



Competency Based Learning Materials (CBLM)

IT Support Service

Level-3

**Module: Installing and Configuring Application
and Utility Software**

Code: CBLM-OU-ICT-ITSS-05-L3-V1



**National Skills Development Authority
Prime Minister's Office
Government of the People's Republic of Bangladesh**

Copyright

National Skills Development Authority
Prime Minister's Office
Level: 10-11, Biniyog Bhaban,
E-6 / B, Agargaon, Sher-E-Bangla Nagar Dhaka-1207, Bangladesh.
Email: ec@nsda.gov.bd
Website: www.nsda.gov.bd
National Skills Portal: <http://skillsportal.gov.bd>

This Competency Based Learning Materials (CBLM) on “Installing and Configuring Application and Utility Software” under the IT Support Service, Level-3 qualification is developed based on the national competency standard approved by National Skills Development Authority (NSDA)

This document is to be used as a key reference point by the competency-based learning materials developers, teachers/trainers/assessors as a base on which to build instructional activities.

National Skills Development Authority (NSDA) is the owner of this document. Other interested parties must obtain written permission from NSDA for reproduction of information in any manner, in whole or in part, of this Competency Standard, in English or other language.

This Competency Based Learning Materials is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this CBLM for activities benefitting Bangladesh.

List of Abbreviations

| | |
|-------|---|
| CS | - Competency Standard |
| ISC | - Industry Skills Council |
| NSDA | - National Skills Development Authority |
| NSQF | - National Skills Qualifications Framework |
| BNQF | - Bangladesh National Qualifications Framework |
| OSH | - Occupational Safety and Health |
| PPE | - Personal Protective Equipment |
| SCVC | - Standards and Curriculum Validation Committee |
| STP | - Skills Training Provider |
| SOP | - Standard Operating Procedure |
| UoC | - Unit of Competency |
| EC | - Executive Committee |
| CBT&A | - Competency based Training & Assessment |
| CBC | - Competency based Curriculum |
| CAD | - Course Accreditation Document |
| CBLM | - Competency Based Learning Materials |

How to use this Competency Based Learning Materials (CBLMs)

The module, Installing and Configuring Application and Utility Software contains training materials and activities for you to complete. These activities may be completed as part of structured classroom activities or you may be required you to work at your own pace. These activities will ask you to complete associated learning and practice activities in order to gain knowledge and skills you need to achieve the learning outcomes.

1. Review the **Learning Activity** page to understand the sequence of learning activities you will undergo. This page will serve as your road map towards the achievement of competence.
2. Read the **Information Sheets**. This will give you an understanding of the jobs or tasks you are going to learn how to do. Once you have finished reading the **Information Sheets** complete the questions in the **Self-Check**.
3. **Self-Checks** are found after each **Information Sheet**. **Self-Checks** are designed to help you know how you are progressing. If you are unable to answer the questions in the **Self-Check** you will need to re-read the relevant **Information Sheet**. Once you have completed all the questions check your answers by reading the relevant **Answer Keys** found at the end of this module.
4. Next move on to the **Job Sheets**. **Job Sheets** provide detailed information about *how to do the job* you are being trained in. Some **Job Sheets** will also have a series of **Activity Sheets**. These sheets have been designed to introduce you to the job step by step. This is where you will apply the new knowledge you gained by reading the Information Sheets. This is your opportunity to practice the job. You may need to practice the job or activity several times before you become competent.
5. Specification **sheets**, specifying the details of the job to be performed will be provided where appropriate.
6. A review of competency is provided on the last page to help remind if all the required assessment criteria have been met. This record is for your own information and guidance and is not an official record of competency

When working though this Module always be aware of your safety and the safety of others in the training room. Should you require assistance or clarification please consult your trainer or facilitator.

When you have satisfactorily completed all the Jobs and/or Activities outlined in this module, an assessment event will be scheduled to assess if you have achieved competency in the specified learning outcomes. You will then be ready to move onto the next Unit of Competency or Module

Approved by __ th Authority Meeting of NSDA Held on -----

TABLE OF CONTENTS

| | |
|--|-----|
| Copyright..... | i |
| List of Abbreviations | ii |
| How to use this Competency Based Learning Materials (CBLMs) | iii |
| Module Content..... | 1 |
| Learning Outcome 1: Prepare for installation and configuration | 3 |
| Information Sheet 1: Preparing for installation and configuration | 5 |
| Self-Check Sheet 1: Preparing for installation and configuration..... | 18 |
| Answer Key 1: Preparing for installation and configuration..... | 19 |
| Learning Outcome 2: Install and Configure Application Software..... | 20 |
| Learning Experience 2: Install and Configure Application Software..... | 21 |
| Information Sheet 2: Install and Configure Application Software..... | 22 |
| Self-Check Sheet 2: Install and Configure Application Software..... | 29 |
| Answer Key 2: Installing and Configure Application Software | 30 |
| Task Sheet 2.1: Install and Configure Application Software | 31 |
| Learning Outcome 3: Install and Configure Utility Software | 32 |
| Learning Experience 3: Install and Configure Utility Software | 33 |
| Information Sheet 3: Installing and Configuring Utility Software..... | 34 |
| Self-Check Sheet 3: Install and Configure Utility Software | 37 |
| Answer Key 3: Install and Configure Utility Software | 38 |
| Task Sheet 3.1: Install and Configuring Utility Software..... | 39 |
| Learning Outcome 4: Install and Configure Security Software..... | 40 |
| Learning Experience 4: Install and Configure Security Software | 41 |
| Information Sheet 4: Install and Configure Security Software | 42 |
| Self-Check Sheet 4: Install and Configure Security Software..... | 48 |
| Answer Key 4: Install and Configure Security Software | 49 |
| Task Sheet 4.1: Install and Configure Security Software | 50 |
| Review of Competency | 51 |
| Reference: | 54 |

MODULE CONTENT

Unit of Competency: Install and Configure Application and Utility Software

Module Title: Installing and Configuring Application and Utility Software

Module Description: This module discusses the aspects that must be given attention when Install and Configure Application and Utility Software. It shows the knowledge and skills requirements for preparing for installation and configuration, installing and configuring application software, utility software and security software.

Nominal Duration: 15 Hours

Learning Outcomes:

Upon completion of this module the trainees must be able to:

1. Prepare for installation and configuration
2. Install and configure application software
3. Install and configure utility software
4. Install and configure security software

Assessment Criteria:

- 1.1 Occupational Safety and Health (OSH) procedures are followed
- 1.2 User requirements are documented
- 1.3 Application software and utility software are collected as per user requirement.
- 1.4 Necessary backup is taken if required
- 2.1 Application software are selected and collected according to the user requirement
- 2.2 Application software are installed
- 2.3 Application software is configured as per requirement
- 2.4 Software license is activated if required
- 2.5 Functionality of installed application software is checked
- 3.1. Utility software are selected and collected according to the user requirement.
- 3.2. Utility software are installed
- 3.3. Utility software is configured as per requirement
- 3.4. Functionality of installed utility software is checked
- 4.1 Required Security software is identified and selected
- 4.2 Security software are stored in local drive
- 4.3 Security software are installed
- 4.4 Security software is configured as per requirement
- 4.5 Functionality of installed security software is checked

Learning Outcome 1: Prepare for installation and configuration

Assessment Criteria:

1. Occupational Safety and Health (OSH) procedures are followed
2. User requirements are documented
3. Application software and utility software are collected as per user requirement.
4. Necessary backup is taken if required

Content:

1. Occupational Safety and Health (OSH) procedures
2. User requirements
3. Application software
 - 3.1. Open Office.
 - 3.2. MS Office
 - 3.3. Bangla typing software
 - 3.4. Internet Browser
4. Utility software.
 - 4.1 PDF Reader
 - 4.2 Anti-virus
 - 4.3 Compress/ decompress software (Winzip/ winrar)
5. Necessary backup

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 1: Prepare for installation and configuration

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

| Learning Steps | Resources specific instructions |
|---|---|
| 1. Trainee will ask the instructor about Preparing for installation and configuration | 1. Instructor will provide the learning materials “Installing and Configuring Application and Utility Software” |
| 2. Read the Information sheet/s | 2. Information Sheet No: 1 Prepare for installation and configuration |
| 3. Complete the Self Checks & Check answer sheets. | 3. Self-Check/s Self-Check No: 1 Prepare for installation and configuration Answer key No. 1 Prepare for installation and configuration |
| 4. Read the Job Sheet and Specification Sheet and perform job | 4. Job- Sheet No: 1- Prepare for installation and configuration Specification Sheet 1 – Prepare for installation and configuration |

Information Sheet 1: Preparing for installation and configuration

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Follow Occupational Safety and Health (OSH) procedures
2. Document User requirements
3. Collect Application software and utility software as per user requirement.
4. Take Necessary backup if required.

Occupational Safety and Health (OSH) procedures

Occupational Safety and Health (OSH) procedures are critical to consider during the installation and configuration of application and utility software, especially in workplace settings where employees are responsible for these tasks. While installing and configuring software may not involve physical hazards like some other tasks, there are still potential risks to consider. OSH procedures relevant to this activity:

Ergonomics:

Ensure that workstations are ergonomically designed to reduce strain and discomfort during prolonged periods of installation and configuration.

Provide adjustable chairs, proper lighting, and ergonomic accessories like keyboard trays to promote good posture and minimize the risk of musculoskeletal disorders.

User requirements

User requirements play a crucial role in the successful installation and configuration of application software. Understanding and meeting these requirements ensures that the software operates efficiently and meets the needs of the end-users. Here's an explanation of user requirements in this context:

Set Up Your Office Workstation



Operating System Compatibility:

Users need to ensure that the application software is compatible with their operating system (e.g., Windows, macOS, Linux) before installation.

Different software versions may have specific OS requirements, such as minimum versions or specific editions (e.g., Windows 10 Professional).

Hardware Specifications:

Users should check the hardware requirements specified by the software vendor to ensure that their system meets the minimum hardware specifications.

This includes considerations such as processor speed, RAM (memory) requirements, available storage space, and graphics capabilities.

Software Dependencies:

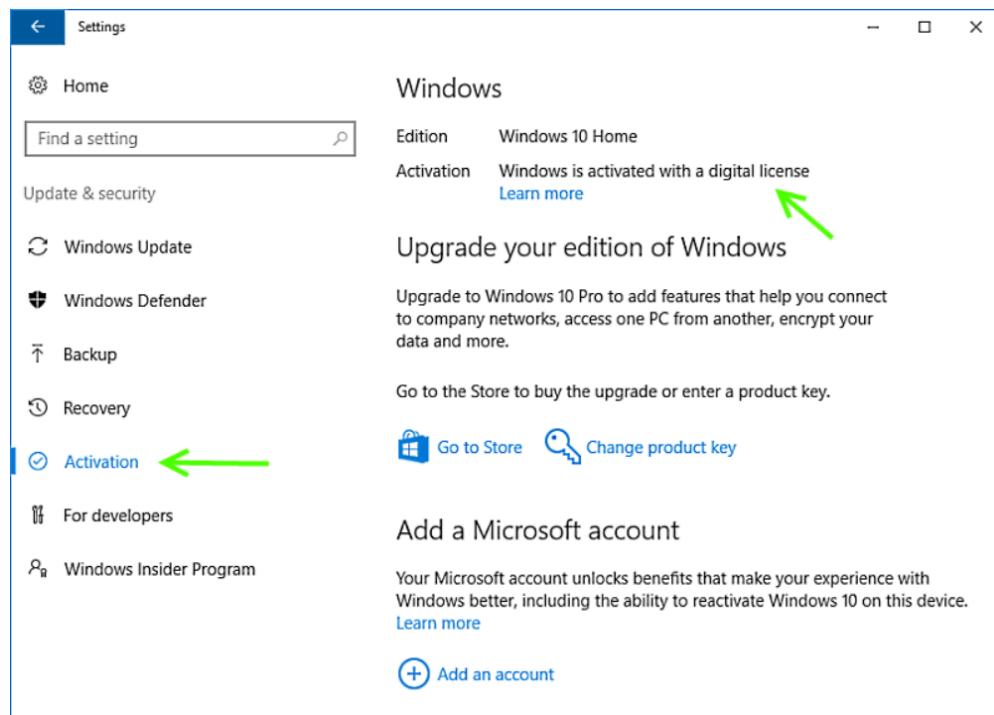
Some applications may have dependencies on other software components or libraries. Users need to ensure that all required dependencies are installed on their system before proceeding with the installation.

Failure to meet these dependencies can result in installation errors or the software not functioning correctly.

Licensing and Activation:

Users must comply with software licensing agreements and activation requirements specified by the vendor.

This may involve entering license keys or serial numbers during the installation process or activating the software online after installation.



Network Connectivity:

For applications that require network access or communication with remote servers or databases, users need a stable internet connection.

They should also ensure that any firewall or network security settings do not block the application's network traffic.

Collecting application software and utility software involves gathering the necessary programs and tools required for various purposes.

Application Software:

Application software refers to programs designed to perform specific tasks or functions for end-users. These could include word processors, spreadsheet programs, graphic design tools, Bangla typing software, web browsers, and multimedia players.

| | |
|--|---|
|  Apache OpenOffice® Writer Calc Impress Draw Base Math Open Office |  Office Excel OneNote Outlook Word PowerPoint |
|  |  |
|  | |

To collect application software:

Identify the specific tasks or functions users need to perform and research suitable software options that meet those requirements.

Evaluate different software solutions based on factors such as features, ease of use, compatibility, cost, and user reviews.

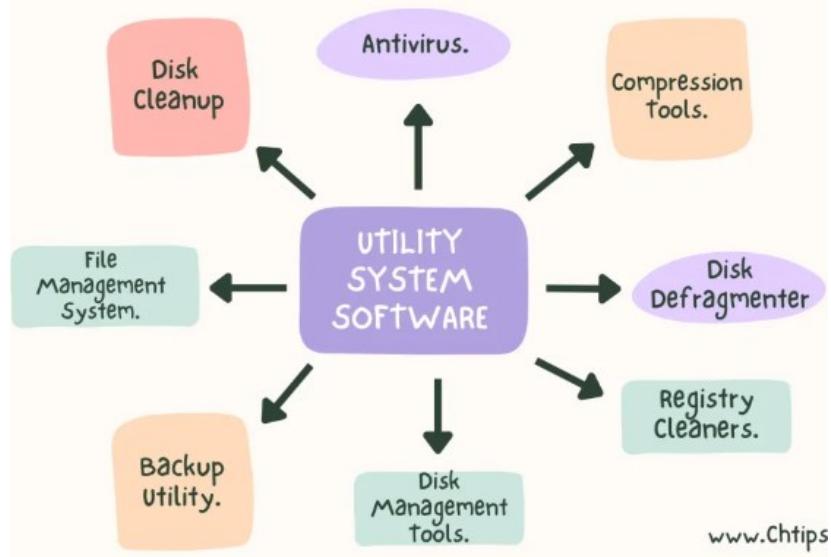
Obtain licensed copies or download free/open-source applications from reputable sources such as official vendor websites, app stores, or trusted software repositories.

Organize the collected application software based on categories or user needs for easy access and management.

Utility Software:

Utility software consists of programs designed to support and optimize system performance, manage resources, and provide essential system services. Examples include antivirus software,

disk utilities, backup tools, system optimization utilities, pdf reader, Compress/ decompress software (Winzip/ winrar), and network monitoring software.



Taking necessary backups

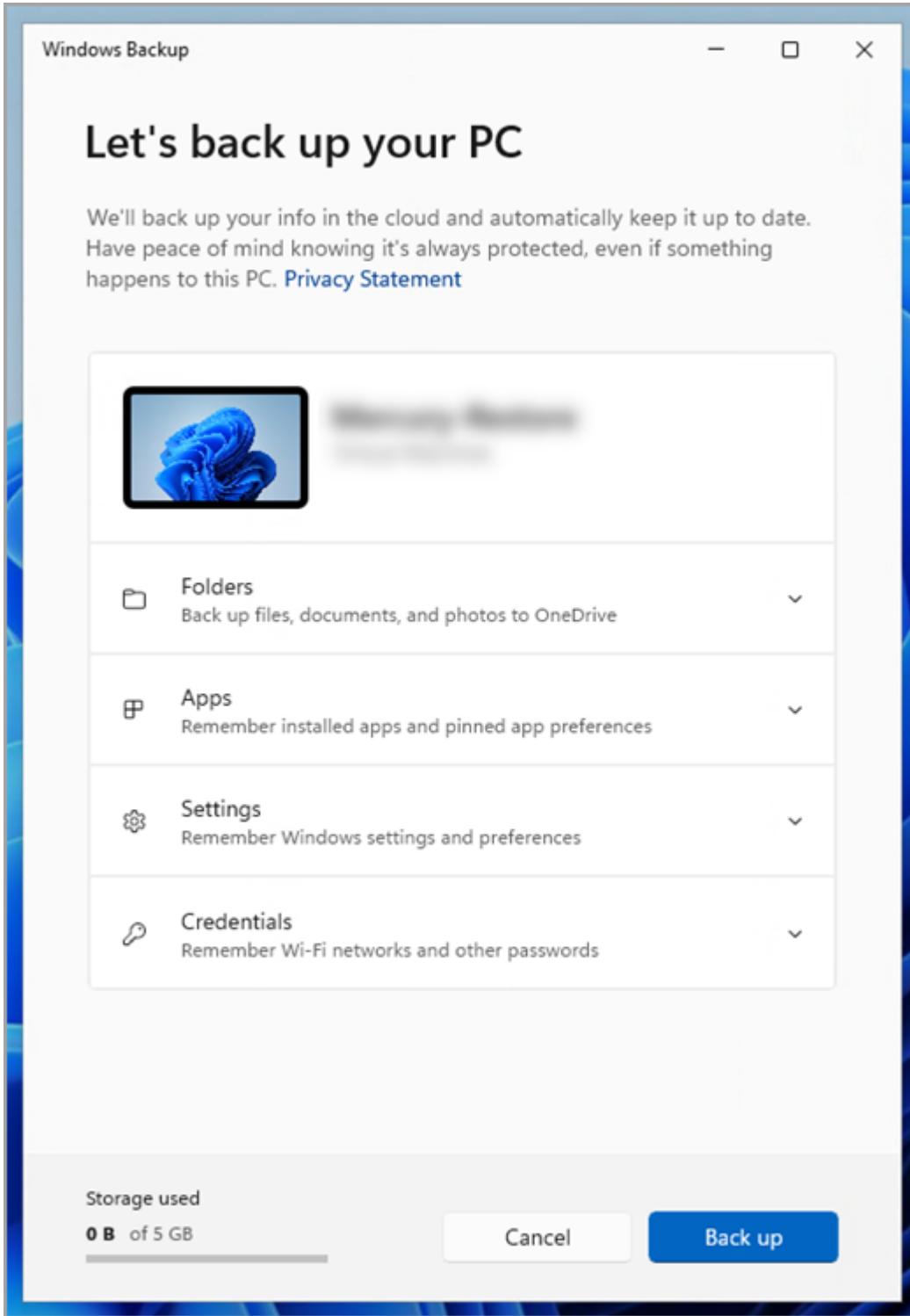
Taking necessary backups before installation is a crucial step to ensure the safety and integrity of data and system settings. Here's an explanation of why and how to take backups before software installation:

Why Take Backups?

Windows Backup:

Your Windows PC comes with a one-stop backup solution, Windows Backup, that will help you to back up many of the things that are most important to you. From your files, themes, and some settings to many of your installed apps and Wi-Fi information - Windows Backup will help protect what matters and make it easier than ever to move to a brand-new PC.

This guide will help you to use Windows Backup to back up key things on your Windows PC.



Step 1: Sign in with a Microsoft account

This is the account associated with Windows, Microsoft 365, OneDrive, Xbox, and more. Your backed-up information will be stored with your Microsoft account, so getting back to your things on a new PC is as easy as signing in.

To sign in to your Microsoft account, select Start  > Settings  > Accounts  > Your info. Select Sign in with a Microsoft account instead. You'll see this only if you're using a

local account. If you see Sign in with a local account instead, you're already using your Microsoft account.

Data Protection: Backing up data safeguards against potential loss or corruption during the installation process. In case of unforeseen issues, such as software conflicts or system errors, backups serve as a safety net to restore critical files and information.

System Restore Points: Backups can create system restore points, allowing users to revert the system to a previous state if the installation process causes instability or undesirable changes.

How to Take Backups:

Data Backup:

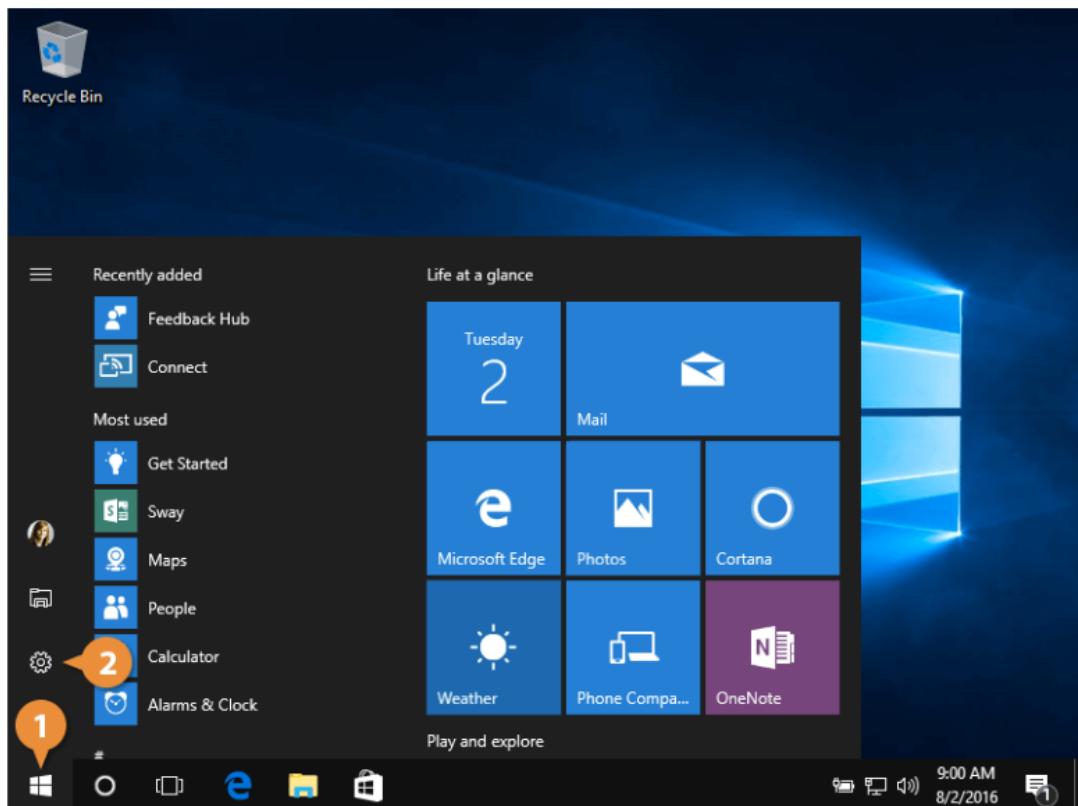
Identify critical files, documents, and user data that may be affected by the installation process.

Copy important data to an external storage device, cloud storage service, or network drive.

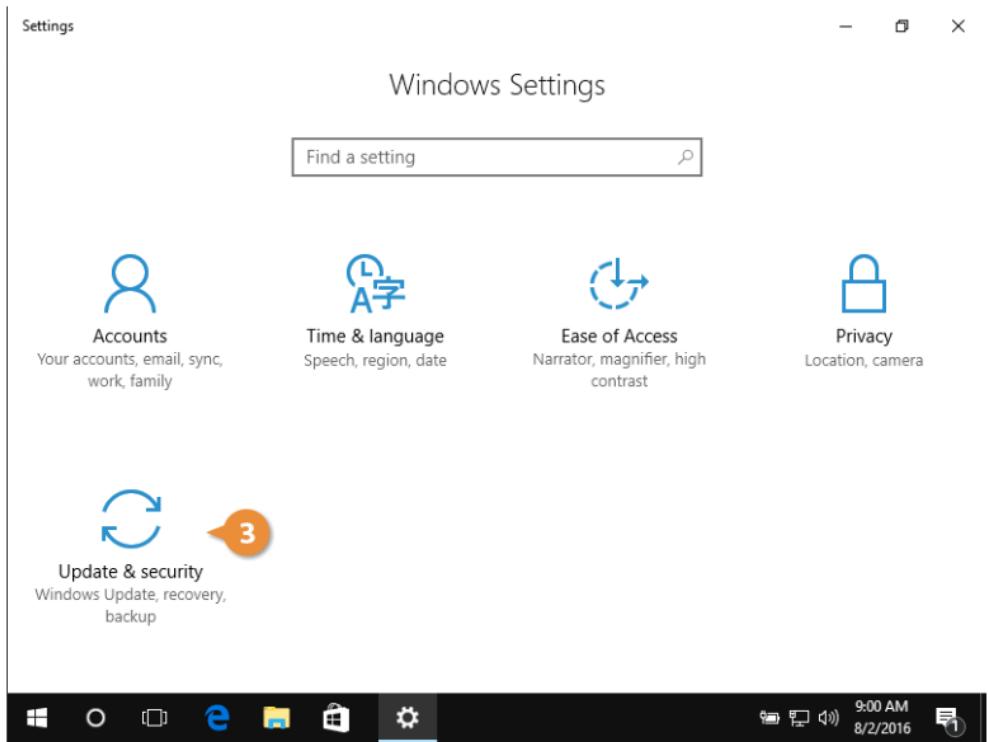
Use backup software or built-in backup utilities to automate the backup process and ensure comprehensive data protection.

Add a Backup Drive

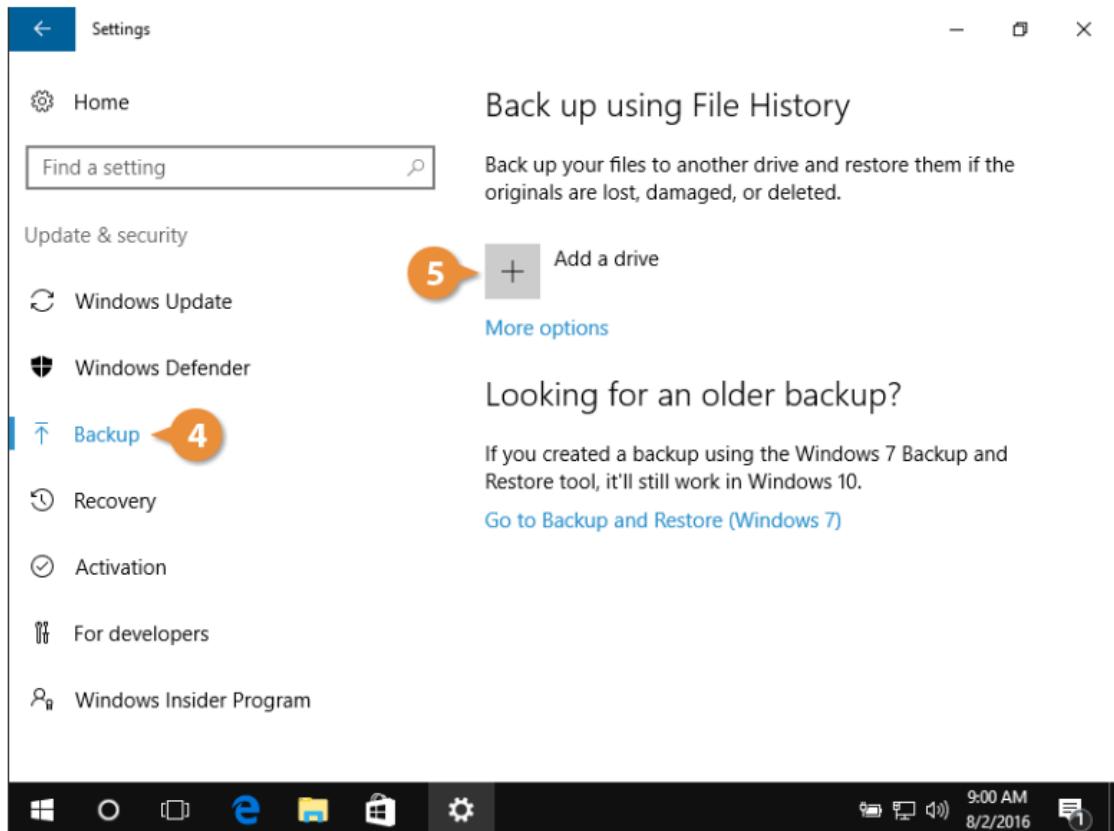
1. Click the Start button.
2. Click the Settings button.



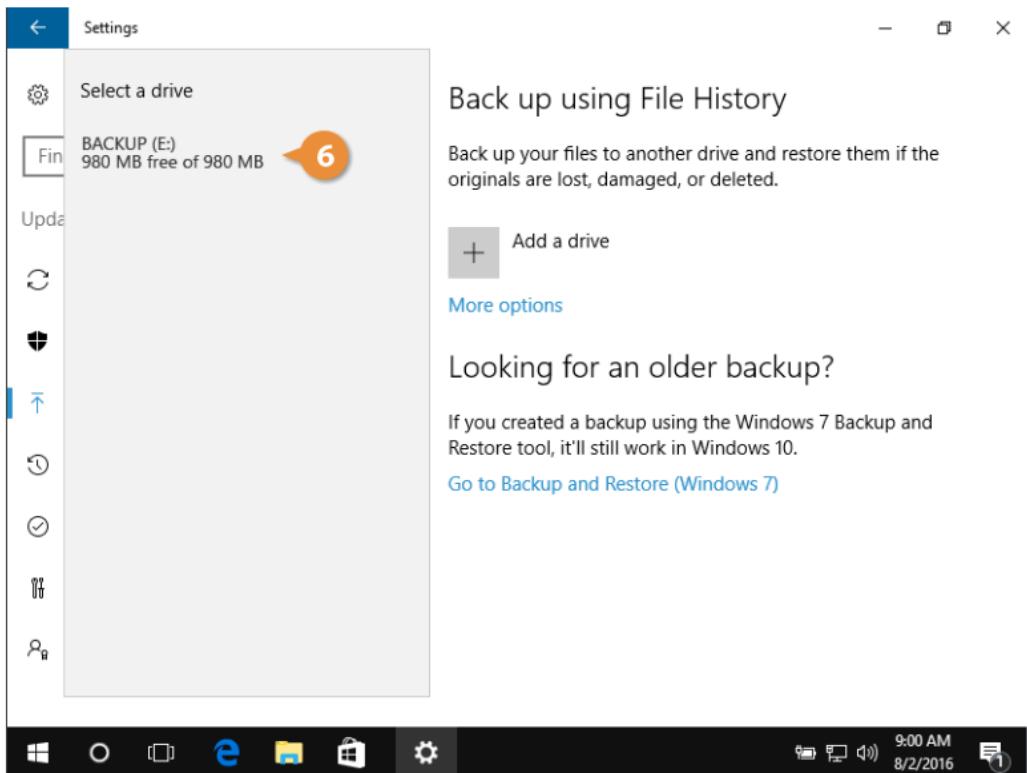
3. Click Update & security.



4. Choose Backup.
- (Any connected external hard drives appear.)
5. Connect an external hard drive, and then click Add a drive.

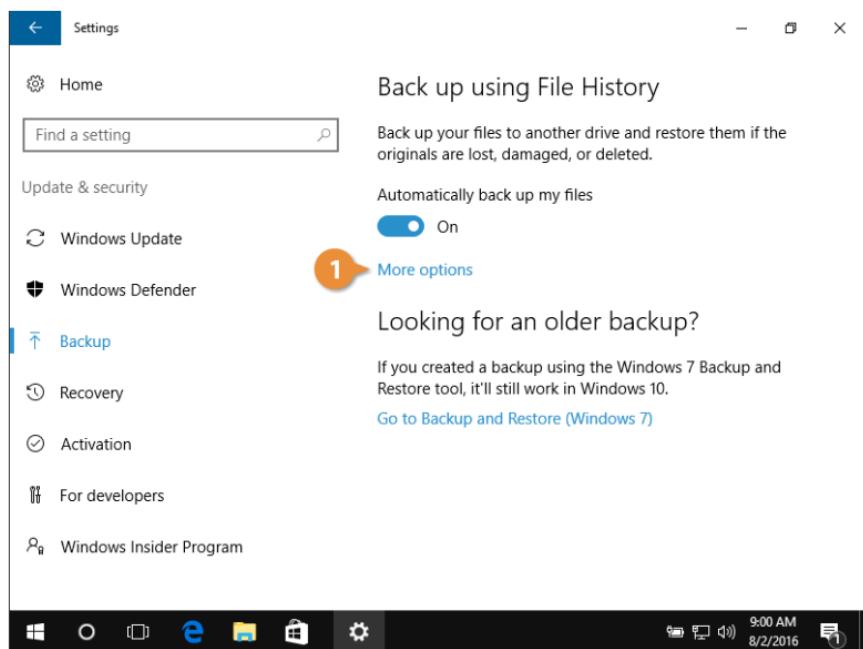


6. Select a drive from the list.

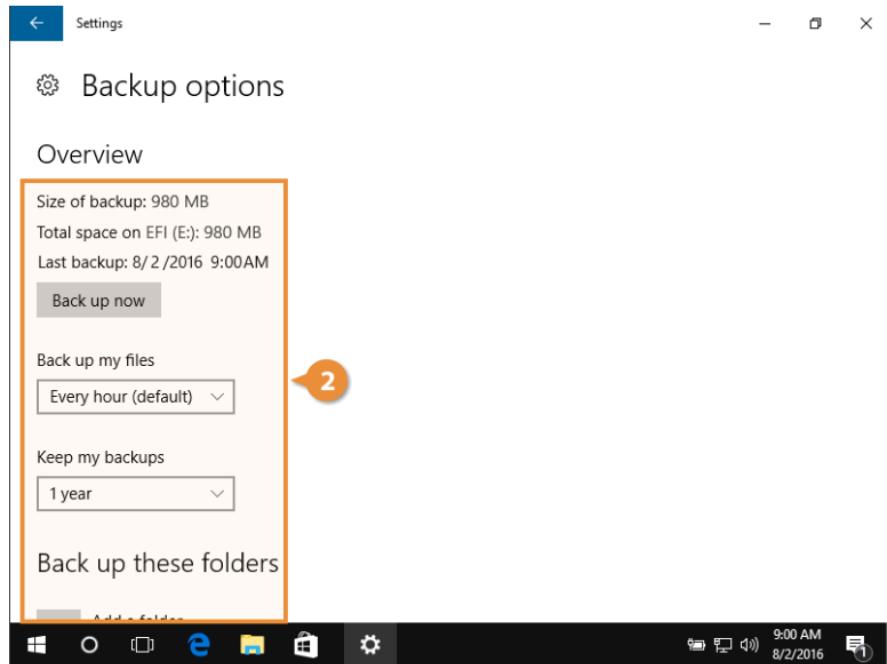


Customize a Backup

1. Click More options under Back up using File History.

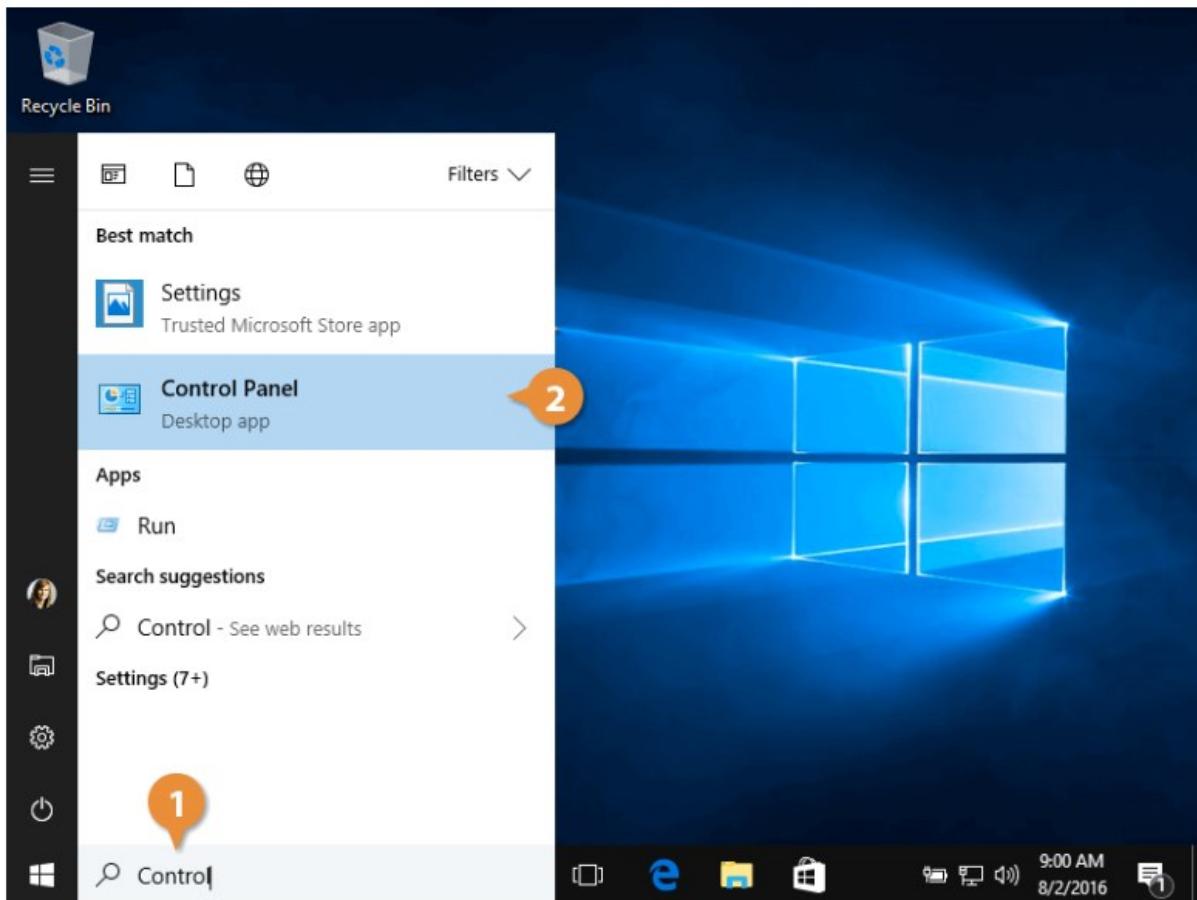


2. Configure your backup settings according to your specifications.

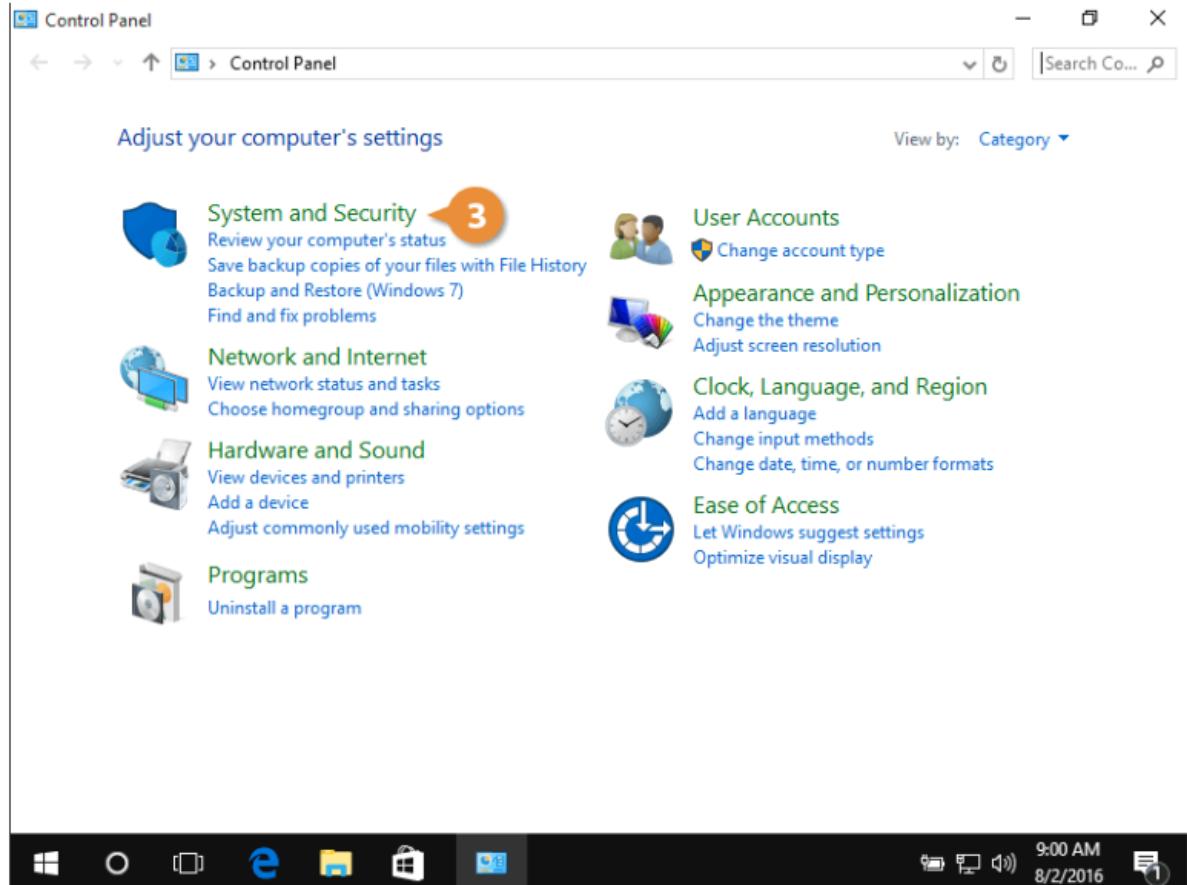


Restore Your Files

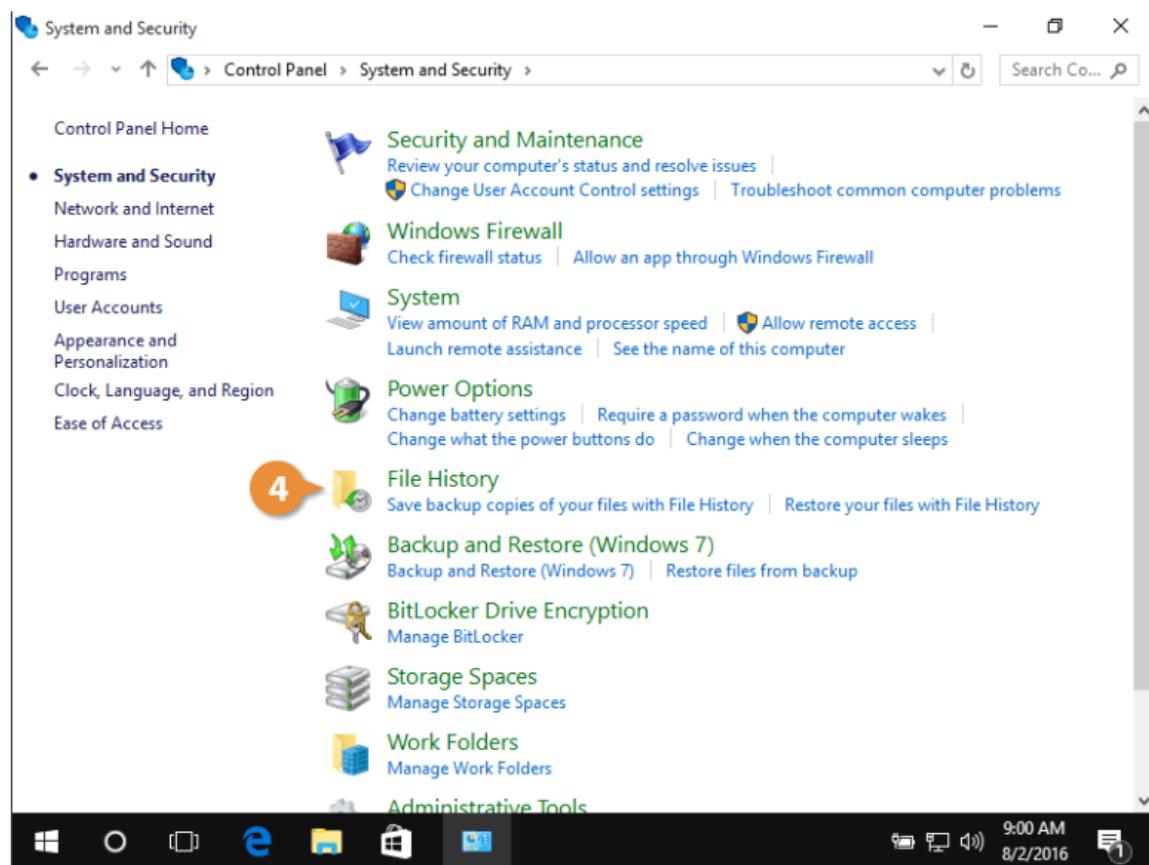
1. Enter Control in the search field.
2. Choose Control Panel.



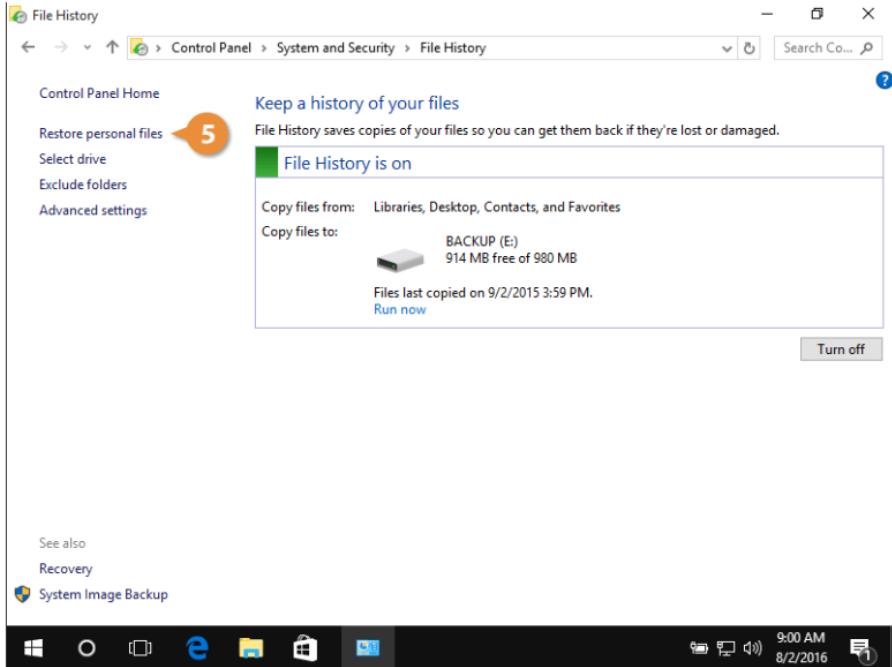
3. Click System and Security



4. Click File History



5. Choose Restore personal files.



6. Click the Previous Version button.

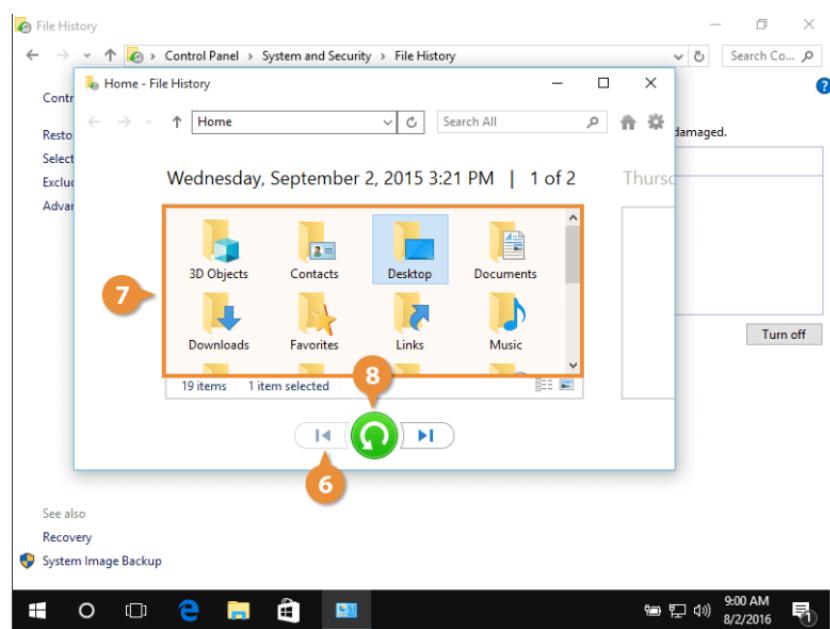
System Backup:

Create a system image or full backup of the entire system drive using backup and recovery software.

System backups capture the entire operating system, including installed programs, settings, and files, allowing for complete system restoration if needed.

7. Select an individual file or entire folder to restore.

Click the Restore button.



Configuration Backup:

Document and save custom configurations, preferences, and settings for installed applications and system components.

Some software applications provide built-in tools or options to export or backup configuration settings for easy restoration later.

Self-Check Sheet 1: Preparing for installation and configuration

1. What are the examples of OSH procedures during software installation?
2. Why should user requirements be documented before software installation?
3. What information should be included in user requirement documentation?
4. Why is it important to collect software according to user requirements?
5. Why is taking backups before software installation important?

Answer Key 1: Preparing for installation and configuration

1. What is the example of OSH procedures during software installation?

Answer: Using ergonomic workstations.

2. Why should user requirements be documented before software installation?

Answer: To ensure that the installed software meets the specific needs and expectations of the users.

3. What information should be included in user requirement documentation?

Answer: Desired features, functionalities, compatibility requirements, and any special preferences or constraints.

4. Why is it important to collect software according to user requirements?

Answer: To ensure that the installed software aligns with the needs and preferences of the users, enhancing productivity and user satisfaction.

5. Why is taking backups before software installation important?

Answer: To safeguard data and system settings against potential loss or corruption during the installation process.

Learning Outcome 2: Install and Configure Application Software

Assessment Criteria:

- 2.1 Application software are selected and collected according to the user requirement
- 2.2 Application software are installed
- 2.3 Application software is configured as per requirement
- 2.4 Software license is activated if required
- 2.5 Functionality of installed application software is checked

Content:

1. Application software
2. Application software configuration
3. Software license
4. Functionality of application software

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 2: Install and Configure Application Software

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

| Learning Steps | Resources specific instructions |
|--|---|
| 1. Student will ask the instructor about installing and configuring application software | 1. Instructor will provide the learning materials “Installing and Configuring Application and Utility Software” |
| 2. Read the Information sheet/s | 2. Information Sheet No: 2 installing and configuring application software |
| 3. Complete the Self Checks & Check answer sheets. | 3. Self-Check/s Self-Check No: 2 - installing and configuring application software Answer key No. 2 - installing and configuring application software |
| 4. Read the Job Sheet and Specification Sheet and perform job | 4. Job- Sheet No: 2 - installing and configuring application software Specification Sheet: 2- installing and configuring application software |

Information Sheet 2: Install and Configure Application Software

Learning Objectives:

After completion of this information sheet, the learners will be able to:

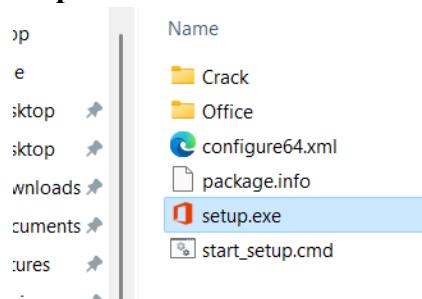
1. Select and collect Application software according to the user requirement
2. Install Application software
3. Configure Application software as per requirement
4. Activate Software license if required
5. Check Functionality of installed application software

Application software, often referred to simply as "applications" or "apps," is a type of computer program designed to perform specific tasks or functions for end-users. Unlike system software, which manages and controls computer hardware and provides a platform for running application software, application software is developed to fulfill particular user needs and objectives.

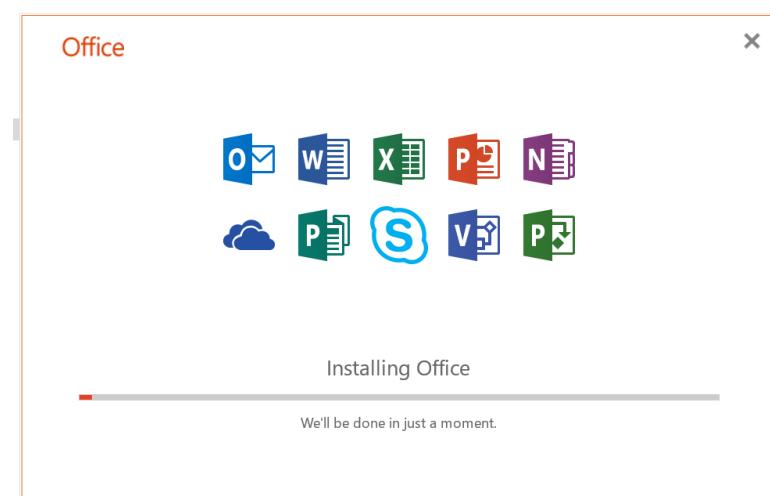
Application software installation:

Step by Step Microsoft Office installation:

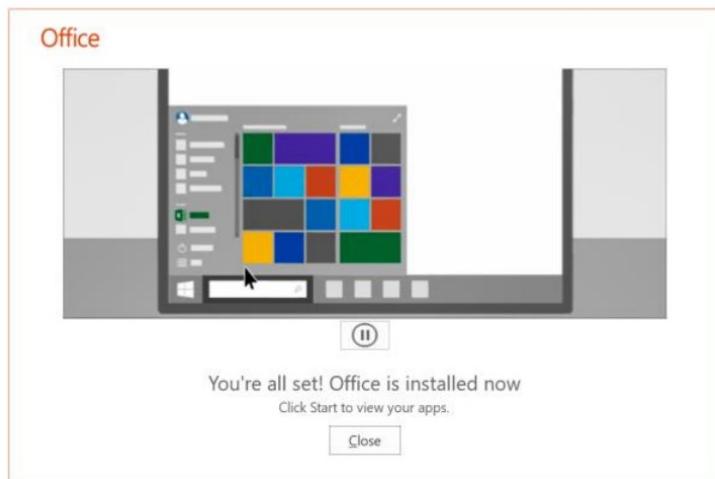
Step 1:



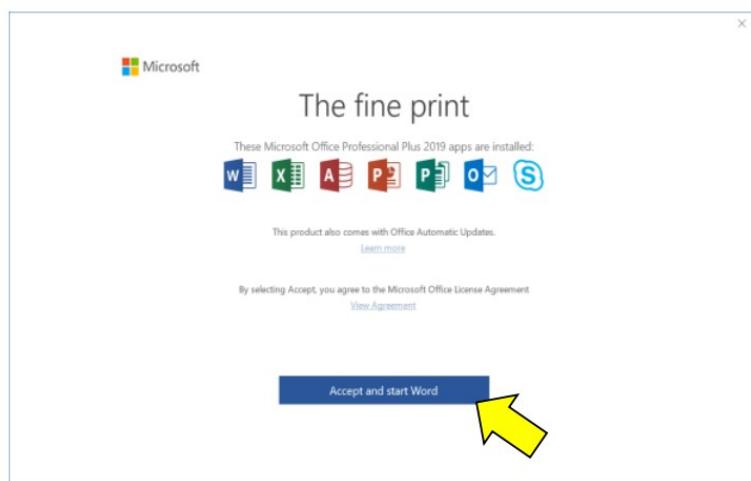
Step 2:



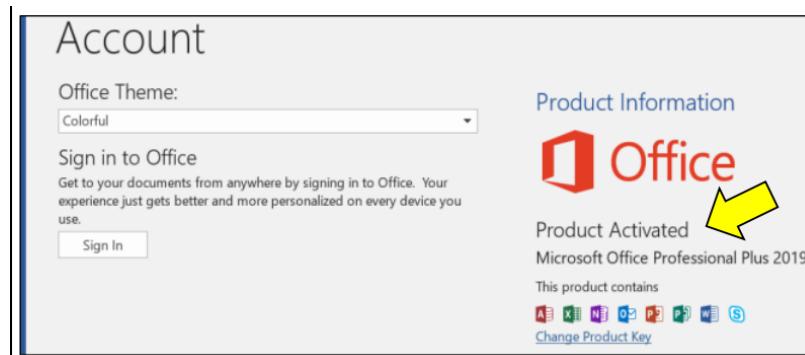
Step 3



Step 4



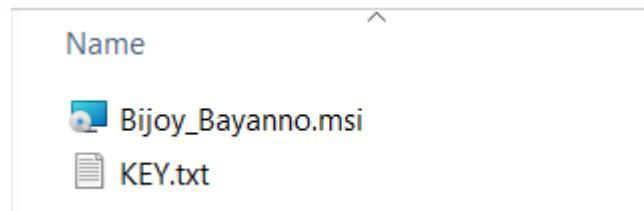
Step 5:



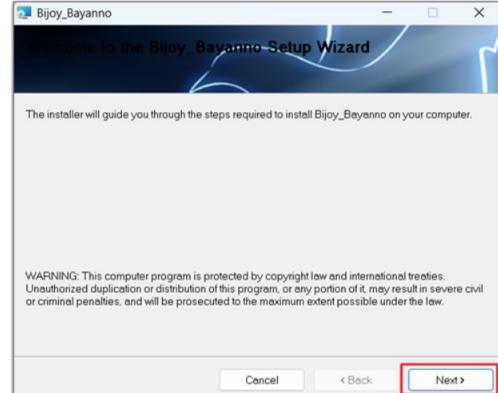
Bangla typing software Installation:

Install Bijoy

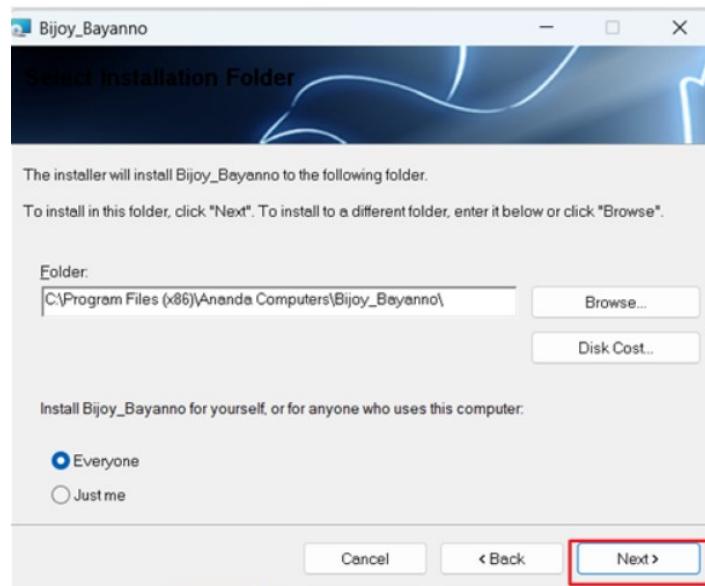
Step 1



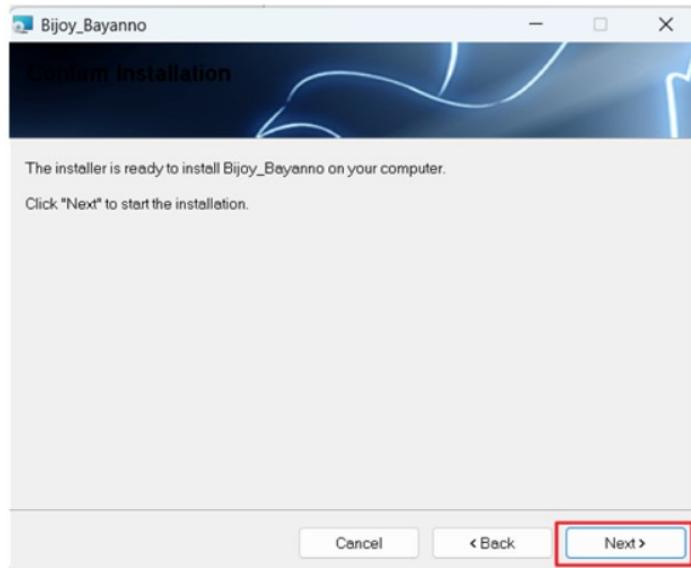
Step 2



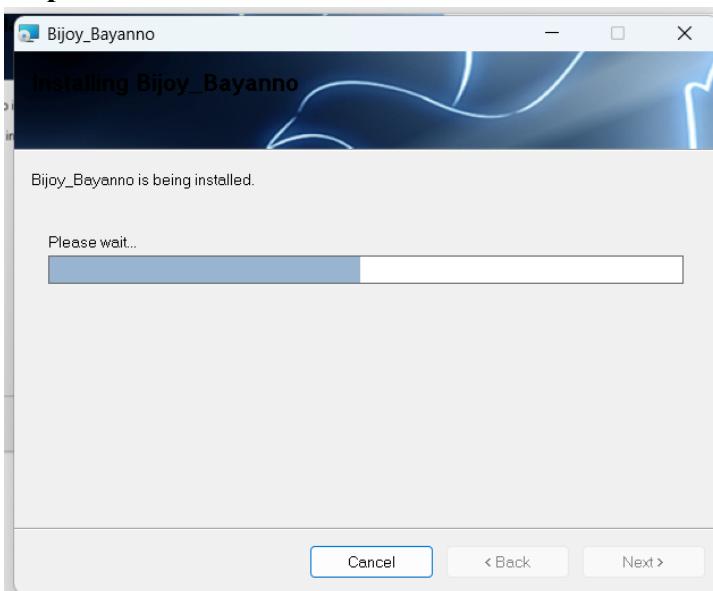
Step 3



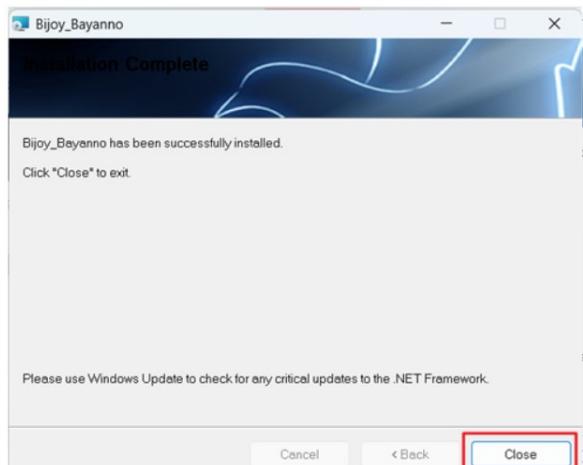
Step 4



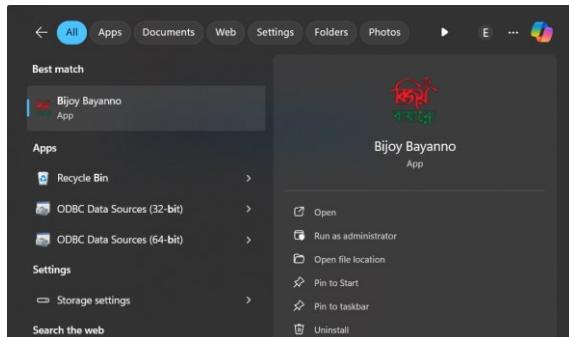
Step 5



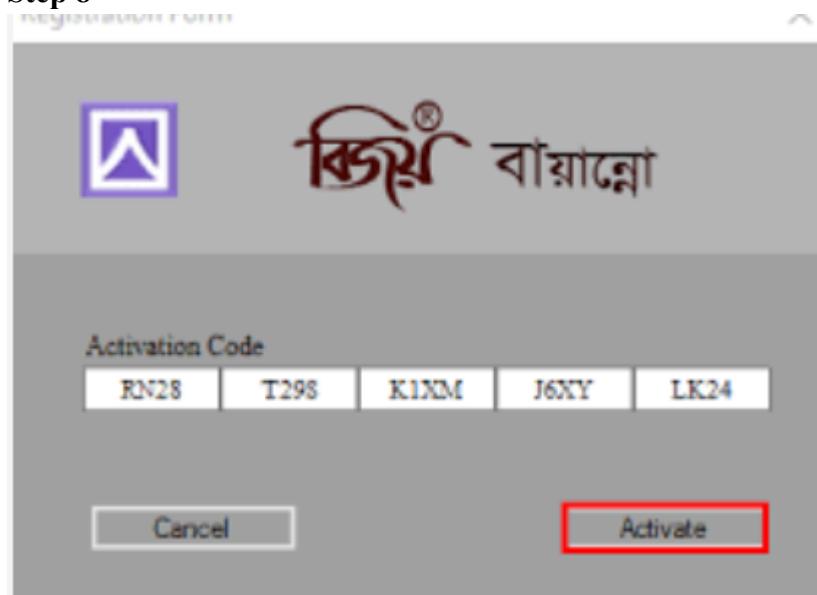
Step 6



Step 7

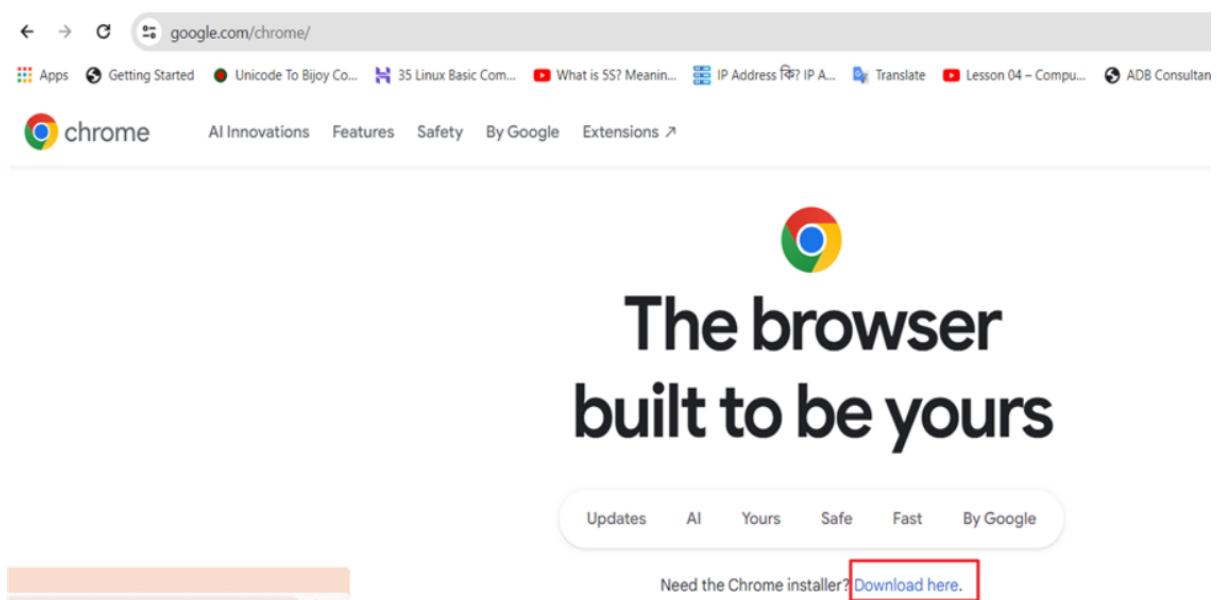


Step 8

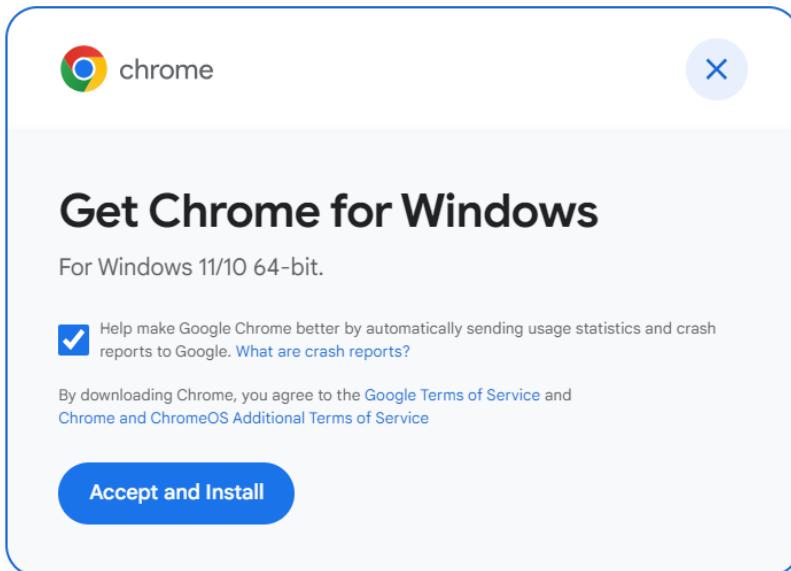


Install Google Chrome

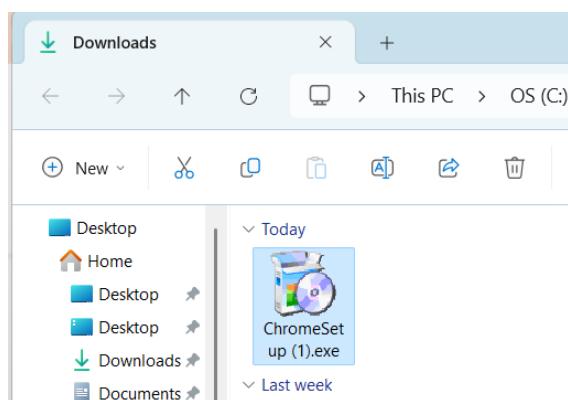
Step 1



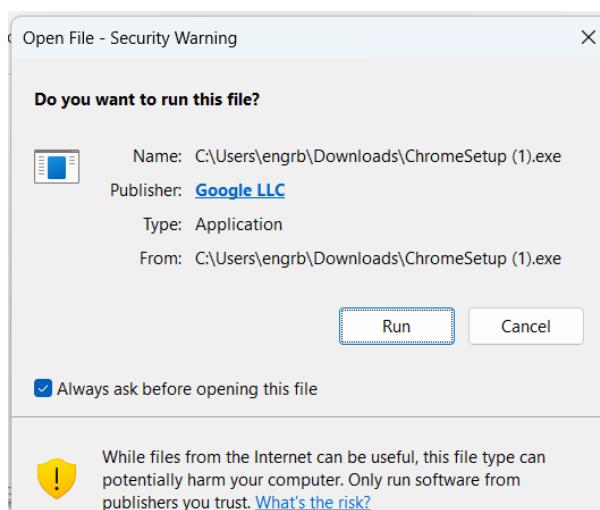
Step 2



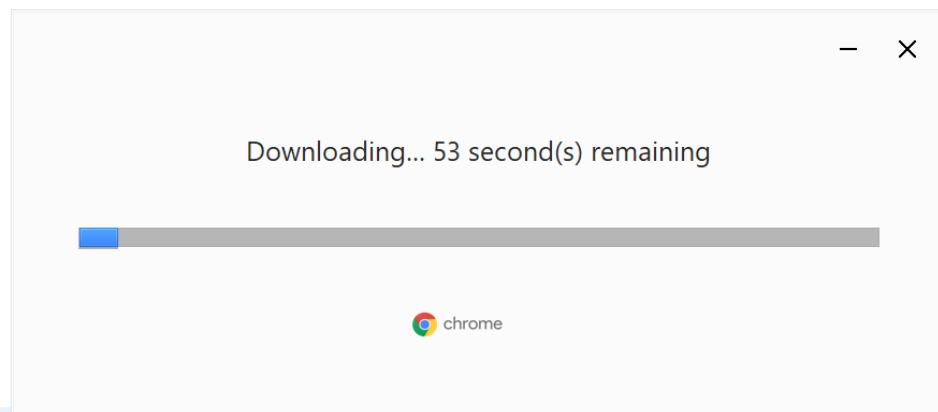
Step 3



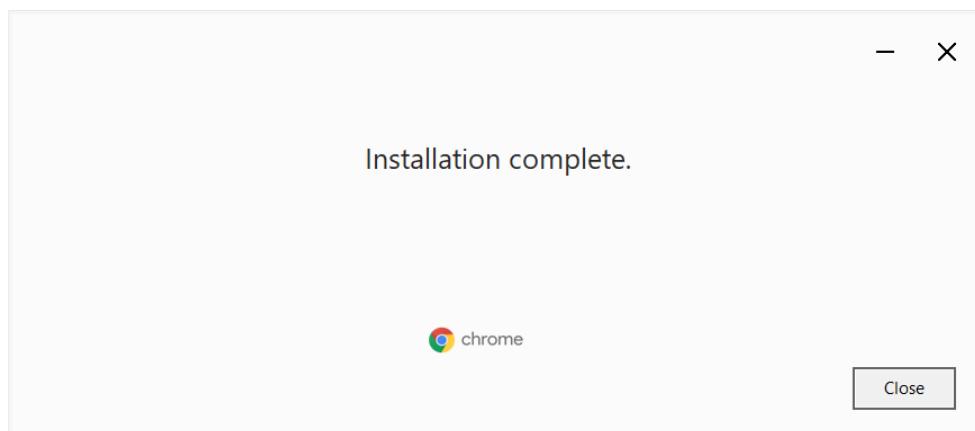
Step 4



Step 5



Step 6



Self-Check Sheet 2: Install and Configure Application Software

1. How can user requirements for application software be determined?

2. What is the purpose of installing application software?

3. What are the typical steps involved in installing application software?

4. Why is it important to configure application software after installation?

5. What are examples of configuration options in application software?

6. Why is it necessary to activate software licenses?

Answer Key 2: Installing and Configure Application Software

1. How can user requirements for application software be determined?

Answer: Through surveys, interviews, feedback sessions, and analysis of business processes and workflows.

2. What is the purpose of installing application software?

Answer: To make the software available for use on a computer or device.

3. What are the typical steps involved in installing application software?

Answer: Downloading or obtaining the installation package, running the installer, following on-screen instructions, and completing the installation process.

4. Why is it important to configure application software after installation?

Answer: To customize the software settings and preferences according to user requirements and workflow needs.

5. What are examples of configuration options in application software?

Answer: Setting default preferences, adjusting user interface elements, configuring access permissions, and integrating with other software tools.

6. Why is it necessary to activate software licenses?

Answer: To legally authorize the use of the software and unlock full functionality or access to premium features.

Task Sheet 2.1: Install and Configure Application Software

| TASK SHEET 2.1 |
|---|
| <p>Performance Objective: At the end of this task, the trainee should be able to select, install, configure, activate, and check the functionality of application software according to user requirements.</p> |
| <ol style="list-style-type: none">1. Conduct user interviews or surveys to determine software requirements.2. Select suitable application software based on compatibility, features, and user feedback.3. Collect installation files or obtain access to download software packages.4. Locate the installation files or download the software package from a trusted source.5. Run the installer executable and follow on-screen instructions to begin the installation process.6. Select installation options as needed (e.g., installation directory, additional components).7. Complete the installation process and ensure successful installation without errors.8. Access the settings or preferences menu within the software.9. Customize settings such as default preferences, user interface options, and access permissions.10. Save configuration changes and ensure they are applied correctly.11. Locate the license key, serial number, or activation code provided by the software vendor.12. Launch the application software and navigate to the license activation section.13. Enter the license key or activation code as instructed.14. Follow on-screen prompts to complete the license activation process. |

Learning Outcome 3: Install and Configure Utility Software

Assessment Criteria:

1. Select and collect Utility software according to the user requirement.
2. Install Utility software
3. Configure utility software as per requirement
4. Check Functionality of installed utility software

Content:

1. Utility software.
2. Utility software installing procedure
3. Utility software configuration procedure
4. Functionality checking of installed utility software

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 3: Install and Configure Utility Software

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

| Learning Steps | Resources specific instructions |
|--|--|
| 1. Student will ask the instructor about Installing and configuring utility software | 1. Instructor will provide the learning materials “Installing and Configuring Application and Utility Software” |
| 2. Read the Information sheet/s | 2. Information Sheet No 3: Installing and configuring utility software |
| 3. Complete the Self Checks & Check answer sheets. | 3. Self-Check/s Self-Check No 3: Installing and configuring utility software Answer key No. 3: Installing and configuring utility software |
| 4. Read the Job Sheet and Specification Sheet and perform job | 4. Job- Sheet No 3-1: Installing and configuring utility software Specification Sheet 3-1: Installing and configuring utility software |

Information Sheet 3: Installing and Configuring Utility Software

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Select and collect utility software according to the user requirement.
2. Install utility software
3. Configure utility software as per requirement
4. Install Functionality of utility software is checked.

Utility software

Utility software refers to a category of computer programs designed to perform specific tasks that are essential for maintaining, optimizing, and managing computer systems and networks. Unlike application software, which focuses on fulfilling user needs and tasks, utility software operates in the background to ensure the smooth functioning and efficiency of the computing environment. Utility software serves various purposes, including system maintenance, data management, security, and performance optimization.

Common types of utility software and their functions:

Antivirus Software: Antivirus software protects computer systems from malicious software such as viruses, worms, Trojans, and spyware. It scans files, emails, and web traffic for known malware signatures and behavior patterns to detect and remove threats.

Disk Cleanup and Optimization Tools: These utilities help users reclaim disk space by removing unnecessary files, temporary data, and redundant system files. They can also defragment hard drives to optimize file storage and improve system performance.

Backup and Recovery Software: Backup utilities enable users to create copies of important files, folders, and system configurations to protect against data loss due to hardware failures, accidental deletion, or other disasters. Recovery tools help restore backed-up data in case of emergencies.

System Monitoring and Diagnostic Tools: These utilities monitor system performance, resource usage, and hardware health metrics in real-time. They provide insights into CPU, memory, disk, and network utilization, helping users identify and troubleshoot performance issues or hardware failures.

File Compression and Archiving Tools: These utilities compress files and folders to reduce storage space and facilitate file transfer. They also create compressed archives or zip files to organize and backup multiple files into a single container.

Password Management Software: Password managers securely store and manage user passwords, login credentials, and other sensitive information. They generate strong, unique passwords and automate the login process for websites and applications.

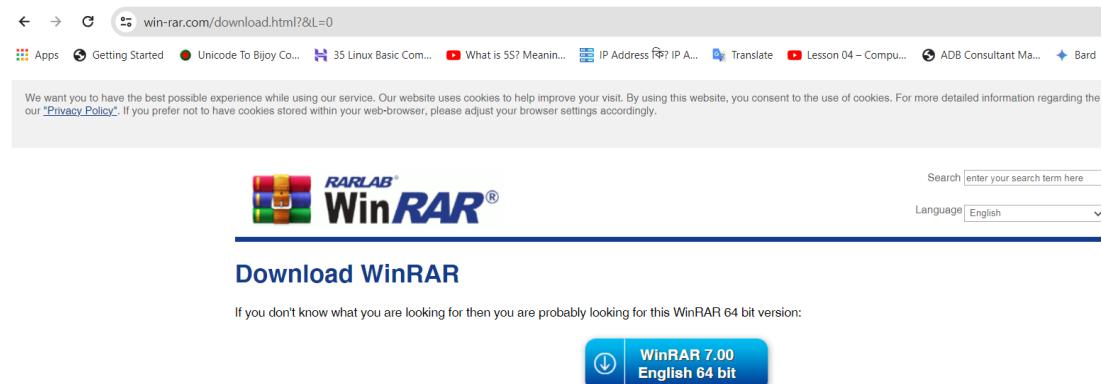
Uninstallers and System Cleaners: These utilities help users remove unwanted or unused programs and files from their systems. They also clean up registry entries, temporary files, and leftover data from uninstalled applications to free up disk space and optimize system performance.

WinRAR

WinRAR is a popular file archiver and compression utility for Windows operating systems. Developed by RARLAB, WinRAR is used to create, manage, and extract compressed files in various formats, including RAR, ZIP, 7-Zip, TAR, and more. It offers a wide range of features and functionalities designed to simplify file compression, extraction, and management tasks.

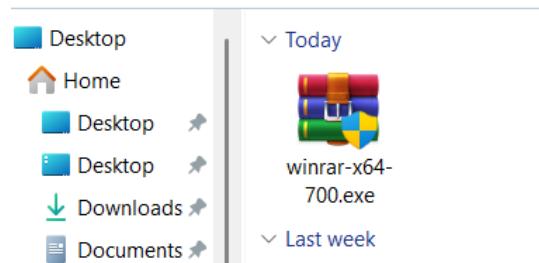
Installing WinRAR

Step 1: Download WinRAR software from the internet

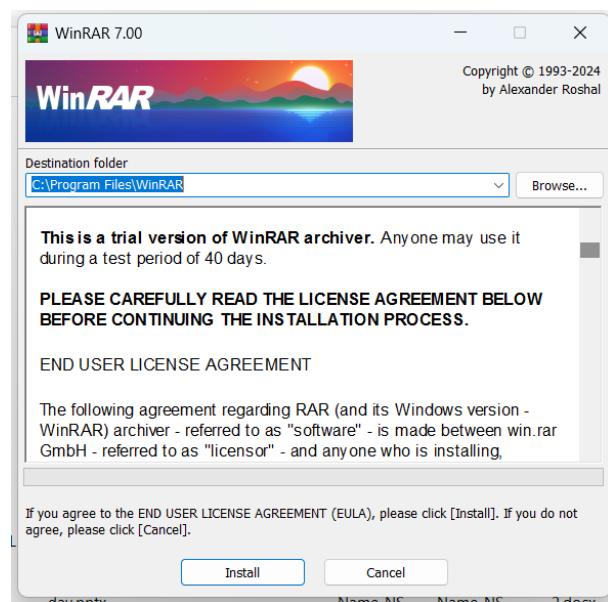


The screenshot shows the official WinRAR download page. At the top, there is a navigation bar with links to 'Getting Started', 'Unicode To Bijoy Co...', '35 Linux Basic Com...', 'What is 55? Meanin...', 'IP Address', 'Translate', 'Lesson 04 – Compu...', 'ADB Consultant Ma...', and 'Bard'. Below the navigation bar, a message encourages users to have the best possible experience by accepting cookies. The main content area features the WinRAR logo and a search bar. A large blue button labeled 'Download WinRAR' is prominently displayed. Below it, a sub-section for 'WinRAR 7.00 English 64 bit' is shown, featuring a download icon and the text 'If you don't know what you are looking for then you are probably looking for this WinRAR 64 bit version:'. A blue button labeled 'WinRAR 7.00 English 64 bit' with a download icon is also present.

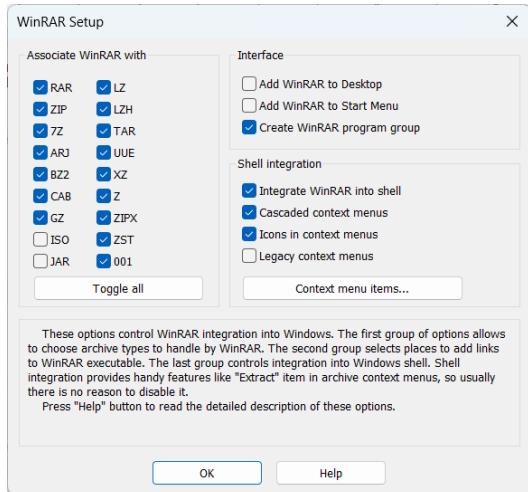
Step 2: Double click on the exe file to install.



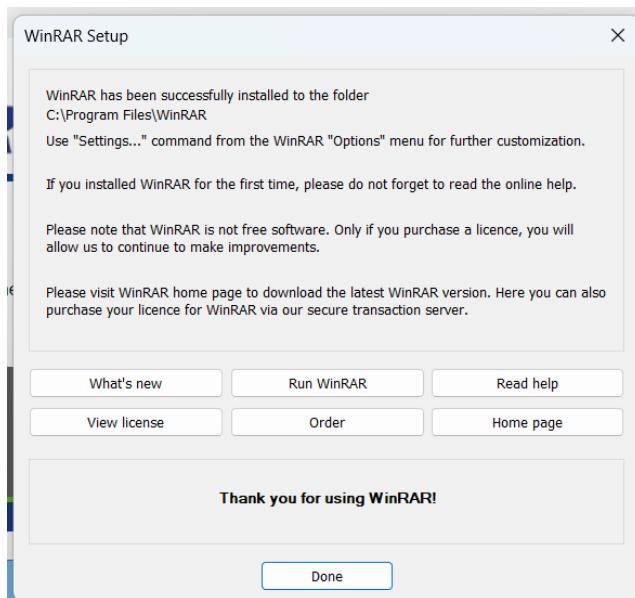
Step 3: Click on install option:



Step 4: Click on ok option:



Step 5: Click on done option:



Self-Check Sheet 3: Install and Configure Utility Software

1. Why is it important to select utility software based on user requirements?

2. How can user requirements for utility software be determined?

3. What are the typical steps involved in installing utility software?

4. Why is it important to configure utility software after installation?

5. What are examples of configuration options in utility software?

6. Why is it important to check the functionality of installed utility software?

7. What are some ways to test the functionality of installed utility software?

Answer Key 3: Install and Configure Utility Software

1. Why is it important to select utility software based on user requirements?
Answer: To ensure that the utility software meets the specific needs and preferences of the users, enhancing efficiency and system performance.
2. How can user requirements for utility software be determined?
Answer: Through assessments of system maintenance, security needs, and analysis of workflow processes.
3. What are the typical steps involved in installing utility software?
Answer: Downloading or obtaining the installation package, running the installer, following on-screen instructions, and completing the installation process.
4. Why is it important to configure utility software after installation?
Answer: To customize the software settings and preferences according to system requirements and workflow needs.
5. What are examples of configuration options in utility software?
Answer: Setting scan schedules, adjusting security levels, configuring backup settings, and defining optimization preferences.
6. Why is it important to check the functionality of installed utility software?
Answer: To ensure that the utility software is working correctly and meeting system maintenance and security needs.
7. What are some ways to test the functionality of installed utility software?
Answer: Running system scans, performing backups, optimizing system performance, and verifying security measures.

Task Sheet 3.1: Install and Configuring Utility Software

| Title: Install and configure utility software |
|--|
| <p>Performance Objective: By the end of this task, the trainee should be able to select, install, configure, and check the functionality of utility software according to user requirements.</p> <ol style="list-style-type: none">1. Gather user requirements through assessments of system maintenance and security needs.2. Select suitable utility software based on compatibility, features, and user feedback.3. Collect installation files or obtain access to download utility software packages.4. Locate the installation files or download the utility software package from a trusted source.5. Run the installer executable and follow on-screen instructions to begin the installation process.6. Select installation options as needed (e.g., installation directory, additional components).7. Complete the installation process and ensure successful installation without errors.8. Launch the installed utility software.9. Access the settings or preferences menu within the software.10. Customize settings such as scan schedules, security levels, backup settings, and optimization preferences.11. Save configuration changes and ensure they are applied correctly.12. Open the installed utility software.13. Test basic functionalities such as running system scans, performing backups, and optimizing system performance.14. Verify that security measures are in place and functioning as intended. |

Learning Outcome 4: Install and Configure Security Software

Assessment Criteria:

1. Required Security software is identified and selected
2. Security software are stored in local drive
3. Security software are installed
4. Security software is configured as per requirement
5. Functionality of installed security software is checked

Content:

1. Security software
2. Installation procedure of Security software
3. Configuring Security software
4. Functionality of security software

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 4: Install and Configure Security Software

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

| Learning Steps | Resources specific instructions |
|--|---|
| 1. Student will ask the instructor about Installing and configuring security software. | 1. Instructor will provide the learning materials “ Installing and Configuring Application and Utility Software ” |
| 2. Read the Information sheet/s | 2. Information Sheet No: 4 Install and configure security software |
| 3. Complete the Self Checks & Check answer sheets. | 3. Self-Check/s Self-Check No: 4 Install and configure security software Answer key No. 4 Install and configure security software |
| 4. Read the Job Sheet and Specification Sheet and perform job | Job- Sheet No: 4 Install and configure security software Specification Sheet: 4 Install and configure security software |

Information Sheet 4: Install and Configure Security Software

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Identify and select required Security software
2. Store Security software in local drive
3. Install Security software
4. Configure Security software as per requirement
5. Check Functionality of installed security software

Security software

Security software refers to a category of programs designed to protect computer systems, networks, and data from various security threats and vulnerabilities. These threats can include viruses, malware, spyware, ransomware, phishing attacks, and other malicious activities that can compromise the confidentiality, integrity, and availability of information.

Functions of security software include:

Virus and Malware Protection: Security software includes antivirus and antimalware capabilities to detect, prevent, and remove malicious software from computer systems. This includes viruses, worms, Trojans, spyware, adware, and other types of malware.

Firewall Protection: Firewalls monitor and control incoming and outgoing network traffic based on predetermined security rules. They act as a barrier between a trusted internal network and untrusted external networks, helping to prevent unauthorized access and malicious activities.

Intrusion Detection and Prevention: Intrusion detection systems (IDS) and intrusion prevention systems (IPS) monitor network traffic for suspicious activities or known attack patterns. They can alert administrators to potential security breaches and take proactive measures to block or mitigate threats.

Email and Web Security: Security software includes features to protect against email-based threats such as spam, phishing, and malicious attachments. It also provides web filtering and content scanning to block access to malicious websites and prevent malware downloads.

Endpoint Security: Security software for endpoints such as desktops, laptops, smartphones, and tablets helps protect against threats targeting individual devices. This includes antivirus, firewall, encryption, and device management features to secure endpoints against various attack vectors.

Antivirus installation procedure:

1. Click on the "Download Centre" button in the email you received or the one corresponding to the product.



Hola
Hemos terminado de procesar tu pedido.
Pedido #

| Producto | Cantidad | Precio |
|----------------------------------|----------|--------|
| Windows 10 Pro - Retail, Digital | 1 | |

Tu(s) Licencia(s)

| |
|----------------------------------|
| Windows 10 Pro - Retail, Digital |
| Aqui se encuentra tu clave |

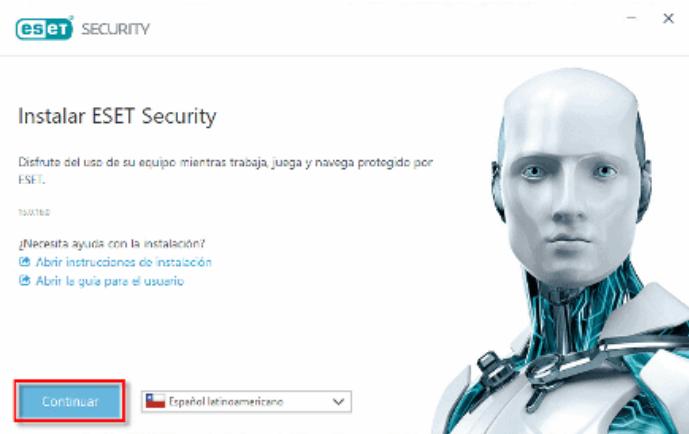
Descargas

| Producto | Caduca | Descargar |
|----------------------------------|--------|-------------------------------------|
| Windows 10 Pro - Retail, Digital | Nunca | 32-bit (ES) |
| Windows 10 Pro - Retail, Digital | Nunca | 64-bit (ES) |
| Windows 10 Pro - Retail, Digital | Nunca | Guía de Instalación |

Dirección de facturación

2. You may be redirected to the manufacturer's website and asked to log in or create a new account.
3. Follow the instructions in the registration process and enter the product key you purchased from us when prompted.

1. Uninstall any antivirus software previously installed on your device before proceeding with the installation of ESET.
2. Download the ESET NOD32 Antivirus installation file and double-click it to start the installation after the download is complete.
3. On the "Install ESET Security" screen, you must click "Next".



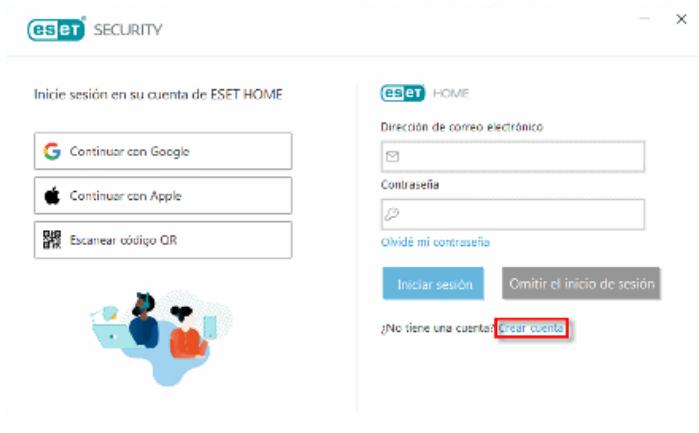
4. Click "I accept" in the End User License Agreement.

5. When the "Setup Wizard" appears, click "Create account" to create a new ESET HOME account (but this is not required). This allows you to manage multiple features associated with your home products from one place.

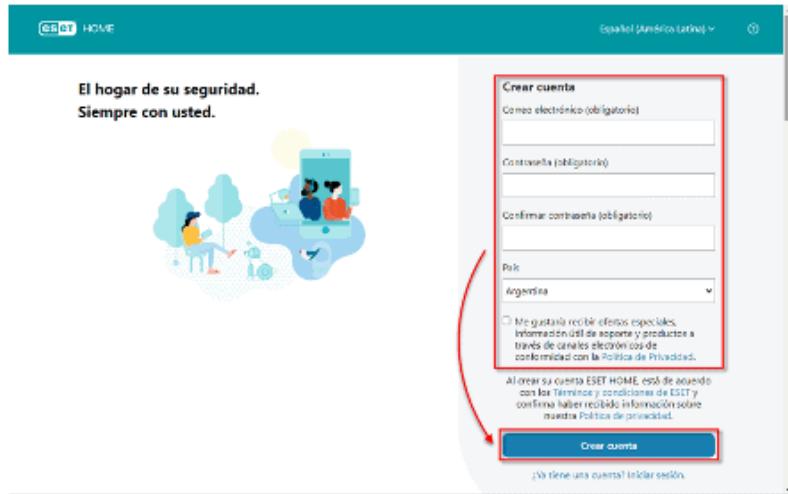


To Create an ESET HOME account

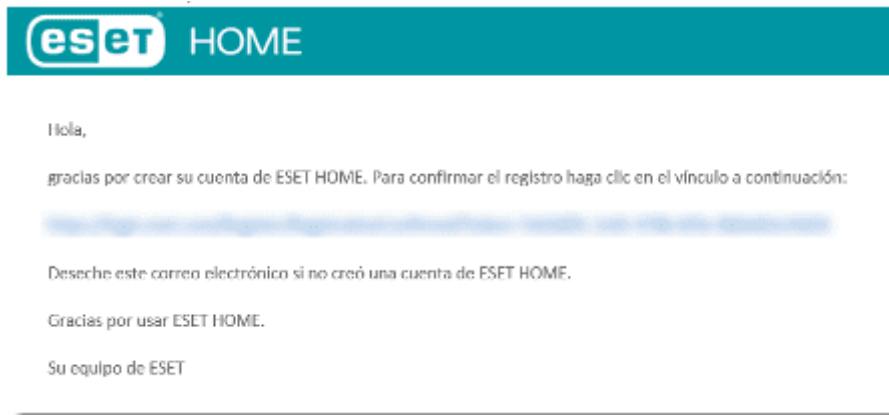
1. Complete the installation steps from here.



2. Enter an email address and password that you will use to access your ESET HOME account. Select a country and then click "Create account".

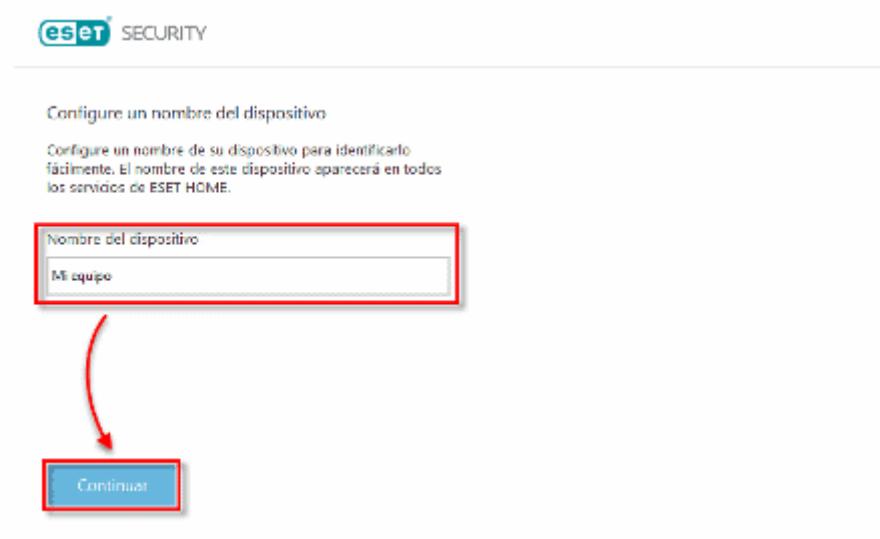


3. You will receive an email for "account verification" in the field linked to your ESET HOME account and click on the verification link.

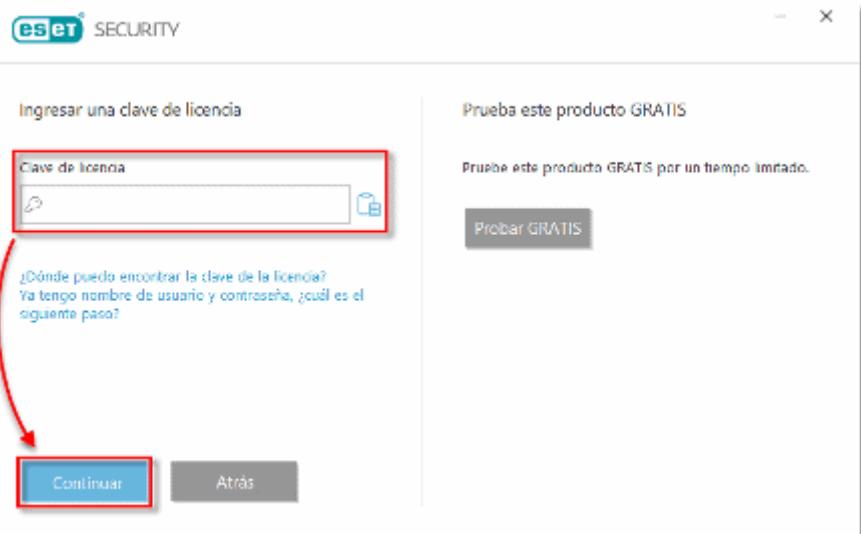


Enter product key

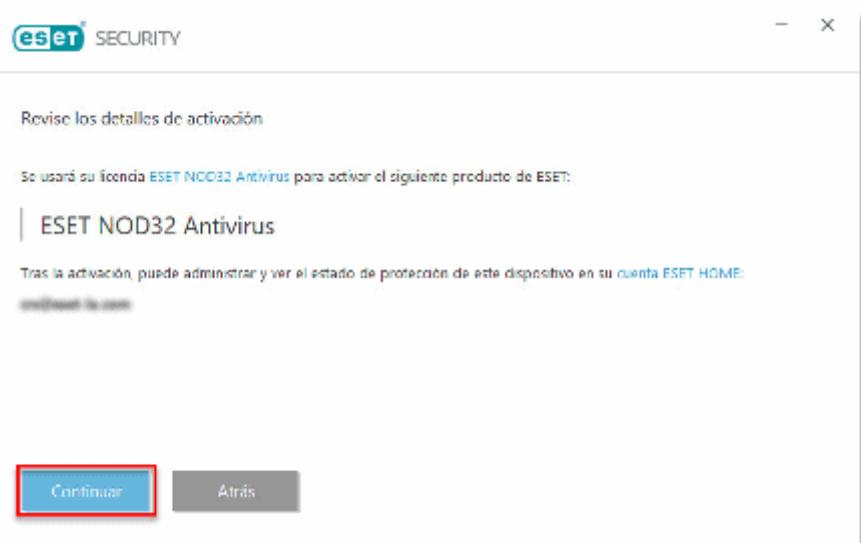
1. Go back to the "Installation Wizard". Next to "Device name" you must enter a name to be associated with your device and click on "Next".



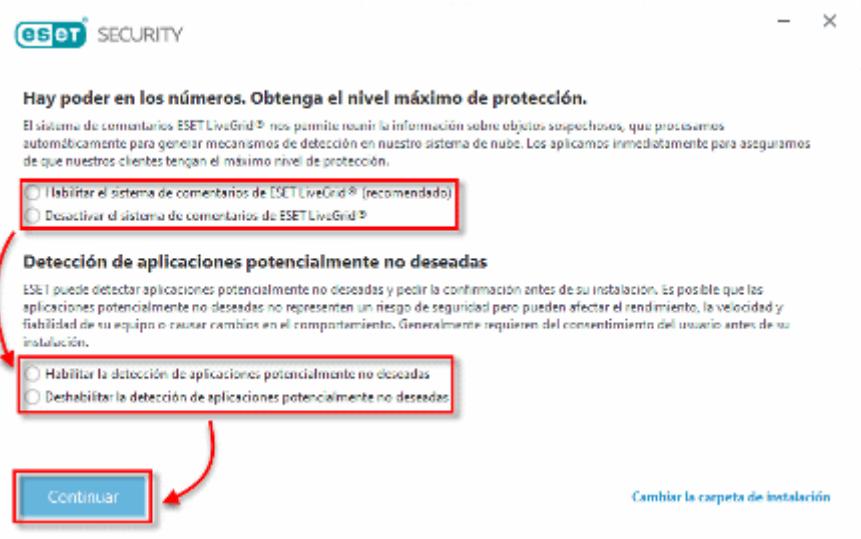
2. Enter the licence key and click on "Next". If you purchased from Licendi, enter the product key that you purchased from us and that you should have in digital form in your messages.



3. Click on "Next". You can select another product during or after the installation.



4. Tick the boxes you prefer for ESET Live Grid and potentially unwanted app detection and click Next.



5. Select your preferences for the Customer Experience Improvement Programme (CEIP) and click "Next". You can change these settings after installation if you wish.

Participar en el Programa de mejora de la experiencia del cliente

Nos gustaría recopilar información anónima acerca de cómo se utiliza este producto. Los datos recopilados nos ayudarán a mejorar su experiencia y nunca se compartirán con terceros. [¿Qué información recopilamos?](#)

Sí, deseo participar en el programa (recomendado)
 No, no deseo participar en el programa

Continuar

Atrás

[Cambiar la carpeta de instalación](#)

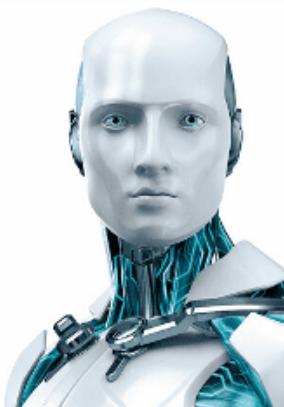
6. Click on "Done" and exit the installation wizard.

Instalación correcta

ESET NOD32 Antivirus se instaló correctamente en el equipo. Se verificará continuamente que el equipo no contenga virus ni malware.

Haga clic en **Listo** para completar la configuración del producto e iniciar el proceso de activación.

Obtenga información sobre la seguridad: [Base de conocimiento de ESET](#)
Comáctese con ESET: [Facebook](#) [Twitter](#) [Youtube](#)

Listo

Self-Check Sheet 4: Install and Configure Security Software

1. Why is it important to identify and select the required security software?
2. How can you determine the required security software?
3. Why store security software in a local drive?
4. What precautions should be taken when storing security software locally?
5. What is the purpose of installing security software?

Answer Key 4: Install and Configure Security Software

1. Why is it important to identify and select the required security software?
Answer: To ensure that the chosen software meets specific security needs and effectively protects against potential threats.
2. How can you determine the required security software?
Answer: By conducting a risk assessment, analyzing security requirements, and considering factors such as threat landscape, system architecture, and compliance regulations.
3. Why store security software in a local drive?
Answer: Storing security software locally ensures quick and convenient access for installation and future updates.
4. What precautions should be taken when storing security software locally?
Answer: Store the software in a secure location, regularly update it to the latest version, and maintain backups to prevent loss of data.
5. What is the purpose of installing security software?
Answer: To provide protection against various security threats, such as malware, viruses, and unauthorized access.

Task Sheet 4.1: Install and Configure Security Software

| |
|---|
| Title: Install and configure security software |
| Performance Objective: By the end of this task, the trainee should be able to identify, select, store, install, configure, and check the functionality of security software according to specific security requirements. |
| 1. Conduct a risk assessment to identify potential security threats and vulnerabilities. |
| 2. Identify available security software options, considering factors such as features, effectiveness, compatibility, and cost. |
| 3. Select the most suitable security software solutions based on the assessment and requirements |
| 4. Download the installation files for the selected security software from trusted sources. |
| 5. Store the downloaded files in a designated folder or directory on the local drive. |
| 6. Ensure that the storage location is secure, backed up, and accessible to authorized personnel only. |
| 7. Locate the installation files stored in the local drive. |
| 8. Run the installer executable and follow on-screen instructions to initiate the installation process. |
| 9. Customize installation options as necessary, such as installation directory and additional components. |
| 10. Complete the installation process and verify successful installation without errors. |
| 11. Perform system scans to detect and remove any existing security threats. |
| 12. Review security logs and reports for any indications of security incidents or anomalies. |

Review of Competency

Below is yourself assessment rating for module “**Installing and Configuring Application and Utility Software**”

| SL no | Assessment of performance Criteria | Yes | No |
|-------|---|-----|----|
| 1. | Occupational Safety and Health (OSH) procedures are followed | | |
| 2. | User requirements are documented | | |
| 3. | Application software and utility software are collected as per user requirement. | | |
| 4. | Necessary backup is taken if required | | |
| 5. | Application software are selected and collected according to the user requirement | | |
| 6. | Application software are installed | | |
| 7. | Application software is configured as per requirement | | |
| 8. | Software license is activated if required | | |
| 9. | Functionality of installed application software is checked | | |
| 10. | Utility software are selected and collected according to the user requirement. | | |
| 11. | Utility software are installed | | |
| 12. | Utility software is configured as per requirement | | |
| 13. | Functionality of installed utility software is checked | | |
| 14. | Required Security software is identified and selected | | |
| 15. | Security software are stored in local drive | | |
| 16. | Security software are installed | | |
| 17. | Security software is configured as per requirement | | |
| 18. | Functionality of installed security software is checked | | |

I now feel ready to undertake my formal competency assessment.

Signed:

Date:

Development of CBLM

The Competency based Learning Material (CBLM) of ‘**Installing and Configuring Application and Utility Software**’ (**Occupation: IT Support Service, Level-3**) for National Skills Certificate is developed by NSDA with the assistance of SIMEC System Ltd., ECF Consultancy & SIMEC Institute of Technology JV (Joint Venture Firm) in the month of June, 2024 under the contract number of package SD-9B dated 15th January 2024.

| SL No. | Name & Address | Designation | Contact Number |
|---------------|---------------------------|--------------------|-----------------------|
| 1 | Md. Abdul Hye Siddiqui | Writer | 01819-725610 |
| 2 | Engr. Md. Zuwel Parves | Editor | 01737-278906 |
| 3 | Engr. Md. Zuwel Parves | Co-Ordinator | 01737-278906 |
| 4 | Md. Saif Uddin | Reviewer | 01723-004419 |

REFERENCE:

1. <https://licendi.com/en/blog/how-to-install-eset-antivirus-installation-guide-for-windows/>
2. <https://chat.openai.com/>