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1. Comodo BackUp - Introduction

Comodo BackUp is a powerful and easy to use desktop application that helps home and business users protect their valuable data against damage or loss.

The application's streamlined design and task orientated architecture means even novice users can learn how to create, run and restore their first backup job in a matter of minutes. Other features include full scheduling, password protection, a backup integrity checker and a range of preset backup jobs that allow you to quickly create copies of important data sets such as the Windows Registry, mail accounts and user settings.

Comodo BackUp is also seamlessly integrated to Windows Explorer so that you can just select the folders or files you want to back up, right click on them and quick start the Back Up wizard.

Features and Benefits:

- **Quick backup** of entire drives or individual files or folders to your local computer, network drive, FTP server or Comodo's online server.
- **Step by step wizards** to guide even novice users through the entire backup, restore and scheduling procedures.
- **Flexible storage options** allow you to specify full, incremental or differential backups.
- **Protection** of invaluable personal and business data from loss or corruption.
- **Quick recovery** of files with a few clicks of the mouse.
- **Granular scheduling options** to take automatic backups at a time that suits you.
- **Real-time backups** synchronization feature to get your files copied over as soon as you save them.
- **Built in checker** to confirm the integrity of your backup files before committing to a restore.
- **Backup presets** including mail folders, windows registry, messenger archives and master boot records.
- **Powerful encryption options** to protect your files so that it cannot be accessed by anyone but you.
• De-duplication feature ensures more efficient utilization of storage space.
• **Comodo Cloud** - online file storage service. Backup your files to a highly secure online storage which can also be mounted as a virtual drive in your system.
• **Command line and scripting support** to automate the online backup and restore operations.

**Comodo Cloud**

Comodo Cloud is our highly secure online file storage service and provides fast and easy access to your important files from anywhere in the world. All files you store online can be browsed through the Comodo Backup interface or by logging in at [https://ccloud.com](https://ccloud.com). In fact, there’s many ways to access your online files:

• **Through the web interface** - Open a browser and log into your account at https://ccloud.com to access your files from wherever you are in the world. For detailed explanation on using CCloud web interface, refer to our guide at [http://help.comodo.com/topic-154-1-509-5871-Using-the-CCloud-Web-Interface-.html](http://help.comodo.com/topic-154-1-509-5871-Using-the-CCloud-Web-Interface-.html)

• **Through the Comodo Backup application** - Comodo Backup has a built in file explorer that allows you to easily manage your online files. Please refer to Managing files on Online Storage for detailed explanations. You can directly choose to store your backup files created through the application, in your online storage space.

• **Through the CCloud client** - The CCloud client is a small application designed to simplify and improve the way you interact with your online files. The client:
  
  • Allows you to mount your online storage space (Comodo Cloud) as a virtual drive and to access it like a normal physical drive, i.e., you can backup/restore files to/from your online storage space through Windows Explorer.
  
  • Displays a drop-zone whenever you drag a file/folder to easily drop them into your online storage space, the drop-zone also accepts text snippets, web links and bookmarks.
  
  • Stores your print screen images automatically as date/time stamped jpeg images in your online storage space.
  
  • Enables automatic synchronization of backed-up files and folders between your system and the online storage - meaning any change you make in the file or folder in your system will be immediately reflected in its backup in the online storage space.
  
  • Provides quick links for you to upgrade your account to get additional online storage space. For more details on using the Comodo Cloud client, refer to the online user guide at [http://help.comodo.com/topic-154-1-456-5010-Comodo-Cloud---Introduction.html](http://help.comodo.com/topic-154-1-456-5010-Comodo-Cloud---Introduction.html)

• **Through the CCloud Drive** - You can mount your online storage space as a virtual drive in your computer using the CCloud Drive program. The virtual drive enables you to access the folders and files from your online storage space as you would with any local drive or partition. For detailed explanation, refer to the dedicated CCloud Drive guide at [http://help.comodo.com/topic-154-1-512-5893-Introduction-to-Comodo-Cloud-Drive.html](http://help.comodo.com/topic-154-1-512-5893-Introduction-to-Comodo-Cloud-Drive.html)

• **Through the CCloud Android app** - The CCloud app allows you to access your files from any Android phone or tablet. For detailed explanation on using CCloud app refer to our guide at [http://help.comodo.com/topic-154-1-453-4850-Comodo-Cloud-for-Android---Introduction.html](http://help.comodo.com/topic-154-1-453-4850-Comodo-Cloud-for-Android---Introduction.html)

**Guide Structure**

This guide is intended to take the user through the installation, configuration and use of Comodo BackUp.

• **Comodo BackUp - Introduction** - An overview of the application.
  
  • **System Requirements** - Minimum required Hardware and Software for the installation
  
  • **Installing Comodo BackUp** - A brief outline of the installation procedure
  
  • **Starting Comodo BackUp** - How to start the application
  
  • **The Main Interface** - Description of Menus and Options in the main interface.
  
  • **Backup** - Guidance on creating Backups
    
    • **Step 1 - Selecting the Backup Source**
    
    • **Step 2 - Selecting a Destination to Backup**
    
    • **Step 3 - Backup Settings**
  
  • **Shortcuts** - Describes how to backup different kinds types of files/folders
• Predefined Profiles
  • Backup all Files/Folders in a Predefined Profile
  • Backup Selected Items from a Predefined Profile

• Other Profiles
  • Online Storage
  • Synchronize Data
  • Browser Data Backup
  • Backup Mail
  • Last Backup

• Custom Profiles
  • Restore Your Files and Settings - Detailed help on every stage of restoring your files and settings from the backup files.
    • The Restore Process
      • Step 1 - Choose Source
      • Step 2 - Restore Destination
      • Step 3 - Restore Options
  • Restoring Self Extracting Backups
  • Managing Your Backups - Description and guidance on usage of the history details maintained by Comodo BackUp, editing pre-configured backup schedules and mounting backups as virtual drives
    • Events Area
    • Mounting Backups as Virtual Drives/ Partitions
  • Configuring Your Comodo Cloud (online storage) Account - Details on creating and viewing your online account in Comodo Server
    • Creating a New Comodo Cloud (online storage) Account
    • Logging-in to Your Account
    • Quick Start - Schedule Regular Backups to Comodo Cloud
    • Managing Files on Comodo Cloud
    • Managing Your Account
  • Troubleshooting Login Problems
  • Comodo BackUp Settings - Details on configuration of overall behavior of the application.
  • Comodo BackUp Feedback - The feedback feature allows users bi-directional communication with the Comodo BackUp development community.

• Using Live Help - Guidance on configuration and usage of GeekBuddy.
  • Installing GeekBuddy Client
  • Activation of Service
  • Launching the Client and Using the Service
  • Accepting Remote Desktop Request
  • Chat History
  • Starting and Using AntiError
  • Uninstalling Comodo GeekBuddy

• Using the Command Line Interface and Script Files - Details on Using the Command Line Interface and Script Files used by backup, restore and scheduling functionality from the Windows command line interface.

• Uninstalling Comodo Backup - A brief outline on uninstalling the application.

• Getting Support - Guidance on how to get technical support for Comodo BackUp.

• Appendix 1 - Encryption Algorithms - Details on Encryption Algorithms used by Comodo BackUp for encrypting and storing your backup files.

• Appendix 2 - Comodo Backup Error Codes - Brief description of error codes
1.1. System Requirements

To ensure optimal performance of Comodo BackUp, please ensure that your PC complies with the minimum system requirements:

**Supported Operating Systems**

- Windows 7 (32bit and 64bit)
- Windows Vista (Home/Business/Ultimate) (32bit and 64bit)
- Windows XP SP2 (Home/Professional) (32bit and 64bit)
- Windows 2003 Server (32bit and 64bit)
- Windows 2008 Server (32bit and 64bit)

**Minimum Hardware**

- Intel Pentium III Processor or higher
- 256 MB RAM
- 23 MB Disk Space

1.2. Installing Comodo BackUp

Before you install Comodo BackUp, read the installation instructions carefully and also review the system requirements listed in this chapter. Quit all other Windows programs before installing Comodo BackUp as other active programs may interfere with the installation.

After downloading the Comodo BackUp setup file to your local hard drive, double click on Setup.exe to start the installation wizard.

**Step 1 - Choosing the Interface Language**

The setup program starts automatically and the 'Choose installer language' dialog is displayed. Comodo BackUp is available in several languages. Select the language in which you want Comodo BackUp to be installed from the drop-down menu and click 'Continue'.
Step 2 - End User License Agreement

Complete the initialization phase by reading and accepting the End User License Agreement (EULA).

Click 'I Agree' to continue installation. If you want to cancel the installation, click 'Cancel'.

Step 3 – Selecting Components and Installation Folder

The next screen allows you to select:

- Whether you wish to install Comodo Cloud (CCloud) client;
- The folder in your hard drive for installing Comodo BackUp.
If you want to install CCloud client, leave the checkbox 'Install Comodo Cloud' selected. The installer will download the CCloud client setup file and install it along with CBU. If you do not wish to install CCloud client at this moment, unselect the check box. To learn more on Comodo Cloud, visit https://www.ccloud.com/. For more details on using CCloud client, refer to the online user guide at http://help.comodo.com/topic-154-1-456-5010-Comodo-Cloud---Introduction.html

By default CBU (and CCloud client if selected) is/are installed at C:\Program Files\Comodo\Comodo BackUp. If you want to install the application in a location other than the default, click 'Browse' to choose a different location.

Click the 'Back' button to review / change any of settings you specified before or press 'Install' to continue with installation process.

Step 4 - Setup Progress

A setup status dialog box is displayed. You can see a progress bar indicating that the files are being installed.
Installing
Please wait while COMODO BackUp and COMODO Cloud are being installed.

This may take several minutes

On completion of CBU setup, CCloud client will be downloaded and installed.
Installing
Please wait while COMODO BackUp and COMODO Cloud are being installed.

Downloading cCloud and installing... This may take several minutes

**Note**: You should be connected to Internet for downloading CCloud client setup.

**Step 5 – Installation Complete**

On completion, the 'Installation Complete' screen will be displayed.
• Click 'Finish'.

In order to finalize the installation, your system has to be restarted.

Please save any unsaved data, and click Yes to restart the system immediately. If you want to restart the system at a later click 'No'.

**Note:** The installation will take effect only after restarting the computer.

After restarting the system you can start the Comodo Backup application by any of the methods explained in the section Starting Comodo Backup.
1.3. Starting Comodo BackUp

You can access Comodo BackUp through the Windows Start Menu, through the desktop shortcut or through the system tray icon.

1. Start Menu

After downloading and installing Comodo BackUp, the setup procedure creates an entry in the 'Programs' section of Windows Start Menu. You can start Comodo BackUp by hitting the 'Start' button and navigating to: Start > All Programs > Comodo > Comodo BackUp > Comodo BackUp.

![Start Menu Image]

2. Desktop Shortcut

You can also start Comodo BackUp by double-clicking on the desktop shortcut created during installation.

![Desktop Shortcut Image]

**Note:** In order to create backups for items like Disk, Partition and registry files that require administrative privileges, Comodo Backup has to be run under administrative privileges. You can use 'Run as...' option to run it with administrative privileges. For more details refer to Limited Access Privileges.

To run Comodo BackUp under an administrator's account

- Right click on the Comodo BackUp Desktop icon
- Select the 'Run as...' option
• In the ‘Run as’ dialog that appears, select ‘Administrator’ from User Name drop-down menu.

• Enter the Administrator Password in the ‘Password’ text box and click ‘OK’.

**Limited Access Privileges**

Comodo BackUp can be run by users with limited account privileges but has certain restrictions for what he/she can do because of limited access. The details of what the user can do and cannot do are given below:

**What the user can do**

• Backup his/her documents, media, user folder and other files that he/she has access to
• Backup his/her mail clients and IM conversations
• Backup registry keys that he/she has access to
• Backup his/her browser data
• Restore files and directories, email clients and IM conversations that are not used by other applications
• Schedule backups
• Synchronize backups
• Mount Comodo Cloud as virtual drive

**What the user cannot do**

• Backup disks and partitions
• Store the backup files in some folders on system drives due to limited access
• Mount backup as virtual drives
• Restore backup files that need restart

1.4. The Main Interface

Comodo BackUp's streamlined interface provides fingertip access and control over all functional areas of the software. The tab structure allows you to quickly initiate a new backup or restore task, specify new schedules and configure overall settings such as password protection. The left-hand pane contains shortcut buttons for common tasks whilst the progress bar makes it easy for new users to track their progress through the backup or restoration processes.

**1. The Summary Area**

The Summary area displays a snapshot of your computer's most recent backup and restore activity. It also contains links to wizards that take you through common tasks such as backup creation. Comodo Cloud account holders can sign in from the summary screen.

The Summary Area is displayed by default whenever the application is started and can be accessed by clicking the ‘Home’ link on the left navigation.

• `<User name>`’s Computer - Clicking the System Backup button will immediately begin an incremental backup of the current state of your entire computer system. This means sector-by-sector backup of your system drive to default location you set in settings. This is useful should your system become unusable or refuse to start and allows you to
quickly implement your previous settings. Selecting this option backups all your data on the system drive.

This section describes your status of your computers and you can see a recommendation regarding your status.

- **Backup** - This section displays an at-a-glance summary of the last backup operation and next scheduled backup job. Clicking the 'Backup Now' button opens the interface for creating a new backup job. Read more here [Creating a New Backup Job](#).

- **Restore** - The 'Restore' section displays an at-a-glance summary of the last restore operation and the last backed-up item. Clicking 'Restore' button starts the process of restoring the latest backup file.

- **Online Storage** - This section displays an at-a-glance summary of your Comodo Cloud account status. You can also register a new account by clicking the [Register Free Account Now](#) link and log-in to your account by clicking [Sign In](#) link. Refer to the section [Configuring Your Comodo Cloud Account](#) for more details.

2. **The Left Hand Side Navigation Pane**

   The Left Hand Side Navigation pane has five tabs:

   - **Home** - Opens the Summary area to provide at-a-glance view of the backup status, last backup operation and schedule information, last restore operation and restored items and your account status of Comodo Cloud.

   - **Backup** - Opens the interface for the backup creation and execution wizard

   - **Shortcuts** - Allows you to select from a range of pre-defined backup profiles.

   - **Restore** - Opens the interface for the restoration wizard

   - **Manage** - Opens the interface for managing stored backups, managing schedules, viewing history of events, and accessing backups mounted as virtual drives.

   - **Online Storage** - Opens the Comodo Cloud interface for signing in to the existing account and for creating a new Comodo Cloud account.

3. **The Tab Structure**

   Depending on the operation selected from the left hand side navigation pane, the tab structure area displays additional tabs for accessing different functionality of the selected operation.

4. **The Title Bar Controls**

   The title bar contains controls for:

   - **Settings** - Opens the interface for performing miscellaneous configuration settings for Comodo BackUp.

   - **Help** - Opens the About dialog of Comodo BackUp as well links to online help guide and live support from GeekBuddy. The About dialog contains the version number, copyright information, links for checking any newer version of CBU and Comodo Backup website.

   ![Help Online](#)

   **Help Online** - Opens the online help guide of Comodo BackUp. The Comodo BackUp help guide contains detailed explanations of the functionality and usage of the application. The Support page near the end of this guide explains other resources and options that are open to users who require further assistance.
Get Help from a GeekBuddy - Launches the GeekBuddy Support client and connects for remote assistance service offered by Security Experts in Comodo who can access your computer through their Remote Desktop. Refer to the chapter Using Live Help for more details.

- Feedback - Allow users to post their views, comments and suggestions about Comodo products. Submit support request posted to forums.comodo.com

5. The Version and Update Information
The bottom pane provides a summary of backup information and update information.

- Version Info - Indicates the version of Comodo BackUp currently installed in your system.
- Update Info - Indicates whether the version you have installed is the latest one or it needs to be updated.
- Share with friends - Click this link and share your experience about CBU with your friends or log into your Facebook account to see which friends are using Comodo.

6. Comodo News Updates
The Comodo News Updates area contains links to view the updated RSS News feeds as well as you can access Facebook, Twitter and Videos from Comodo.

2. Backup
In order to create copies of your data you have to create one or more backup jobs as backup profiles. During the creation of a backup job you can choose which type of data you wish to backup (source), how to backup (backup settings), where you want your backed up files to be stored (destination) and when to backup (schedule the job).

Comodo Backup is capable of backing up files using a variety of methods – for example, simple copy, ZIP file, ISO file or CBU file. However, the application can only restore files from .cbu format or simple copy format. Please bear this in mind whenever the application asks you to choose the format for the backup job. That is, if you intend restore a backup job using the Comodo Backup application, you should save only in .cbu format or simple copy format. You can, of course, still restore your files if you use one of the other formats but restoration will have to be completed manually, outside the CBU application.

The de-duplication feature eliminates the possibility of storing multiple backup copies of files with the same content but different filenames. Comodo Backup will only keep one backup copy of the file and link the duplicates to this original. Even if there is a change in the content in one of the files and when backed up, the size of backup copy will be still significantly less with the space used being the size of one file plus the size of changed content. This functionality is available for all storage destinations except backups to email and FTP.

Creating a custom backup job/profile allows you to choose the specific items, location and schedule of a backup job. Items you can choose to backup include the entire disk, a partition, individual folders/files, the entire registry or custom registry entries, mail accounts, Instant Messenger (IM) conversations, system state and more.

To access the Backup interface, click on the 'Backup' tab from the Left Hand Side Navigation pane.
Opens the New Backup interface for creating and executing a custom backup job/profile. The created backup job can be added as a custom profile and made to be listed in the Shortcuts area for instant access and execution.

Creating and executing a backup job can be done in two modes:

- **Fewer Options Mode** - Enables to backup your selected item with just a few mouse clicks. Suitable for beginners.
- **More Options Mode** - Enables to configure granular backup settings for your backup job such as incremental, differential and full backup. In this mode, various options of backup format is available such as zip file, ISO file, synchronize data etc. This mode is useful for advanced users.

To switch between these modes, click the link ‘More options’ or ‘Fewer options’ at the top right corner.

The backup process consists of three steps:

- **Step 1 – Selecting the Backup Source**
- **Step 2 – Selecting a Destination to Backup**
- **Step 3 – Configuring the Backup Settings**
2.1. Step 1 - Selecting the Backup Source

The first stage of the process is to choose which item you want to backup. Comodo BackUp allows you to backup entire drives; select multiple or individual files and folders; take complete or partial backups of the Windows registry and backup important system settings. The program also allows you to make copies of your emails, IM messages and personal Windows user settings. In some cases, after selecting the type (or 'Source') of backup you want from the left panel you need to make a further selection from the right panel.

There are two options available in Step 1: What to Backup.

- **Fewer Options Mode** - Enables to backup your selected item with just a few mouse clicks. Suitable for beginners.

- **More Options Mode** - Enables to configure granular backup settings for your backup job such as incremental, differential and full backup. In this mode, various options of backup format is available such as zip file, ISO file, synchronize data etc. This mode is useful for advanced users.

To switch between these modes, click the link ‘More options’ or ‘Fewer options’ at the top right corner.

2.1.1. Fewer Options Mode

In the ‘Fewer Options’ mode you can configure and execute your backup operation in three simple steps, and enables you to complete the backup operation quickly with just a few mouse clicks.

The three steps are:

- **Step 1**: Select the source of backup (Choose which kind of data you wish to backup)
- **Step 2**: Choose the destination of your backup
- **Step 3**: Configuring your backup settings

The progress bar on the top indicates the configuration progress with step numbers. Placing the mouse cursor on a step displays a tool tip with a brief description of the step.

To return to a previous step to review/redo the configuration made, just click the respective step number. You can also return to the previous step by clicking the ‘Back’ button.
Clicking Default Settings clears the selections made in the respective step and allows you to reconfigure the options in that step.

The 'Load script' button allows you to run backup jobs of files saved in .cbs format. This is useful if you want to back up jobs very often without scheduling. Refer to 'Export to script' to find out how to save files in .cbs format. Clicking the 'Load script' button will allow you to select the script that you wish to load. The process moves to Step 2 after you click 'Next'.

On completion of the backup job configuration, you need to finalize the backup operation by executing it instantly or schedule the job to be executed at a later time or at recurrent intervals.

2.1.1.1. Source Types
Details on each of the Backup sources can be found by clicking the links below.

- Files and Directories
- Disk, Partitions and Master Boot Record (MBR)
- Registry Files
- Registry Entries
- Email Accounts
- IM Conversations
- Browser Data

Files and Directories
This option allows you to manually browse your local or network file structure and select specific files or folders for backup. Selecting only the files and folders you require gives you the flexibility to create precise, custom jobs that encompass files scattered across multiple locations into a single, consolidated, backup routine. Handpicking files and folders in this manner may also help to save time and disk space (especially important to users with limited resources or if the application is to be used in a networked environment on multiple workstations).

To backup only selected folders or files

- Select the 'Files and Directories' radio button.

The right hand side pane displays a message that no items are available for backup. In More Options mode you have to select files / folders from tree view.
To add files or folders, click the 'Add file...' or 'Add folder...' buttons.

- Navigate and select the file(s) or the folder(s) you want to backup. Repeat the process to add more files or folders. The selected items will be displayed in the right side pane.
**Note:** Selecting a folder helps to backup all the sub-folders and the files in it.

If you want to delete the added files or folders, select the item(s) and click the 'Delete items' button.
• Click 'Next'.
Alternatively, you can also select a desired file / folder to be backed up, from the Windows Explorer window. Right click on the desired item and select 'CBU BackUp'.
The process moves to **Step 2**.

**Disk, Partition and Master Boot Record**

You can backup the contents of the entire hard disk drive or specific partition in your computer and/or the Master Boot Record (MBR) of that drive.

**Background Note**: Track0 is the area located at the start of your hard disk containing the first 63 sectors. It stores the information regarding the layout of the disk like the partition table. Also Track0 stores the licensing information for software because it is an area of the disk outside the OS file system and not seen or used by most computer users (and therefore cannot be easily modified or replicated).

The MBR is the very first sector on Track0 and contains the instructions necessary for a computer to start up. It is also known as the ‘Boot Sector’.
Backing up the Track0 and MBR (preferably to a separate physical drive or removable media) helps to recover a drive should the original Track0 and MBR become corrupted and the machine un-bootable.

**Important Note:** In order to create a backup for Disk Partitions and MBR, Comodo BackUp has to be run under administrative privileges. Refer to the note in the chapter Starting Comodo BackUp for more details.

To backup the whole Disk drive, drive partition(s) and / or the MBR

- Select the 'Disk, Partitions and MBR' radio button.

The right hand side pane displays the options for selecting the item to be backed up.

To backup the whole hard disk in your system, select the 'Disk0' checkbox. This includes the boot partition and all the other individual partitions.

To backup the Track0 and MBR, select the 'Track0 and MBR' checkbox.

To select the individual drive partitions, CD / DVD or the USB memory, select the checkbox of the respective partition drive letter.

Click 'Next'.

Alternatively, you can also select a desired drive partition to be backed up, from the Windows Explorer window, Right click on the desired drive and select 'CBU BackUp'
Comodo BackUp - User Guide

Background Note: The backup of the selected disk / partition is performed in sector-by-sector method and the resulting backup file is an image of the selected drive or partition.

The process moves to Step 2.

Registry Files
The Windows registry is a huge, constantly referenced, archive for collecting and storing configuration settings of Windows components and installed software and hardware. Whenever you perform a task such as installing or removing a program or modifying a file on your computer, Windows creates an entry in the Windows Registry to reflect this change. It is difficult to overestimate the importance of the registry to Windows users because the entire operating system is so heavily reliant upon it. One corrupted or deleted registry key could bring your system crashing to a standstill. It is therefore a highly recommended practice to take regular backups of your registry so that, in the event of catastrophe, you can quickly roll back your system to its last working state. For the same reason, it is also a good idea to backup your registry before you install new software or hardware drivers.

Important Note: In order to create a backup for the Registry files, Comodo BackUp has to be run under administrative privileges. Refer to the note in the chapter Starting Comodo BackUp for more details.

To backup entire Windows Registry Files

- Select the 'Registry Files' radio button.
• By default, all the Registry files are selected. If you want to backup the registry files selectively, uncheck the files which you do not need to back up.

The process moves to **Step 2**.

**Registry Entries**

Individual registry keys and / or 'hives' can be backed up selectively (for example, the registry entries corresponding to specific Windows components / installed hardware / software / applications etc). You may want to do this because you are about to install a new device, driver or piece of software and wish to be able to revert very important areas of the registry to their previous state or because you would rather back up very important areas of the registry instead of taking complete backup. Because of its somewhat complex nature, this option is suitable for advanced users. Users who do not have a working knowledge of the Windows registry are advised to backup the entire registry rather than selecting individual registry items.

**Important Note:** In order to create a backup for selected Registry entries, Comodo BackUp has to be run under administrative privileges. Refer to the note in the chapter **Starting Comodo BackUp** for more details.

**To backup the Windows Registry hives selectively**

• Select the 'Registry Entries' radio button.

The right hand side pane displays a message that no items are available for backup.
To add registry keys or hives, click the 'Add value...' or 'Add key...' buttons.

- Navigate and select the registry hive(s) you want to backup. Repeat the process to add more registry values or keys. The selected items will be displayed in the right side pane.
If you want to remove some items from the list, select the item(s) and click the 'Delete items' button.

• Click 'Next'.
The process moves to **Step 2.**

**Mail Accounts**
You can backup emails from mail clients like Mozilla Thunderbird, Eudora, Microsoft Outlook 2003 - 2010, Windows Live Mail, Windows Mail and Outlook Express. Address books and email client settings (such as incoming server, outgoing server and so on) can also be backed up. This is helpful to restore your mail and mail settings when you reinstall your operating system or configuring mail on a new computer system. Please note that only the mails and settings of the currently logged-in user can be backed up.

To backup of all the emails in your inbox and the settings configured for your mail clients

- Select the 'Mail Accounts' radio button.

The right hand side pane displays a list of all the installed mail clients. The supported clients are Mozilla Thunderbird, Eudora, Microsoft Outlook 2003, Microsoft Outlook 2007, Windows Live Mail and Outlook Express.

- Select the client(s) for which you wish to backup the emails stored (Inbox, Outbox, Unsent Items etc.) and their configuration settings by selecting the checkbox(s) beside the respective client(s).

- Click 'Next'.

The process moves to **Step 2.**

**Instant Messenger Archive and Settings**
You can backup items like conversation history and conference chats from Instant Messenger (IM) clients like Windows Live Messenger, Skype, Yahoo! Messenger and Pidgin. You can also backup settings that are stored on the local machine (for example active skin, privacy settings, connection settings, proxy settings and so forth). This is helpful to restore your IM archives when you reinstall your operating system or you are configuring your IM client on a new computer.

To backup messenger archive and their configuration settings

- Select the 'IM Conversations' radio button.

The right hand side lower pane displays a list of all the installed messenger clients. The supported clients are Windows Live
Messenger, Skype, Yahoo! Messenger and Pidgin.

- Select the client(s) for which you wish to backup the profiles related data (archives, profile settings etc.) by selecting the checkbox(s) beside the respective client(s).
- Click 'Next'.

The process moves to **Step 2**.

**Browser Data**

You can backup your browser settings such as Home page, Favorites, Security Settings and stored passwords. Please note that the browser data of the currently logged user only can be backed up.

**To backup browser data**

- Select the 'Browser Data' radio button.

The right hand side lower pane displays a list of all the installed browsers.
• Select the browser(s) for which you wish to backup the profiles related data (home page, security settings, stored passwords etc.) by selecting the checkbox(s) beside the respective browser(s).
• Click 'Next'.

Note: You can also backup browser data in Other Profiles area of Shortcuts interface. Refer to 'Other Profiles' section for more details.

The process moves to **Step 2**.

2.1.2. More Options Mode

Clicking 'More Options' allows you to specify 'Backup Type' and 'Backup Format' in addition to 'Backup Source'. The remainder of this section explains 'Backup Type' and 'Backup Format'. If you wish to see explanations of the various types of Backup Source, please refer to the preceding section, 'Source Types'.

Note: The only difference for adding files / folders between 'Fewer Options Mode' and 'More Options Mode' as source types is in the former you have to add files or folders from the buttons available at the bottom of the interface while in the latter you have to select files / folders from the tree view in the right side pane.
The first stage of the process is to choose the type of backup (full, differential or incremental), which item you want to backup and the format of the backup file. Comodo BackUp allows the user to backup entire drives; select multiple or individual files and folders to backup; take complete or partial backups of the Windows registry and backup important system settings. The program also allows the user to make copies of their emails, IM messages and personal Windows user settings.

**Note:** The default backup type in More Options mode is incremental and Automatic base for a backup job.

### 2.1.2.1. Selecting the Backup Type

Comodo Backup allows you to generate three different types of backups:

- **Full Backup**;
- **Differential Backup**;
- **Incremental Backup**.

<table>
<thead>
<tr>
<th>Type</th>
<th>Backup operations</th>
<th>Restore Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>Slowest</td>
<td>Fastest</td>
</tr>
<tr>
<td>Differential</td>
<td>Faster</td>
<td>Faster</td>
</tr>
<tr>
<td>Incremental</td>
<td>Fastest</td>
<td>Slowest</td>
</tr>
</tbody>
</table>

**Full Backup**

As the name suggests, a full backup is a complete copy of every source file and folder specified by the user. The suggested file name of a full backup will have a suffix FULL_files in it, e.g. filename_full_files.cbu. Once a full backup has been taken it will serve as the baseline upon which future incremental and differential backups are based.

If backup runs as full and a valid backup file with same name already exists, the new backup will overwrite the existing backup file and all backups linked to that backup file will be deleted.
**Differential Backup**

After an initially creating a full backup, all new files and modified files will be copied to the 'differential' backup container. This means the entirety of your data set is backed up across just two containers. Every time you take a differential backup, you will copy all new or modified files created since the original backup date. The amount of data you copy with each successive differential backup operation should, therefore, grow over time. The default file name of a differential backup will have a suffix `dif_files` in it. e.g. filename `filename_dif_files.cbu`. Advantages of differential backup - faster restore operations than incremental backups because your data is spread across just two containers. Disadvantages - Slower backups than incremental backups because you are saving all data that has changed since the last full backup.

While running a differential backup:

1. If a backup base is specified by user and it still exists, it will be used as a base
2. If Automatic Base is selected and the destination file exists and if it contains one or more backups, the last backup that is incremental or full will be used as base
3. If base is not found, the backup job will run as full and it will be base for further runs

If the backup runs as incremental / differential and a valid backup file with same name already exists, the new backup is appended to existing backup file.

Comodo Backup is capable of creating a differential backup using a full, incremental or differential backup as the base.

**Tip:** Use a combination of full, differential and incremental backups to achieve a good balance. For example, schedule daily incremental backups, a weekly differential backup and a monthly full backup.

**Example:**

Let's assume you are taking a full backup of a folder 'Test Folder' containing Four files File A, File B, File C and File D on day 1 and have scheduled to take differential backups of the folder on a daily basis. The following table explains what would be the contents of successive differential backups, if you modify the files as given in column two.

<table>
<thead>
<tr>
<th>Day</th>
<th>Files Edited</th>
<th>Type of Backup taken</th>
<th>Files contained in the full backup (Test Folder_full_files.cbu)</th>
<th>Files contained in the differential backup (Test Folder_dif_files.cbu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Full</td>
<td>Full</td>
<td>File A, File B, File C and File D</td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td>File B</td>
<td>Differential</td>
<td>File A, File B, File C and File D (original versions)</td>
<td>File A (version modified on Day 2) and File B (version modified on Day 3)</td>
</tr>
<tr>
<td>Day 4</td>
<td>File B and File C</td>
<td>Differential</td>
<td>File A, File B, File C and File D (original versions)</td>
<td>File A (version modified on Day 2), File B (version modified on Day 4) and File C (version modified on Day 4)</td>
</tr>
</tbody>
</table>

Also, restoring the files to the latest version is easy, as the files are to be restored from the last full backup location and the differential backup location.

**To perform a differential backup**

1. Select Differential from the 'Backup Type' drop-down menu. Another drop-down menu will be displayed to select whether you want to create a new backup or choose existing backup as base line.
• If you want to manually select the backup source for the differential backup yourself, select ‘Automatic base’ and then select the backup source.

• If you want the application to automatically choose the backup source for which a full backup has been taken previously, select ‘Choose specific base’. Another drop-down will appear to choose the previous full backup of the same source as the baseline.

• From Comodo Online Storage - Select a full backup stored on Comodo Cloud.
  • If you are not signed-in after installation, type your user-name and password and click ‘Sign-in’ You will then be able to browse your online files.
  • Navigate to the folder where you have stored the backup, select the base file and click ‘Next’.

• From My Computer - Select a full backup stored on your hard disk. On selecting this option a list view of disk drives will be displayed in the lower panel.
  • Navigate to the folder where you have stored the backup, select the backup file and click ‘Next’.
From FTP - Select a full backup stored on a FTP server.
- Type the name of your FTP server in the 'Server' text box (The prefix ftp:// is optional).
- Enter the port number of the server for connection (default = 21).
- Type your user name for the FTP server in the 'Username' text box.
- Type your password for accessing the FTP server.
- Click 'Sign In'.

On successful log-in, the folder tree structure of the server will be displayed.
- Navigate to the folder where you have stored the backup, select the backup file and click 'Next'.

From Network - Select a full backup stored on a computer in your network. On selecting this option, all connected computers in your network are displayed (it may take a few seconds to list all the computers).
- Select the computer on which you have saved your backup. You will be prompted to enter the user name and password if the computer you selected is protected by user access control.
- Enter the user name and password for the computer you selected in and click 'OK'.
- On the network computer, navigate to the folder where you have stored the backup, select the backup file and click 'Next'.

On selecting a previous full backup, the corresponding backup source will be automatically selected in the 'Backup Source' area and you can directly move to the Step 2 - Selecting a Destination to Backup by clicking 'Next'.

Tip: The full backup and incremental/differential backups for a same source, can be stored in the same destination backup file in .cbu format.

Note for Advanced Users: The differential backup is performed at 64KB block level - meaning the file will be divided into blocks of 64KB size and the differential backup will store only those 64KB blocks, in which the data is changed and not the other blocks. For example, if only one byte of data has been changed in a 4GB file, only that 64KB block in which the data has changed will be backed-up.

Incremental Backup
Each incremental backup contains only those new or modified files created since the last backup was taken. This makes for very fast daily backups as you are only copying new files or those files that you have changed today. However, because you are spreading your data over multiple containers, restore operations will take longer than from a full or differential backup. The suggested file name of an incremental backup will have a suffix inc_files in it. e.g. filename_inc_files.cbu.

Incremental Backup supports simple copy format for files and folders. While backing up for the first time, all the selected files and folders are copied to the destination and during subsequent executions, whether scheduled or custom profile backup job, only files that are altered are copied to the destination thus saving bandwidth if the backup destination is in the network, FTP or Comodo Cloud.

While running an incremental backup for the first time:
  a) If a backup base is specified by user and it still exists, it will be used as a base
  b) If Automatic Base is selected and the destination file exists and if it contains one or more backups, the last backup that is incremental or full will be used as base
  C) If base is not found, the backup job will run as full and it will be base for the next run

For an incremental backup at second or further runs:
  a) If a backup created at the previous run still exists, it will be used as a base
  b) If not (a) and the destination file exists and if it contains one or more backups, the last backup that is incremental or full will be used as base
  c) If base is not found, the backup job will run as full and it will be base for the next run

If backup runs as incremental / differential and a valid backup file with same name already exists, the new backup is appended to existing backup file.

Tip: Use a combination of full, differential and incremental backups to achieve a good balance. For example, schedule daily incremental backups, a weekly differential backup and a monthly full backup.
Example:

Let us take, for example, that you are taking a backup of a folder called 'Test Folder' containing four files - File A, File B, File C and File D. On day 1 you take a full backup then a schedule incremental backups of the folder on an ongoing basis. The following table explains what would be the contents of successive incremental backups if you edited the files as per column 2.

<table>
<thead>
<tr>
<th>Day</th>
<th>Files Edited</th>
<th>Type of Backup taken</th>
<th>Files contained in the full backup (Test Folder_full_files.cbu)</th>
<th>Files contained in the incremental backup (Test Folder_inc_files.cbu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 4</td>
<td>File B and File C</td>
<td>Incremental</td>
<td>File A, File B, File C and File D (original versions)</td>
<td>File B (version modified on Day 4) and File C (version modified on Day 4)</td>
</tr>
</tbody>
</table>

**Tip:** To have the files which are not modified intact during restoration, Comodo recommends to select 'Append files' while choosing the restoration method for incremental file in Restore Method.

To perform an Incremental Backup

1. Select 'Incremental' from the ‘Backup Type’ drop-down menu. Another drop-down menu will be displayed to select whether you want to create a new backup or choose existing backup as base line.

   - If you want to manually select the backup source for the incremental backup yourself, select 'Automatic base' and then select the backup source.
   - If you want the application to automatically choose the backup source for which a full backup has been taken previously, select 'Choose specific base'. Another drop-down will appear to choose the previous full backup of the same source as the baseline.
• **From Comodo Online Storage** - Enables to select a full backup stored in Comodo Cloud.
  - If you are not signed-in after installation process, enter your username and password for accessing your online storage space and click Sign-in.
  - After signing-in, your online space will be visible/accessible and folders will be listed.
    - Navigate to the folder where you have stored the backup, select the base file and click 'Next'.
  - **From My Computer** - Enables to select a full backup stored in your hard disk. On selecting this option, the list view of disk drives will be displayed in the lower panel.
    - Navigate to the folder where you have stored the backup, select the backup file and click 'Next'.
  - **From FTP** - Enables to select a full backup stored on a FTP server.
    - Type the name of your FTP server in the 'Server' text box (The prefix ftp:// is optional).
    - Enter the port number of the server for connection (default = 21).
    - Type your user name for the FTP server in the 'Username' text box.
    - Type your password for accessing the FTP server.
    - Click 'Sign In'.
  - On successful login, the folder tree structure of the server will be displayed.
    - Navigate to the folder where you have stored the backup, select the backup file and click 'Next'.
  - **From Network** - Enables to select a full backup stored on a computer in your network. On selecting this option, all the computers connected in your network are displayed. (It may take a few seconds to list all the computers. Please wait).
    - Select the computer in which you have saved your backup. You will be prompted to enter the user name and password if the computer you selected is protected by user access control.
    - Enter the login User name and password for the computer you selected in the respective fields and click 'OK'.
    - You can navigate through the folder structure of the selected computer.
    - Navigate to the folder where you have stored the backup, select the backup file and click 'Next'.

On selecting a previous full backup, the corresponding backup source will be automatically selected in the 'Backup Source' area.
and you can directly move to the **Step 2 - Selecting a Destination to Backup** by clicking 'Next'.

**Tip**: The full backup and incremental/differential backups for a same source, can be stored in the same destination backup file in .cbu format.

**Note for Advanced Users** - The incremental backup is performed at 64KB block level - meaning the file will be divided into blocks of 64KB size and the incremental backup will store only those 64KB blocks, in which the data are changed and the the MD5 checksum values for the other blocks. For example, if only one byte of data has been changed in a 4GB file, the backup file will contain only that 64KB block in which the data has changed and the checksum values of the other blocks.

### 2.1.2.2. Selecting the Backup Format

Comodo BackUp can generate the backup files in different formats. The availability of the backup formats differ according to the backup source that you have selected. The backup sources and the formats available for them are given below:

<table>
<thead>
<tr>
<th>Backup Source</th>
<th>Available Backup Formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Files and Directories</td>
<td>• CBU File</td>
</tr>
<tr>
<td></td>
<td>• Two way sync</td>
</tr>
<tr>
<td></td>
<td>• One way sync</td>
</tr>
<tr>
<td></td>
<td>• Simple copy</td>
</tr>
<tr>
<td></td>
<td>• ZIP file</td>
</tr>
<tr>
<td></td>
<td>• ISO file</td>
</tr>
<tr>
<td></td>
<td>• Self Extracting CBU</td>
</tr>
<tr>
<td>Disk, Partitions and MBR</td>
<td></td>
</tr>
<tr>
<td>Registry Files</td>
<td></td>
</tr>
<tr>
<td>Registry Entries</td>
<td></td>
</tr>
<tr>
<td>Email Accounts</td>
<td></td>
</tr>
<tr>
<td>IM Conversations</td>
<td></td>
</tr>
<tr>
<td>Browser Data</td>
<td></td>
</tr>
<tr>
<td>CBU File</td>
<td></td>
</tr>
<tr>
<td>Two way sync</td>
<td></td>
</tr>
<tr>
<td>One way sync</td>
<td></td>
</tr>
<tr>
<td>Simple copy</td>
<td></td>
</tr>
<tr>
<td>ZIP file</td>
<td></td>
</tr>
<tr>
<td>ISO file</td>
<td></td>
</tr>
<tr>
<td>Self Extracting CBU</td>
<td></td>
</tr>
</tbody>
</table>
### Backup Source - Available Backup Formats

<table>
<thead>
<tr>
<th>Backup Source</th>
<th>Available Backup Formats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk, Partitions and MBR</td>
<td>• CBU File</td>
</tr>
<tr>
<td></td>
<td>• Mirror disk/partition</td>
</tr>
<tr>
<td>Registry Files</td>
<td>• CBU File</td>
</tr>
<tr>
<td>Registry Entries</td>
<td>• CBU File</td>
</tr>
<tr>
<td></td>
<td>• REG File</td>
</tr>
<tr>
<td></td>
<td>• Self Extracting CBU</td>
</tr>
<tr>
<td>Mail Accounts</td>
<td>• CBU File</td>
</tr>
<tr>
<td></td>
<td>• Simple copy</td>
</tr>
<tr>
<td>IM Conversations</td>
<td>• CBU File</td>
</tr>
<tr>
<td></td>
<td>• Simple copy</td>
</tr>
<tr>
<td>Browser Data</td>
<td>• CBU File</td>
</tr>
<tr>
<td></td>
<td>• Simple copy</td>
</tr>
</tbody>
</table>

The available backup format types and their descriptions are given below.

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBU File</td>
<td>Native file format of the Comodo BackUp application. The backup file will be stored in the selected destination with a .cbu extension. This type of backup can be restored only with the CBU application.</td>
</tr>
<tr>
<td>Mirror disk/partition</td>
<td>Available only when selecting Disk, Partitions and MBR as the backup source. Mirroring is the process of copying the entire content of one disk/partition to another disk, so that the destination disk is an exact copy of the source disk. For example, if you are mirroring a bootable disk/partition with a working operating system, the destination disk can be used to boot the system alone without the need of the source disk. This is very much useful when moving to a larger capacity disk or to restore to a virgin installation. <strong>Note:</strong> Disk signature is also mirrored during the mirroring process and for the disk to be visible on Windows Vista and Windows 7 operating systems, go to Control Panel &gt; Administrative Tools &gt; Computer Management &gt; Disk Management.</td>
</tr>
<tr>
<td>Simple Copy</td>
<td>Preserves a copy of files / folders in original format. The backup files / folders are an exact copy of the selected files / folders in the current state.</td>
</tr>
</tbody>
</table>
| Two way sync      | Two-way synchronization keeps both the source and destination folders up to date with each other. There are two types of ‘two way’ syncs: ‘manual’ and ‘profile’. For manual, two-way sync operations:  
  - If you add a file to either the source or destination folders, it will be automatically copied to the other folder  
  - If you delete a file in either source or destination folder, it is automatically restored from the other folder during the next sync operation  
  - If you want to truly delete a file, you have to remove it from both source and destination folders  
For ‘profile’ two-way sync operations:  
  - Profile sync operations behave the same as scheduled sync operations.  
  - If you add a file to either source or destination folder it will be automatically copied to the other folder  
  - If you update a file in either source or destination folder, the updated file will be copied to and will
### One way sync

In a one-way sync, only changes done in the source folder will be copied to the destination folder. Changes to files in the destination folder will not be reflected in the source folder.

There are two types of ‘one-way’ syncs: ‘manual’ and ‘profile’.

**For manual, one-way sync operations:**
- If you add a file to the source folder, it will be automatically copied to the destination folder. Files added to the destination folder will not be copied to the source folder.
- If you delete a file in the destination folder, it is automatically restored from the source folder during the next sync. If you delete a file from the source folder, it will not be deleted from the destination folder.
- If you want to truly delete a file, you have to remove it from both source and destination folders
- If a newer version of a file exists in the source folder then this file will overwrite the corresponding file in the destination folder. However, files are not copied from destination to source so, If the newer version is in the destination folder, then both versions will be retained

**For ‘profile’ one-way sync operations:**
- Profile sync operations behave the same as scheduled sync operations.
- If you add a file to the source folder, it will be automatically copied to the destination folder. Files added to the destination folder will not be copied to the source folder.
- If you delete a file in the destination folder, it is automatically restored from the source folder during the next sync. If you delete a file from the source folder, it will also be deleted from the destination folder.
- If a newer version of a file exists in the source folder then this file will overwrite the corresponding file in the destination folder. However, files are not copied from destination to source so, If the newer version is in the destination folder, then both versions will be retained

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZIP File</td>
<td>Stores the backup as a zip file in the selected destination. The original files can be restored by simply extracting the zip file using programs like WinZip, WinRar, etc.</td>
</tr>
<tr>
<td>ISO File</td>
<td>Stores the backup as an ISO image. This is suitable if you wish to store the backup on a CD or DVD. You can directly write the image on to a CD or a DVD using a third party disk burning application.</td>
</tr>
<tr>
<td>Self Extracting CBU</td>
<td>Stores the backup file as an executable file (with the extension .exe). The backup can be restored by directly double clicking on the file from the Windows Explorer, without the need of CBU application. For more details on restoring a self extracting backup package, refer to the section <a href="#">Restoring Self Extracting Backups</a>.</td>
</tr>
<tr>
<td>REG File</td>
<td>Available only when selecting ‘Registry Entries’ as the backup source. The selected Registry entries are stored in the same format (with the .reg extension).</td>
</tr>
</tbody>
</table>

- Select the backup format by clicking on the respective radio button and click Next.

The process moves to **Step 2 - Selecting a Destination to Backup.**

### 2.2. Step 2 - Selecting a Destination to Backup

The second stage of the process is to choose the destination for storing your backup files / folders. All the items you chose in **Step 1** are stored with the selected format (e.g. filename.cbu) in the destination you select in this step. Depending on the
requirement you can choose the destinations from:

- **Comodo Cloud** - Saves your backup file on the Comodo online server.
- **My Computer** - Saves your backup file on your local hard drive, removable drives connected to your computer or a network drive.
- **CD/DVD** - Writes the backup file onto a compact disk (CD) or digital versatile disk (DVD).
- **Network Location** - Saves your backup file on another computer in the network.
- **FTP server** - Saves your backup file on a FTP server.
- **Email** - Sends the backup file through email to you or to the address specified by you.

After choosing the files/folders for backup in Step 1, click the 'Next' button and select the destination for storing the backup from the options described above.

**Comodo Cloud**

If you want to have an online backup of your content, Comodo BackUp allows you to save files on Comodo's highly secure servers and this can be accessed over the Internet from anywhere in the world. With this feature, you can be sure your backed-up data is not only highly secure, but is always updated. In the event something goes wrong with your hard drive, or you lose your system in a disaster or to burglary, you can retrieve your precious files instantly.

**Note:** In order to back up your content to Comodo Cloud servers, you need to have a Comodo Cloud account. To create an online account click the 'Register Free Account Now' link. Comodo Online Storage accounts are available in a range of competitively priced packages suitable for businesses and home users alike. Click here to know the details about Comodo Cloud accounts. For more detailed information on Comodo Cloud refer to the chapter Configuring Your Comodo Cloud (online storage) Account.

**To save your backup in Comodo Cloud server**

- Select 'Comodo Cloud' tab.

If you signed-in into the CCloud account after the installation the online storage will automatically open. Otherwise, the login page for your Comodo Cloud account will be displayed.
If you are a new user and do not have a Comodo Cloud account, click 'Register Free Account Now'. This will open the sign-up page at https://www.ccloud.com/ where you can enroll for your free 10GB of online storage. For more detailed information on account creation, see Configuring Your Comodo Cloud (online storage) Account.

If you are an existing account holder, enter your user-name and password and click 'Sign-in'.

After login, your online space will be accessible and folders will be listed.

- Select the folder to which you want to store the current backup.
- A suggested file name for the current backup with an extension .cbu will be automatically populated in the Backup Name text box. If you want to alter the name, enter the new name in the text box.
- Click the 'Save as Custom Profile' button to save the selected backup job as a custom profile. Click here for more details on creating custom profiles.

- Click the alarm clock button to create a schedule for the backup job. Click here to know more about Scheduling options.

- Click the 'Backup Now' button to create a backup of the selected item(s) with default backup settings. Click here for more details on Backup Settings.
- Click 'Next'.
The process moves to **Step 3.**

**My Computer**

If you wish to store the backup file in your local hard disk drive itself, a removable storage device like USB memory or a network drive, select the radio button beside 'My Computer'. You can select even a virtual disk mounted in your system.

**To save the backup on your computer**

- Select 'My Computer' tab.

![New Backup interface](image)

By default, the destination location will be given as C:\Documents and Settings\Username... You can change the default location by accessing the Settings interface. Refer to Comodo BackUp Settings > Default Backup Location for more details.

Navigate and can select a location of your choice from the disk drives and folders. You can select from:

- **Local Drives** - The hard drive partitions residing locally in your system.
- **Network Drives** - The drive in the file server connected in your network and mapped by your computer. This is a good practice so that you can restore your original files and settings even if your computer crashes and you have to reinstall Windows again.
- **Virtual Drives** - The disk images mounted in your system using a disk emulator software, to resemble a physical disk drive partitions. This suits for the backup of your confidential documents as virtual drives are encrypted by default and require a password set during encryption, while restoring the files.
- **USB Drives** - The USB memories or a removable hard disk drive plugged in to an USB port of your system.

Navigate to the drive and the folder where you wish to save the backup file.

A suggested file name for the current backup with an extension .cbu will be automatically populated in the Backup Name text box. If you want to alter the name, enter the new name in the text box.

Click the 'Save as Custom Profile' button to save the selected backup job as a custom profile. Click here for more details on creating custom profiles.
Click the alarm clock button to create a schedule for the backup job. Click here to know more about Scheduling options.

Click the ‘Backup Now’ button to create a backup of the selected item(s) with default backup settings. Click here for more details on Backup Settings’.

Click ‘Next’.

The process moves to Step 3.

CD/DVD

If you wish to have a permanent copy of the backup, storing it on an optical disk like compact disk (CD) or digital versatile disk (DVD) will be the best choice. Comodo BackUp has a built-in disk burner feature, which can directly write the backup file onto your CD/DVD.

To save the backup on a CD/DVD

Select ‘CD/DVD’ tab.

A configuration interface for disk writing task will be displayed.

- From - Allows you to select the CD/DVD drive (if you have more than one optical disk drive) to write the backup file on to the disk.
• **Disk Label** - Allows you to set the Disk label for the disk to be written. By default:
  - If a blank or a new disk (without a pre-configured label) is inserted, this field is auto-populated with the date of creating the back-up. If you want to set the label of your choice, you can edit the text in this field;
  - If a disk with a pre-configured label is inserted, this field is auto-populated with the disk label of the inserted disk.

• **Burn Speed** - Allows you to specify the speed at which the CD or DVD will be burned. The exact options listed in the drop-down reflect the speeds that your device is capable of. Slower speeds take longer but are less prone to write errors. Comodo recommends you first select the fastest speed available for your device and try stepping down only if you experience write errors.

• **Erase Disk** - Instructs CBU to erase the contents of the disk prior to writing the backup file onto it (Applies only for Rewritable (RW) disks)

• **Eject disk when finished** - Instructs CBU to eject the disk on completion of writing operation.

• Click the 'Save as Custom Profile' button to save the selected backup job as a custom profile. **Click here** for more details on creating custom profiles.

• Click the alarm clock button to create a schedule for the backup job. **Click here** to know more about Scheduling options.

• Click the 'Backup Now' button to create a backup of the selected item(s) with default backup settings. **Click here** for more details on Backup Settings'.

• Click 'Next'.

The process moves to **Step 3**.

**Network Computer**

If you are connected to a network, you can also choose to save your backup on another computer in your network. This is a good practice so that you can restore your original files and settings even if your computer crashes and you have to reinstall Windows again.

**To save your backup on another computer on your network**

• Select 'Network' tab.
All the computers connected in your network will be displayed. (It may take a few seconds to list all the computers. Please wait)

- Select the computer in which you want to save the backup. You will be prompted to enter the user name and password if the computer you selected is protected by user access control.
- Enter the login User name and password for the computer you selected in the respective fields and click 'OK'.
- You can navigate through the folder structure of the selected computer.
  - Select the destination folder you want to save the backup.
  - A suggested file name for the current backup with an extension .cbu will be automatically populated in the Backup Name text box. If you want to alter the name, enter the new name in the text box.
  - Click the 'Save as Custom Profile' button to save the selected backup job as a custom profile. Click here for more details on creating custom profiles.

- Click the alarm clock button to create a schedule for the backup job. Click here to know more about Scheduling options.

- Click the 'Backup Now' button to create a backup of the selected item(s) with default backup settings. Click here for more details on Backup Settings.
- Click 'Next'.

The process moves to Step 3.
FTP Server

If you are having an access to an FTP site, Comodo BackUp allows you to save your backup files in the FTP server. This provides an additional layer of safety that you can restore your backup even your total network crashes. Also this does not need a dedicated disk space in your computer or network to save your backup files.

To save your backup in an FTP server

- Select 'FTP Server' tab.

The login page for your FTP server will be displayed.

- If you are using an FTP account for the first time, select 'New' from the Account: drop-down.
- Type the name of your FTP server in the 'Server' text box (The prefix ftp:// is optional).
- Enter the port number of the server for connection (default = 21).
- Type your user name for the FTP server in the 'Username' text box.
- Type your password for accessing the FTP server.
- Click 'Sign In'.

Note: The 'Account' drop-down can display all the FTP accounts you might be using as Backup destinations. New FTP accounts can be added to this drop-down, by selecting the 'Remember my username and password' checkbox whenever you use an FTP account for the first time. When using a previously added FTP account in future, you just need to select the account from the Account: drop-down, and need not enter the Server name, username and password.
On successful login, the folder structure of the server will be displayed.

- Browse through the folders and select the location for storing your backup.
- A suggested file name for the current backup with an extension .cbu will be automatically populated in the Backup Name text box. If you want to alter the name, enter the new name in the text box.
- Click the ‘Save as Custom Profile’ button to save the selected backup job as a custom profile. Click here for more details on creating custom profiles.

- Click the alarm clock button to create a schedule for the backup job. Click here to know more about Scheduling options.

- Click the ‘Backup Now’ button to create a backup of the selected item(s) with default backup settings. Click here for more details on Backup Settings’.
- Click ‘Next’.

The process moves to Step 3.

**Email**

Comodo BackUp is capable of creating a backup file and send it through email to the address you specify as an attachment. This is very much useful if you want to send some files or folders to some one, instantly and relieves you from the chores of composing a new mail and adding attachments every time you send files to your friend/colleague. If a file in .cbu format is used, backup is split automatically when the size exceeds the maximum email attachment size. If simple copy is used, only files that are smaller or equal in size will be emailed and the recipient may receive more than one email if the files exceed maximum permitted mail attachment size.

**To send your backup file through email**
- Select ‘Email’ tab.
The email account configuration interface will be displayed.

- If you are using your email account for the first time, Select 'New' from the 'Account:' drop-down.
- Enter the name of the SMTP server, the address of the outgoing mail server that the notification emails are sent through, in the 'SMTP Server' text box.
- Enter the port number of the server to be used. (default = 25 for non-SSL connection and 465 for SSL connection)
- If you want to use the secure SSL or TLS connection for the email, select it from the SSL/TLS drop-down.
- Type the subject for the backup email in the 'Subject' text box. This is to indicate that the email is auto-generated by Comodo BackUp application (e.g. Comodo BackUp file).
- Enter the address on behalf of whom the backup file should be sent. (e.g. your email address) in the 'From' text box. Note: This address should be supported by SMTP server you defined.
- Enter the email address of the person to whom the backup should be sent in the 'To' text box. If you want the backup file to be sent to yourself, enter your email address here.
- Type the username of your email account in the 'Username' text box.
- Type your email account password in the 'Password' text box.

**Note:** The 'Account:' drop-down can display all the email accounts you might be using for sending Backup files. New email accounts can be added to this drop-down, by selecting the 'Remember me' checkbox whenever you use an email account for the first time. When using a previously added email account in future, you just need to select the account from the Account: drop-down, and need not enter the other details.
• To check whether you have made the configurations correctly, click 'Send test message' button. A success or failure dialog will be displayed. If a failure dialog is displayed, recheck your specifications and try again. On success message, check your email inbox to see the test message.

• Click the 'Save as Custom Profile' button to save the selected backup job as a custom profile. Click here for more details on creating custom profiles.

• Click the alarm clock button to create a schedule for the backup job. Click here to know more about Scheduling options.

• Click the 'Backup Now' button to create a backup of the selected item(s) with default backup settings. Click here for more details on Backup Settings'.

• Click 'Next'.

The process moves to Step 3.

2.2.1. Saving a Backup Job as a Custom Profile (optional)

Adding the backup job as a custom profile displays the configured job as a custom profile in the list of Custom Profiles in the 'Shortcuts' main interface, enabling easy access to the job and to execute repeatedly with a single mouse click. If you wish to execute the currently configured job often, so that all the updates done to the source files are reflected in the backup, you can opt for adding this job as a custom profile.

To save a backup job as a custom profile
• Click the 'Save as custom profile' button
• The text box in this area allows you to enter a name for the profile. By default, the file name of the current backup is displayed.

• Enter a name to easily identify the backup job and click 'Yes' to add the backup job as a custom profile...

...so that the current backup job is added as a custom profile and listed in the 'Shortcuts' interface.
Clicking the down button you have three options:

- Backup Now - Allows you to backup the custom backup profile instantly
- Edit - Allows you to edit the custom backup profile
- Rename - Allows you to rename the custom backup profile

Click the X button to delete the custom profile.

**Note:** To delete a custom profile that is scheduled, you have to first delete the schedule and then delete the profile. Refer to the section Viewing Details of Backup/Restore Events and Editing Scheduled Backup Jobs in Managing Your Backups chapter for details on deleting a schedule.

### 2.2.2. Schedule the Backup (optional)

The scheduling option in Comodo Backup enables you to run the configured backup job periodically. Once you scheduled, the backup job will be executed at the set intervals with the chosen **run mode** without your intervention and will ensure that the latest version of the source selected in **Step 1** is backed-up in the destination selected in **Step 2**.

If you need the configured backup job to be run at recurring intervals or upon occurrence of a certain event, click the alarm clock button at the bottom right corner.

Schedule Settings interface will open.
Schedule Options
The available scheduling options are:

- Manual
- At Logon
- Once
- Daily
- Weekly
- Monthly
- When Idle
- Every x minutes

To schedule the created backup job

- Click the drop-down button in the Frequency: drop-down menu to select the period option. The lower two options vary depending on the selection made in the topmost menu.

Manual
Allows you to execute the backup job at any time you wish.

**To schedule the created backup job to be executed manually**

1. Select the option ‘Manual’ from the Frequency: drop-down menu.
2. Select the run mode of the scheduled backup job. See [Selecting Run Mode for Scheduled Backup Job](#) for more details.
3. Click ‘Save Schedule’.

**At Logon**

Executes the created backup job every time when the user logs on to the computer.

**To schedule the created backup job to be executed at logon**

1. Select the option ‘At Logon’ from the Frequency: drop-down menu.
2. Select the time delay for the backup job to start from the logon time (in seconds) in the ‘Wait before starting task’ text box that appears after selecting ‘At Logon’.
3. Select the ‘Run mode’ of the scheduled backup job. See [Selecting Run Mode for Scheduled Backup Job](#) for more details.

**Note:** The system resources are utilized by the startup services and programs during logon. You have to set enough time delay for the Comodo BackUp to start so that your system resources are not overloaded during start-up and adequate resources are available for the application to execute the backup job.
4. Click 'Save Schedule'.

**Once**
Executes the created backup job only once at a scheduled day / time.

**To schedule a backup job to run once**

1. Select the option 'Once' from the Frequency: drop-down menu. The drop-down options for selecting the day and time are displayed below.
2. Click the drop-down button from the date menu and select the day at which the backup job to be executed from the calendar displayed.

3. Select the time at which the backup job is to be executed from the time combo box.
4. Select how the application should react if the schedule fails to execute from the 'If schedule is missed' drop-down menu. See **Missed Schedule Options** for more details.
5. Select the 'Run mode' of the scheduled backup job. See **Selecting Run Mode for Scheduled Backup Job** for more details.
6. Click 'Save Schedule'.

**Note:** The backup job scheduled to run 'once' will be deleted after the successful completion of backup.

**Daily**
Executes the created backup job every day at the set time.
To schedule a backup job to be executed daily

1. Select the option 'Daily' from the Frequency: drop-down menu. The drop-down option for selecting the time is displayed below the topmost drop-down menu.

2. Select the time at which the backup job is to be executed from the time combo box.

3. Select how the application should react if the schedule fails to execute from the 'If schedule is missed' drop-down menu. See Missed Schedule Options for more details.

4. Select the 'Run mode' of the scheduled backup job. See Selecting Run Mode for Scheduled Backup Job for more details.

5. Click 'Save Schedule'.

Weekly

Executes the created backup job on selected day(s) of every week at the set time.

To schedule a backup job to be executed weekly

1. Select the option 'Weekly' from the Frequency: drop-down menu

The check-boxes for selecting the day(s) of the week (Monday through Sunday) and a combo box for selecting the time are displayed.

2. Select the day(s) of the week for scheduling the backup job by selecting the checkboxes beside the respective day(s). You can choose any number of days.

3. Select the time at which the backup job is to be executed from the time combo box.

4. Select how the application should react if the schedule fails to execute from the 'If schedule is missed' drop-down menu. See Missed Schedule Options for more details.
5. Select the ‘Run mode’ of the scheduled backup job. See Selecting Run Mode for Scheduled Backup Job for more details.

6. Click ‘Save Schedule’.

**Monthly**

Executes the created backup job on selected date of every month at the set time.

**To schedule a backup job to be executed Monthly**

1. Select the option ‘Monthly’ from the Frequency: drop-down menu.

A text box for entering the date and a combo box for selecting the time are displayed.
2. Enter the date at which the backup job has to be executed every month (between 1 and 31. If you have entered 31, the back up is executed only on the months with 31 days e.g. January, March, May... and is not executed on the months with 30,29 or 28 days, e.g. February, April, June etc.)

3. Select the time at which the backup job to be executed from the time combo box.

4. Select how the application should react if the schedule fails to execute from the 'If schedule is missed' drop-down menu. See Missed Schedule Options for more details.

5. Select the ‘Run mode’ of the scheduled backup job. See Selecting Run Mode for Scheduled Backup Job for more details.

6. Click ‘Save Schedule’.

When Idle
Executes the created backup job whenever the system goes idle with a set delay.

To set the backup job to be executed whenever the system goes idle

1. Select the option ‘When Idle’ from the Frequency: drop-down menu.

2. Enter time delay (in minutes) for the backup job to start from the instant the system goes idle in the 'When computer is idle for:' text box.

4. Click ‘Save Schedule’.

**Every x minutes**
Executes the created backup job on selected x minutes at the set time.

**To set the backup job to be executed on selected intervals**
1. Select the option ‘Every x minutes’ from the Frequency: drop-down menu.
2. Enter in the Interval field your option (in minutes) for the backup job to start.

4. Click ‘Save Schedule’.

**Additional Notes:**

- If you want to run the backup job immediately (apart from the schedule), click ‘Backup Now’ button.
- An additional checkbox ‘Remember connection information (unsafe)’ is displayed if you have chosen to save the backup on a password protected location like a network computer, FTP server or online server in Step 2. If you select this option the connection credentials like the username and password is stored by the application in encrypted manner. You are not prompted every time to enter the username and password on execution of the backup job.

**Missed Schedule options** - You can configure how Comodo BackUp should react if a scheduled backup job does not run on time (for example, because the machine was powered off). The options available are:

- **Do nothing** - The missed scheduled backup job is ignored
- **Prompt user** - The user is prompted to run the missed backup job the next time that they open the application
• Run it at first chance - The scheduled backup job is run immediately when the user opens Comodo BackUp for the next time.
• Select the required option from the drop-down menu.

**Selecting the Run Mode of the Scheduled Backup Job** - You can configure how the scheduled backup job is to be executed at the scheduled time from the Run mode drop-down menu. The options available are:

• **Normal** - Comodo BackUp is invoked at the scheduled time and the backup process is executed. On completion of the backup process, you have to click the 'Finish' button. You can even abort the backup process if you want during the backup progress. The application is not closed until you click the close button from the Windows controls.

• **Autoclick Finish after backup** - The backup is run at the scheduled time and the backup process is executed. You can even abort the backup process if you want, during the backup progress. On successful completion of the backup process, the 'Finish' button is effectively clicked automatically so that the application returns with its main interface. The application is not closed until you click the close button from the Windows controls.

• **Close Comodo Backup after schedule runs** - On successful completion of the backup job, the application is closed automatically. You can even abort the backup process if you want, during the backup progress.

• **Silent run** - Comodo BackUp is run at the background at the scheduled time to execute your backup job.

• **Service run** - Comodo BackUp is run as a Windows Service so that the backup job is executed at the background automatically even if you are not logged in.

Select the required option from the drop-down menu.

**Note:** The Run mode options will not be available if you have chosen the 'Manual' schedule option.

• **Remember connection information (unsafe)** - Remembers connection credentials (username and password) for external connections for FTP, Network or Online Storage.

### 2.2.3. Run the Backup

To execute the configured backup job instantly, just click the Backup Now button at the bottom right corner. The source files selected in the **Step 1** are backed-up at the location you specified in **Step 2**. The progress bar indicates the backup progress. You can Pause, Resume or Abort the backup operation at this stage.
The lower pane displays the log information and shows the details about the files currently being backed up and error reports, if any.

**Note:** The log will be displayed only if the option **Log to Screen** in **Backup Settings** is left checked.

- If you want your system to be shutdown on completion of the backup operation, select the checkbox ‘Shut down after backup is complete’. On successful completion, the system will automatically shutdown.
- If you want to stop the backup job under progress, click ‘Abort’ button.
- If you want to temporarily stop the backup operation, click the ‘Pause’ button. The backup progress is withheld.
- To restart the backup operation, click ‘Resume’ button. The process is restarted and the backup job is completed.
Click the 'Open Containing Folder' link to open the folder containing the backup.

Click the 'Save as Custom Profile' button to save the selected backup job as a custom profile. Click here for more details on creating custom profiles.

Click 'Finish' to return to the 'Summary' interface.

After backup is finalized, user can right click and copy the log of the backup operation.

**Note:** If you have chosen Comodo Cloud, Network location or FTP server in Step 2 - Selecting a Destination to Backup and the if the internet/network is disconnected during a backup, the process will resume as soon as the connection is restored.

If you had chosen the [backup format](#) as a CBU file, you can see the file properties by right-clicking on it in Windows Explorer and selecting file properties from the context sensitive menu.
• Click on the Comodo Backup tab to view details of the CBU file.
2.3. Step 3 - Backup Settings

The next stage is to configure for archiving the backup files, set encryption and password protection for the backup. The settings available are:

- Macros and Description
- Compression and Split
- Password Protection
- Backup Method
- Filters
- Resource Usage
- Log
- Email Notification
- Before and After Tasks
- Export to Script

Click on the drop-down arrow button on the right side of any of the settings menu to open its settings area.
2.3.1. Macros and Description

The file names of the backup files can be named in chronological order, by adding suffixes to the file names indicating the date, time etc. This is useful when setting a single source (disk, file folder, etc) to be backed up periodically by setting scheduled backups or synchronized backups. You can even add the revision numbers as suffix. The suffix enables you to identify the backups of different versions of the same file and helps you in case you want to restore an earlier version of the file.

To set the Macros for naming the files

1. Select the 'Enable Macros' checkbox.

2. From the drop-down menu containing the Macros, which are the building blocks for the suffixes to be added to the file name, select the Macros you want.

3. Click the 'Add Macros' button. The selected Macro appears as a suffix to the file name in the file name text box. You can add any number of macros to the file name by adding them one by one in the order you want.

   Note: Selecting the option 'REVISION_NO_MAX(_REV_NO_MAX)' from the drop-down displays the 'Reset Revision Number at' field. Select the checkbox if you want to reset the revision number and enter the revision number in the adjacent field. When you use this option, backup will run as full each time the revision number is reset.

4. In the 'Description' text box, enter the description of the file if you require. This option is available for files backed up in CBU format only and can be viewed by right-clicking on it in Windows Explorer and selecting file properties from the context sensitive menu.

5. To remove the macros added, simply click the 'Remove Macros' button.

2.3.2. Compression and Split

Comodo BackUp compresses all the data into one file and stores with the file name having extension .cbu (e.g. filename.cbu), in the destination you choose in Step 2. You can choose the compression level in this stage of the process. You can choose from the levels 'None' through 'Maximum'. Higher the compression level, lower the backup disk space requirement. Select the compression level you want to use from the drop-down menu.

You can split the backup file into segment sizes of your choice. This is useful when you are taking backups of very large sizes, in removable media like CD's, DVD's, ZIP drives, USB drives etc. You can set the maximum files sizes of the segments to fit to the media you choose. The files can be rejoined while restoring the backup.
Note For the backup files created without selecting the compression level, e.g., the backup files created right after **Step 2 - Selecting a Destination to Backup** by skipping the further steps, the compression level is set as 'Low' by default.

To split the Backup

1. Select the checkbox beside 'Split BackUp'
2. Select the size you want from the preset sizes (set corresponding to different types of removable storage media like Floppy disk, CD, DVD etc.) from the drop-down combo-box.

3. Alternatively, if you want the backup to be split into custom sizes, enter the maximum size (in MB) for each segment in the backup in the drop-down combo-box.

**2.3.3. Password Protection**

Providing a password protection requires the password to be entered while restoring the backup and also encrypts the backup with an encryption algorithm you choose.

To provide a password protection and encrypting the backup

1. Select the checkbox beside 'Password Protection'
2. Select the Encryption Algorithm you want to use for encrypting the backup from the drop-down menu.

Encryption Algorithms:

- 3DES - 168-bit/ strong
- AES - 128bit / strongest
- Blowfish - 64-bit block / strong
- DES
- Serpent - 128,192 or 256 bit / very strong
- Twofish - 128-bit block/ strong
- Xor - Variable block size / weak

For more details on the Encryption Algorithms, see Appendix 1 Encryption Algorithms.

3. Type the password (of minimum four characters) in the 'Password' Text box.

4. Retype the password in the 'Confirm password' text box.

CBU generates a 32 byte key by applying a SHA256 hash algorithm to the password entered by you. If the encryption algorithm chosen by you requires a key of smaller bit length, the 32 byte key is truncated to the required length. CBU encrypts the backup file with the chosen algorithm using this key. During the restoration the backup file, CBU receives the password entered by you, generates a key by applying the same hash algorithm and uses this key to decrypt the backup file. If a wrong password is entered by someone maliciously, the key required to decrypt the backup could not be generated and the backup could not be restored, ensuring additional level of safety to the backup of your confidential information.

2.3.4. Backup Method

When encountering locked files - The drop-down menu allows you to instruct how Comodo BackUp should react on the situation where one or more files to be backed-up are locked for reasons like they are in use by other programs or other users.

- **Volume Shadow Copy** - Uses Volume Snapshot Service (VSS) offered by the Windows Operating System. The service creates read-only copy or snapshot of the volume or the file system where the file in question is stored, at the specific point of time when the backup was initiated. The file is read from the read-only copy of the volume for inclusion in the backup.

- **Raw Read** - The locked files will be read directly from disk in the state they are, when they are processed for
backup. This enables to have latest version of the file in the backup than the volume shadow copy.

- **Skip files** - Ignores the locked files.

**Ignore read errors from source** - Selecting this option will enable CBU to continue the backup process and skip the files that report read errors from the source.

**Backup all sectors including free space** - This option is visible only when 'Disk, Partitions and MBR' is selected as Backup Source in Step 1. Comodo BackUp backs up only the contents in the occupied space of the selected drive partition. If you want to backup the free space in the drive, select this checkbox. Including the free space in the backup enables you to recover files that were deleted from the drive upon using advanced, 3rd party, file recovery software.

**Create parent folders in destination path** - This option is visible only when Simple Copy or Sync copy is chosen as Backup Format in Step 1. Selecting this option creates separate folder at the destination when you are creating simple copy of Sync copy backup for individual files and stores the files in the folders.

### 2.3.5. Filters

Comodo Backup allows you to set filters for including or excluding the files or specific path to the backup from the source Files / Folders selected in Step 1. This is useful, when you want to exclude or only include files of selected type or files having a selected string in their file name in the backup. For example, you may want to exclude all the temporary files in the selected folder from being backed up, include only the files with a specific string in the file name of a selected set of files or folder into the backup, excluding a specific file in the folder by providing the path in the filter. You can set the exclusion and inclusion filters accordingly in this step.

**Important Note:** The Filter Settings is active only if you have chosen Files and Folders as your backup source in Step 1. Inclusion filters apply only to files, while exclusion filters apply to both files and folders.
To set the filters

1. Click 'Add Filter' button.

2. Enter the filter with wildcard characters suffixed with the file extension if you want certain file types to be excluded or to be only-included (e.g. *.tmp, *.txt) or rename the filter with the string having wildcard characters if you want to exclude files include only the files with the selected string in their filenames (e.g. nam*.*).

3. Select whether you want to set the filter as inclusion (only the files having the specified extension or the file name will be included in the backup from the source and the other files will be omitted) or exclusion (the files having specified extension or the file name, contained in the source, will be omitted during the backup process) from drop-down in the 'Filter type' column.

4. The filter will be added. Repeat the procedure for adding more number of filters.

Example 1 - If you have added an exclusion filter with the name '*.tmp', all the files with the extension .tmp in the set of files or folders you chose in step 1 are omitted and only the other files in the set of files or folders are included in the backup. If you added an exclusion filter with the name ?a*.*, all the files / folders having 'a' as second letter in their file / folder names are omitted.

Example 2 - If you have added an inclusion filter with the name '*.doc', only the files with the extension .doc in the set of files or folders you chose in step 1, are included in the backup and the other files are omitted. If you added an exclusion filter with the name ?a*.*, only the files / folders having 'a' as second letter in their file / folder names is included.
In the example shown above, Comodo Backup can include only the files with the extensions .doc and .pdf from the selected folders into the backup. The .doc or .pdf files having 'nam' at the start of their file names are not included in the backup.

**Example 3** - If you want to back up all documents except a particular document in a folder, you can set the filter accordingly by entering the specific path and the file name as shown below.

In the example shown above, Comodo Backup includes all the files in the folder for the backup job except the one added as exclusion in the filter. Please note this kind of file selection applies for only exclusion and not for inclusion.

- To edit a filter, select the filter from list and click 'Edit'.
- To remove a filter, select the filter from list and click 'Delete Filter'.

**Exclude hidden files** - If this option is selected, the hidden files, if any in the selected folder, will be excluded in the backup.

**Exclude system files** - If this option is selected, the system files (files with .sys extension), if any in the selected folder, will be excluded in the backup.

### 2.3.6. Resource Usage

**Disk (Network) Usage** - You can choose the usage of the disk and network resources for the created backup job in this stage of the process. The available options are from 'Low' through 'High'. Higher the disk and network resources usage level, higher the speed of the backup process. Select the disk usage level you want to use from the drop-down menu.
Processor Usage - You can choose the usage of the processor resources for the created backup job in this stage of the process. The available options are from 'Low' through 'High'. Higher the processor usage level, higher the speed of the backup process. Select the processor usage level you want to use from the drop-down menu.

2.3.7. Log

- Add backup to Manage events - Instructs the application to add this backup event to History so that the details of this backup operation is viewable through the 'Manage' interface.
- Log to screen - The log of events (for example, details on each file or folder being backed up, error reports, size of the backup when compressed and uncompressed etc.) is created and displayed at the final stage of the backup operation in the interface, only if this checkbox is left selected. By default, this option is selected. If you do not want to log the backup events, deselect this checkbox.
- Log to file - Enables you to save the log of events (for example, details on each file or folder being backed up / restored, error reports etc.) generated during the backup progress, as a text file for later reference or analysis.

To save the log of events

- Select the 'Log to file' checkbox.
A 'Browse...' button will appear enabling you to navigate to the folder/file where you want to save the log.

- Click the Browse button and navigate to the folder.

- If you want to store the log as a new file, type the new file name in the File Name text box. If you want to add the log information to an existing log file, select the file. Click 'Save'. The new file name will appear in the interface.

- Select 'Create' from the 'Log method' drop-down menu, if you want to create a log file at each run. Select 'Append' if you want to add the log information to the existing file. If 'Append' is used and the log file doesn't exist, it will be created when backup job runs.

2.3.8. Email Notification

Comodo BackUp can send email notifications on execution of each backup job. You can configure CBU to send notifications to yourself or other people like your team members, to be informed of the backup. You can also configure whether the email notifications are to be sent only on successful creation of backup, only on failure or both.

To configure email notification

1. Select the check boxes beside 'on success' and / or 'on failure' depending on your requirement on when you and
others are to be informed of the backup job.

2. If you are using your email account for the first time, Select 'New' from the 'Account:' drop-down.
3. Enter the name of the SMTP server, the address of the outgoing mail server that the notification emails are sent through, in the 'SMTP Server' text box.
4. Enter the port number of the server to be used. (default = 25 for non-SSL connection and 465 for SSL connection).
5. If you want to use the secure SSL or TLS connection for the email, select it from the SSL/TLS drop-down.
6. Type the subject for the backup email in the 'Subject' text box. This is to indicate that the email is autogenerated by Comodo BackUp application (e.g. CBU Notification).
7. Enter the address on behalf of whom the notification should be sent. (e.g. your email address) in the 'From' text box.
   Note: This address should be supported by SMTP server you defined.
8. Enter the email address of the person to whom the notification should be sent in the 'To' text box. If you want the notification file to be sent to yourself, enter your email address here.
9. Type the username of your email account in the 'Username' text box.
10. Type your email account password in the 'Password' text box.

**Note:** The 'Account:' drop-down can display all the email accounts you might be using for sending Backup files. New email accounts can be added to this drop-down, by selecting the 'Remember me' checkbox whenever you use an email account for the first time. When using a previously added email account in future, you just need to select the account from the Account: drop-down, and need not enter the other details.
To check whether you have made the configurations correctly, click 'Send test message' button. A success or failure dialog is displayed. If a failure dialog is displayed, recheck your specifications and try again. On success message, check your email inbox to see the test message.

2.3.9. Before and After Tasks

Run Tasks before and/or after Backup - Comodo Backup allows you to run specific tasks before and/or after every manual or scheduled backup. For example, you may want to run your virus scanner before backing up to avoid potential infection of the destination folder. You can even mount an unmounted drive partition before backup to enable storing the backup file in the partition and unmount the partition on completion of the backup process by running a batch file with a list of corresponding Windows commands, play music files to indicate start and/or completion of the backup operation etc. You can also verify the backup job after it is created and choose to shut down after the backup job is completed.

To run a task before a backup operation

1. Select the 'Run task before backup' checkbox and click 'Browse'.
2. Navigate to the location of the file to be executed and click ‘OK’.

3. Select the checkbox ‘Wait for task to complete’ if you want CBU to wait until the selected task is to be completed before executing the backup job. Leaving this box unchecked makes CBU to start the backup operation before completion of the selected task.
   - Repeat the same procedure for running a task after backup.

2.3.10. Export to script

Clicking the ‘Export to script’ button enables you to store the backup job as a script file in any desired location in your system and to run the saved job from that location when ever needed. This is useful for the backup jobs you want to execute often, without scheduling.

To store the created backup job as a script file

1. Click ‘Export to script’ button. A ‘Save As’ dialog opens.

2. Browse to the location where you want to store the script file of the created backup job.
3. Enter the ‘File name’ as you want and click ‘Save’. An option dialog to encrypt the script file will be displayed.

4. Click ‘Yes’ if you want to encrypt the file.

5. Enter the encryption password for the file and click ‘OK’. Note this password in a safe location since you will need this to run the script file.

The encrypted script is stored as a file with .cbs extension.

To run the script from the saved location
1. Navigate to the location where the Backup Job script is saved with the .cbs extension, from Windows Explorer.
2. Double click the saved file or right click on the file and select the 'Open' option.
If you have opted to password protect the encrypted scrip file, then you have to enter the password.

3. Enter the password and click 'OK'.

The selected backup job is executed as explained in the section Finalization > Instant Execution.
The final stage is the execution of the configured backup job. You can:

- **Schedule the backup to run at recurring time intervals or upon the occurrence of an certain event (optional).**
- **Save as custom profile**
  and/or
- **Execute the backup job instantly**
2.3.11. Backup Now

To execute the configured backup job instantly, just click the ‘Backup Now’ button at the bottom right corner. Please refer to Run the Backup for detailed explanation of the process.

3. Shortcuts

Comodo BackUp ships with a set of predefined profiles that allow you instantly backup commonly used and important areas of your computer. Profiles include ‘My Pictures’, ‘My Videos’, ‘My Documents’, and ‘My Music’. You can also instantly access your Comodo Cloud account and custom profiles, perform other actions such as synchronize data between source and backup files, backup predefined backup configuration profiles for Browser data, mails and open the last backup operation from the initial step.

The ‘Shortcuts’ interface has three sections:

- Predefined Profiles
- Other Profiles
- Custom Profiles

Click on any of the above links for more details.

3.1. Predefined Profiles

The predefined profiles in CBU allow you to instantly take backup of important areas such as ‘My Pictures’, ‘My Videos’, ‘My Documents’ and ‘My Music’. You can backup all the files/folders in a predefined profile or selected items in a predefined profile.

Click the following links to know more:

- Backup all files/folders in a predefined profile
- Backup selected items from a predefined profile

To access the Predefined Profiles interface, click on the ‘Shortcuts’ tab from the Left Hand Side Navigation pane.
3.1.1. Backup all Files/Folders in a Predefined Profile

Comodo Backup allows you to create a backup of all files/folder in a predefined profile with few mouse clicks.

Settings

The default location of the backup files is configured in 'Comodo BackUp Settings' interface. See the section 'Comodo BackUp Settings' for more details. To store the backup files to another location, click the 'Browse...' button at the right side of the Backup Destination field at the top of the interface.

Backup Type

You have the option to save the the predefined profile as simple copy or in .cbu format. Comodo Backup is capable of restoring backup files that are in .cbu format or simple copy only. You can also restore items that are saved in simple copy format by just copying the backup files from the backed up location and pasting it in the original location or simply drag and drop in Windows Explorer.

- **CBU File** - Native file format of the Comodo BackUp application. The backup file will be stored in the selected destination with a .cbu extension. This type of backup can be restored only with the CBU application.

- **Simple copy** - Preserves a copy of the file in original format. The backup file is an exact copy of the selected file / folder in the current state. You can restore the files with CBU application or by copying and pasting it to another location.
Select the backup type you want and click 'OK'.

To backup all files/folders in a predefined profile

- Click the 'Backup Now' button beside the profile that you want to backup.

The progress of the backup will be displayed...

...and on completion of the task, a message indicating the successful completion of the backup process will be displayed at the top of the interface.
• Click 'OK'.

The backed up files will be saved with .cbu extension in the default location or your selected location. You can also schedule your backup jobs by selecting the alarm icon in the respective predefined profile tab.

Click here to know more about scheduling your backup jobs.

3.1.2. Backup Selected Items from a Predefined Profile

Comodo Backup allows you to backup selected items from a predefined profile with a few mouse clicks.

To backup selected items from a predefined profile

• Click on the 'Shortcuts' tab from the Left Hand Side Navigation pane.
• Click on the name of the predefined profile (for eg. My Pictures) from which you want to backup selected items.

The folders in the selected predefined profile will be displayed.
Click the Expand/Collapse button beside any of the folders to view all the files in the respective folder.

The details of individual files such as name, size, and type of the file will be displayed and you can easily decide what files to
backup by looking at the details.

- The checkbox ‘Select none/Select all’ allows you to select all the files and folders or none.
- Select the checkbox beside the items that you want to backup.
- Type the name of the file in the ‘Search’ field to search for particular file or folder.
- Select the location where the backup should be stored...

...or click the … button and navigate to another location for the backup to be stored.

- Choose the format that you want to save the backup from the drop-down button. You can choose between CBU File or Simple copy.

- **CBU File** - Native file format of the Comodo BackUp application. The backup file will be stored in the selected destination with a .cbu extension. This type of backup can be restored only with the CBU application.
- **Simple copy** - Preserves a copy of the file in original format. The backup file is an exact copy of the selected file / folder in the current state. You can restore the files with CBU application or by copying and pasting it to another location.

- To schedule a backup to run at a later time or at periodic intervals, click the alarm clock button and create a schedule. [Click here](#) to know more about Scheduling options.
• Click the ‘Backup Now’ button to instantly backup the selected files. The backup files will be saved in the chosen format in the selected location. Similarly, you can backup the files/folders available in other predefined profiles.

3.2. Other Profiles

The Other Profiles area displays shortcuts for accessing your online storage account, synchronize data between source and backup files, predefined backup configuration profiles for Browser data, mails, and open the last backup operation from the initial step.

Click the following links for more details on each of the profile:

• Online Storage
• Synchronize Data
• Browser Data Backup
• Backup Mail
• Last Backup

3.2.1. Online Storage

Clicking the shortcut ‘Online Storage’ in ‘Other Profiles’ area of the ‘Shortcuts’ menu opens an interface for logging-in to your Comodo Cloud account.
This interface is similar to the Online Storage interface appearing on clicking Online Storage tab from the Left Hand Side Navigation panel. Refer to the section Configuring Your Comodo Cloud (online storage) Account for more details.

### 3.2.2. Synchronize Data

The ‘Synchronize data’ feature allows you to synchronize data between two files / folders having the same name and any changes made to one are reflected in the other. Once configured, Comodo Backup will periodically check both synchronized files / folders and automatically update any items that have been modified. Users have the option to specify the frequency of the synchronization checks. Configuring an effective synchronization schedule is a very important part of ensuring your backups are kept up-to-date.

Please note that synchronization is a two-way operation. If you update a synced file in one location then this change will be reflected in the other - and vice versa.

**Important Note:** In Comodo BackUp v 4.0 and higher versions, items deleted from one location will not be automatically removed from the other location. This means that the user must delete the item from both synced folders (otherwise they will be copied back upon the next time you may want to run your virus scanner before backing up to avoid potential infection of the destination folder. You can even mount an unmounted drive partition before backup to enable storing the backup file in the partition and unmount the partition on completion of the backup process by running a batch file with a list of corresponding Windows commands, play music files to indicate start and / or completion of the backup operation etc. You can also verify the backup job after it is created and choose to shut down after the backup job is completed (sync operation). Delete propagation will be available from version 3.1 onwards.

### To synchronize data between a source file and its backup stored in your system

1. Click the shortcut ‘Synchronize data’ from the ‘Other profiles’ area.

![Synchronize data](image)

2. Click ‘Browse...’ beside ‘What to sync’ text box and navigate to the source item.
3. Click ‘Browse...’ beside ‘Where to sync’ text box and navigate to the location where the selected file should be synced.

4. Set the frequency at which you wish the data to be synchronized between the synchronized files. There are three options for you to select the frequency.

**Automatic** - Updates the synced files automatically whenever there is a change in either one of them.

**Only once** - When you select this option and press the ‘Synchronize Now’ button, the files will be synchronized only once and any subsequent changes in either of the file will not be synchronized.

**Time based** - This option allows you to set the intervals at which you wish the data to be synchronized between the synced files.

- Enter the time period in the ‘Frequency’ text box
5. Click 'Synchronize Now'. The synchronization progress will be displayed.

6. Click 'Abort' if you want to cancel the sync operation. On completion, the synced files will be updated with the latest data.

From this moment, the synced files will be updated at periodic intervals as set in the Frequency field.

3.2.3. Browser Data Backup

Clicking the shortcut Browser data backup enables to backup your Browser settings such as Home page, Favorites, Security Settings, stored passwords with a few mouse clicks. The browser data can also be backed up by selecting 'Browser Data' in Source Types in a new backup process.

- The web browsers installed in your system are listed in the right hand side pane. Select the browsers whose data are to be backed-up.
3.2.4. Backup Mail

The shortcut Backup mail allows you to backup the emails in the inbox of your mail clients like Mozilla Thunderbird, Eudora, Microsoft Outlook 2003, Microsoft Outlook 2007, Windows Live Mail, Outlook Express etc. with a single click. This will also backup settings (such as incoming server, outgoing server, if the email is downloaded or remains on server, etc). This is helpful to restore your mails and settings when you reinstall your operating system or configuring your mail settings on a new computer system.

- The mail clients installed and configured in your system are listed in the right hand side pane. Select the mail client(s) whose data are to be backed-up.
- Click 'Browse...' beside 'Where to Backup' text box and navigate to the destination for the backup file
- Click 'Backup Now'.

3.2.5. Last Backup

Clicking the shortcut ‘Last backup’ opens the interface of the last performed backup operation from the initial step. This shortcut enables to edit the destination or the settings of the backup job. This is also useful if you have accidentally deleted the last backed up job and allows you to perform the backup operation again.

To open your last backed up job

- Click the shortcut 'Last backup' from the 'Other profiles' area.

The interface of the last backed job Step 1 will open.
Now, you can edit the configuration such as backup format, destination of the backup and the settings of the backup job or switch to 'Fewer options' mode. See the section Backup for more details.

3.3. Custom Profiles

Comodo Backup allows you to save any backup job as a custom profile that enables you to instantly execute the backup job with a few mouse clicks. Please note that 'Custom profiles' interface will be available in the 'Shortcuts' menu only if at least one job is saved as a custom profile.

To open the custom profile interface

- Click on the 'Shortcuts' tab from the Left Hand Side Navigation pane.

The backup jobs that have been saved as custom profiles will be displayed in the lower pane.
See the section ‘Saving a Backup Job as a Custom Profile (optional)’ for more details on saving a backup job as a custom profile and editing a custom profile.

4. Restoring Your Files and Settings

Once you have successfully created a backup (.cbu or a simple copy) file you can ‘restore’ these files at any time and to any location. The restore wizard quickly guides you through this process and allows you to choose the specific file from which you want to restore; the mode of restoration; the precise files within from the .cbu that you wish to copy over and finally the folder or drive that you wish to restore to.

Note: Comodo BackUp can perform a restore operation only from a valid Comodo backup file .cbu or restore files / folders that were backed up as simple copy.

Tip: If you have created a self extracting backup by selecting the backup format as ‘Self extracting CBU’ in Step 1 selecting the backup format, you can restore it just by double clicking on the file from Windows Explorer window. For more details, please refer to the section Restoring Self Extracting Backups.
4.1. The Restore Process

To access the Restore interface, click on the 'Restore' tab from the Left Hand Side Navigation pane.

**Note:** For best results, we highly recommend that you close all other programs and save any unsaved documents before beginning the restore process.

Restoring the files from the backup consists of four simple steps:

**Step 1:** Choose Source  
**Step 2:** Restore Destination  
**Step 3:** Restore Options  
**Step 4:** Finalization / Restoring Backup

The progress bar on the top indicates the restoration configuration progress with step numbers. Placing the mouse cursor on a step displays a tool tip with a brief description of the step.

To return to a previous step to review/redo the configuration made, just click the respective step number. You can also return to the previous step by clicking the 'Back' button.
On completion of the above steps, you need to finalize the restoration operation by executing it instantly.

4.1.1. Step 1 - Choose Source

The first stage of the process is to specify the path where the backup file is located. You can choose to restore from your local machine, from another computer in your network, or from a FTP server, where you have saved your backup of the files you require to restore.

Click on the links below to get more information on each destination type.

- Online Storage - Restores your backup file located on Comodo Cloud.
- Recent Backups - Restores your recent backups
- My Computer - Restores your backup file located on your local hard drive.
- Network - Restores your backup file located on another computer in the network.
- FTP Server - Restores your backup file located on a FTP server.

After selecting the restore path from the left hand side panel, you need to make a further selection from the right hand side panel.

Alternatively, right-click on a CBU file in Windows Explorer and select CBU Restore from the context sensitive menu.

Online Storage

To restore a backup of your content stored on Comodo Cloud

1. Select 'Online Storage' tab.

The login page for your Comodo Cloud Account will be displayed.
2. Enter your Username and Password and click ‘Sign In’

The folders and files in your online storage space will be displayed as a list view.
3. Navigate to and select the `.cbu` file that you wish to restore and click 'Next'.

This takes you to **Step 2 - Restore Destination**.
Tip: Clicking ‘Restore Now’ at this stage will restore the selected backup to the original location instantly with default restore options.

Recent Backups
To restore any recent backup file that stored in the local drive etc.

1. Select ‘Recent Backups’ tab.

```
Step 1: Choose a backup to restore

<table>
<thead>
<tr>
<th>Name</th>
<th>Created date</th>
<th>Type</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dragon Setup.inc_files.cbu</td>
<td>12-32-2013 15:19:06</td>
<td>Files and Directories</td>
<td>C:\Users\My Backups</td>
</tr>
</tbody>
</table>
```

A list of recent backups stored in your computer will be displayed as a list.

2. Select the file for restoring and click ‘Next’.

This takes you to Step 2 - Restore Destination.

Tip: Clicking ‘Restore Now’ at this stage will restore the selected backup to the original location instantly with default restore options.

My Computer
To restore a backup stored in your local hard disk drive, a mapped network drive, a USB memory plugged to your computer, a mounted virtual drive or a CD/DVD inserted into the respective drive.

1. Select ‘My Computer’ tab.

The disk drives in your computer are displayed in a list view.
2. Navigate to and select the .cbu file that you wish to restore and click 'Next'.
Alternatively

- Navigate to the backup file through Windows Explorer, right click on the .cbu file and select 'CBU Restore' for restoring to a different destination or select 'CBU Restore Here' to restore in the same location.

This takes you to **Step 2 - Restore Destination**.

**Tip**: Clicking ‘Restore Now’ at this stage will restore the selected backup to the original location instantly with default restore options.

**Network Location**

To restore a backup stored in another computer on your network

1. Select 'Network' tab.
All the computers connected in your network are displayed as a list. (It may take a few seconds to list all the computers. Please wait).

2. Select the computer in which you have saved the backup. You will be prompted to enter the user name and password if the computer you selected is protected by user access control.

3. Enter the login User name and password for the computer you selected in the respective fields and click 'OK'.

You can navigate through the selected computer.

4. Navigate to the backup file you wish to restore and click 'Next'.

Network:

- JANIE's Computer
- ALICE's Workstation
- DAVID's Computer
Step 1: Choose a backup to restore

This takes you to Step 2 - Restore Destination.

**Tip:** Clicking 'Restore Now' at this stage will restore the selected backup to the original location instantly with default restore options.

**FTP Server**

To restore a backup stored in an FTP server

1. Select 'FTP Server' tab.

   The login page for your FTP server will be displayed.
2. Type the name of your FTP server in the 'Server' text box (The prefix ftp:// is optional).
3. Enter the port number of the server for connection (default = 21).
4. Type your user name for the FTP server in the 'Username' text box.
5. Type your password for accessing the FTP server.
6. Click 'Sign In'.

**Note:** The 'Account:' drop-down can display all the FTP accounts you might be using as Backup destinations. New FTP accounts can be added to this drop-down, by selecting the 'Remember my username and password' checkbox whenever you use an FTP account for the first time. When using a previously added FTP account in future, you just need to select the account from the Account: drop-down, and need not enter the Server name, username and password.

On successful login, the folders and files stored in your FTP account will be displayed as a list view.
7. Navigate to the backup file you wish to backup.
8. Click 'Next' to move to **Step 2 - Restore Destination**.

**Tip:** Clicking 'Restore Now' at this stage will restore the selected backup to the original location instantly with default restore options.

### 4.1.2. Step 2 - Restore Destination

The second stage of the process is to select the files you wish to backup from the backup image (.cbu file) and the restoration location - the drive / folder in your hard drive where the files are to be copied.
The upper pane shows a list of the files that you specified in the backup job. To select the files to be restored, select the checkboxes beside the respective file names and leave the rest unchecked. The Snapshot list in the upper right corner allows you to...
select which backup you want to restore since a cbu backup file may contain multiple backups. Click on the down arrow in the 'Snapshot' and select the backup file from the list.

The lower pane allows you to select the folder to which the files are to be restored.

- If you wish to restore the files to their original location, leave the check box 'Restore to default location' checked. This restores the files to original locations from where those were backed up. If your backup consists of files or folder from multiple locations then all files are restored to their respective original locations.

- If you wish to restore the files to a different location from the original location, uncheck 'Restore to default location' and type the path in the 'Restore path' text box. You can also click 'Browse' button and navigate to the required folder.

Restoring Registry and User Settings

You can restore the Registry, User, Mail and Messenger settings and / or system files when you want to 'rollback' part of a system to a previous configuration. In order for this 'rollback' to work correctly, the backup copy of the registry and / or the user settings MUST be restored back to their original locations. For this reason, Comodo recommends that users leave 'Restore to default location' checked. If you wish to export the backed up registry and / or user settings to an alternative location (for example, troubleshooting or other analysis) then uncheck 'Restore to default location' and select a different restore destination by clicking the 'Browse' button.

- Click 'Next' to move to Step 3 - Restore Options
- To skip the further step and to restore the items to their original location, click 'Restore Now'. The files will be appended to the original location - meaning only those files having the same file names in the original location, as those in the backup are replaced from the backup. Files having different file names from those in the backup, are kept intact.

4.1.3. Step 3 - Restore Options

In the third stage of restore process, you have the option to check the details of backup job, verify image, selecting the restore method and configuring log options.
Click on the drop-down arrow at the right side of any of the options to expand its settings area.
Click the following links for more details:
- Backup Info
- Image Options
- Restore Method
- Log

**Note:** The restoration process available in as incremental type with automatic base (or full if a base can not be used).

### 4.1.3.1. Backup Information

The Backup Info pane will open by default. You can also click on the drop-down arrow on the right side of the tab if it is closed. The tab will expand and display the details of the backup information related to the selected backup job. This allows you to verify whether you have chosen the correct backup and check whether the backup file is valid and consistent.
4.1.3.2. Image Options

You can check whether the backup file has the specific file / folder that you wish to restore. To confirm that you are restoring the correct backup you wanted, you can search the backup file for a keyword / phrase specific to the contained file / folder you wanted to restore. For example, if you want to restore a backup containing your bank statements, you can search the backup file for keywords like bank name, month, available balance etc. You can even enter the file name of a content file of a backup as your search keyword.

To search the backup file for a specific keyword

- Expand the 'Image Options' tab by clicking the down arrow at its right end.
- Enter the keyword in the text box and click the 'Find' button.
The contents of the backup file is searched for the input keyword. If the input keyword is found in the backup file, the message 'Search text found in the backup file' will be displayed. If the input keyword does not exist in any of the content files in the backup, then the message 'No match found' will be displayed.

Verify Image – You can check the integrity of the backup file before you restore.

- To instantly check the integrity, click 'Verify Image'
- If you want the application to check the integrity of the backup before it restores it, select the checkbox 'Verify image before restore'

All the split segments in the backup file are checked and on completion of verification and if the backup file is found to be intact, the message 'The backup image has been verified successfully' is displayed. If the backup file is found corrupted, then the message 'The backup image is corrupted' is displayed.
4.1.3.3. Restore Method

The next of the process is to specify the restoration mode (whether to replace all the files in the restoration folder with the restored files or to replace only the files with the same file names as those of the restored files and leave the other files in the restoration folder undisturbed).

- **Clean restore** - Selecting this option deletes all the files in the folder you specify as restoration location in step 2 and copies the files from the backup in the folder. For example if you want to restore a backup file to folder D:\Data, the folder D:\Data is deleted, then recreated with all files and folders in the backup.

- **Append files** - Selecting this option deletes only those files having same file name as those in the backup and replaces them in the restoration folder. Files having different file names from those in the backup, are kept intact.

- **Skip locked items to avoid restart** - If checked, files in the default location that are currently being used by the

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**Note:** If you have selected the entire folder for backup in step 1 while creating a new backup job, then all the files are replaced in the destination folder during the restoring operation as said above. If you have selected only individual files from a folder for backup, only those files are replaced in the same folder during restoration operation and the other files in the same folder are not affected.
system will be omitted from the restore operation. By default this option is unchecked so if Comodo Backup detects that certain files are in use, then a restart will be required to complete the restoration process.

- **Restore directory structure** - Selecting this option will maintain the directory structure of the selected restore item in the restore location.

- **Restore NTFS Security attributes** - If enabled, any existing NTFS security attributes that are assigned to your files and folders will be maintained after restoration. These attributes include permission settings such as Full Control, Modify, Read, and Execute, and so forth. If this option is disabled then default permissions will be applied to all files after restoration - removing any specific permissions that had set by the original administrator.

- **After restore take following action** - You can configure for the action to be taken by your system after a restore operation, from the drop-down.
  - **Nothing** - Your system will neither shut down or restart after the restore operation.
  - **Shut down** - Your system will shut down after the restore operation.
  - **Restart** - Your system will restart after the restore operation.

### 4.1.3.4. Log Options

You can configure the log options such as how to save the log file, to save in a new location, log to screen and log to file.
• **Log to screen** - The log of events (for example, details on each file or folder being restored, error reports etc.) is created and displayed at the final stage of the restoration operation in the right pane of the interface, only if this checkbox is left selected. By default, this option is selected. If you do not want to log the restoration events, deselect this checkbox.

• **Log to file** - Enables you to save the log of events (for example, details on each file or folder being restored, error reports etc.) generated during the restoration progress, as a text file for later reference or analysis.

**To save the log of events**

• Select the 'Log to file' checkbox.

The 'Browse...' button will be enabled allowing you to navigate to the folder/file where you want to save the log.

• Click the 'Browse' button and navigate to the folder.
• If you want to store the log as a new file, type the new file name in the File Name text box. If you want to add the log information to an existing log file, select the file. Click ‘Save’.

The new file name will appear in the interface.

• Select ‘Create’ from the ‘Log method’ drop-down, if you want to create a log file at each run. Select ‘Append’ if you want to add the log information to the existing file. If ‘Append’ is used and the log file doesn’t exist, it will be created when the backup job runs.

• Add restore to Manage events - Instructs the application to add this restoration event to history so that the details of this restoration operation is viewable through the ‘Manage’ interface.

• Clicking ‘Restore Now’ will move to the Finalization step.
4.1.3.5. Export to Script

Clicking the 'Export to script' button enables you to store the restore job as a script file in any desired location in your system and to run the saved job from that location whenever needed. This is useful for the restore job you want to execute often.

To store the created Restore job as a script file

1. Click 'Export to script' button. A 'Save As' dialog opens.

2. Browse to the folder where you want to store the script file of the created restore job.

3. Enter a 'File name' for the script file as you wish and click 'Save'. The script will be stored as a file with .cbs extension.

To run the script from the saved location

1. Browse to the location where the Restore Job script is saved with the .cbs extension through the Windows Explorer.
2. Double click the saved file or right click on the file and select the ‘Open’ option. The selected Restore job is executed as explained in the section Finalization.

4.1.4. Finalization / Restoring Backup

In order to finalize the restoration operation, click the ‘Restore Now’ button. The progress bar indicates the restoration progress.
The lower pane displays the log information and shows the details about the files currently being restored and error reports, if any.

You can 'Pause', 'Resume' or 'Abort' the restore process during the process by clicking respective buttons.
After restore is finalized, user can right click and copy the log of the restore operation.

**Note:** The log is displayed only if 'Log to Screen' is left selected in Log Options. You can also save the log as a text file for later reference or analysis.

- To complete the restoration process, click 'Finish'
4.2. Restoring Self Extracting Backups

If you have created self extracting backup packages of your files/folders or registry entries by selecting the backup format as Self extracting CBU in step 1 while creating the backup jobs, the backup files are stored as executable files (with the extension .exe). They can be restored without starting the Comodo BackUp application, just double clicking on the file from the Windows Explorer window.

**To restore a self extracting backup package**

1. Open the folder containing the backup file in Windows Explorer and double click on the file.

The Self Extractor wizard will start.

2. Select the restore location:
   - If you wish to restore the files to their original location, leave the check box 'Extract to default location' checked and click 'OK'. This restores the files to original locations from where those were backed up. If your backup consists of files or folder from multiple locations then all files are restored to their respective original locations;
   - If you wish to restore the files to a different location from the original location, uncheck 'Extract to default location', click 'Browse' and navigate to the required folder and click 'OK'.

![Self Extractor Wizard](image-url)
Tip: You can also create a new sub folder inside the selected folder by clicking the Make New Folder button.

3. Click 'Restore'.
The folders/files will be restored to the selected location and the completion dialog will be displayed.

Tip: If you have restored the files to a different location other than the original location, you can view the files immediately by clicking the 'Open containing folder' link.

4. Click 'Finish' to close the wizard.

5. Managing Your Backups

The Manage area in Comodo BackUp allows you to view the history of backup and restore events, scheduled backup jobs that are due to be executed and to edit and instantly run the scheduled backup jobs. Also, it allows you to mount the stored backups as virtual drives.

To access the manage interface, simply click the Manage tab from the Left Hand Side Navigation pane.
The Manage Area contains two tabs namely:

- **Events** - Displays the history of backup and restore events and scheduled backups which are due to run. You can switch between:
  - **Calendar view** - Displays a calendar with the restore/backup events indicated on each date
  - **List view** - Displays the events as a list.
- **Mounted Drives** - Enables you to view a list of backups mounted as virtual disks in your system and allows you to mount new virtual disks from the stored backups.

### 5.1. Events Area

The Events area in the Manage Interface allows you to view the history of backup and restore events. It is displayed by default whenever you click the 'Manage' tab. You can also access the area by clicking the Events tab from the tab structure of the 'Manage' interface.

The history of the events can be viewed in **calendar view** or **list view**.

You can switch between Calender view and List view by clicking the respective buttons at the top right.

The respective button for the current view will be grayed out and the other will be active.

#### 5.1.1. Calendar view

Switch to calendar view from list view by clicking the Calendar button in the interface.
The calendar view displays icons indicating the successful backup, restore and scheduled backup events occurred in the respective dates and a list of events occurred on the selected date in the lower pane.

- Indicates the backup events
- Indicates the restore events
- Indicates the scheduled backup jobs and synchronization events
- Indicates an unsuccessful operation

• To switch the selection to the current date in the calendar click the ‘Today’ button.
• To view backup and restore events on a specific date in the current month, click on the specific date in the calendar.
• To view the backup and restore events in the previous months, select the month and year from the month and year drop-down menus at the top.

5.1.2. List View
• To switch to list view, click the List button in the interface.
The list view displays the list of events in chronological order.

- To filter the entries based on time, select the period from the first drop-down menu.

- To filter the entries based on activities, select the activity from the second drop-down menu.

- To delete all the entries and clear the list, click the 'Clear recent activity' button.

5.1.3. Viewing Details of Backup/Restore Events and Editing Scheduled Backup Jobs

- To view the details of a backup/restore event, click the down button alongside the corresponding entry.

You can restore or load the backup job again for editing and backing up again from here.

- To restore the backup, click the Restore... link. It will take you to 'Restore' interface. See the section 'Step 1 – Choose Source' for more details about the Restore Process.

- To load the backup job again, click the Load backup... link. It will take you to 'New Backup' interface. See the section 'Step 1 – Selecting the Backup Source' for more details.

- To delete entry from the list of events, click the 'Delete' button.
To edit/reschedule a scheduled backup job, select the down arrow button alongside scheduled backup entry.

To run the scheduled backup job instantly, click the Backup Now link.

To modify the time and date that the backup should run, click the Edit link. The schedule interface will open. Refer to the section Schedule the Backup for more details.

To cancel/remove the backup job click the 'Delete' button.

To clear the recent activity from history, click the 'Clear recent activity' button.

The application will ask your confirmation for clearing the recent activities.

Click 'Yes' to clear.

5.2. Mounting Backups as Virtual Drives / Partitions

The 'Mounted Drives' area in the Manage Interface allows you to view the list of virtual drives mounted in your system from the stored backup files and also to mount new virtual drives.

**Background Note:** The backup file mounted as a virtual disk is displayed as a separate drive partition with a new drive letter in Windows Explorer and actually serves as a drive in its own right. You can browse through the Folders and Files in the disk as you normally browse a physical disk partition and search/edit files in comparably less time.

To access the Mounted drives area, click the Mounted Drives tab from the 'Manage' interface.
Note: Only disk/partition backups can be mounted in read / write mode, and when unmounting them a new incremental backup will be created which will be appended to backup file containing only the changes.

To mount a backup as a new virtual drive

- Click on the 'Mount existing backup...' link or the 'Browse' button, navigate and add the backup file into the 'Mounted Drives' area.
• Navigate to the backup file and click the 'Open' button. The backup will be added to the 'Mounted Drives' area.
• To mount the backup with the next available drive letter, click 'Mount'.
• If you want to configure advanced options for mounting the virtual drive, click the down arrow beside the backup file name.

Make your selections from:

• **Mount backup everytime Windows starts** - Instructs the application to repeatedly mount the backup as virtual drive with the selected drive letter, every time windows is started. Select this option if the backup is scheduled once and going to be updated periodically.
• **Mount backup as read-only** - By default, the backup is mounted as a Read-Only drive, so that you can view the folders and files but cannot edit the files. If you want to mount the virtual drives enabling editing the files, uncheck this checkbox.
• **Select a snapshot to mount** - Creating a full backup and multiple differential and incremental backups for the same source creates several snapshots for the same backup file (.cbu format). The 'Select a snapshot to mount' box displays a list of all the snapshots of the backup file and allows you to select which backup in the .cbu file you want to mount as the virtual drive.
• **What to mount** - If you have chosen to mount the backup of a disk/partition as a virtual drive, the partitions in the backup are listed in the 'What to mount' box. You can select which partition you want to mount as the virtual drive.
• Select a drive letter from the Drive letter drop-down menu.
Click 'Mount'. Alternatively, right-click on a CBU file in Windows Explorer and select CBU Mount from the context sensitive menu. The file will be mounted as a virtual drive.

6. Configuring Your Comodo Cloud (online storage) Account

Comodo Cloud is Comodo’s secure online storage service providing essential disaster recovery for mission critical or otherwise important files in the event of damage, deletion or theft. Files and data of all types are stored on Comodo’s highly secure servers and can be accessed over the Internet from anywhere in the world. You can mount your online storage space as a virtual drive simultaneously on multiple systems and browse/manage files with Windows Explorer as you do with your normal drive partition. Comodo Cloud can be accessed in multiple ways:- using Comodo Backup, via a web interface; by using a lightweight Comodo Cloud (CCloud) client; by using CCloud app in your Android device and; by using CCloud Drive. If you have already created a Comodo Cloud account, then you can login and begin using your storage space right away.

To access the online storage space, click the 'Online Storage' tab from the Left Hand Side Navigation pane.
From here, you can:

- Create a new Comodo Cloud account;
- Log-in into your account;
- Quick Start - Schedule Regular Backups to Comodo Cloud;
- Manage your files on Comodo Cloud;
- Manage Your Account.

6.1. Creating a New Comodo Cloud (online storage) Account

- Comodo Backup users - if you have already created a Comodo Cloud account, you can login to your storage by clicking the online storage button. See section 6.2 - Logging in to your account.
- Comodo Backup users - if you have not yet created a Comodo Cloud Account then you need to do so before you can access your space. Do this by clicking 'Register Free Account Now' link from the Online Storage interface or by visiting https://ccloud.com/ and clicking the 'Register' button. Refer to the section To create a new online account for more details.

You can upgrade your account to get more storage space at any time. See Upgrading Your Online Storage Space for more details.

- If you wish to purchase 500 GB of online storage space, then please visit https://www.ccloud.com/online-storage-plans.php and select a plan. See Upgrading Your Online Storage Space for more details.

To create a new online account

1. Click the 'Register Free Account Now' link from the Online Storage interface. You will be taken to https://www.ccloud.com/signup.html "Register Your disk space in the cloud" page from where you can choose the account type whether Personal or Business. Refer to Appendix 3 – Comparison of CCloud Packages for more details.
• Alternatively, visit https://www.ccloud.com/ and click the 'Sign up FREE' button.

The Sign Up page will be displayed.

2. Select the account type that you want to sign up for.
3. Enter you first and last names in the respective fields.
4. Enter your email address in the Email field.
5. Enter a password of your choice in the Password field. Your password should contain minimum six characters.
6. Click the 'Sign Up' button. Your account will be created and an activation mail will be sent to the email address entered.
7. Click the word 'here' in the mail to activate your newly created account.

You can now login to your online storage account using your email address as username and the password you entered during our account creation.

**Tip:** You can use the same username and password to login to Comodo Cloud (CCloud) client installed in your computer and to the Comodo Cloud web interface hosted at [https://www.ccloud.com/](https://www.ccloud.com/).

### 6.2. Logging-in to Your Account

Once you have successfully created an online account, you can login to your online storage area, by entering your username (your email address) and password that you specified during account creation.

**To log-in to your account**

- Click 'Online Storage' from the Left Hand Side Navigation pane.
- You will be automatically signed in into the Online Storage. In case you are not signed in into the Comodo Cloud:
Enter your Username (your email address) and Password that you specified during account creation.

Click ‘Sign In’.

Tip: You can also sign-in to your account by entering your username and password from the 'Online Storage' area in the Summary screen.

6.3. Quick Start - Schedule Regular Backups to Comodo Cloud

Now that you have signed up for a Comodo Cloud account, the next step is to back up your files to the online storage space. Follow the steps given below:

1. Start the application and click ‘Backup Now’ on the summary screen.
2. Select 'Fewer options' mode or 'More options' mode to create your backup job. 'More options' mode allows granular configuration of your backup job and is suitable for advanced users. 'Fewer options' mode is suitable for most users and allows you to create a backup job in the least number of steps.

3. Add the files, folders and other important areas that you want to back up from the 'Backup Source' area and click 'Next'.

4. Select 'COMODO Cloud' as the 'Backup Destination'.
5. Enter your username and password and click ‘Sign In’. If you are already logged into the Comodo Cloud account, the status will be displayed at the top of the interface.

6. If you are logged-in into the CCLOUD account after successful installation, you will automatically sign-in into the Comodo Cloud account. The CCLOUD drive interface will open.
7. Click the alarm clock icon to configure a backup schedule.
8. Click 'Next' if you wish to configure advanced backup settings.

9. Click 'Backup Now' when you are ready to start copying the selected items to online storage.

That's it. Comodo Backup will begin copying your files over to your online storage immediately. Future backups will run according to the schedule you specified.

Refer the section Managing Files on Comodo Cloud for more details on utilizing your online storage space to its full potential.

6.4. Managing Files on Comodo Cloud

Your online storage space can be accessed and managed in multiple ways:

1. **Via the Comodo Backup interface** - Click the ‘Online Storage’ tab to login and manage files using a Windows Explorer style interface.

2. **Using the web interface** - Click the ‘login’ button at [https://www.ccloud.com/](https://www.ccloud.com/) to open the web interface. The Comodo Cloud web interface is useful since you can access it from anywhere in the world using any Internet browser and upload new folders/files or download from the cloud to the computer that you are using. For detailed explanation on using CCloud web interface, refer to our guide at [http://help.comodo.com/topic-154-1-509-5871-Using-the-CCloud-Web-Interface-.html](http://help.comodo.com/topic-154-1-509-5871-Using-the-CCloud-Web-Interface-.html)

3. **Using the Comodo Cloud (CCloud) client** - Optionally installed along with Comodo BackUp. The client can also be downloaded from [https://www.ccloud.com/](https://www.ccloud.com/). The CCloud client enables you to instantly upload your files and folders to your online storage by simple drag and drop operation. The client also synchronizes the files and folders in your local drive and the online storage space whenever changes are made to them at any one of the two locations. For detailed explanation on using CCloud client, refer to our guide at [http://help.comodo.com/topic-154-1-456-5010-Comodo-Cloud---Introduction.html](http://help.comodo.com/topic-154-1-456-5010-Comodo-Cloud---Introduction.html)

4. **Using the CCloud Drive** - You can mount your online storage space as a virtual drive in your computer using the CCloud Drive program. The virtual drive enables you to access the folders and files from your online storage as you would with any local drive or partition. For detailed explanation, refer to the dedicated CCloud Drive guide at [http://help.comodo.com/topic-154-1-512-5893-Introduction-to-Comodo-Cloud-Drive.html](http://help.comodo.com/topic-154-1-512-5893-Introduction-to-Comodo-Cloud-Drive.html)


The remainder of this section deals with managing files using option 1.

After successful login, your username is displayed in the tab structure area and the disk partitions and folders of your system are displayed in the left hand side pane and the folders and files in your online storage space are displayed in the right hand side pane. The CCloud space will be mounted as a virtual drive in your computer after login and can be used as any local drive or partition.

The status bars above the panes display the usage state of your local hard disk and your online storage space.
You can:

- Copy folders/files between your local system and the online storage
- Synchronize the contents of a folder/file in your system with the copy of the same in the online storage
- Create new folders on your local system and the online storage
- Delete folders/files in your local system and the online storage
- Mount your online storage space as a virtual drive in your system
- Rename folders/files in your local system and the online storage
- Upgrade your account for additional storage space.

6.4.1. Copying Folders / Files Between Your Local System and Comodo Cloud

1. First navigate and select the destination folder in the destination location (online storage or the local system).
2. Select the folder/file to be copied from the source location (local system or the online storage).

**Tip:** Use Control/Shift keys to select multiple folders/files at once.

3. Click the right arrow to copy the selected folders/files to the online storage or click the left arrow to copy the selected folders/files to your computer.

**Tip:** Alternatively you can select the folders/files to be copied, drag and drop to the destination folder.
The transfer progress will be indicated in the lower pane and...

- If you want to temporarily stop the copying process, press 'Pause'. You can restart the process by clicking the 'Resume' button.
- If you want to terminate the process, click 'Cancel'.
- To view the details of the files being currently copied, click the down arrow.

...on completion, clicking the down arrow will display the log of the copying process.
6.4.2. Synchronizing the Contents of Folders / Files in Your System with the Same Copy in Comodo Cloud

1. First select the copy of the folder in the destination location (online storage or the local system).
2. Select the source folder from the source location (online storage or the local system).
3. Click the ‘Sync’ button.

The synchronization progress will be indicated.
If you want to temporarily stop the synchronization process, press ‘Pause’. You can restart the process by clicking the ‘Resume’ button.

If you want to cancel the process, click ‘Cancel’.

To view the details of the process, click the down arrow.

On successful completion, the two folders will be having the same content.

6.4.3. Creating New Folders in Your Local System or Comodo Cloud

To create new folders in your local system or online storage space, click the new folder icon 🌐.
A new folder will be immediately created in the parent folder. Browse to the new folder and rename it as you require.

6.4.4. Deleting Folders / Files in Your Local System or Comodo Cloud

- To delete folders/files in your local system or online storage, simply select the folder/file and click the delete icon. A confirmation message will be displayed.

- Click ‘Yes’ in the confirmation message

The selected folder / file will be deleted.

**Tip:** Use Control/Shift keys to select multiple folders/files at once.

6.4.5. Mounting / Unmounting Comodo Cloud as a Virtual Drive

Comodo Backup mounts your online storage space as a virtual drive in your computer system and enables you to access the
files and folders in it like physical drives in your system, once you login to your online storage account through it. If it is unmounted, you can mount it from the Online Storage interface of the application.

**To mount your online storage space as a virtual drive**

- Click the ‘Mount as drive’ button at the top right side of the interface.

The progress of the mounting will be displayed.

On completion, the online storage space will be mounted with the drive letter next to the drive letter of your last hard disk partition. You can see the drive in ‘My Computer’ window.
You can browse and manage folders and files in the online storage through Windows Explorer.

- To unmount the virtual drive, click the 'Unmount' button.

6.4.6. Renaming Folders / Files in Your Local System or Comodo Cloud

- Right-click on the item that you wish to rename and select 'Rename' from the context sensitive menu.
• Type the new name for the file or folder.

Or

• Select the folder / file to be renamed in Windows Explorer and click 'Rename' in the File menu.

6.4.7. Upgrading Your Online Storage Space

• Click the 'Get more space' link. You will be taken to the Comodo Online Storage Signup page at https://secure.comodo.com/home/purchase.php?pid=16&dp=1y

The page allows you to select the package that meets your requirements.
• The subscription pack you chose will be displayed pre-selected in the Package drop-down. Select the subscription package you want to use from the drop down list if you want to change it.
• In the Customer Details section, select ‘Existing Client’ or ‘New Client’ and fill the relevant details.
• Select your payment mode in the Payment Options section and fill the relevant details.
• Read the ‘End User License and Subscriber Agreement’ and ‘Terms of sale’ and after selecting the checkbox beside it, proceed to buy the plan.

Your order will be processed, your online storage space will be upgraded and a confirmation email will be sent from Comodo.

Tip: You can also upgrade your account from the ‘Account Settings’ area. Refer to Upgrading your Account for more details.

6.4.8. Logging-out from Comodo Cloud

To logout, simply click the ‘Sigh Out’ tab at the tab structure area.

A Confirmation message will be displayed.
• Click 'Yes'.

6.5. Managing Your Account

The Account Settings area enables you to view your account details and change your Login username and password at anytime.

To access the Account Settings area, click the 'Account Settings' tab from the Online Storage interface.

You will be taken to the Comodo Account login page. Enter your Comodo Online Storage username (your email address) and password and click 'Login'. Your account settings page will open.
The Accounts Settings page contains four tabs:

- Comodo Online Storage;
- My Account;
- Help;
- Contacts.

By default, the 'My Account' page will be opened, displays the full details of your account with Comodo Accounts Manager. For more details on this page, please refer to My Account section.

6.5.1. Comodo Online Storage Area and Upgrading Your Account

The Comodo Online Storage tab displays your Comodo Online Storage account details like your validity period and the usage status of your online space. This area also allows you to upgrade your account for additional space.

You can upgrade your account for purchasing additional online storage space on Comodo Online Storage from the 'Comodo Online Storage' area. To do so:

1. Click 'Online Storage' from the Left Hand Side Navigation pane and click Account Settings tab.
2. Login to your account page by entering your Username and Password.
3. Click 'Comodo Online Storage' tab.
4. Click the 'Upgrade account' link in the right hand side pane.
You will be taken to the Comodo Online Storage Sign-up page.
5. Choose the subscription package as per your requirement from the drop-down.

6. Enter your contact details in the 'Contact Information' area.
7. If your Billing address is same as the contact information, leave the checkbox The same as Contact Information under Billing Information selected. Else, uncheck the option and enter your billing address.

8. Select your payment mode in the Payment Options section and enter the required details in the respective fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>J.C. Dithers Construction</td>
</tr>
<tr>
<td>Street Address</td>
<td>ABC Street</td>
</tr>
<tr>
<td>Address2</td>
<td>XYZ Area</td>
</tr>
<tr>
<td>City</td>
<td>City Name</td>
</tr>
<tr>
<td>Country</td>
<td>United States</td>
</tr>
<tr>
<td>State or Province</td>
<td>Alabama</td>
</tr>
<tr>
<td>Postal Code</td>
<td>123456</td>
</tr>
</tbody>
</table>
9. Read the 'End User License and Subscriber Agreement' and accept to it by selecting 'I accept the Terms and Conditions' checkbox.
10. Click 'SIGN UP'

Your order will be processed, your online storage space will be upgraded and a confirmation email will be sent from Comodo.

6.5.2. My Account

The 'My Account' tab displays the full details of your account with Comodo Accounts Manager.

This area allows you to change your account settings and information and also to sign-up for other Comodo Products and Services. The right hand side pane contains the shortcuts for the following:

- Viewing your account details
- Changing your account password
- Changing your contact details
- Changing your email address
- Managing your credit card details
- Viewing your purchase history

Changing Your Comodo Account Password

The 'Change Password' option in the right hand side pane allows you to change the password to access your Comodo Online Storage (COS) account and the Comodo Accounts Manager (CAM).
To change your password

1. Click 'Change Password' from the right hand side pane in the 'My Account' interface

2. Enter your existing password on Old Password text box.

3. Enter your new password in the New Password text box and re-enter for confirmation in the Reenter New Password text box.

4. Click 'Submit'.

Your access password is now changed. You need to enter your new password to access your online storage space from next login onwards.

Changing Contact Information

The 'Change Contact Information' option in the right hand side pane enables you to change your contact details from those provided during your account sign-up.

To change your contact details

1. Click 'Change Contact Information' from the right hand side pane in the 'My Account' interface

The 'Change Contact Information' form will appear, pre-populated with the details entered while signing-up the account.

2. Modify the details as required.
Note: Fields marked with * are mandatory.

3. Click 'Submit' at the end of the page.

Your contact information attached with the account are now changed.

Changing Your Email Address
The 'Change Contact Information' option in the right hand side pane enables you to change your email address that is associated with your account.

To change your contact email address

1. Click 'Change Email Address' from the right hand side pane in the 'My Account' interface. The Change Email Address form will appear, pre-populated with the email entered while signing-up the account.

2. Enter the new email address in the New Email Address text box and re-enter the same in the Reenter New Email Address text box for confirmation.

3. Click 'Submit'.

The email address attached to your account is now changed. You will receive email notifications related to your Comodo Online Storage account only in your new email address. But your login email address remains the same, as signed-up with.

Managing Your Credit Cards Information
The 'Credit Cards Management' option in the right hand side pane enables you to change the details of the credit card(s) associated with your account. The details of the credit card you used earlier will be displayed.

To add a new card, click 'Add Credit Card' and fill-in the form with the details of the new card. This will help in pre-populating your credit card details when you are renewing your subscription, purchasing additional online storage space or subscribing for other Comodo Products or Services.

Viewing Your Purchase History
In this page you can view the details of Comodo products that you have purchased in the past.

To view your purchase history

- Click 'Purchase History' from the right hand side pane in the 'My Account' interface.

The page displays the details of products that you have purchased and also allows you to view the orders and change future payment method.

- Click the 'Orders' link to view all your product orders and their details.
Subscribing for Other Comodo Products and Services

The 'User Details' page under 'My Account' tab displays the currently enabled services for your account and a list of other products and services available from Comodo at its bottom.

- To subscribe for other Comodo products or Services, simply click the corresponding link and follow the enrollment procedure.

6.5.3. Help

Clicking the Help tab takes you to Comodo's searchable knowledgebase and troubleshooter at http://support.comodo.com.
If you do not find a solution in our Knowledgebase or Troubleshooter, you can submit a support ticket after registering an account. Registration is free.

6.5.4. Contacts

Clicking the 'Contacts' tab takes you to the 'Contact Us' page.
The 'Contact Us' page contains telephone numbers and email addresses for contacting Comodo for purchasing Comodo Products and Services and to get Product Support.

6.6. Troubleshooting Login Problems

Problems logging into your Comodo Cloud account via the Comodo Backup interface could be because you have forgotten your account username or the password may be wrong.

Retrieving a Forgotten Password

If you have forgotten your password, please use the 'Forgot Password' link at https://accounts.comodo.com/login.
• Enter your username or your valid email address (registered with your account) and click ‘Submit’.

An email will be sent to the specified email address. Follow the instructions in the email to change your password. You will be able to login to your account with your new password.

7. Comodo BackUp Settings

The ‘Settings’ area in Comodo BackUp allows you to configure the miscellaneous settings concerning the overall behavior of the application.

To access the settings area, simply click the ‘Settings’ link from the title bar.
The 'Settings' panel will open.

You can configure for the following in the Settings panel:

- Integration to Windows Explorer
- Scan all files on this computer for backup proposes
- Default Backup Location
- Change Language
- Update Settings

Comodo BackUp User Guide | © 2014 Comodo Security Solutions Inc. | All rights reserved
• **Create a rescue disk**

**Integration to Windows Explorer**
By default, Comodo BackUp application is integrated to Windows Explorer Shell, so that:

- You can directly start the backup operation of a drive partition, folder or file onto any desired location by right clicking on the item from Windows Explorer window and selecting 'CBU Backup' from the context sensitive menu;
- You can directly start the backup operation of a drive partition, folder or file onto online storage by right clicking on the item Windows Explorer window and selecting 'Online Backup' from the context sensitive menu;
- You can directly start the restore operation of a backup file (file with .cbu extension) by right clicking on the item and selecting 'CBU Restore' from the context sensitive menu;
- You can directly mount a backup file as a virtual drive in your system by right clicking on the item and selecting 'CBU Mount' from the context sensitive menu;

If you do not want to have CBU integrated to your Windows Explorer, uncheck the 'Integrate into Windows Explorer Shell (right click menu)' check box.

**Scan all files on this computer for backup proposes**

By default, Comodo Backup scans your system in real time to identify new files added and the files modified for backup operations under relevant **pre-defined profiles**. If you do not need this option deselect the 'Scan all files on this computer for backup purposes' checkbox.

**Default Backup Location**

Comodo BackUp allows you to define a default location for storing the backup files when using the predefined backup profiles. The application is shipped with a default location C:\Documents and Settings\<User name>\My Backups\filename.cbu.

**To set a default location of your choice**

1. Ensure that the 'Default Backup Location' checkbox is selected.
2. If you want to change the default location, select the 'Browse' button...
...and navigate to the location of your choice.

Change Language

Comodo Backup is available in several languages. You can select the language in which you want the application by choosing it from the ‘Language’ drop-down menu. *(Default = English)*
Update Settings

Automatically check for updates - Starts the process of searching for latest updates for Comodo BackUp from the Comodo servers whenever the application is started and prompts you to download and install the updates, if available.

Use local cache to store files, for better speed and offline access - Local caching of data improves your online storage browsing and upload/download speed.

- Click ‘Apply’ for your settings to take effect.
- Click ‘Use Default’ to clear your selections and rollback the applications to default settings.

Click ‘Back’ to return to your previous window.

Use Status Bar – By default this is selected and the status of updates for Comodo BackUp will be displayed in the interface. Deselect this check box if you do not want to view the update status.

Create Rescue Disk

Comodo BackUp enables you to create a rescue disk in the form of a CD or DVD, for Windows. Using a rescue disk you can start Windows, even if a hardware or software fault has disabled the installed operating system(s) on the internal hard drive. The rescue disk enables a bare metal restore of your entire system. It can also be used to scan for and remove rootkits, viruses and spyware (that have infected boot files), or to reset a lost administrator password.

In order to create a rescue disk your operating system should have disk writing capabilities and Windows Automated Installer Kit as prerequisites. If your system does not have the above said components, Comodo BackUp will prompt you to download and install those, when you are creating a disk for the first time.

To install the prerequisites

- Click ‘Create Disc’. If your system does not have the disk writing capabilities, you will be prompted to download and install Microsoft IMAPI v2.0. If your system already has the component installed, the process will start creating the rescue disk.
• Click Download. You will be taken to the download page for Microsoft IMAPI v2.0, from where you can download and install the component. After installing the component, You can retry creating the rescue disk.

Upon retry, the application will check whether your operating system has the Windows Automated Installation Kit installed. If not, you will be prompted to download and install the component. If you have the component installed, the process will start creating the rescue disk.
To create a rescue disk

1. After confirming that you have all the components mentioned in the prerequisites installed, load a blank CD or DVD in to your CD/DVD writer
2. Select the CD/DVD writer from the drop-down beside ‘Create bootable Rescue Media using:’
3. Click ‘Create Disc’. The application will start creating a rescue disk and the progress will be displayed.
4. Upon completion, click 'OK'...

... and wait till you CD/DVD drive automatically ejects the disk.

You Rescue Disk is created. Label it as 'Windows Rescue Disk' and store it in a safe place, for use during system failure.

8. Comodo BackUp Feedback

The feedback feature allows users bi-directional communication with the Comodo BackUp development community and can be used to quickly offer feedback, comments and suggestions about the software. The feedback feature is present throughout the application and allows you to simply register a Like/Dislike comment by clicking the appropriate button and (optionally) to send us a comment about your impressions of the software. If you do choose to leave a comment then any replies from the developers will be displayed within the Comodo BackUp interface itself. Every message reaches our developers and Comodo makes great efforts to take every comment into consideration and to reply to our users. Developers and testers will interact directly with you through the application interface and suggestions for new features may well be implemented in future versions of the product.
Integrating the ability to provide software feedback in such a direct fashion allows our users to raise issues and suggestions more quickly, improves our ability resolve problems faster and ultimately allows us to produce a product that truly reflects the requests of our users.

Refer the next topic ‘How to leave Feedback’ to provide your comments and feedbacks.

8.1. How to Leave Feedback

To open the feedback interface, simply click the ‘Feedback’ menu item at the top right of the Comodo BackUp interface (see screenshots below).

Click the ‘I Like’ or ‘I Dislike’ buttons to send a quick notice of your approval or disapproval with the application in general. If you would like to be more specific then please type a comment in the field provided before clicking the ‘I Like’ or ‘I Dislike’ button. Your message will be immediately sent to our developers.

- Click on any of the feedback in the list to view all the feedbacks and responses, including your own as shown below:
9. Using Live Help

Comodo GeekBuddy is a remote assistance service offered by Security Experts in Comodo who can access your computer through their Remote Desktop. Should you need any assistance or encounter a problem with your system, you can get an immediate solution from our computer experts by clicking the Help link from the Main interface of Comodo BackUp.
Click on Help link from menu bar and then click on the second button "Get help from a Geek Buddy" and the client will be automatically installed in your system.

GeekBuddy includes the following services:

- **Virus & Malware Removal**: Our technicians remotely clear any detected viruses or malware that is found on your PC.
- **Internet and Online Identity Security**: Optimization of your computer's security settings to prevent loss of sensitive data and identity theft.
- **Printer Setup**: Installation or updating of printer software and/or drivers, checking ink levels and configuring your printer to work on a wireless or wired network.
- **Internet-based email account**: We set up your email - any provider, any account. Great for new computers and novice email users.
- **Software Activation**: Installation, initial configuration, and activation of third party software in your system.
- **General PC Troubleshooting**: We'll perform a detailed system check to identify and eliminate basic hardware and software conflicts in your Windows PC.
- **Computer Power Setting Optimization**: Optimization of your power management settings based on how you use your computer. Your GeekBuddy will help you go green and save money on your electric bill.
- **Comodo Software Installation and Set up**: Installation and support of software supplied by Comodo.
- **Comodo Account Questions**: Clarification of any issues regarding your Comodo account.

For more details, refer to:

- Installing GeekBuddy Client
- Activation of Service
- Launching the Client and Using the Service
- Accepting Remote Desktop Requests
- Chat History
- Uninstalling Comodo GeekBuddy

## 9.1. Installing GeekBuddy Client

Getting support from a Geek Buddy needs a GeekBuddy Client installed in your system.

**To install the GeekBuddy Client**
• Click the Help link form Comodo Backup main Interface.

• Click the second button from Help window.

• The application will detect whether the client is installed in your system. If not, the application will download the GeekBuddy client.

• After the download, the software will be installed automatically.

The GeekBuddy setup file also contains an important feature, Issur Tracker, which automatically identifies common problems and helps you to resolve them quickly and easily. If the problems are beyond its scope for rectification, you can contact a GeekBuddy to resolve them.

After installation, you can launch the Geek Buddy from your desktop shortcut icon or from the start menu and chat with a Comodo Computer Support Technician any time.

You can also purchase the GeekBuddy services from http://www.GeekBuddy.com/.
Click on **Start Now** button to start the purchase process.

9.2. Activation of Service

Start the GeekBuddy client in one of the following methods:

- From Comodo Backup interface - > Help Option - > ‘Get help from a Geek Buddy’ button
- Double clicking on the GeekBuddy shortcut icon from the desktop
- Clicking the GeekBuddy system tray icon
- From Start menu - Click ‘All Programs > COMODO > GeekBuddy > Comodo GeekBuddy’

The GeekBuddy Chat screen will be displayed.
• Click the 'About' link at the top far right of the screen.

The About GeekBuddy screen will be displayed.

• Click the 'Change your license key' link in the screen.

The 'Activate your License' screen will be displayed.
• Enter the License Key from your GeekBuddy retail package or the key you received through your email (for online purchases).
• Click the 'Activate' button or if you need more help on this click the 'Let our technicians activate the license for you' button.

The license key will be checked and if correct, the 'Activation successful' screen will be displayed.

• Enter the name and email details in the respective fields.
• Click 'Continue'.

The home page of GeekBuddy will be displayed. Now you can start using it and seek the help of an expert to resolve your
computer problems.
Click the following link for more details on how to start and using GeekBuddy service:

- **Launching the Client and Using the Service**

### 9.3. Launching the Client and Using the Service

You can open the GeekBuddy client in one of the following methods:

- From Comodo Backup interface - > Help Option - > 'Get help from a Geek Buddy' button
- You can access the GeekBuddy by double clicking on the shortcut icon to GeekBuddy from the desktop;
- Click on the 'GeekBuddy' system tray icon or launch GeekBuddy from the Start Menu. Click 'All Programs > COMODO > GeekBuddy > Comodo GeekBuddy'.

The GB Home screen will open.

![GeekBuddy Chat Screen](image)

- To contact a support technician, type your issue in the field or enter the invitation code if you have it and click the 'Send' button.

You will be connected to a GeekBuddy...
...and once the connection is established, our support technician will initiate a chat with you.

• Proceed to chat now.
• Explain your problem. The technician will assess your problem with you and work with you to fix any issues.

You can view the actions taken by the technician for solving the problems in your system by clicking the 'JOBS' link at the top left side of the interface.

Clicking the 'HELP' at the top right side of the interface will take you to the online GeekBuddy help guide.

**About GeekBuddy**

• Click 'About' link at the top right side of the interface.

The About GeekBuddy information screen will be displayed.
The 'About' dialog displays the copyright and product version information. The screen also displays information about the licensee, its validity and to change the license key or activate the account.

9.4. Accepting Remote Desktop Requests

In order to solve certain issues, the support technician may need to directly connect to your computer via a remote connection. Remote control can only go ahead if you grant permission for this to happen. Our technicians will always request your permission via the chat window.
The technician will ask your permission before he or she makes any changes to your machine. Such changes might include installing programs, creating system restore points or deleting unnecessary or infected files.

- Click the 'Yes' button at the top of the interface in order to allow the technician to connect to your computer.
Upon completion of their work, the technician will disconnect from your computer, inform you that the requested tasks have been completed and ask whether you would like help with anything else.

- Click the 'Disconnect' button and confirm it in the next screen to end the session with our GeekBuddy.

Congratulations, you just finished your first GeekBuddy support session. We hope you enjoy using your trouble-free computer.
9.5. Chat History

GeekBuddy keeps a local record of every chat session you have with a Comodo technician. Clicking the 'History' link at the top of the interface will display all chat sessions that you had with our technician. This helps you keep track of previous computer issues and chats and can be useful as a reference when trying to fix future issues.

To view history of chat sessions

- Click the 'History' link at the top of the interface.

All the sessions will be displayed.

- Click on the arrow button at the far end of the session history box that you want to view or double-click anywhere on the box.

- The chat session that you had with our technician will be displayed on the right side.
Similarly you can view the chat history of other sessions also.

9.6. Uninstalling Comodo GeekBuddy

To uninstall Comodo GeekBuddy

- Click Start > Control Panel
- In the Control Panel, double-click Add/Remove Programs
- In the list of currently installed programs, click GeekBuddy
- Click the ‘Change/Remove’ button.

- Click ‘Yes’ to confirm uninstallation.

The progress of GeekBuddy removal will be displayed...
and after a few minutes the uninstallation will be complete.

10. Using the Command Line Interface and Script Files

Comodo Backup allows users to operate its backup, restore and scheduling functionality from the Windows command line interface. Command lines (and sequences of command lines) for backup and restore tasks can also be saved as a script file (.txt format) which can be called to execute the task from the command line interface.

To access the Windows command line interface

- Click Start > All Programs > Accessories > Command Prompt.
- Click Start > Run, type ‘cmd’ in the Run interface and click ‘OK’.

Click the links below for more details on the tasks executed from the Command Line Interface:

- Running a Backup Task from the Command Line Interface
- Running a Restore Task from the Command Line Interface
- Running a Scheduled Backup Job Instantly from the Command Line Interface
- Running Backup/Restore Tasks using Script Files

Note: The command lines that has more than 260 characters including path to CBU.exe will not work, so use script files to avoid this limitation.

10.1. Running a Backup Task from the Command Line Interface

- Open the Windows command line interface
- Commands are specified in the format

  `<installation path>/ <executable>/ <command #1> <command #2>`

So the path to the executable is followed by commands for the configuration of the backup task in sequence with space between each switch command. For example, if Comodo Backup has been installed to the default directory, the
format would be:
```
C:\Program Files\COMODO\COMODO BackUp\CBU.exe /command#1 /command#2.
```

Note: The Commands and the arguments are not case sensitive and can be arranged in any order.

### Table of backup commands and arguments

<table>
<thead>
<tr>
<th>Command / Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/backup_operation</td>
<td>Standard backup operation command.</td>
</tr>
<tr>
<td>/backup_type &lt;backup type&gt;</td>
<td>Specifies the type of backup. Can be full, incremental or differential backup.</td>
</tr>
<tr>
<td>/parent_backup_backup_type &lt;destination type&gt;</td>
<td>Specifies the destination type of the parent backup if any. (Use for incremental and differential type backups). Parameters same as for /destinationType command.</td>
</tr>
<tr>
<td>/parent_backup_path &lt;full path&gt;</td>
<td>Specifies the full path for the parent backup file if any. (Use for incremental and differential type backups). Encapsulate in quotes.</td>
</tr>
<tr>
<td>/parent_incremental_snapshot_no &lt;number&gt;</td>
<td>Specifies the incremental snapshot number from the parent backup (for backup containing multiple snapshots). This command is optional.</td>
</tr>
<tr>
<td>/parent_backup_connection_password &lt;password&gt; and /parent_backup_connection_username &lt;username&gt;</td>
<td>Specifies for incremental and differential backups that have parent backups on destinations like Ftp or Comodo Cloud. Encapsulate the parameters in quotes.</td>
</tr>
</tbody>
</table>
| /type <backup source type> | Specify the backup source type. It can be one of the following:  

- "disk" - To backup an entire disk.  
- "partition" - To backup a disk partition.  
- "filesandfolders" - To backup selected files or folders.  
- "regkeys" - To backup selected registry keys and values.  
- "email" - To backup emails in your inbox and client settings of your email clients like Mozilla Thunderbird, Eudora, Microsoft Outlook 2003, Microsoft Outlook 2007, Windows Live Mail, Outlook Express etc.  
- "messenger" - To backup messenger archive like the history of all conversations, conferences, calls, etc. of Instant Messenger (IM) clients like Windows Live Messenger, Skype, Yahoo! Messenger and Pidgin. |
| /source <actual source> | Specify the actual source data to be backed up. Depending on the source type selected the <actual source> can be one of the following:  

- disk backup - “diskN” where N is an integer number representing the disk number. (E.g. /source disk3) |
## Backup Commands and Arguments

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>partition(s) backup</td>
<td>A list of the partition(s)'s drive letters separated by commas (E.g. /source E, F)</td>
</tr>
<tr>
<td>files and folders backup</td>
<td>A list of paths of the files or folders separated by ‘</td>
</tr>
<tr>
<td>custom registry keys backup</td>
<td>A list of the keys to be backed up with in the quotation marks. (E.g. /source &quot;HKEY_LOCAL_MACHINE\SYSTEM\123</td>
</tr>
<tr>
<td>entire registry backup</td>
<td>No need for specifying because there can only be one source.</td>
</tr>
<tr>
<td>user settings backup</td>
<td>No need for specifying because there can only be one source.</td>
</tr>
<tr>
<td>email backup</td>
<td>A list of email clients using the predefined macro's : THUNDERBIRD (for Mozilla Thunderbird), EUDORA (for Eudora), WL_MAIL (for Windows Live Mail), OUTLOOK2003 (for Microsoft Outlook 2003), OUTLOOK2007 (for Microsoft Outlook 2007), OUTEXP (for Outlook Express), W_MAIL (for Windows Mail). (E.g. /source OUTLOOK2003)</td>
</tr>
<tr>
<td>instant messenger backup</td>
<td>A list of instant messengers using the predefined macro's : YAHOO_MESS (for Yahoo Messenger), SKYPE (for Skype), WL_MESS (for Windows Live Messenger), PIDGIN (for Pidgin). (E.g. /source SKYPE, WL_MESS)</td>
</tr>
<tr>
<td>system backup</td>
<td>No need for specifying because there can only be one source.</td>
</tr>
<tr>
<td>/backupStepSize</td>
<td>Specify this only for disk or partition backup. (Eg. /backupStepSize 65536). (valid values are: 65536, 131072, 262144, 524288 and 1048576 ). This command is optional. Default value is 65536;</td>
</tr>
<tr>
<td>/backupFreeSpace</td>
<td>Specify this only for disk or partition backup, if you want to backup the free space in the selected disk or partition. Including the free space in the backup enables to recover even deleted files from the drive upon restoring the backup, using your preferred file recovery software. This command is optional.</td>
</tr>
<tr>
<td>/simpleCopy</td>
<td>Specify this for files and folders if you want to preserve the backup copy of the file in the original file format. This command is optional.</td>
</tr>
<tr>
<td>/simpleCopyToZip</td>
<td>Specify this if you want the files and folders type backup to be saved in zip format. Optional. Default vaue is FALSE (cbu format).</td>
</tr>
<tr>
<td>/syncSimpleCopy</td>
<td>Specify this only for files and folders if you want to preserve the backup copy of the file in the original file format and to update it along with the source. Set the update interval in minutes so that Comodo BackUp checks the source file for updates at the set interval and update the copy if any update is found. (E.g. /syncSimpleCopy 5) This command is optional. If this option is enabled /scheduleTask is not available.</td>
</tr>
<tr>
<td>/selfExtracting</td>
<td>Specify this if you want the backup to be stored as a self extracting .cbu file. Available for files and folders and registry entries type backup. Optional (default backup type is .cbu format).</td>
</tr>
<tr>
<td>/regFile</td>
<td>Specify this for only for custom registry backup, if you want to preserve the backup in .reg format.</td>
</tr>
<tr>
<td>/backupRegAttributes</td>
<td>Specify this for only for custom registry backup, if you want to the backup security attributes too. This command is optional.</td>
</tr>
<tr>
<td>/exclusionFilter &lt;filters&gt;</td>
<td>Specify this only for files and folders if you want to exclude certain file types from being</td>
</tr>
</tbody>
</table>
## Backup Commands and Arguments

backed up. Provide a list of file types using wildcard characters separated by "|" within the quotation marks. (E.g. /exclusionFilter "*.bak|*.a*|..."). This command is optional.

### /inclusionFilter <filters>
Specify this only for files and folders if you want to include only certain file types to the back up. Provide a list of file types using wildcard characters separated by "|" within the quotation marks. (E.g. /inclusionFilter "*.txt|*.a*|..."). This command is optional.

### /compressionLevel <level>
Specify this to set the compression level for the backup file. The options available are low, medium, high and maximum. Higher the compression level, lower the disk space requirement. This command is optional. Default value is no compression. (E.g. /compressionLevel medium)

**Note** - This option is not available for /simpleCopy and /syncSimpleCopy commands.

### /encryptionPassword <actual password>
Specify a password, if you want to encrypt your backup. Include the password within quotation marks. (E.g. /encryptionPassword "password"). This command is optional. The file is not encrypted by default.

**Note** - Providing a password protection requires the password to be entered while restoring the backup and also encrypts the backup with an encryption algorithm you choose. This is useful when you are creating a backup job for your confidential files/folders.

### /encryptionAlgorithm <encryption algorithm>
Select an algorithm to be used for encrypting your backup. The options available are AES, Serpent, XOR, Blowfish, DES, 3DES, Twofish. Include the selected algorithm within quotation marks. (E.g. /encryptionAlgorithm "Serpent"). If this command is not specified but /encryptionPassword is specified, then the the default algorithm is AES.

For more details on the Encryption Algorithms, see [Appendix 1 Encryption Algorithms](#).

### /reCheckPassword
If this command is set, the encryption password is asked every time when the scheduled backup is executed. This is equivalent to un-checking the "Remember backup password (unsafe)" check box in the Schedule Settings GUI of Step 3 - Backup Settings during creation of a backup job.

### /split <split size>
Specify this command if you want to split the backup into smaller segments. This is useful when you are taking backups of very large sizes, in removable media like CD's, DVD's, ZIP drives, USB drives etc. You can set the maximum files sizes of the segments to fit the media you choose. The files can be rejoined while restoring the backup. Minimum size is 5 MB. This command is optional. The backup file is not split by default.

### /locked_files_treatment <treatment>
Specifies the handling type of locked files (in use etc.). Can be vss, rawread or skip. This parameter is optional. Default value is vss.

### /description <description>
You can provide a description for the backup like the purpose of the backup etc. This description is displayed on the 'History' panel of Comodo BackUp interface to remind you on the purpose of backup etc. Include the description within the quotation marks. (E.g. /description "this is my first backup").

### /destinationType
Specify the type of destination. The options available are:

/destinationType Disk File or /destinationType1 (for storing the backup in your hard drive locally);
/destinationType Ftp or /destinationType3 (for storing the backup in a FTP location);
/destinationType Network or /destinationType7 (for storing the backup in a network computer).
### Backup Commands and Arguments

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>/destinationPath &lt;backup destination&gt;</code></td>
<td>Specify the destination for the backup file within quotation marks. (E.g. /destinationPath &quot;D:\backup\file.cbu&quot; (local backup), /destinationPath &quot;\user1\upload\backup.cbu&quot; (network destination), /destinationPath &quot;ftp://ftp.funet.fi/pub/standards/folder/backup.cbu&quot; (ftp server destination))</td>
</tr>
<tr>
<td><code>/remote_username &lt;username&gt;</code></td>
<td>Specify the user name credential of a remote backup destination such as a Comodo Cloud account or other network / ftp backup server. Include the user name within quotation marks. This command is required only if the remote computer / ftp server requires a username. (E.g. /remote_username &quot;user1&quot;)</td>
</tr>
<tr>
<td><code>/remote_password &lt;password&gt;</code></td>
<td>Specify the user name credential of a remote backup destination such as a Comodo Cloud account or other network / ftp backup server. Use in conjunction with /remote_username. This command is only required if the remote computer / ftp server requires a password. (E.g. /remote_password &quot;password&quot;)</td>
</tr>
<tr>
<td><code>/emailNotification</code></td>
<td>Set email notification to be sent. The Command is optional. No notification is sent by default. Comodo BackUp can send email notifications on execution of each backup job. You can configure CBU to send notifications to yourself, or create a mailing list of other people like your team members, to be informed of the backup. You can also configure whether the email notifications are to be sent only on successful creation of backup, only on failure or both.</td>
</tr>
<tr>
<td><code>/onSuccess</code></td>
<td>Specify to Send email on successful backup operation. Used in conjunction with /emailNotification.</td>
</tr>
<tr>
<td><code>/onFailure</code></td>
<td>Specify to Send email if the backup operation fails. Used in conjunction with /emailNotification.</td>
</tr>
<tr>
<td><code>/smtpServer &lt;smtp server&gt;</code></td>
<td>Specify smtp server for email notification. (E.g. /smtpServer my.outgoing.server.com)</td>
</tr>
<tr>
<td><code>/subject &lt;email subject&gt;</code></td>
<td>Specify the subject of the email to be sent on success or failure. Used in conjunction with /emailnotification. (E.g. /subject &quot;CBU Notification&quot;)</td>
</tr>
<tr>
<td><code>/sender &lt;email address of sender&gt;</code></td>
<td>Specify the email address of the sender of the email notification. Used in conjunction with /emailnotification. (E.g. /sender &quot;<a href="mailto:yourname@yourdomain.com">yourname@yourdomain.com</a>&quot;)</td>
</tr>
<tr>
<td><code>/recipient &lt;email address of recipient&gt;</code></td>
<td>Specify the email address(es) of the recipient(s0 of the email notification. Used in conjunction with /emailnotification. (E.g. /recipient &quot;<a href="mailto:user1@domain.com">user1@domain.com</a>, <a href="mailto:user2@somemail.com">user2@somemail.com</a>&quot;)</td>
</tr>
<tr>
<td><code>/emailUsername &lt;username&gt;</code></td>
<td>Specify the user name for email notification. Include within quotation marks. Used in conjunction with /emailnotification. (E.g. /emailUsername &quot;yourusername&quot;)</td>
</tr>
<tr>
<td><code>/emailPassword &lt;password&gt;</code></td>
<td>Specify the password for email notification. Include the password within quotation marks. Used in conjunction with /emailnotification. (E.g. /emailPassword &quot;password&quot;)</td>
</tr>
<tr>
<td><code>/runTaskBefore &lt;path&gt;</code></td>
<td>Set a task to be executed before the execution of the backup job. Specify the path of the file to be executed within quotation marks. <strong>Note:</strong> Comodo Backup allows you to run specific tasks before and/or after every manual or scheduled backup. For example you may want to run a run your virus scanner before backing up to avoid potentially infecting the destination folder. You can even mount an unmounted</td>
</tr>
<tr>
<td>Backup Commands and Arguments</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>drive partition before backup to enable storing the backup file in the partition and unmount the partition on completion of the backup process by running a batch file with a list of corresponding Windows commands, play music files to indicate start and/or completion of the backup operation etc.</td>
<td></td>
</tr>
<tr>
<td>/runTaskAfter &lt;path&gt;</td>
<td>Set a task to be executed after the execution of the backup job. Specify the path of the file to be executed within quotation marks.</td>
</tr>
<tr>
<td>/shutdown</td>
<td>Specify this option only if you want your system to be shutdown on completion of the backup job. This command is optional. The computer is not shut down by default.</td>
</tr>
<tr>
<td>/scheduleTask</td>
<td>Specify a schedule for the backup.</td>
</tr>
</tbody>
</table>
| /schedule_mode <mode> | Specify the schedule mode. Used in conjunction with /scheduleTask. The schedule mode can be one of the following:  
  Once - The backup job is executed once at the set date and time.  
  Manual - Allows you to execute the backup job at any time you wish.  
  Atlogon - Executes the created backup job every time when the user logs on to the computer.  
  Daily - Executes the created backup job every day at the set time.  
  Weekly - Executes the created backup job on selected day(s) of every week at the set time.  
  Monthly - Executes the created backup job on selected date of every month at the set time.  
  WhenIdle - Executes the created backup job whenever the system goes idle with a set delay. |
| /rememberPassword | Specify this command if the password should be remembered (only for network or ftp type destination) for the scheduled backup. Used in conjunction with /scheduleTask. This command is optional. |
| /rememberUser | Specify if the user name should be remembered (only for network or ftp type destination) for the scheduled backup. Used in conjunction with /scheduleTask and /rememberPassword. This command is optional. |
| /scheduleSettings <settings> | Specify the schedule settings (interval, date, time, day, etc.). Used in conjunction with /scheduleTask. Depending on the schedule mode the options are:  
  for "once" the format is: "DAY/MONTH/YEAR_HOUR:MINUTE".  
  for "daily" the format is: "HOUR:MINUTE".  
  for "weekly" the format is: "WEEKDAY|WEEKDAY|...|..._HOUR:MINUTE".  
  for "monthly" the format is: "DAYOFMONTH_HOUR:MINUTE".  
  For "whenIdle" the format is: "NUMBEROFSECONDSTOWAITBEFOREIDLE".  
  /scheduleSettings is optional for whenIdle mode. Default value is 0.  
  for the rest there are no settings to be set.  
  Time format is 24 hours style. |
| /backupNow | Specify if the scheduled backup should also be run at the moment. Use in conjunction with /scheduleTask. This command is optional. The default behavior is only to create the schedule and finish. |
| /handleMissedSchedule <no of option> | Specifies in what way a missed scheduled backup should be treated. Options available are: |
### Backup Commands and Arguments

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO_ACTION = 1</td>
<td>(no action is taken).</td>
</tr>
<tr>
<td>RUN_TASK = 2</td>
<td>(the scheduled task is run when the user opens the Comodo BackUp application for the next time).</td>
</tr>
<tr>
<td>NOTIFY = 3</td>
<td>(notifies the user that a scheduled task has been missed). (E.g. /handleMissedSchedule 1) Use in conjunction with /scheduleTask. This Command optional. Default value is no_action.</td>
</tr>
</tbody>
</table>

/\guiRunMode

Specifies the way the user interface should behave on completion of a scheduled backup. Options available are:

- /\guiRunMode Normal or /\guiRunMode 1 (for normal run mode),
- /\guiRunMode AutoClickFinish or /\guiRunMode 2 (On successful completion of the backup process, the 'Finish' button is effectively be clicked automatically so that the application returns with its main interface. The application is not closed until you click the close button from the Windows controls.),
- /\guiRunMode AutocloseGUI or /\guiRunMode 3 (On successful completion of the backup job, the application is closed automatically)
- /\guiRunMode SilentRun or /\guiRunMode 4 (Comodo BackUp is run at the background at the scheduled time to execute your backup job),
- /\guiRunMode ServiceModeRun or /\guiRunMode 5 (Comodo BackUp is run as a Windows Service so that the backup job is executed at the background automatically even if you are not logged in)
- /\guiRunMode MinimizeToTray or /\guiRunMode 6 (On successful completion of the backup job, the application GUI is minimized to system tray)

Used in conjunction with /\scheduleTask. Command is optional. Default value is /\guiRunMode AutoClickFinish.

/\secondsToWait \<number of seconds>

Specify number of seconds to wait before a logon type scheduled backup. Use in conjunction with /\scheduleTask /Atlogon. This command is optional. The default value is 0.

/\log \<log file path>

Specify the log file path if you want the log of the events to be stored in a text file. Include the log file path within quotation marks. (E.g. /\log "C:\Documents and Settings\username\My Documents\cbulog.txt"). If no parameter(\log file path\) is set, the log file is created in the default COMODO Backup folder.

**Note** - It is recommended to setup a log file when running a backup job from the command line interface as it enables you to check the success or failure of the backup job at a later time.

/\disc_label

Specifies the optical disc label if the user has chosen an optical disc as a backup destination. This command is optional.

/\burn_speed

Specifies the burning speed for the optical drive where the user has select to store the backup. This command is optional.

/\eject_disc

Specifies if the optical disc should be ejected after the backup is complete. This command is optional.

/\silentRun

Specify this command if you want the backup operation to be performed silently. Otherwise the GUI will open directly at step 6 and the operation will start.

/\waitBeforeTask

To be used in conjunction with /\runTaskBefore parameter.
Backup Commands and Arguments

If present, it specifies that the task to run before backup should be waited to complete.

/waitAfterTask
To be used in conjunction with /runTaskAfter parameter.
If present, it specifies that the task to run after backup should be waited to complete.

/noLogToScreen
Specify this command to disable log to screen functionality.

Examples:

To backup the emails and settings of your Outlook 2003 mail client in another computer in your network every Monday at 6:00 pm, you can enter the command line as follows:

```
"C:\Program Files\COMODO\COMODO BackUp\CBU.exe /backup_operation /type email /source OUTLOOK2003 /destinationType 7 /destinationPath "\user1\myusername\emailbackup.cbu" /remote_username "user1" /remote_password "password"/scheduleTask /schedule_Mode weekly /scheduleSettings Monday_18:00 /guiRunMode 1"
```

To backup your files in My Documents folder, excluding the .bak files, in encrypted form and in your F: drive daily at 7:00 pm, you can enter the command line as follows:

```
"C:\Program Files\COMODO\COMODO BackUp\CBU.exe /backup_operation /type filesandfolders /source "C:\Documents and Settings\username\My Documents" /destinationtype 1 /exclusionfilter "*.bak" /destinationpath "f:\mydocumentsbackup.cbu" /encryptionPassword "password" /encryptionalgorithm "AES" /scheduleTask /schedule_mode daily /scheduleSettings 19:00 /runmode 1".
```

Note: The command lines that has more than 260 characters including path to CBU.exe will not work, so use script files to avoid this limitation.

10.2. Running a Restore Task from the Command Line Interface

- Open the Windows command line interface
- Commands are specified in the format

```
<installation path>/<executable> <command #1> <command #2>
```

So the path to the executable is followed by commands for the configuration of the restore task in sequence with space between each switch command. For example, if Comodo Backup has been installed to the default directory, the format would be:

```
"C:\Program Files\COMODO\COMODO BackUp\CBU.exe /command#1 /command#2"
```

Note: The Commands and the arguments are not case sensitive and can be arranged in any order.

Table of Restore Commands and Arguments

<table>
<thead>
<tr>
<th>Command / Argument</th>
<th>Description</th>
</tr>
</thead>
</table>

Comodo BackUp User Guide | © 2014 Comodo Security Solutions Inc. | All rights reserved 187
## Restore Commands and Arguments

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>/restore_operation</code></td>
<td>Standard restore operation command.</td>
</tr>
<tr>
<td><code>/destinationType &lt;type&gt;</code></td>
<td>Specify the type of destination. The options available are:</td>
</tr>
<tr>
<td></td>
<td>- <code>/destinationType Disk File</code> or <code>/destinationType 1</code> (for restoring a backup from your local hard drive);</td>
</tr>
<tr>
<td></td>
<td>- <code>/destinationType Ftp</code> or <code>/destinationType 3</code> (for restoring a backup from a FTP location);</td>
</tr>
<tr>
<td></td>
<td>- <code>/destinationType Network</code> or <code>/destinationType 7</code> (for restoring a backup from a network computer).</td>
</tr>
<tr>
<td><code>/backupFileDestination &lt;destinationPath&gt;</code></td>
<td>Specify the destination path from which the backup file has to be restored, within quotation marks. (E.g. <code>/destinationPath &quot;D:\backup\file.cbu&quot;</code> (local backup), <code>/destinationPath &quot;\user1\upload\backup.cbu&quot;</code> (network destination), <code>/destinationPath &quot;ftp://ftp.funet.fi/pub/standards/folder/backup.cbu&quot;</code> (ftp server destination))</td>
</tr>
<tr>
<td><code>/snapshot_to_restore &lt;snapshot number&gt;</code></td>
<td>Specifies the snapshot number to be restored (for multiple snapshot backups). This parameter is optional. By default the last snapshot will be restored.</td>
</tr>
<tr>
<td><code>/remote_username &lt;username&gt;</code></td>
<td>Specify the user name credential of a remote backup destination such as a Comodo Cloud account or other network / ftp backup server. Include the user name within quotation marks. This command is required only if the remote computer / ftp server requires a username. (E.g. <code>/remote_username &quot;user1&quot;</code>)</td>
</tr>
<tr>
<td><code>/remote_password &lt;password&gt;</code></td>
<td>Specify the user name credential of a remote backup destination such as a Comodo Cloud account or other network / ftp backup server. Use in conjunction with /remote_username. This command is only required if the remote computer / ftp server requires a password. (E.g. <code>/remote_password &quot;password&quot;</code>)</td>
</tr>
<tr>
<td><code>/backupFile_password &lt;password&gt;</code></td>
<td>If the backup file is encrypted, specify the encryption password within quotation marks.</td>
</tr>
<tr>
<td><code>/verify</code></td>
<td>Specify this command if you want to check the integrity of the backup file before restoration. Can also be used in stand-alone mode without <code>/restore</code> command. When used in conjunction with <code>/restore_operation</code>, the backup file is first verified; if the verification is not successful the restore process does not continue. In stand-alone mode the following commands must be supplied: <code>/destinationType</code>, <code>/backupFileDestination</code>, <code>/backupFile_password</code> if file is encrypted, <code>/remote_username</code> and <code>/remote_password</code> if needed. This command is optional.</td>
</tr>
<tr>
<td><code>/cleanRestore</code></td>
<td>Specifying this command chooses the Clean Restore method in which all the files in the folder you specify as restoration location are deleted and the files from the backup are copied to the folder. For example if you want to restore a backup file to folder D:\Data, the folder D:\Data is deleted, then recreated with all files and folders in the backup. <strong>Note:</strong> The default method is Append Files, in which only those files having same file name as those in the backup are deleted and replaced with those in the restoration folder. Files having different file names from those in the backup, is kept intact.</td>
</tr>
</tbody>
</table>
| `/selectiveRestore <selected paths>` | Specify which files from the backup to be restored. Can be used for files and folders, custom registry, email and instant messengers type backups. For files, folders and registry
<table>
<thead>
<tr>
<th>Restore Commands and Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>keys the paths must be included in quotation marks and separated by &quot;</td>
</tr>
<tr>
<td>/restoreLocation &lt;location path&gt;.</td>
</tr>
<tr>
<td>Specify the restore location. For files and folders type backup specify the full path. For partitions and the format is: &quot;C-&gt;Y</td>
</tr>
<tr>
<td>/setNativeModeRestore</td>
</tr>
<tr>
<td>Specifying this command schedules for a native mode restoration if it cannot be performed in plain Windows (user mode) due to files that are opened etc. The command is optional.</td>
</tr>
<tr>
<td>/diskUsage</td>
</tr>
<tr>
<td>Specifies the usage degree of the disk(network) for the backup operation. Options are: low, below_normal, normal, above_normal and high. This command is optional. Default value is high.</td>
</tr>
<tr>
<td>/processorUsage</td>
</tr>
<tr>
<td>Specifies the usage of the processor for the backup operation. Options are: low, below_normal, normal, above_normal and high. This command is optional. Default value is normal.</td>
</tr>
<tr>
<td>/log &lt;log file path&gt;</td>
</tr>
<tr>
<td>Specify the log file path if you want the log of the events to be stored in a text file. Include the log file path within quotation marks. (E.g. /log &quot;C:\Documents and Settings\username\My Documents\cbulog.txt&quot;). If no parameter(&lt;log file path&gt;) is set, the log file is created in the default COMODO Backup folder. <strong>Note</strong>: It is recommended to setup a log file when running a restoration job from the command line interface as it enables you to check the success or failure of the restore job at a later time.</td>
</tr>
<tr>
<td>/silentRun</td>
</tr>
<tr>
<td>Specify this command if you want the restore operation to be performed silently. Otherwise the GUI will open directly at Step 3 - Backup Settings and the operation will start.</td>
</tr>
<tr>
<td>/noLogToScreen</td>
</tr>
<tr>
<td>Specify this command to disable log to screen functionality.</td>
</tr>
</tbody>
</table>

**Example:**

To restore a folder importantbackup.cbu to its original location with clean restore method, C:\Program Files\COMODO\COMODO BackUp\cbu.exe /restore_operation /destinationtype 1 /backupfiledestination "F:\backups\importantbackup.cbu" /cleanrestore.

**Note:** The command lines that has more than 260 characters including path to CBU.exe will not work, so use script files to avoid this limitation.
10.3. Running a Scheduled Backup Job Instantly from the Command Line Interface

Scheduled backup jobs can be immediately run from the command line interface by using the `runbackup` command followed by the ID number of the target job.

- Open the Windows command line interface
  
  `<installation path>/<executable> /runbackup <backupID>`

  Take care to place a space between the command and the ID. For example, if Comodo Backup has been installed to the default directory, the full command would be:

  **Example:**

  ```
  C:\Program Files\COMODO\COMODO BackUp\CBU.exe /runbackup 63241739864.
  ```

  The backup ID for a scheduled backup job can be found from the 'Manage' > 'Events Area' interface of Comodo BackUp.

  To find the Backup ID of a Scheduled Backup job, click the down arrow alongside the corresponding entry in the list of backup events and scheduled backup jobs displayed in the lower pane. The backup ID will be given in the list of attributes of the scheduled backup job.

  **Note:** The command lines that has more than 260 characters including path to CBU.exe will not work, so use script files to avoid this limitation.

10.4. Running Backup and Restore Tasks from Script Files

You can create script files (in .txt format) for the Backup and Restore jobs executed often and call the script file to execute the task from the command line interface instead of typing the commands repeatedly. Each script file should contain the command line to execute the specific backup or restore task.

You can also export the configured backup and restore jobs as script files if you want to execute. For more details, refer to the sections:

- **Configuring Email Notification and Miscellaneous Settings** > Export to Script for creating a script file for a backup job;

  and

- **Selecting Restore Method** > Export to Script for creating a script file for a restore job.

To generate a script file manually
• Open a new notepad file by clicking Start > All Programs > Accessories > Notepad.
• Type the command line in the file.
• Save the file at desired location.

For example, to backup your My Documents folder, generate the script as given below.

```
"C:\Program Files\COMODO\COMODO BackUp\CBU /backup_operation /type filesandfolders /source "C:\Documents and Settings\username\My Documents" /destinationtype 1 /exclusionfilter "~.bak" /destinationpath "f:\mydocumentsbackup.cbu" /encryptionPassword "password" /encryptionAlgorithm "AES" /runmode 1"
```

To execute the task from the command line interface using the script file, type the command as follows:

```
C:\Program Files\COMODO\COMODO BackUp\CBU.exe /script "<script file path>"
```

- Include the file path within quotes.

**Example:**

```
C:\Program Files\COMODO\COMODO BackUp\CBU.exe /script "D:\backup_script_files\mydocuments_backup.txt"
```

The backup/restore task is executed as per the command line in the script file.

**Note:** If a script file syntax is wrong, the application will assume that the script file is encrypted and will ask for a password from the user.

### 11. Uninstalling Comodo Backup

To uninstall Comodo BackUp:

1. Click Start > Control Panel
2. In the Control Panel, double-click Add/Remove Programs
3. In the list of currently installed programs, click Comodo BackUp
4. Click the 'Change/Remove' button.
1. Click Start > All Programs > Comodo > Comodo BackUp > Uninstall & Repair.

The configuration wizard will be started.

- Select Uninstall.
- If you want to uninstall Comodo Cloud along with Comodo Backup, select ‘Apply option for Comodo Cloud’ checkbox.
- If you want reinstall Comodo Backup and wish to retain the application configuration including schedules and history events to be carried over to the new installation, leave ‘Delete Settings’ checkbox unselected. Else, select Delete Settings. All the traces of the application will be removed from your computer.
- Click ‘Next’. The Uninstallation progress will be displayed...
Uninstalling
Please wait while COMODO BackUp is being uninstalled.

This may take several minutes

...and on completion, the 'Uninstallation Complete' screen will be displayed.
11. **Uninstallation Complete**

COMODO BackUp has been uninstalled from your computer.

![Uninstallation Complete dialog]

- Click the 'Finish' button. The restart dialog will be displayed.

![Restart dialog]

Click 'Yes' to restart your system and to complete the uninstallation. If you want to restart your system at a later time, click 'No'.

**Note:** The uninstallation will take effect only on the restart of your computer.

12. **Getting Support**

Comodo is committed to provide the best support for its products. If you need technical assistance, we offer the following convenient support services:
Comodo Forums

Find the answers to your questions online at http://forums.comodo.com

Register at Comodo Forums and join thousands of other users discussing all aspects of our products.

You’ll benefit from the expert contributions of developers and fellow users alike and can find answers to any questions you may have. Join the forums now.

Email Support

If you are unable to find a solution in either the help guide or the forums, then please email support at support@comodo.com

Note: We do not offer phone support for any of our Free products.

Before reporting problems, please visit our searchable knowledgebase and troubleshooter at http://support.comodo.com If you do not find a solution in our knowledgebase or troubleshooter, please submit a support ticket at http://support.comodo.com.
# Appendix 1 - Encryption Algorithms

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Block Size / Encryption level / Speed</th>
<th>Brief Description</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AES</td>
<td>128 bits/Strongest</td>
<td>Also known as Rijndael. This cipher is used for encryption by default.</td>
<td>Ideal for both domestic and exportable use.</td>
</tr>
<tr>
<td>Serpent</td>
<td>128, 192 or 256 / very strong / fast</td>
<td>128, 192, 256-bit block cipher. Designed by Ross Anderson, Eli Biham and Lars Knudsen as a candidate for the Advanced Encryption Standard.</td>
<td>Ideal for both domestic and exportable use.</td>
</tr>
<tr>
<td>3DES</td>
<td>168 bits/strong/Slow</td>
<td>Applies Data Encryption Standard (DES) cipher three consecutive times to the message to form the message digest. Offers protection against meet-in-the-middle attacks.</td>
<td>Suitable for domestic use.</td>
</tr>
<tr>
<td>XOR</td>
<td>Variable block size /very weak / very fast</td>
<td>160 bit key. XOR encryption is a trivially simple symmetric cipher which is used in many applications where security is not a defined requirement</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Blowfish</td>
<td>64-bit block / variable key length: 32 bits to 448 bits/strong/fast</td>
<td>Symmetric block cipher. It is a Feistel network, iterating a simple encryption function 16 times. The block size is 64 bits, and the key can be any length up to 448 bits. Designed by Bruce Schneier.</td>
<td>Ideal for both domestic and exportable use. Much faster than DES and IDEA.</td>
</tr>
<tr>
<td>Twofish</td>
<td>128-bit block/ 28-, 192-, or 256-bit key/ strong/ very fast</td>
<td>Symmetric key block cipher with a block size of 128 bits and key sizes up to 256 bits.</td>
<td>A widely used and recommended choice for most cases.</td>
</tr>
</tbody>
</table>
Appendix 2 - Comodo BackUp Error Codes

The most common error codes for Comodo BackUp are given below:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Generic error code</td>
</tr>
<tr>
<td>5</td>
<td>Required object was not found</td>
</tr>
<tr>
<td>8</td>
<td>Invalid password</td>
</tr>
<tr>
<td>10</td>
<td>Invalid device</td>
</tr>
<tr>
<td>15</td>
<td>The object/device is busy</td>
</tr>
<tr>
<td>29</td>
<td>Read error</td>
</tr>
<tr>
<td>30</td>
<td>Write error</td>
</tr>
<tr>
<td>46</td>
<td>Path is invalid</td>
</tr>
<tr>
<td>47</td>
<td>The request is not yet implemented</td>
</tr>
<tr>
<td>49</td>
<td>Device not ready</td>
</tr>
<tr>
<td>53</td>
<td>A connection error occurred</td>
</tr>
<tr>
<td>54</td>
<td>Operation cannot be completed because disk is full</td>
</tr>
<tr>
<td>55</td>
<td>Access denied</td>
</tr>
<tr>
<td>59</td>
<td>Corrupted backup</td>
</tr>
<tr>
<td>64</td>
<td>File / folder in use</td>
</tr>
<tr>
<td>67</td>
<td>Specified file was not found</td>
</tr>
<tr>
<td>80</td>
<td>Bad username or password</td>
</tr>
<tr>
<td>84</td>
<td>Invalid &quot;split&quot; file found</td>
</tr>
<tr>
<td>89</td>
<td>Insufficient resources</td>
</tr>
<tr>
<td>90</td>
<td>A file/folder is used by another program</td>
</tr>
<tr>
<td>92</td>
<td>No content</td>
</tr>
<tr>
<td>97</td>
<td>The function call is invalid</td>
</tr>
<tr>
<td>108</td>
<td>Invalid http request to the server</td>
</tr>
<tr>
<td>111</td>
<td>File too big</td>
</tr>
<tr>
<td>146</td>
<td>Unrecognized command</td>
</tr>
<tr>
<td>147</td>
<td>Temporarily unavailable</td>
</tr>
<tr>
<td>176</td>
<td>The operation could not be performed because the service is stopped</td>
</tr>
<tr>
<td>177</td>
<td>Resource locked (the item is used by another program)</td>
</tr>
<tr>
<td>185</td>
<td>CCloud server connection problem</td>
</tr>
<tr>
<td>Error Code</td>
<td>Error Message</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>199</td>
<td>No drive letter available</td>
</tr>
<tr>
<td>211</td>
<td>CCloud storage full</td>
</tr>
<tr>
<td>215</td>
<td>File timestamp is invalid or corrupted.</td>
</tr>
<tr>
<td>217</td>
<td>CCloud server internal error</td>
</tr>
<tr>
<td>221</td>
<td>Network resources can't be accessed in service mode</td>
</tr>
<tr>
<td>230</td>
<td>Inactive account. The account needs activation.</td>
</tr>
<tr>
<td>231</td>
<td>Expired account. The subscription needs to be renewed.</td>
</tr>
<tr>
<td>233</td>
<td>Path is too long</td>
</tr>
<tr>
<td>234</td>
<td>Server internal exception</td>
</tr>
<tr>
<td>235</td>
<td>Too many CCloud user sessions</td>
</tr>
<tr>
<td>&gt; 100000</td>
<td>For error codes greater than 100000 (except those got when restoring at system start-up), subtract 100000 from the error and then look here: <a href="#">System error codes</a>. For example 100023 minus 100000 = 23, which is Data error (cyclic redundancy check).</td>
</tr>
</tbody>
</table>

If you encounter error codes other than those mentioned in the above table, contacts us at support@comodo.com or visit [http://www.comodo.com/support/comodo-support.php](http://www.comodo.com/support/comodo-support.php) to resolve the issue.
## Appendix 3 – Comparison of CCloud Packages

<table>
<thead>
<tr>
<th>Features</th>
<th>Comodo Cloud</th>
<th>Comodo Cloud for Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage space / Price per month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 GB / $7.99 month</td>
<td>100 GB / $4.99 month</td>
<td></td>
</tr>
<tr>
<td>200 GB / $14.99 month</td>
<td>100 GB / $8.99 month</td>
<td></td>
</tr>
<tr>
<td>500 GB / $34.99 month</td>
<td>500 GB / $39.99 month</td>
<td></td>
</tr>
<tr>
<td>1000 GB / $69.99 month</td>
<td>1000 GB / $69.99 month</td>
<td></td>
</tr>
<tr>
<td>Free 90 days</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Max. File Size</td>
<td>Unlimited</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Quickly share documents, videos, pictures and music</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create Public links to files</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Can mount CCloud as a removable drive</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create unlimited contacts</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Incoming and outgoing notifications</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Create unlimited business users</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Create groups of business users</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Share files with groups</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Specify share-permissions per user or group</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>(All shared files have full read-write permissions)</td>
<td></td>
<td>Can configure 'Read', 'Write', 'Deny-Read' and 'Deny-Write' per file, per user</td>
</tr>
<tr>
<td>Shared file is not subtracted from recipient's storage space</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>(Shared files count against the storage space of all recipients)</td>
<td></td>
<td>(Shared files do not count against recipient's storage space)</td>
</tr>
<tr>
<td>Automatic sharing without requiring confirmation</td>
<td>×</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Notes:

**Comodo Cloud**

If a CCloud subscription is canceled, the account automatically becomes inactive.

- You won't be able to login to ccloud.
- Any files that you shared with other people will no longer be accessible.
- Your files might be deleted at any time and without notice.
Comodo Cloud for Business

If the subscription for a paid business account is canceled, the account automatically becomes inactive.

• You won't be able to login to ccloud.
• Any files that you shared with other people will no longer be accessible.
• Your files might be deleted at any time and without notice.

Extra storage space for referrals

Additional storage space can obtained by referrals. Up to 50 friends can be referred and for each successful sign-up, the user gets an additional 200 MB up to a maximum of 10 GB of extra storage space.
About Comodo

The Comodo companies are leading global providers of Security, Identity and Trust Assurance services on the Internet. Comodo CA offers a comprehensive array of PKI Digital Certificates and Management Services, Identity and Content Authentication (Two-Factor - Multi-Factor) software, and Network Vulnerability Scanning and PCI compliance solutions. In addition, with over 10,000,000 installations of its threat prevention products, Comodo Security Solutions maintains an extensive suite of endpoint security software and services for businesses and consumers.

Continual innovation, a core competence in PKI and a commitment to reversing the growth of Internet-crime distinguish the Comodo companies as vital players in the Internet's ongoing development. Comodo, with offices in the US, UK, China, India, Romania and the Ukraine, secures and authenticates the online transactions and communications for over 200,000 business customers and millions of consumers, providing the intelligent security, authentication and assurance services necessary for trust in on-line transactions.

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