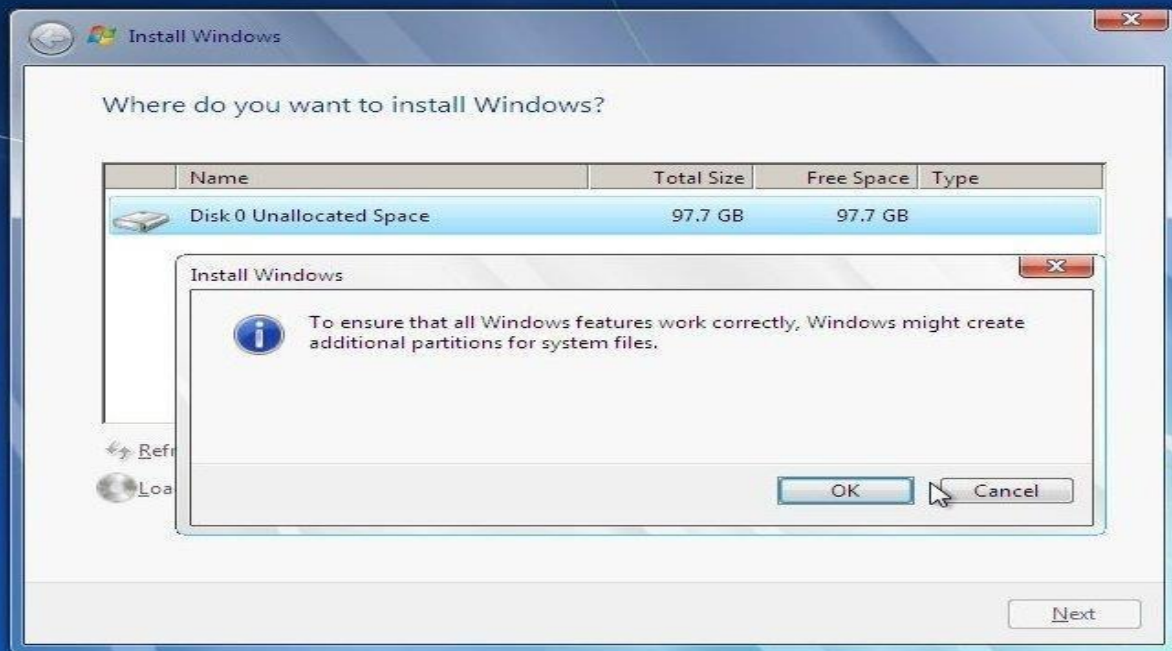
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Collecting information

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Installing Windows

Drive Options Menu: Windows warns that it may need to create a few partitions for the system, Click "OK" to continue.

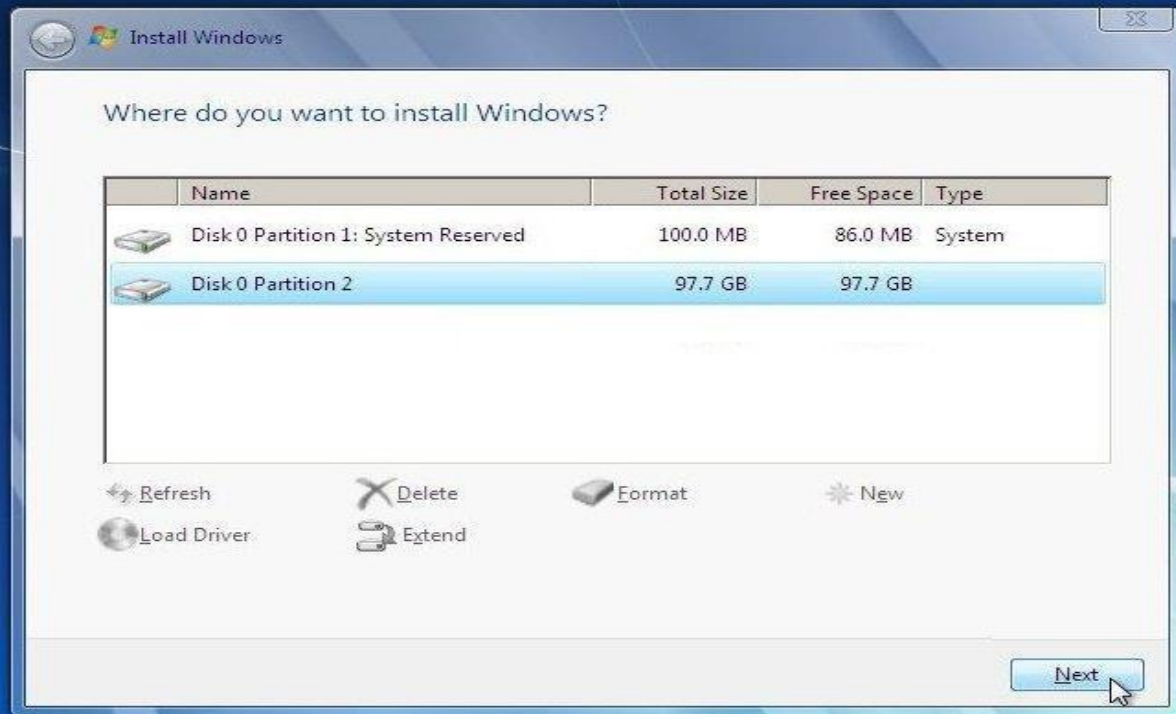


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Collecting information

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Installing Windows



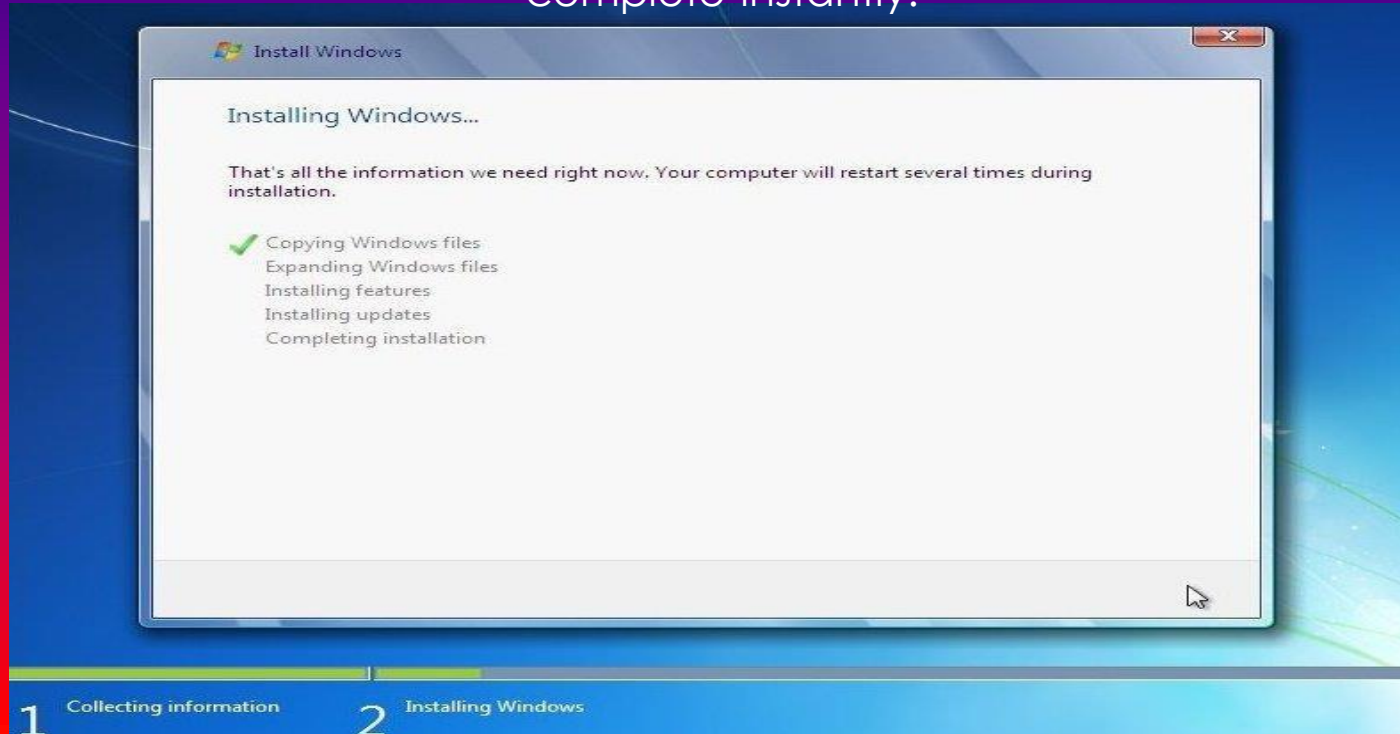
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Collecting information

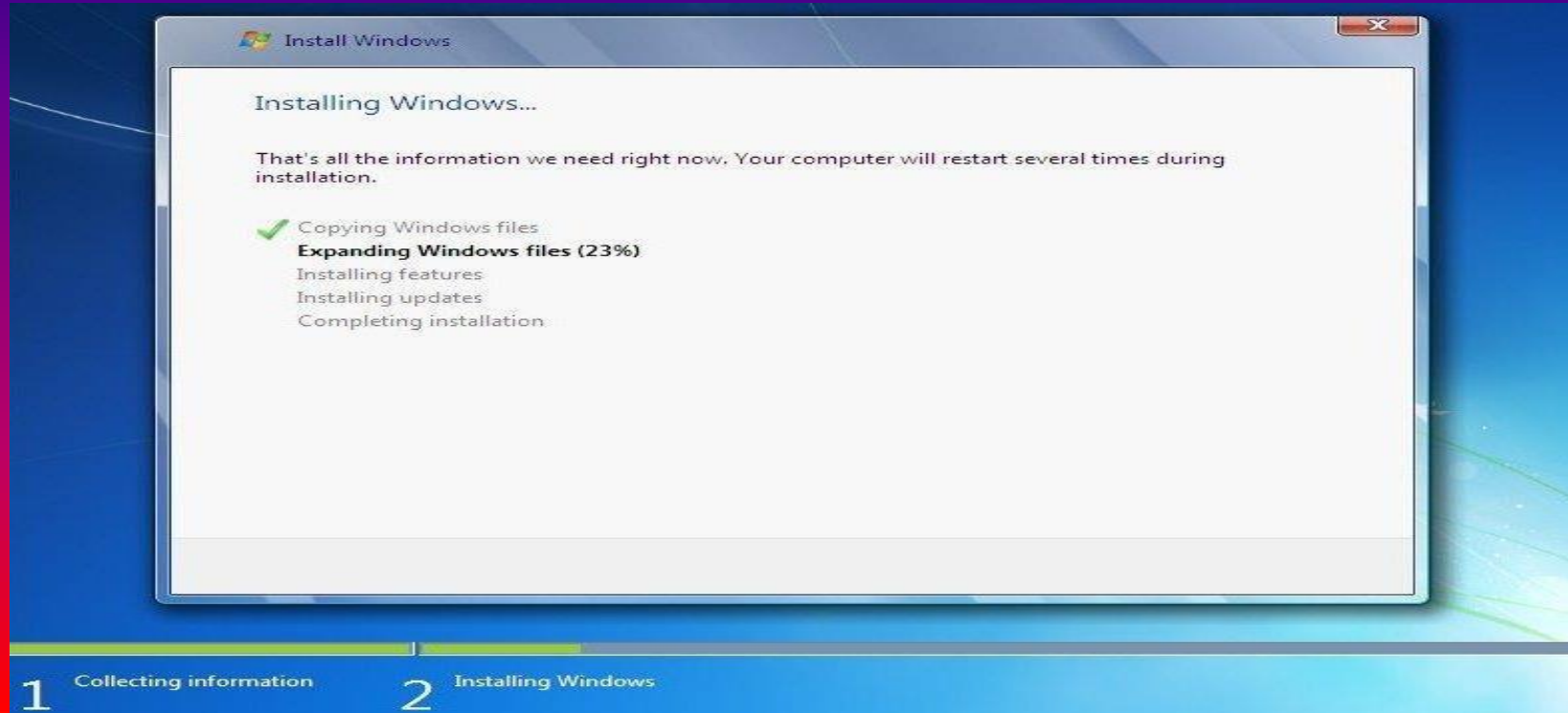
2

Installing Windows

It will now start installing **Windows 7**. The first step, (i.e. **Copying Windows files**) was already done when you booted the **Windows 7 DVD** so it will complete instantly.



After completing the first step, it will expand (decompress) the files that it had copied.



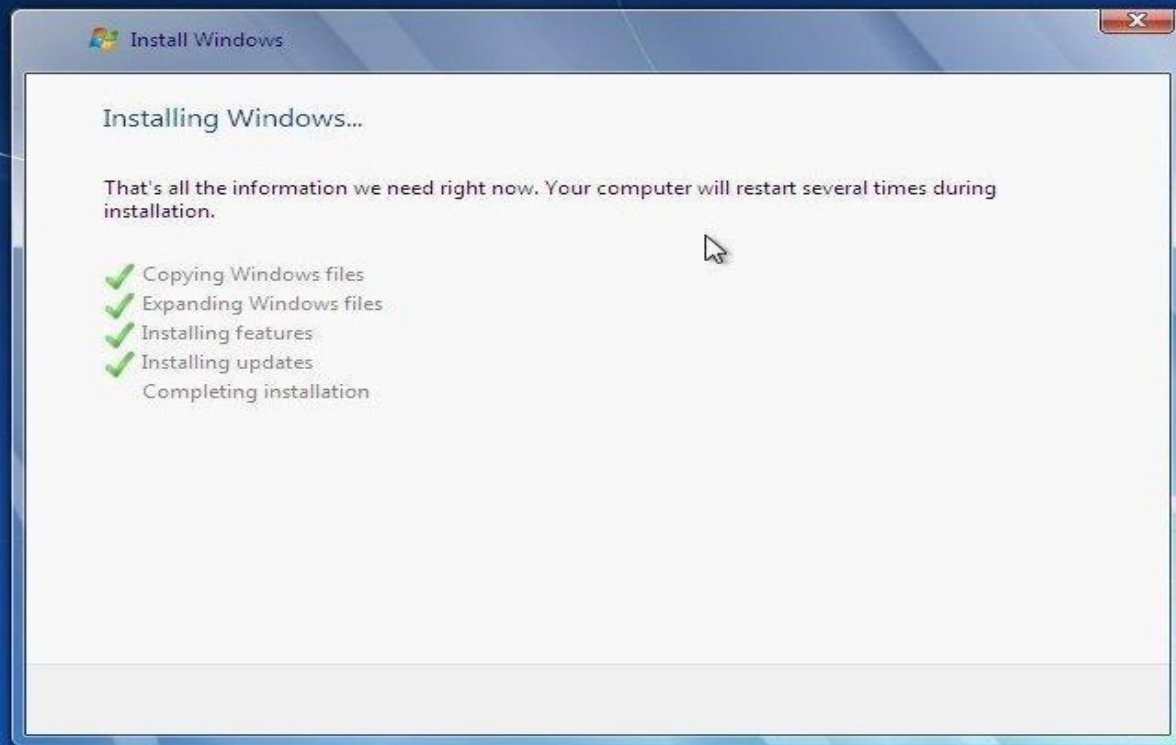


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Collecting information

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Installing Windows



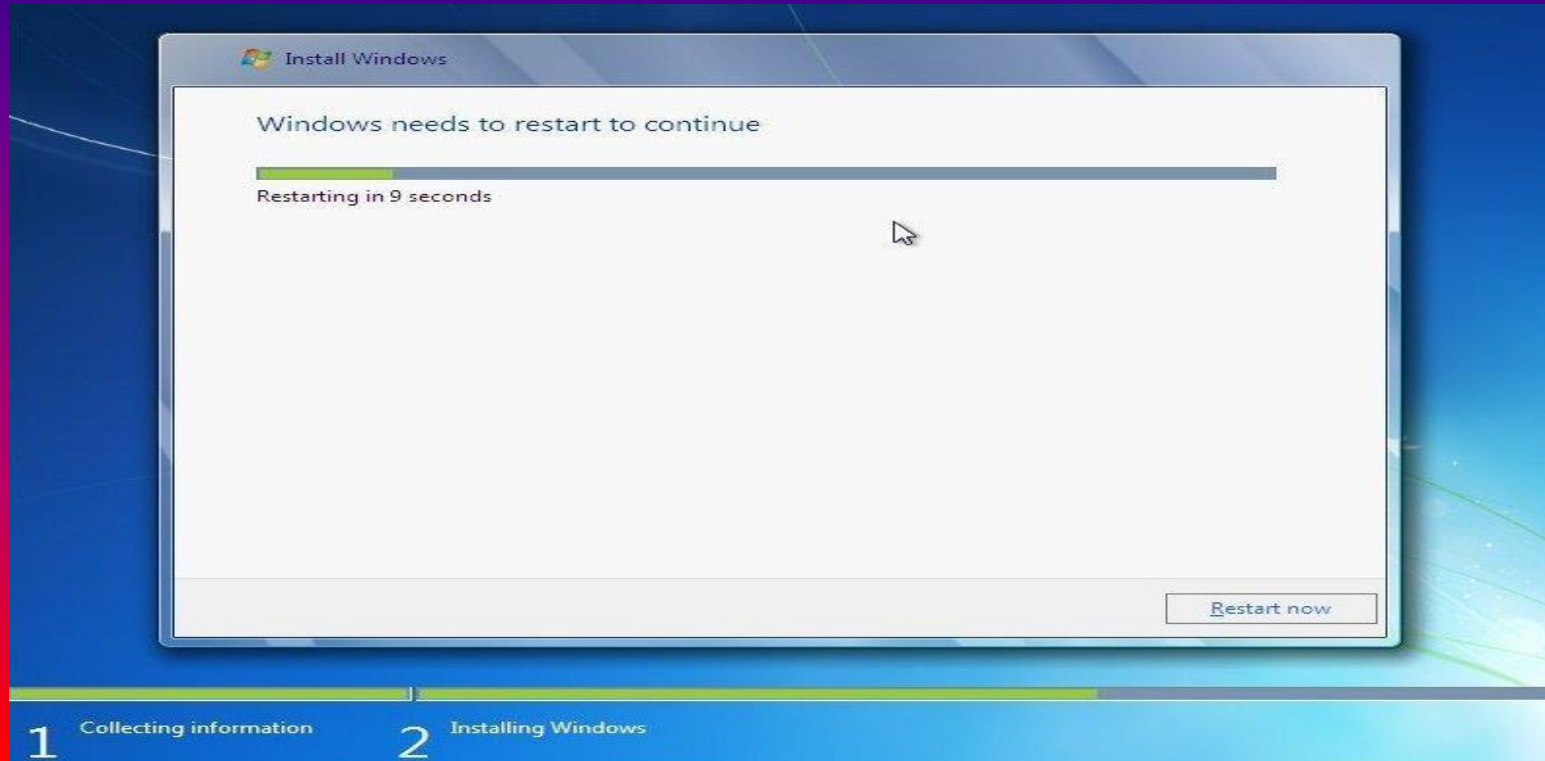
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Collecting information

2

Installing Windows

After that it will automatically restart after 15 seconds and continue the setup. You can also click Restart now to restart without any delays.



After installation, Please do not press key this time

Press any key to boot from CD or DVD.



Starting Windows

© Microsoft Corporation



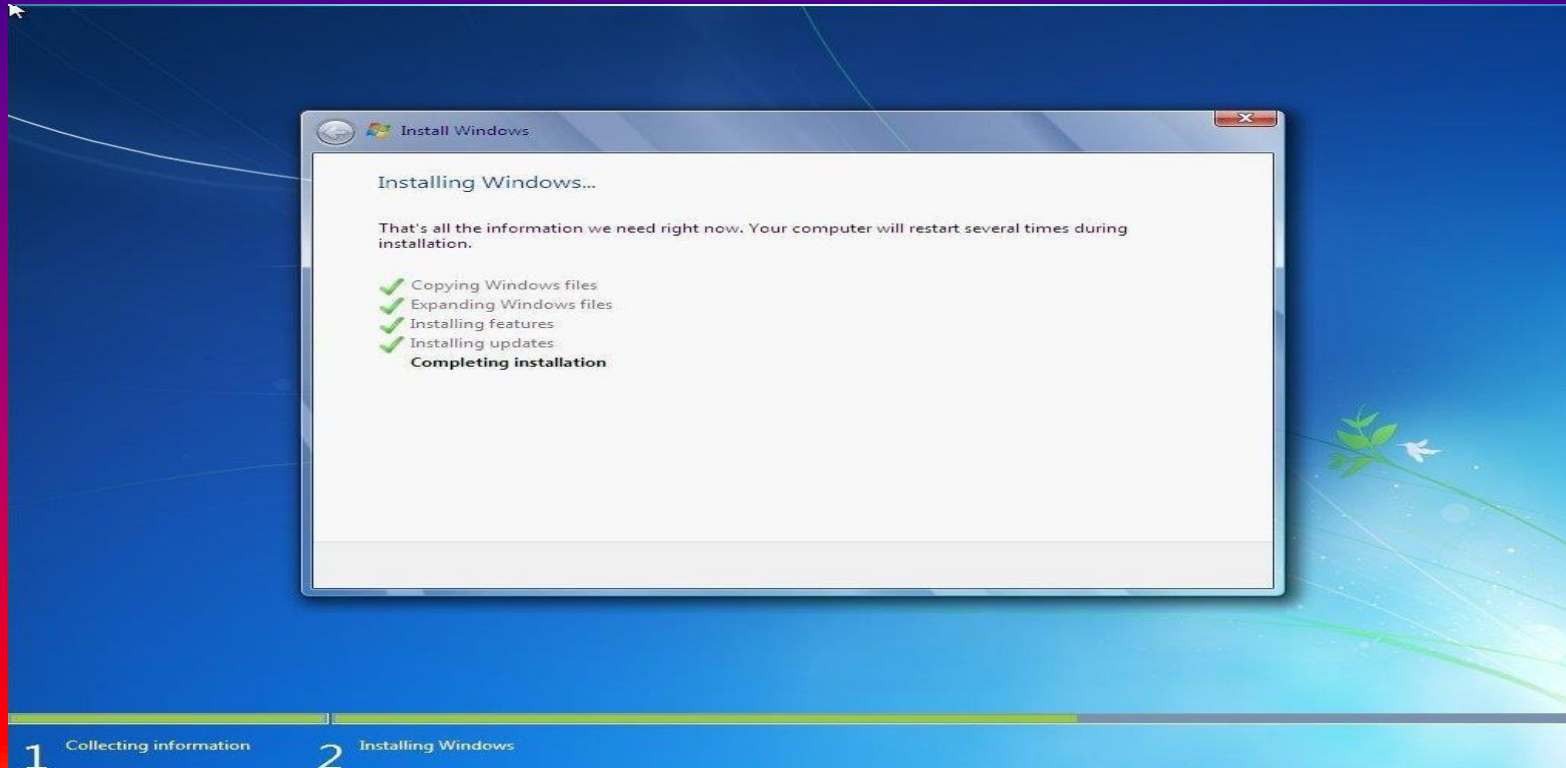
Setup is updating registry settings

© Microsoft Corporation

The image shows a Windows 7 desktop background. It features a bright blue sky with soft, wispy white clouds. In the lower right corner, there is a small, stylized green plant with a few leaves and a small white flower. The text "Setup is starting services" is centered on the screen in a white, sans-serif font.

Setup is starting services

After restarting for the first time, it will continue the setup. This is the last step so it will take the most time than the previous steps.

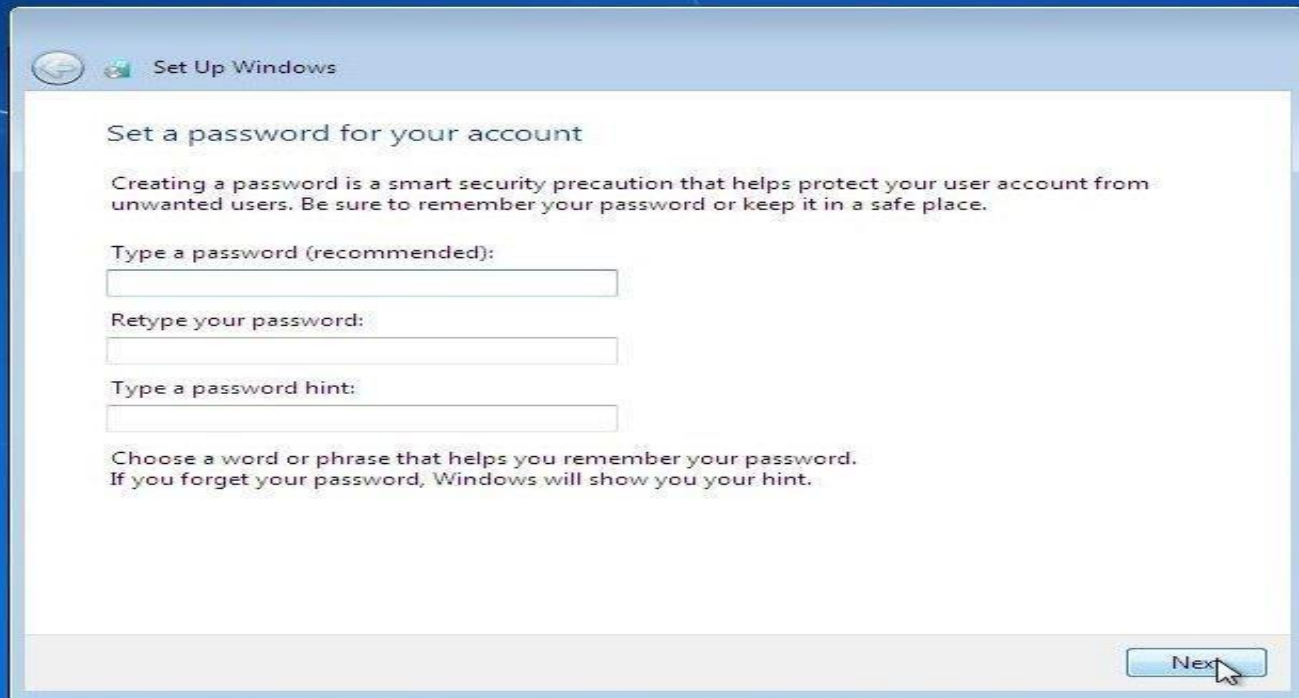




Setup will continue after restarting your computer

Type your desired user name in the text-box and click Next. It will automatically fill up the computer name.

If you want to set a password, type it in the text-boxes and click Next.



The screenshot shows a Windows Setup window titled "Set Up Windows". The main heading is "Set a password for your account". Below this, a paragraph explains: "Creating a password is a smart security precaution that helps protect your user account from unwanted users. Be sure to remember your password or keep it in a safe place." There are three text input fields: "Type a password (recommended):", "Retype your password:", and "Type a password hint:". Below these fields, another paragraph states: "Choose a word or phrase that helps you remember your password. If you forget your password, Windows will show you your hint." At the bottom right, there is a "Next" button with a mouse cursor hovering over it.

Set Up Windows

Set a password for your account

Creating a password is a smart security precaution that helps protect your user account from unwanted users. Be sure to remember your password or keep it in a safe place.

Type a password (recommended):

Retype your password:

Type a password hint:

Choose a word or phrase that helps you remember your password. If you forget your password, Windows will show you your hint.

Next

Type your product key in the text-box and click Next. You can also skip this step and simply click Next if you want to type the product key later. Windows will run only for 30 days if you do that.



The screenshot shows the 'Set Up Windows' window. At the top, there is a back arrow icon and the title 'Set Up Windows'. The main heading is 'Type your Windows product key'. Below this, a paragraph explains where to find the product key. Then, it says 'The product key looks similar to this:' followed by 'PRODUCT KEY: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX'. There is a text input field with a cursor. Below the field, it says '(dashes will be added automatically)'. There is a checkbox labeled 'Automatically activate Windows when I'm online' which is checked. At the bottom, there are two links: 'What is activation?' and 'Read our privacy statement'. A 'Next' button is in the bottom right corner.

Set Up Windows

Type your Windows product key

You can find your Windows product key on a label included with the package that came with your copy of Windows. The label might also be on your computer case. Activation pairs your product key with your computer.

The product key looks similar to this:

PRODUCT KEY: XXXXX-XXXXX-XXXXX-XXXXX-XXXXX

(dashes will be added automatically)

☒ Automatically activate Windows when I'm online

[What is activation?](#)

[Read our privacy statement](#)

Next

Select your desired option for Windows Updates.



Select **your** time and click **Next**.

Set Up Windows

Review your time and date settings

Time zone:

(UTC) Dublin, Edinburgh, Lisbon, London

☒ Automatically adjust clock for Daylight Saving Time

Date:

August 2009						
Mo	Tu	We	Th	Fr	Sa	Su
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Time:



14:47:00

Next

If you are **connected** to any network, it will ask you to set the network's location.



Window is finalizing your settings



Welcome Screen



Preparing your desktop



Personalized Settings

Setting up personalized settings for:
Windows Desktop Update



Personalized Settings

Setting up personalized settings for:
Browser Customizations



And there you have a fresh copy of Windows 7 installed!



Observations

- The installation process was successful without major issues.
- Proper partitioning ensured smooth functioning of the system.
- Learned how BIOS settings affect booting and installation.

Conclusion

This practicum provided hands-on experience in installing the Windows operating system. It improved my technical knowledge, enhanced problem-solving skills, and prepared me to assist in ICT integration within teaching and learning environments.

ACKNOWLEDGMENT

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Mr. Pallab Bid, Faculty , Purnadisha J.T.T. College

RESOURCES

- 1.<http://www.slideshare.com>
- 2.<http://www.wikihow.com>
- 3.<http://www.clker.com>



"Thank you."