# COMODO

Creating Trust Online™

# **Comodo Time Machine**

Version 2.4

**User Guide** 

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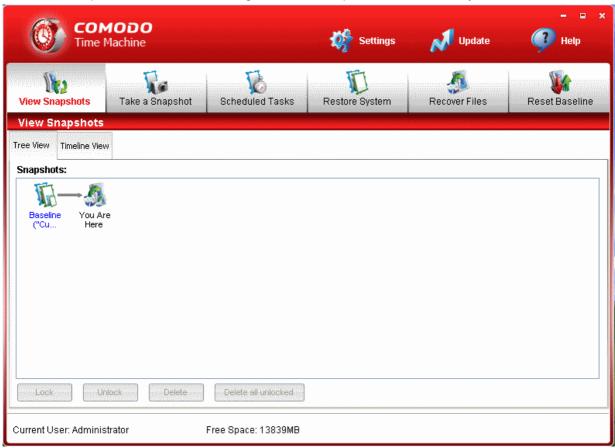
### **COMODO Time Machine –**

### Introduction

Comodo Time Machine (CTM) is a powerful system rollback utility that allows users to quickly restore their computers to an earlier point in time. CTM 'snapshots' are a complete record of your entire system (including the registry, critical operating system files and user created documents).

As part of a layered security strategy, users can schedule automatic snapshots to be taken at regular intervals then roll back to the last known working state in the event of virus attacks or crashes. It is also a recommended practice to take snapshots of your computer before large installations or system maintenance like installing a Windows service pack, security updates or new drivers. Software Developers and testers can easily restore test systems to the default configuration after each deployment without the need to manually uninstall each application. Home users can even let the kids run amok on the family PC for an afternoon and be safe in the knowledge that any damage can be instantly undone and all files recovered.

Comodo Time Machine features an intuitive, friendly interface which offers quick and easy access to all functionality in the application. Additionally, it also features a sub-console that can be accessed before Windows starts and a Quick Operation console containing shortcuts to important and commonly executed tasks.





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#### **Key Features and Benefits:**

- · Easy to use even beginners can quickly create system snapshots with a few mouse clicks
- Provides instant and comprehensive system recovery after virus or spyware infections
- Instantly reclaim your machine after devastating system crashes
- · Rollback the changes to ALL your documents not just changes to system files and the registry
- · Boot-up console allows you to rollback even when your system will not boot to Windows
- Test new software and network configurations in the knowledge that you can quickly switch back if problems develop
- Completely remove unwanted software installations without the need to uninstall or clean the registry
- · Flexible restore options allow you to mount and browse snapshots to recover individual files or folders
- · Right click on any file or folder to synchronize it with a snapshot version
- Schedule regular system snapshots to ensure highly relevant restore points
- · Network administrators have another way to quickly fix user or software problems
- Libraries, Internet cafes and other publicly shared networks can schedule a total system restore at the end
  of each session

#### **Guide Structure**

This guide is intended to take the user through the installation, configuration and use of COMODO Time Machine and is broken down into the following main sections:

- Comodo Time Machine Introduction Short overview and key features of Comodo Time Machine.
  - <u>System Requirements and important Information</u> Minimum required Hardware and Software requirements and operational considerations.
  - <u>Installation</u> A brief outline of the installation procedure.
  - <u>Starting COMODO Time Machine</u> How to start the application.
  - <u>The Main Interface</u> Description of Menus and Options in the main interface. Also contains a table of definitions of terms used in the application interface.
- Taking a Snapshot Describes how to manually take a snapshot a of your current system.
- <u>Viewing and Managing Snapshots</u> Explains how to access the list of stored snapshot s and manage them.
  - Viewing Snapshots
  - Managing Snapshots
  - Restoring Your System to a Selected Snapshot
  - Mounting a Snapshot as a Virtual Drive on Your Computer
- Restoring Your System Explains how to restore your system to a selected snapshot.
- Scheduled Tasks Explains how to schedule new snapshot and system restore tasks.
  - Adding Scheduled Snapshot Tasks
  - Adding Scheduled System Restore Tasks
  - Managing the Scheduled Tasks
- Recovering Individual Files/Folders Explains how to recover lost or corrupted files from other snapshots.
  - Synchronization of Files/Folders
- Reset the Baseline Snapshot Explains how to reset your baseline snapshot.



- - Program Settings
  - User Settings
  - Protection Settings
  - Network Settings
  - · Check for Updates Guidance on getting program updates.

<u>Settings</u> - Guidance on configuration of the application.

- Help and About Comodo Time Machine Guidance on accessing the online help and accessing the 'About' dialog.
- <u>Using the Quick Operation Console</u> Explains how to access and work with the Quick Operation Console that provides shortcuts to important tasks.
  - Taking a Snapshot
  - Restoring Your System
  - Accessing Main Interface
- <u>Using the sub-console on system start up</u> Explains how to access and work with the sub-console that is accessible before Windows starts in your system.
  - Restoring Your System
  - Taking a Snapshot
  - Compacting Snapshots
  - Uninstalling COMODO Time Machine
- <u>Using the Windows Command Line Interface</u> Explains how to perform important tasks of Comodo Time
   Machine from the Windows Command Line Interface, without starting the application.
  - Take a snapshot of the current state of the system;
  - · Roll back your system to a previously taken snapshot;
  - · Reset Baseline snapshot;
  - Compact preserved snapshots;
  - Hide/Unhide System tray icon;
  - Uninstall Comodo Time Machine;
  - Show Help.
- <u>Uninstalling COMODO Time Machine</u> A brief outline on uninstalling the application.

# 1.1 System Requirements and Important Information

### 1.1.1 Hardware and Software Requirements

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



#### **Supported Operating Systems**

Windows 7.0 (32 and 64 bit) Windows Vista (32 and 64 bit)

Windows XP with service pack 2 or higher (32 and 64 bit)

Windows Server 2003 (32 and 64 bit)

Windows Server 2008 (32 and 64 bit. Except Windows Server 2008 Core)

#### **Minimum Hardware Requirements**

Intel Petium III Processor or higher 128 MB RAM

#### Free Disk Space\*

4 GB (minimum) / 10 GB (recommended)

\* Free disk space is required for the creation of snapshots. These requirements apply to each 'bootable' drive upon which Comodo Time Machine is installed (e.g. If you have a dual boot system then you *have* to install CTM on both drives. The 4 GB/10 GB space recommendations apply to both those drives.)

#### 1.1.2 Important Installation and Usage Information

In order for Comodo Time Machine to function correctly, it MUST be installed on all operating systems on a multi-boot system.

CTM writes its snapshots and internal data to free disk space. If this data gets overwritten then your snapshots may become corrupted (and in certain cases your computer may even fail to boot properly.) To prevent programs from overwriting this data, CTM assumes full control of all read/write processes on the protected operating system. If CTM is not installed on the particular OS that you are booting to, then CTM does not have the required control to prevent the OS, users or other programs from over-writing this essential data.

- If you have a dual or multi-boot system, install CTM on all operating systems that you plan to use (boot into). Do not boot your system with an operating system that does not have CTM installed.
- Once CTM has been installed on all operating systems, you should not physically unplug/remove the protected drives from the motherboard then operate your system. Neither should you re-arrange the channels/shots that each drive is plugged into. Doing so will essentially 're-arrange' the configuration of your drives on which CTM has based your snapshots and therefore render them invalid. If you wish to carry out system maintenance such as this then we advise you to (i) copy or save all data that you need (ii) uninstall CTM from all drives (iii) carry out the maintenance (iv) re-install CTM on all operating systems. This will mean CTM can begin creating snapshots based on your new configuration.
- It is not possible to install a new operating system on protected drives after CTM has been installed. Again, if you wish to install a new OS, we advise you first make sure you have saved all data then follow the uninstall/re-install process outlined in the previous bullet.
- If the system is booted from removable media like CD or DVD or into an environment such as WinPE, then please take care to ensure that you do not write any new data to protected drives.
- If you plan to re-size or adjust the size of a partition using 3rd party or Windows software, then make sure this is done from an operating system that has CTM installed. Do not re-size a partition from an environment 'outside' CTM control such as WinPE, DOS or if you have booted from a DVD.



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• Do not run another piece of software of the same functionality as Comodo Time Machine. Note - it is OK to use Windows System Restore at the same time as CTM because that is a file-level restore system.

The following tables contain a summary of the restrictions on usage environment of Comodo Time Machine.

Environment	Supported/Not Supported
Multi-Boot System	✓
Dynamic Disk	✓
Simple Volume	✓
Striped Volume	×
Spanned Volume	×
Basic Disk	✓

File System	Supported/ Not Supported
NTFS	✓
NTFS Compressed Volume	✓
FAT32	✓
FAT16	✓
FAT12	*

#### **Hardware Limitations**

Hard disk Interface	Supported / Not Supported
IDE	✓
SATA	✓
SCSI	✓
RAID	*
Storage Media	Supported / Not Supported
Hard Disk	✓
Flash Drives (USB drives etc.)	*
Removable Disks (CD, DVD etc.)	*
Motherboard Technology	Supported / Not Supported
ATA-ATAP14	✓
ATA-ATAP15	✓
ATA-ATAP16	✓
CPU Architectures	Supported / Not Supported
IA32	✓
IA64	*



Maximum Number of disks supported	Four Disks
Maximum capacity of each hard disk	4GB - 64TB

#### **Software Compatibility**

Software	Compatible /Not Compatible
Same type of software	×
Full Disk Encryption software	×
Antivirus (AV) software	✓
Host Intrusion Protection System (HIPS) software	✓
Other Applications	✓

### 1.2 Installing COMODO Time Machine

Before you install Comodo Time Machine, read the installation instructions carefully and also review the <u>system requirements</u>. Quit all other Windows programs before installing Comodo Time Machine. The installer requires administrative privileges on the computer.

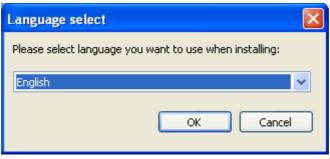
After downloading the Comodo Time Machine setup file to your local hard drive, double click on Setup.exe



to start the installation wizard.

#### Step 1 – Choosing the Interface Language

The set up program starts automatically and the Language selection dialog is displayed. Comodo Time Machine is available in several languages.



Select the language in which you want the Comodo Time Machine is to be installed from the drop-down menu and click 'OK'.

#### Step 2 - Welcome Screen

The Installation Wizard starts automatically and the Welcome screen is displayed.

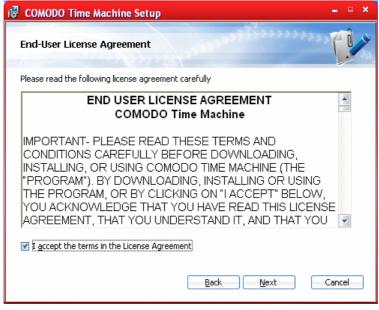




Click 'Next' to continue the installation.

#### Step 3 - End - User License Agreement

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



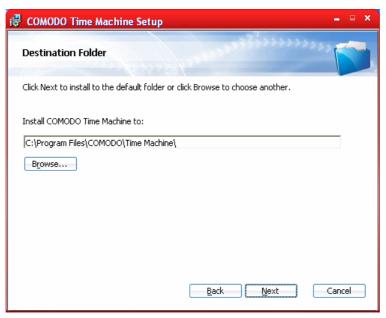
Select the check box 'I accept the terms in the License Agreement' and click 'Next'. If you want to cancel the installation, click 'Cancel'.

#### **Step 4 - Select Destination Folder for Installation**

The next screen allows you to select the folder in your hard drive for installing COMODO Time Machine. The default path is *C:\Program Files\COMODO\Time Machine*.



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If you want to install the application in a location other than the default location, click 'Browse' to choose a different location.

#### Step 5 - Installation on Multi-Boot Systems

Important. Comodo Time Machine must be installed on all bootable partitions that have an operating system. It is vital that users boot into each OS and install CTM on each. Failure to do so can lead to corruption of CTM snapshots if you choose to start an OS that does not have CTM installed (the OS will write to disk space required by CTM during boot). For more information on this and to view other important considerations, please see the Important Installation and Usage Information section of the System Requirements chapter.

If the setup wizard detects that your system has multiple operating systems then it allows you to specify an installation option that corresponds with your current situation



This is a single boot computer. - If your computer has a single operating system installed, select this



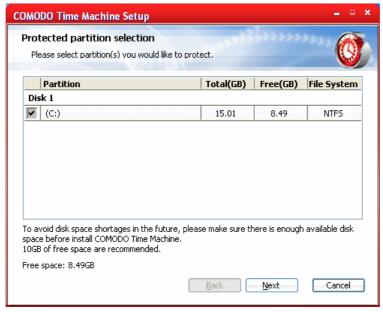
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- option and click 'Next'
- This is a multi-boot computer and I have not installed the products to the others yet Select this
  option if your computer has multiple operating systems installed and click 'Next'. After installation on the
  present OS is complete you should boot your computer into the other operating systems (one by one) and
  install Time Machine in each of the operating systems.
- On installing Comodo Time Machine on the final operating system, select 'This is a multi-boot computer
  and this is the last operating system I am installing the product'. Note <u>Step 6</u> 'Select Partitions to
  be Protected' will be skipped if this option is selected and the installation will continue from <u>Step-7</u>.

Click 'Next' to continue.

#### Step 6 - Select Partitions to be Protected

The next step is to specify the drive partitions to be protected by Comodo Time Machine.



To select the partition(s) select the check box(es) beside the drive letter(s) and click 'Next'

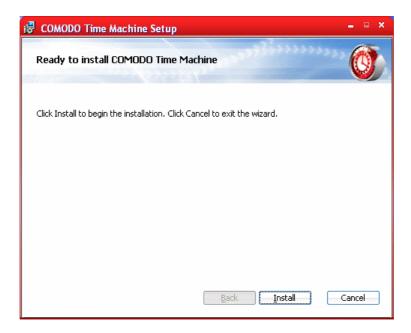
**Important Note**: You cannot change the protection status of the drive partition(s) and cannot unplug/remove the protected drives and change the SATA/PATA/IDE/SCSI slots of the motherboard through which the disk drive is connected.

#### Step 7 - Confirmation Dialog

After completing the configuration options to your satisfaction in the preceding steps, a confirmation dialog box will be displayed.

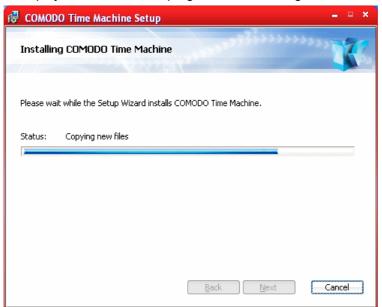
To confirm your choices and begin the installation of Comodo Time Machine, click 'Install'. If you want to modify the settings, click 'Cancel' and start the installation wizard from the beginning.





#### **Step 8 - Setup Progress**

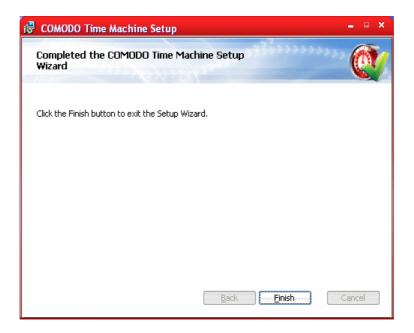
The setup status box will be displayed. You will see a progress bar indicating that files are being installed.



#### **Step 9 - Installation Complete Dialog**

The Installation Complete dialog is displayed indicating the successful completion of installation.

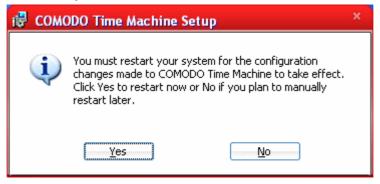




Click 'Finish'.

#### Step 10 - Restarting Your System

For the installation to take effect, the system has to be restarted.



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

**Note:** The installation will take effect only on the next restart of the computer.

### 1.3 Starting COMODO Time Machine

You can access COMODO Time Machine through Windows Start Menu, through the desktop shortcut or through the system tray icon.

#### Windows Start Menu

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





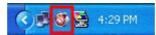
#### **Desktop Shortcut**

You can also start COMODO Time Machine by double-clicking on the Comodo Time Machine desktop shortcut icon.



#### System Tray Icon

Double clicking on the tray icon will start the Quick Operation console of Comodo Time Machine.



The Quick Operation Console provides shortcuts to take a snapshot of the current system state, restoring the system to a previously taken snapshot and to open the main interface. <u>Click here</u> for more details on using the quick operation console.



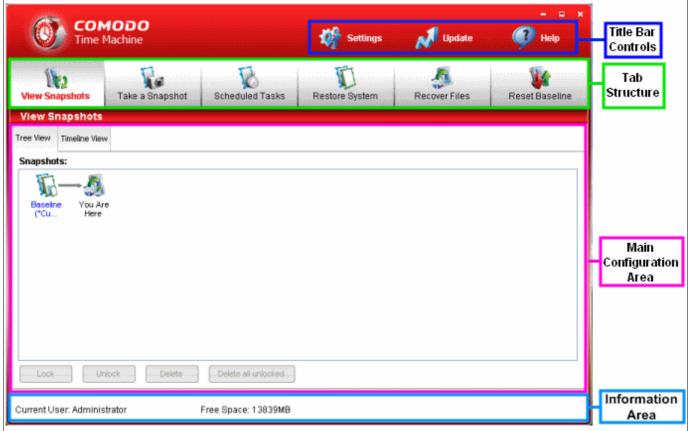


### 1.4 The Main Interface

Comodo Time Machine's streamlined interface provides fingertip access and control over all areas of the software.

The tab structure allows you to quickly open the main configuration area to take a new snapshot; start a restore task, specify new schedules, recover files and reset the baseline snapshot. The title bar controls allow access to overall application settings, program updates and access to help documentation.

The table at the foot of this page aids you in familiarizing with the terms used in the interface.



#### The Tab Structure

The Upper pane of the main interface contains six tabs for initiating tasks like taking a new snapshot, restoring your system to a previous snapshot, scheduling snapshot and restore tasks, recovering lost files etc.

- <u>View Snapshots</u> Opens the main configuration area that displays the previously taken snapshots in tree structure or in timeline order.
- <u>Take a Snapshot</u> Opens the the main configuration area for taking new snapshot of the current state of the system.
- <u>Scheduled Tasks</u> Opens the the main configuration area for scheduling snapshot creation and system restore tasks.
- <u>Restore System</u> Opens the the main configuration area for rolling back your system to a previously taken snapshot.
- Recover Files Enables you to recover files that were lost due to switching your system to a snapshot taken at an earlier time or accidental deletion.
- Reset Baseline Enables you to set the current state of the system as a fixed state removing all previously



taken snapshots.

#### The Main Configuration Area

The main configuration area provides options for configuring the process and settings options when the corresponding tab is selected.

#### **Title Bar Controls**

- <u>Settings</u> Opens the settings panel that enables you to configure the overall behavior of the application. <u>Click here</u> for more details.
- <u>Updates</u> Starts checking for the program updates from the Comodo Servers. If any updates are found, you will be prompted to download and install them. Refer to <u>Check for Updates</u> for more details.
- <u>Help</u> Opens the inbuilt help guide. The Comodo Time Machine help guide contains detailed explanations of the functionality and usage of the application.
- About Comodo Time Machine Clicking the Comodo Time Machine icon at the top left of the title bar opens the 'About' dialog. The About dialog contains the version information and the copyright information.

#### **Information Area**

The Information Area displays the currently logged user and the free disk space available in your system.

#### **Table of Definitions**

Term	Definition
Baseline Snapshot	The baseline snapshot is an image of your hard drive including the system configuration, installed programs and data stored in your computer at the time of installing Comodo Time Machine.
Lock Snapshot	Locking a snapshot prevents it from accidental deletion.
Mount Snapshot	Mounting a snapshot as a virtual drive in your system. This enables to access and recover files from the snapshot without restoring your system to the snapshot.
Quick Operation Console	The operation console accessible by double clicking on the Comodo Time Machine system tray icon. The Quick Operation Console provides short cuts to important functionalities of the application.
Reset Baseline	Making the current state of the system as the Baseline Snapshot at any given time, removing the old baseline created during the installation of the Time Machine and the other snapshots created before.
Recover Files	Recovering files/folders from previously taken snapshots if the file/folders in the current system are corrupted or lost due to restoring your system to a different snapshot.
Restore System	Rolling back your system to a previously taken snapshot.
Snapshot	A snapshot is an image of the your hard drive in the current state including the current system configuration, installed programs and data stored in your computer.
	The operation console accessible before Windows starts in your system. This console can be accessed by pressing the 'Home' key from your key board, when Comodo Time Machine splash screen appears before Windows starts.
Switch to	Rolling back your system to a previously taken snapshot.



Term	Definition
Snapshot	
Take a Snapshot	Creating a new snapshot of the current system state.
Unlock Snapshot	Unlocking unwanted snapshots enables easy deletion of them.

# 2 Taking a Snapshot

The 'Take a Snapshot' interface allows you to instantly create an image of the current state of your computer. You may want to create a snapshot of your system before major software installations, large data transfers or system maintenance like installing service packs, security updates or new drivers. Taking an instant snapshot means you can roll back your system to its previous condition and recover valuable documents if you encounter any problems or data corruption.

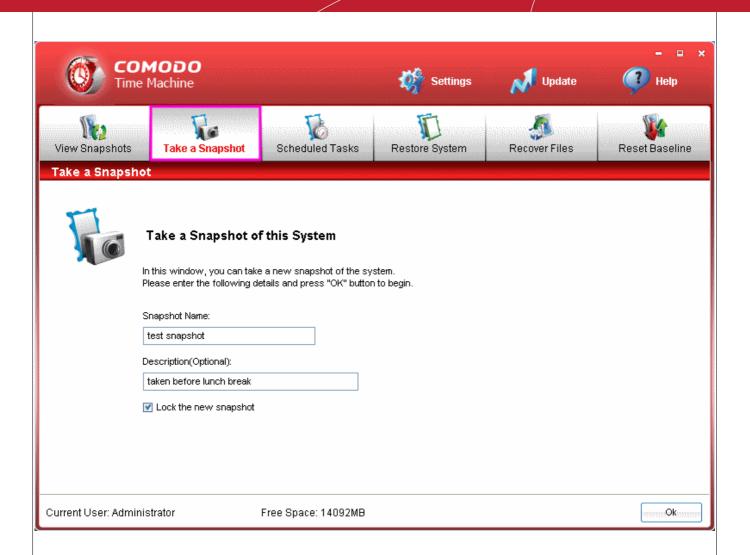
You can also instruct Comodo Time Machine to take the snapshots of your system automatically at regular intervals by scheduling the new snapshot task. See <a href="Scheduled Tasks">Scheduled Tasks</a> for more details.

To manually take a snapshot of the current status of the system

1. Click the 'Take a Snapshot' tab from the main interface. The Take a Snapshot interface appears.



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- 2. Type a name for the snapshot to be created in the 'Snapshot Name' text box. (you can give a name to indicate the situation when the snapshot is taken e.g. before installing the xyz application. This enables you to identify the snapshot easily when you want to roll back your system to the present configuration at a later time)
- 3. Type a description for the backup in the 'Description' text box. (This is optional).
- 4. Select the check box 'Lock the new snapshot' if you want to protect the snapshot from accidental deletion.

  Note You can also lock or unlock any snapshot from the <u>View Snapshots</u> interface.
- 5. Click OK.

The snapshot will be created. You can view the snapshot in the View Snapshots interface.



Tip: You can also take a snapshot:

- By double clicking on the system tray icon. <u>Click here</u> for more details.
- By accessing the sub console on system start up. Click here for more details.
- Through the Windows Command Line interface. <u>Click here</u> for more details.

# 3 Viewing and Managing Snapshots

The 'View Snapshots' tab allows users to easily visualize and manage all disk snapshots that have been taken so far. Snapshots can be viewed in 'Tree View' or 'Timeline View'.

The Tree View displays the snapshots in a highly visual branching hierarchy while the Timeline View represents the snapshots as a more traditional file listing. Both views provide strong management functionality and allow you to lock, unlock, delete and restore snapshots within a few mouse clicks.

From this panel you can:



- View the snapshots;
- Manage the snapshots;
- Restore your system to a selected snapshot;
- Mount a selected snapshot as a virtual drive on your computer.

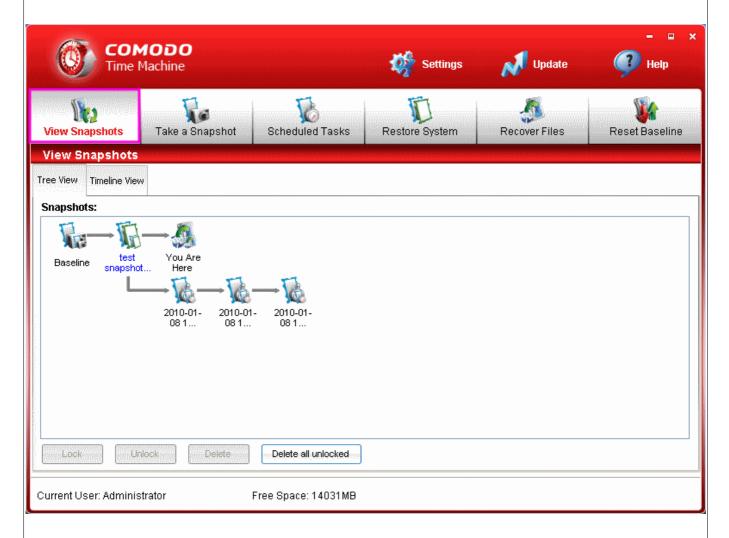
### 3.1 Viewing Snapshots

To view the list of snapshots taken earlier, click 'View Snapshots' tab from the main interface. The View Snapshots interface has two tabs namely:

- <u>Tree View</u> Displays the snapshots in a hierarchical tree structure following the order in which they were taken.
- <u>Time line View</u> Lists the snapshots in chronological order.

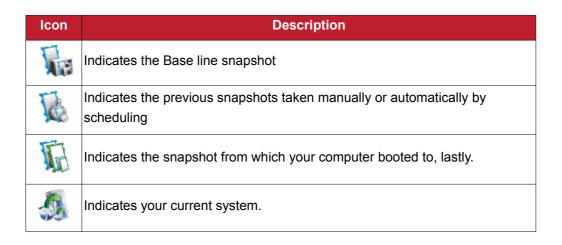
#### **Tree View**

To view the snapshots in tree structure, click View Snapshots > Tree View tab.



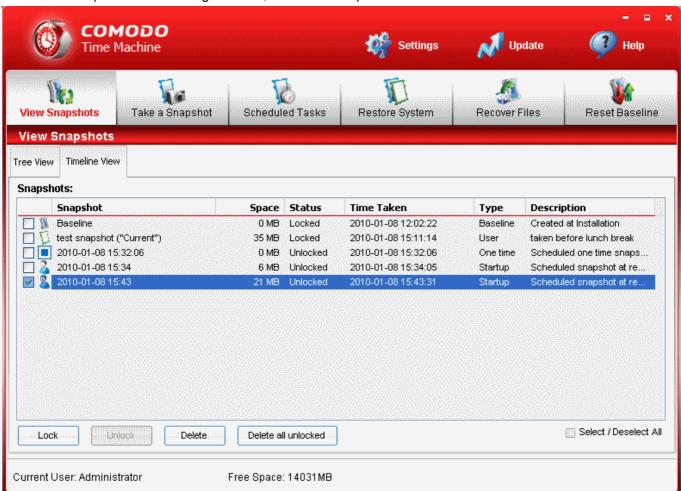
The snapshots are displayed in the hierarchical order in which they were taken. The icon 'You Are Here' indicates the current state of your system. The following table contains brief descriptions of the icons in this interface.





#### **Time line View**

To view the snapshots in chronological order, click View Snapshots > Time line View tab.



The snapshots are listed in the time line order in which they were taken with the following details.

- **Snapshot** Name of the snapshot (the name that you specified while taking the snapshot manually or the auto-generated names on taking scheduled snapshots)
- Space The space occupied by the snapshot image in your hard drive partition in which the Time Machine

is installed.

- Status Indicates whether the snapshot is locked or unlocked.
- Time Taken The date and time at which the snapshot was taken.
- Type Indicates the mode of taking the snapshot, whether it is manual, scheduled etc.
- Description the description given for the snapshot (the description that you specified while taking the snapshot manually or the description auto-generated on taking scheduled snapshots).

### 3.2 Managing Snapshots

Both the tree structure view panel and the time line view panel allow you to manage the snapshots like locking, unlocking and deleting the snapshots.

#### To manage the snapshots

1. Select the snapshot from the panel by selecting the checkbox beside the snapshot name.

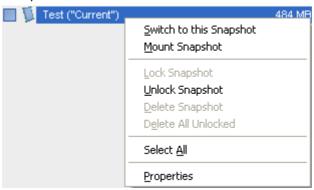
Note - In the tree structure view, select the icon from the panel.

- 2. Click the required button at the bottom left of the interface.
  - Lock Locks the unlocked snapshot. The snapshot can be protected from accidental deletion by locking it. If you want to delete a locked snapshot, it has to be unlocked and then deleted.
  - **Unlock** Unlocks the locked snapshot and enables you to delete the snapshot. Note The Baseline is locked by default and cannot be unlocked. If you want to change the Baseline snapshot, use Reset Baseline feature. See Resetting Baseline Snapshot for more details.
  - Delete Deletes the selected snapshot.
  - Delete all unlocked Deletes all the unlocked snapshots at once.

**Tip:** Select the Select/Deselect All checkbox if you want to apply the changes for all the snapshots at once. This checkbox is not available in the Tree View panel.

### 3.2.1 Right Click Options

Right clicking on any snapshot will open a context sensitive menu that allows to manage the snapshot.

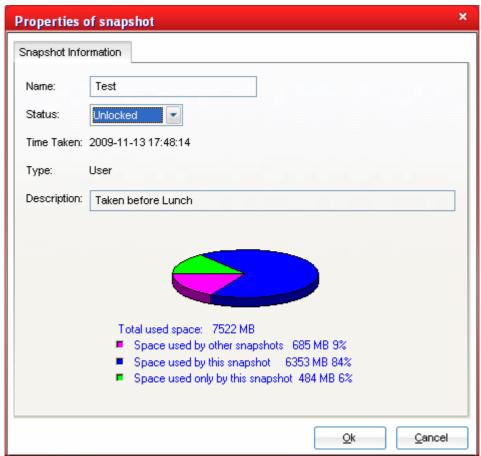


- Switch to this Snapshot Enables you to restore your system to the selected snapshot. <u>Click here</u> for more details.
- Mount Snapshot Enables you to mount the selected snapshot as a virtual drive on your computer. <u>Click here</u> for more details. (This option will be visible only if none of the snapshots is already mounted as a virtual drive)



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- **Dismount** Enables you to unmount a virtual drive previously mounted on your hard disk. (This option will be visible only if anyone of the snapshots is already mounted as a virtual drive)
- Lock Snapshot Locks the unlocked snapshot. The snapshot can be protected from accidental deletion
  by locking it. If you want to delete a locked snapshot, it has to be unlocked and then deleted.
- Unlock Snapshot Unlocks the locked snapshot and enables you to delete the snapshot. Note The
  Baseline is locked by default and cannot be unlocked. If you want to change the Baseline snapshot, use
  Reset Baseline feature. See Reset the Baseline Snapshot for more details.
- Delete Snapshot Deletes the selected snapshot.
- Delete All Unlocked Deletes all the unlocked snapshots at once.
- Select All Selects all the snapshots if you want to apply any change for all the snapshots at once.
- Properties Opens the Properties dialog of the selected snapshot. The 'Properties' dialog displays the
  information on the snapshot, a pie diagram indicating the breakdown of the space occupied by other
  snapshots and this snapshot in your hard drive and also allows you to switch the snapshot between
  'Locked' and 'Unlocked' states. Tip The Properties dialog can also be opened by double clicking on a
  snapshot.



The 'Properties' dialog displays the following details:

- Name Name of the snapshot (the name that you specified while taking the snapshot manually or the autogenerated names on taking scheduled snapshots)
- Status Indicates whether the snapshot is locked or unlocked in a drop-down box. To change the status, click on the drop-down arrow and select the status.
- Time Taken The date and time at which the snapshot was taken.

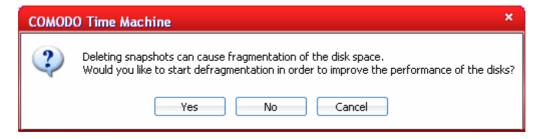


- Type Indicates the mode of taking the snapshot, whether it is manual, scheduled etc.
- **Description** The description given for the snapshot (the description that you specified while taking the snapshot manually or the description auto-generated on taking scheduled snapshots)

#### 3.2.2 Defragmenting the Snapshots

On completion of any 'Delete' operation, Comodo Time Machine will start the defragmentation process on the existing snapshots to reclaim your disk space and enhance the disk usage efficiency. The defragmentation is a three step process.

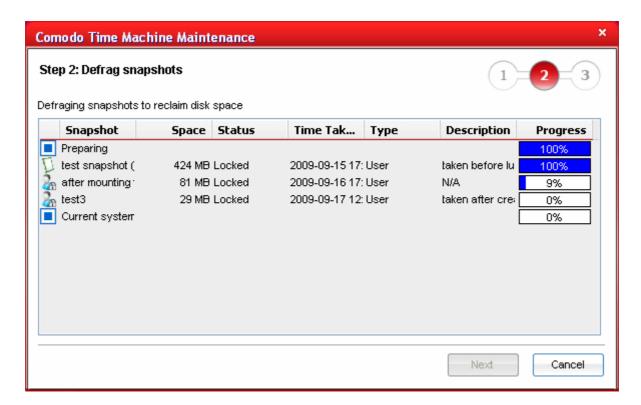
#### Step1 - Confirmation to continue the defragmentation process



Comodo Time Machine will display a confirmation dialog to start the defragmentation process. Click 'Yes'.

#### **Step 2 - Defragmentation Progress**

The progress in defragmentation in the existing snapshots will be displayed.

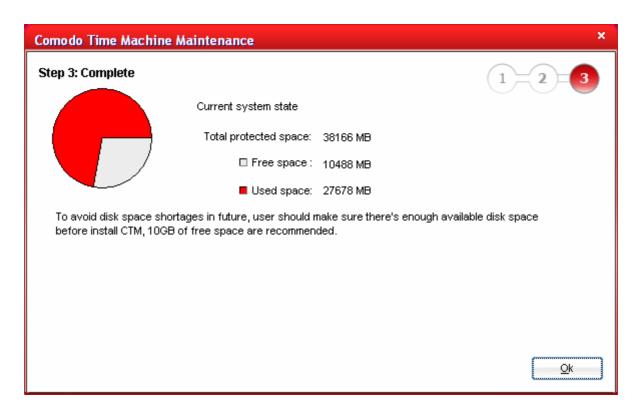


On completion, click 'Next'.



#### **Step 3 - Defragmentation Completion**

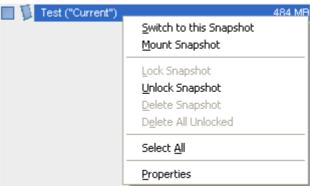
The 'Defragmentation Complete' dialog will be displayed. It will display a pie chart indicating the usage of disk space in the partition in which Comodo Time Machine is installed.



· Click OK.

#### 3.2.3 Restoring Your System to a Selected Snapshot

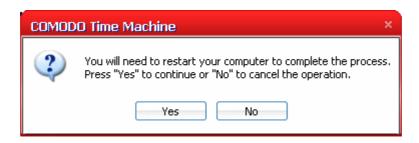
Right clicking on the snapshots from both Tree View and Time line View panels also enables you to restore the your system to the selected snapshot.



To restore your system to a selected snapshot from the View Snapshots interface

- 1. Right click on the snapshot.
- 2. Select 'Switch to this Snapshot' from the context sensitive menu. A confirmation dialog will appear. Your system has to be restarted for reverting to the selected snapshot.





3. Save all unsaved data in the other open programs, close all other programs and Click 'Yes'. Your system will be restarted and rolled back to the selected snapshot.

#### 3.2.4 Mounting a Snapshot as a Virtual Drive on Your Computer

Mounting a snapshot as a virtual drive provides you an easy way to access the files/folders in a selected snapshot, without the requirement of rolling back your system to the selected snapshot. You can also copy the files which were lost due to rolling your system to a different snapshot, from the mounted snapshot to the current system, and synchronize files between different mounted snapshots.

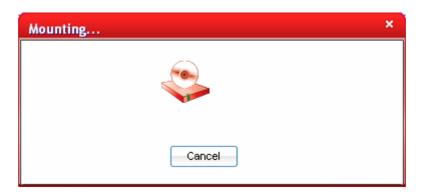
To mount a snapshot as a virtual drive

- 1. Right click on the snapshot.
- 2. Select 'Mount Snapshot' from the context sensitive menu. The 'Mount mode select' dialog will appear.



- 3. Select the mode in which you want the snapshot to be mounted in your computer.
  - 1 Mount with read-only access (Recommended) Mounts the snapshot as a read-only drive. You can browse your files and folders in the snapshot without rolling back to the snapshot and even copy them to your current system.
  - 2 Mount with full access Mounts the snapshot as a virtual drive with full read and write access. You can browse and even edit/delete the files in the snapshot without rolling back to the snapshot and copy them to your current system. When you rollback your system to the same snapshot, the changes that you made in the virtual drive will be reflected. Comodo Time Machine will create a snapshot on unmounting the disk to save all the changes.

4. Click OK. The mounting progress will be indicated.



The completion of mounting will be indicated by a balloon at the bottom right of the screen. The snapshot will be mounted as a virtual drive with an unsued drive letter (typically drive Z, X, Y etc) and can be accessed using Windows Explorer as a normal drive. If you have used all the drive letters from C to Z, you can opt for mounting the drive in a specified NTFS directory by selecting the option Mount snapshot into NTFS directory from the Settings > Program Settings interface. Click here for more details.

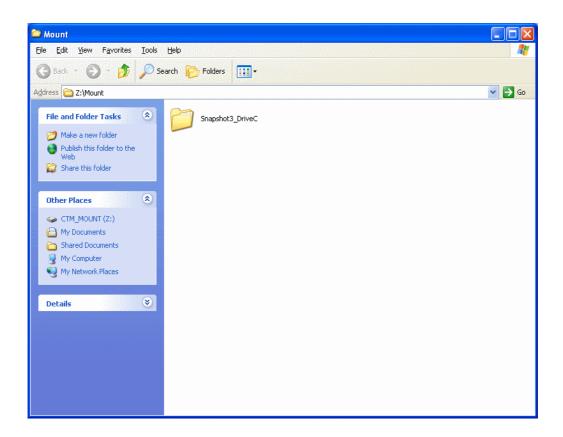


You can access the mounted snapshot by two ways:

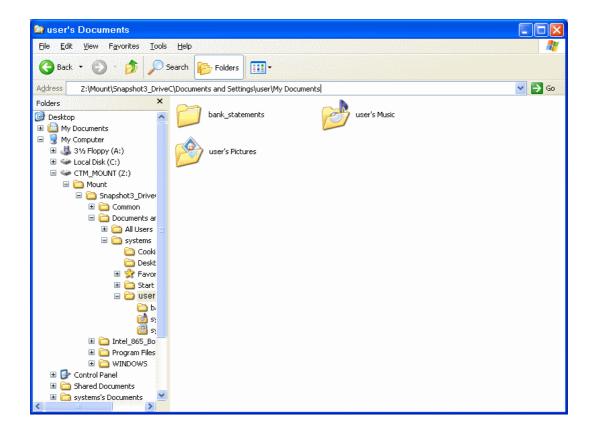
1. Through the system tray icon - Double click on the system tray icon.



The mounted drive will be opened in Windows Explorer.



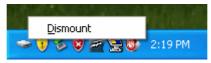
**Tip:** For easy navigation and to facilitate easy file management, dragging and dropping, synchronization of files between the mounted snapshot and your local drives etc., click View > Explorer Bar > Folders to view the drive/folders in the left hand pane and content folders/files in the right hand pane.





2. Open Windows Explorer by clicking Start > All Programs > Accessories > Windows Explorer and navigate to the mounted drive.

**Note:** You can mount only one snapshot at a time as a virtual drive. If you want to mount a different snapshot, remove the existing virtual drive and mount the snapshot you wish. To remove the virtual drive, right click on the snapshot mounted as virtual drive and select 'Dismount' from the context sensitive menu or right click on the virtual drive icon in the system tray and select 'Dismount'.



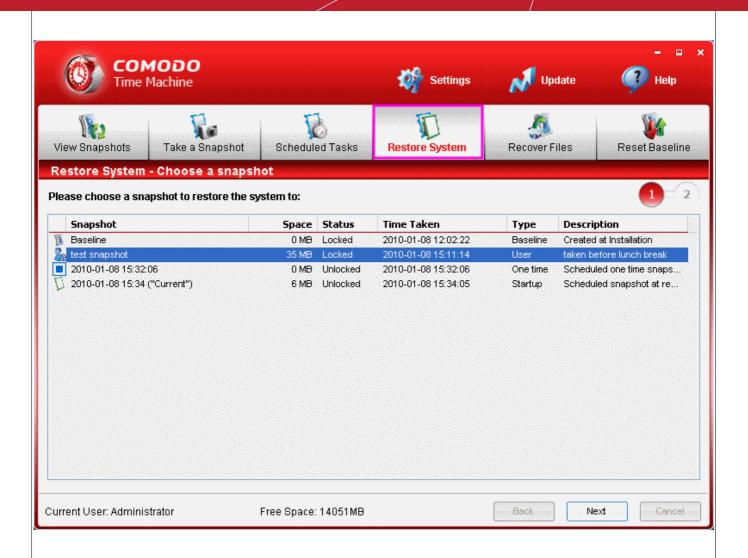
# 4 Restoring Your System

Once you have successfully created a system snapshot, you can roll your system back to it anytime you want. You may want to do this to reinstate a previous 'working' state after you encounter a virus attack, problems due to newly installed software or data corruption.

Another use of this functionality would be to reset a model system environment when testing software or hardware. Any changes, damage or data corruption that occurred after that snapshot will be discarded and your system will be reverted to the system configuration at the time of taking the selected snapshot.

**Tip:** If you encounter a system crash and Windows does not start, you can enter the sub console of Comodo Time Machine, which is accessible immediately after you switch on your system and roll back your system to a last known healthy snapshot. <u>Click here</u> for more details.

To access the Restore System interface, click Restore System tab from the main interface. The Restore System interface will display a list of all the previously taken snapshots in chronological order.



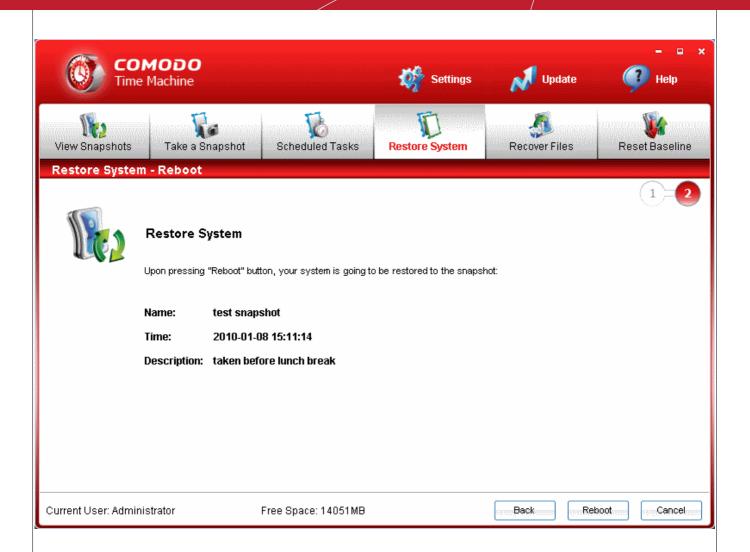
Restoring your system to a last known working snapshot is a two step process. The progress bar at the top left corner indicates the steps in the system restore operation.

#### Step 1 - Choose the Snapshot

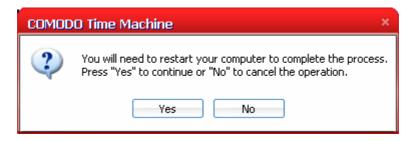
• From the 'Restore System' interface, select the snapshot you wish to revert to and click 'Next'.

#### Step 2 - Restarting the System

The next screen displays the snapshot chosen in step 1. In order to revert your system to the selected snapshot, your system has to be restarted.



• Click 'Reboot' to restart your system. A confirmation dialog will appear.



· Click 'Yes'.

Your system will restart and reverted to the selected snapshot. All the changes made after the time of taking the selected snapshot will be discarded. If you want to recover any file/folder that was created after the snapshot, you can do the same by using the <u>Recover Files</u> feature of Comodo Time Machine.

**Tip:** You can also restore your system to a selected snapshot:

• By double clicking the system tray icon and accessing the Quick Operation Console. <u>Click here</u> for more details.



- From the 'View Snapshots' interface. <u>Click here</u> for more details.
- By accessing the sub console on system start up. <u>Click here</u> for more details.
- Through the Windows Command Line interface. Click here for more details.

### 5 Scheduled Tasks

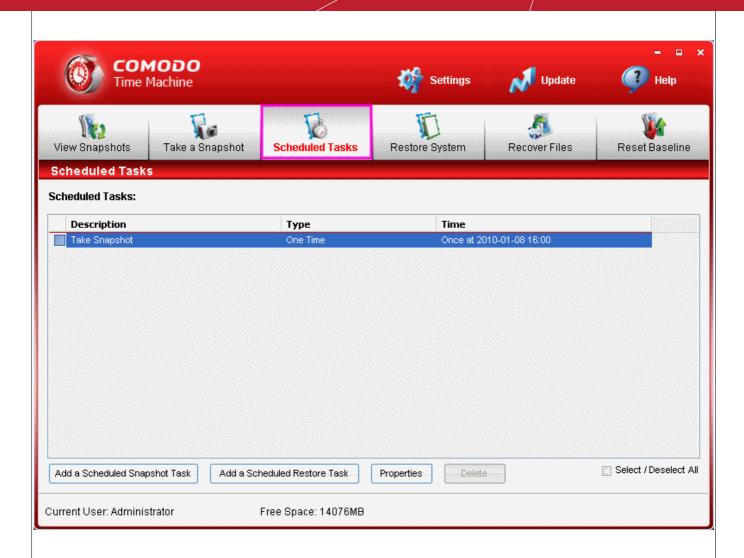
Comodo Time Machine's flexible scheduler allows you to take automatic system snapshots at intervals of your choice and/or immediately before running selected executables. Once set, the scheduler will continue to take snapshots at the time or event you specified without any further intervention on your behalf. If you are unfortunate enough to encounter any system failures, virus attacks or data corruption then you can easily rollback your system to the last known working configuration.

Obviously, the more frequently that you take scheduled snapshots, the more likely that the latest snapshot will contain all your recent documents and system changes. Users can also schedule CTM to run automatic system restore tasks. A scheduled restoration is useful if you want a system to rollback to a specific configuration at the end of a certain time period so that you (or the users of the target machines) will always begin working with an 'ideal' configuration (for example, computers in Internet cafes and public libraries).

To access the Scheduled Tasks interface, click the 'Scheduled Tasks' tab from the main interface. From this interface you can:

- · Add Scheduled Snapshot Tasks;
- Add Scheduled Restore Tasks;
- Manage the scheduled Tasks.

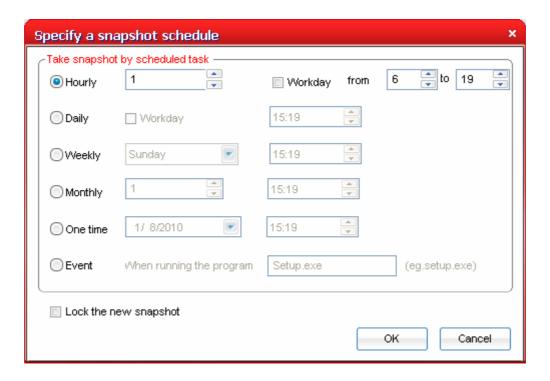




### 5.1 Adding Scheduled Snapshot Tasks

1. Click 'Add a Scheduled Snapshot Task' button to schedule creating the snapshots. The 'Specify a snapshot schedule' dialog will appear.





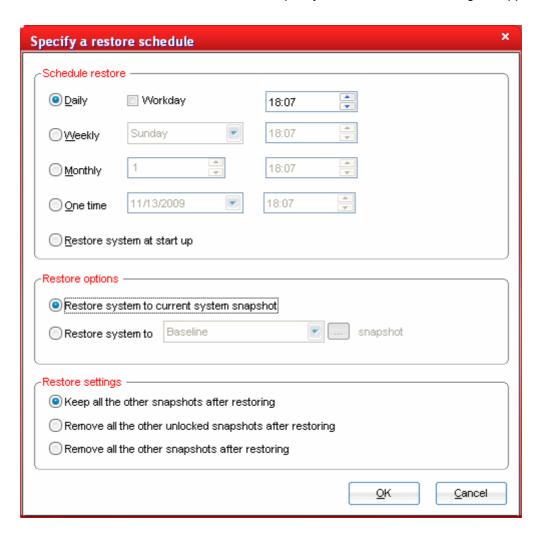
- 2. Choose the period by selecting the respective radio button.
  - Hourly Takes the snapshots on start of every hour between the time you specify in From and To text boxes. Select the check box Workday if you want to take the snapshots only on the days you work on the computer and not on the days when the computer is idle.
  - Daily Takes the snapshots daily at the time you specify in the time drop-down combo box. Select the check box 'Workday' if you want to take the snapshots only on the days you work on the computer and not on the days when the computer is idle.
  - Weekly Takes the snapshots once in every week in the day you select from the day drop-down box at the time you specify in the time drop-down combo box.
  - Monthly Takes the snapshots once in every month at the date you specify in the date drop-down combo box and at the time you specify in the time drop-down combo box. (If you have entered 31, the snapshot will be taken only on the months with 31 days e.g. January, March, May.. and will not be taken on the months with 30,29 or 28 days, e.g. February, April, June etc.)
  - One Time Takes the snapshot only once at the date you specify in the date drop-down combo box and at the time you specify in the time drop-down combo box.
  - Event Takes a snapshot every time on the occurrence of a specific event like running a setup
    program. This is helpful to roll back your system to previous state if the installed software
    malfunctions or contains viruses.
- 3. Select the check box 'Lock the new snapshot' if you want to protect the snapshots taken by this schedule from accidental deletion. **Note** You can also lock or unlock any snapshot from the <u>View Snapshots</u> interface.
- 4. Click 'OK'. The schedule will be saved and displayed in the Scheduled Tasks interface.

Note: You can add multiple schedules as required by following the same procedure.



## 5.2 Adding Scheduled System Restore Tasks

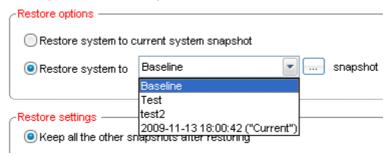
1. Click 'Add a Scheduled Restore Task' button. The 'Specify a restore schedule' dialog will appear.



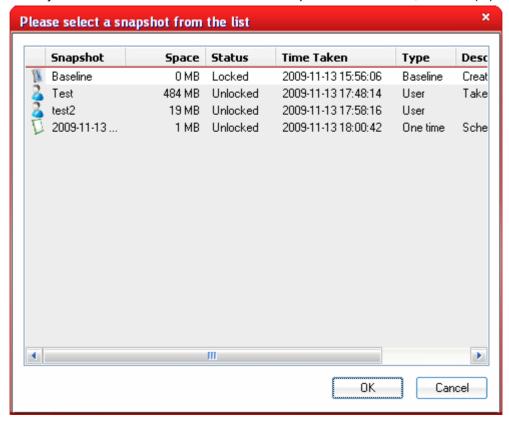
- 2. Choose the period by selecting the respective radio button.
  - Daily Restores your system to the snapshot selected under 'Restore options daily at the time you
    specify in the time drop-down combo box. Select the check box 'Workday' if you want to restore the
    system only on the days you work on the computer and not on the days when the computer is idle.
  - Weekly Restores your system to the selected snapshot once in every week in the day you select from the day drop-down box at the time you specify in the time drop-down combo box.
  - Monthly Restores your system to the selected snapshot once in every month at the date you specify in the date drop-down combo box and at the time you specify in the time drop-down combo box. (If you have entered 31, the snapshot will be taken only on the months with 31 days e.g. January, March, May.. and will not be taken on the months with 30,29 or 28 days, e.g. February, April, June etc.)
  - One Time Restores your system to the selected snapshot only once at the date you specify in the date drop-down combo box and at the time you specify in the time drop-down combo box.
  - Restore System at startup Restores your system to the selected snapshot every time you start your system.



- 3. Choose the Restore Options by selecting the respective radio button.
  - Restore system to baseline snapshot Restores your system to the baseline snapshot. <u>Click here</u> for more details on baseline snapshot.
  - Restore system to ... snapshot Allows you to manually select a specific snapshot to which you want your system to be rolled back.
    - Select a snapshot from the drop-down menu.



If you have want to see the details of the snapshots for selection, click the (...) button.



- All the snapshots will be listed in a time line view. Select the snapshot you want and click OK.
- 4. Specify the Restore Settings by selecting the respective radio button.
  - **Keep all other snapshots after restoring** Keeps all the snapshots intact on completion of the scheduled restore operation (recommended).
  - Remove all the other unlocked snapshots after restoring Deletes all the unlocked snapshots on completion of the scheduled restore operation to save your disk space.
  - Remove all the other snapshots after restoring Deletes all the locked and unlocked snapshots



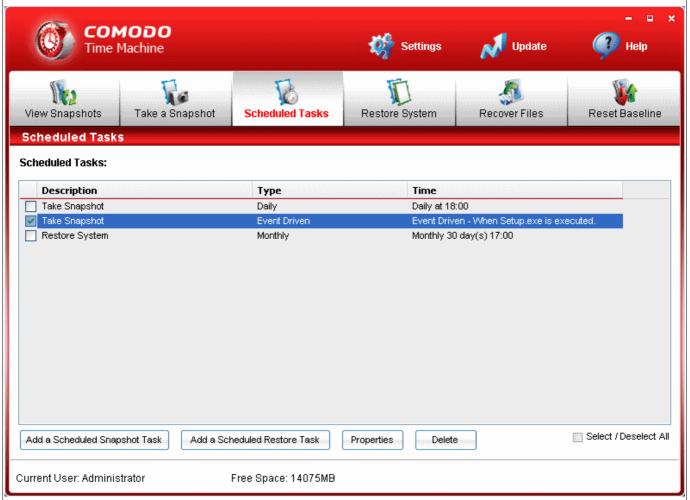
on completion of the scheduled restore operation to save your disk space.

5. Click 'OK'. The schedule will be saved and displayed in the Scheduled Tasks interface.

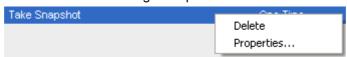
Note: You can add multiple schedules as required by following the same procedure.

## 5.3 Manage the Scheduled Tasks

You can edit or delete the scheduled snapshot creation and system restore tasks which you don't want to continue, from the Scheduled Tasks interface.



To edit a scheduled task, choose the task by selecting the check box beside the task and click 'Properties' or right click on the task and select 'Properties' from the context sensitive menu. The 'Specify a Snapshot Schedule' or 'Specify a Snapshot Schedule' dialog will open correspondingly as shown in <a href="Adding Scheduled System Restore Tasks">Adding Scheduled System Restore Tasks</a> above. You can modify the settings of the scheduled task from the dialog as explained above.



To remove a scheduled task, choose the task by selecting the check box beside the task and click 'Delete'
or right click on the task and select 'Delete' from the context sensitive menu.



Tip: Select the Select/Deselect All checkbox if you want to delete all the scheduled tasks at once.

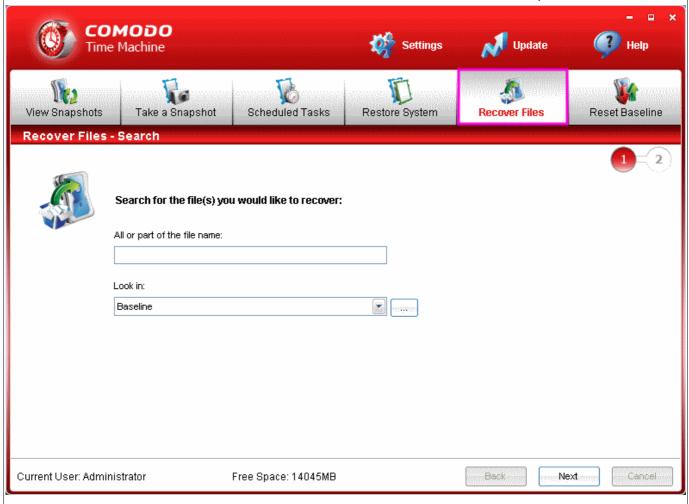
## 6 Recovering Individual Files/Folders

The 'Recover Files' feature allows you to locate and restore individual files and folders from any snapshot. This is especially useful if files are accidentally lost, important data is corrupted or simply to find an older version of a particular file. The ability to recover files in this way avoids the need for a full rollback and provides users with the flexibility to access data and files across multiple points in time.

**Tip**: You can also rollback (or synchronize) the current version of a file/folder to an older version by right clicking on the file/folder from Windows Explorer. <u>Click here</u> for more details.

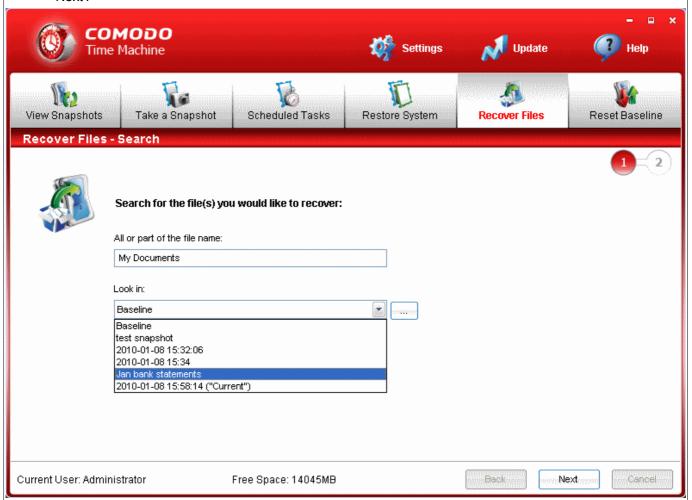
#### To recover a lost file/folder

1. Click 'Recover Files' tab from the main interface. The Recover Files interface will open.



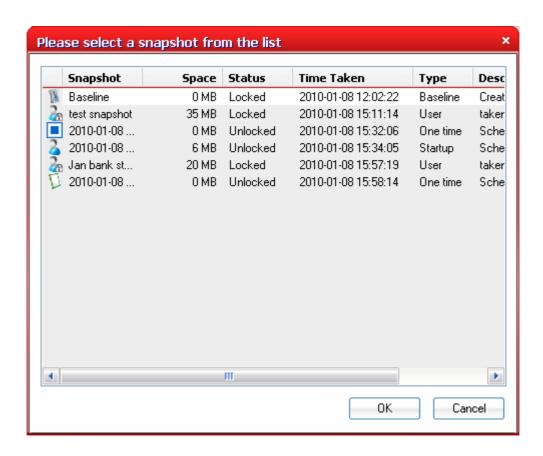


- 2. Enter the name of the file/folder you want to recover in full or in part in the 'All or part of the file name' text box.
- 3. Select the snapshot from which you want to recover the file/folder in the Look in drop-down menu and click 'Next'.



Alternatively, If you want a list view of the preserved snapshots to select from, click the (...) button. The list of preserved snapshots with their details will be displayed.

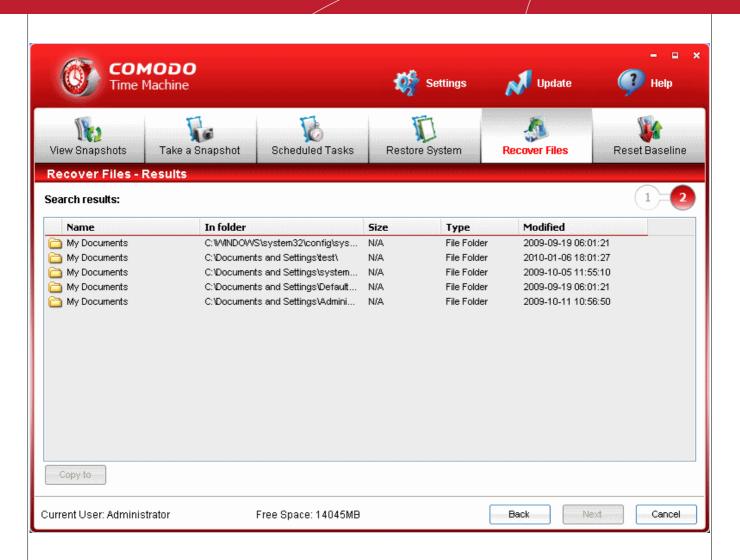




• Select the snapshot from the list and click 'OK' and click 'Next' in the Recover Files - Search pane. Comodo Time Machine searches for the file/folder from the selected snapshot...



...and the search results are displayed in the Recover Files - Results pane.



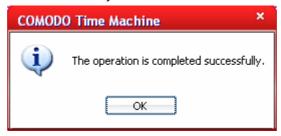
4. Select the file/folder you want to recover from the results and click 'Copy to'. The 'Browse For Folder' dialog will appear.





- 5. Navigate to the disk/folder in which you want to save the restored file/folder. If you want to create a new folder to save the restored file/folder. click 'Make New Folder', type a name for the new folder and select the new folder.
- 6. Click 'OK'.

The recovered file/folder will be saved in the folder you chose and a confirmation dialog will appear.



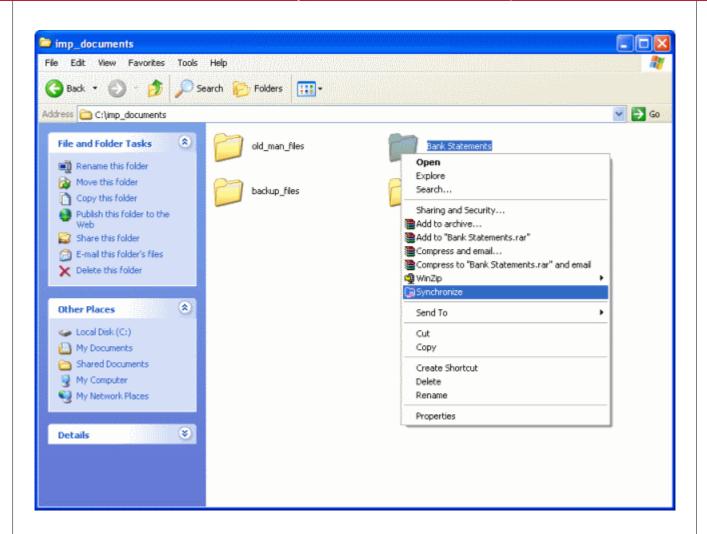
**Tip:** You can also recover individual files/folders through the Windows Command Line interface. <u>Click here</u> for more details.

# 6.1 Synchronization of Files/Folders of Current System with those in Previously Taken Snapshot

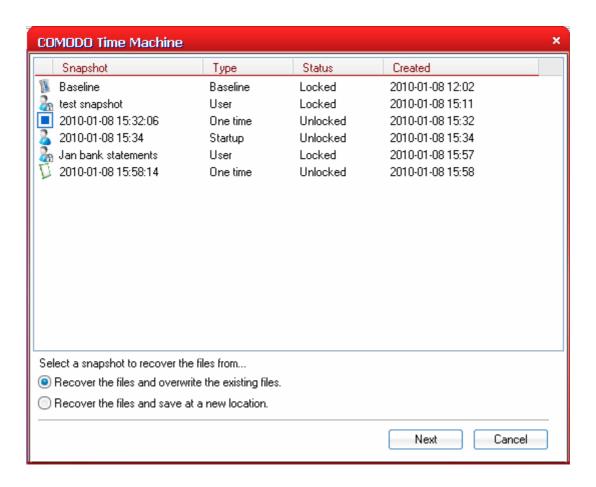
You can also synchronize the file/folder in the current system with the files/folders in a previously taken snapshot from Windows Explorer. This is useful when you want to revert a current version of a file to an older version or to recover corrupted files. The selected file/folder in the current system can be overwritten with the file/folder from the selected snapshot or the same file/folder can be recovered from the snapshot and stored in a different location in your hard disk.

To synchronize the file/folder in the current system to a previous version,

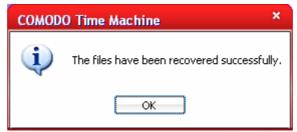
1. Right click on the desired file/folder in the current system and select 'Synchronize' from the context sensitive menu.



2. Select the snapshot from which you want to synchronize the file/folder.



- 3. Select the synchronization mode.
  - Recover the files and overwrite the existing files Fetches the files from the selected snapshot and overwrites the current version of the files/folders in the same location.
  - Recover the files and save at a new location Allows you to choose a location in which you want
    to store the older version of the files/folders fetched from the selected snapshot, without altering the
    current version.
- 5. Click 'Next'.
  - If you have chosen 'Recover the files and overwrite the existing files' Comodo Time Machine
    searches the file/folder from the selected snapshot and overwrites the existing file/folder. A dialog
    indicating the successful completion will be displayed.



• If you have chosen 'Recover the files and save at a new location', you will be prompted to select a new location to store the recovered files/folders.





6. Navigate to the location where you want to store the file/folder of older version and click OK. Comodo Time Machine searches the file/folder from the selected snapshot and stores in the location specified by you.

## 7 Resetting the Baseline Snapshot

The 'baseline' is the snapshot taken at the time you first installed Comodo Time Machine. This serves as the foundation snapshot for all subsequent snapshots. It is locked by default and cannot be deleted from the <u>View Snapshots</u> interface. You may want to reset this baseline after a major update like installing a Windows Service Pack or after implementing system configuration or software changes that you regard as highly important.

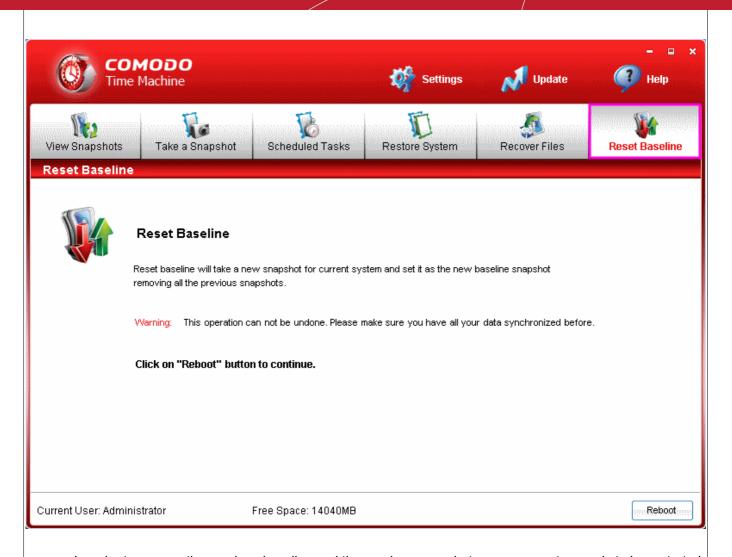
By resetting the baseline snapshot you will:

- Delete the old baseline snapshot and all child snapshots that were derived from it;
- Set the current state of your system as the new baseline thus creating a reference snapshot for all subsequent snapshots.

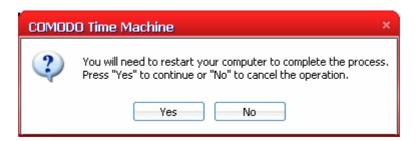
Comodo recommends that users only reset the baseline once they are satisfied that all installed programs and devices are working correctly and that there are no problems with the current system configuration.

To begin the baseline reset process, click the 'Reset Baseline' button at the upper right of the interface:





In order to remove the previous baseline and the previous snapshots, your computer needs to be restarted. Save all unsaved data in other open applications, close all the other applications and click Reboot to restart your computer. A confirmation dialog will appear.



· Click 'Yes'.

On restarting, the current state of your computer will be set as the new baseline and this will stand as the foundation for the other snapshots taken in future.

**Tip:** You can also reset the Baseline Snapshot from the Windows Command Line interface. <u>Click here</u> for more details.

**Note:** Since all the other snapshots (both locked and unlocked) from the previous baseline will be deleted permanently, you will not be able to recover any files/folders from them after resetting the baseline. Use the Recover Files option or Mounting the Snapshot option to synchronize the files between the previous snapshots

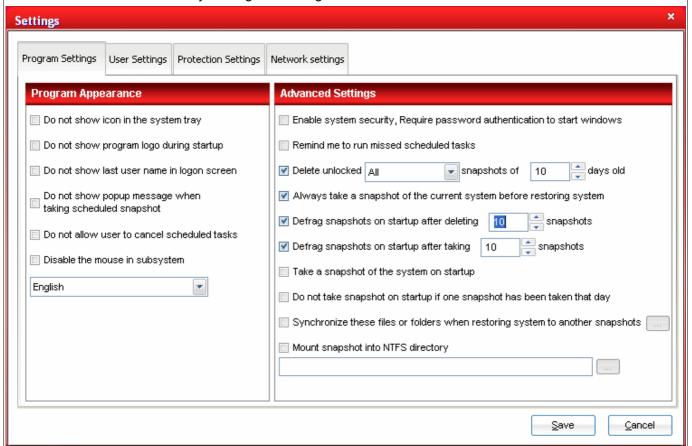


and the current system.

#### **Settings** 8

The Settings interface in Comodo Time Machine allows you to configure the overall behavior of the application.

The interface can be accessed by clicking the 'Settings' link in the title bar of the main interface.



The interface has four tabs to configure:

- Program related settings;
- User related settings;
- Disk protection settings;
- · Network settings.

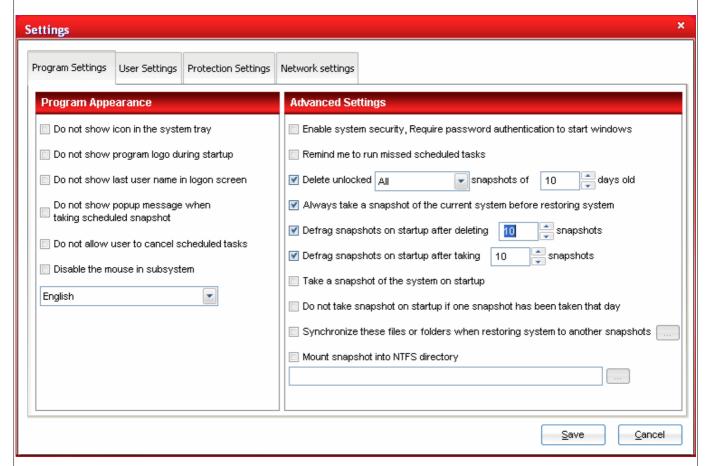
### 8.1 Program Settings

The Program Settings interface allows you to configure the general behavior settings of Comodo Time Machine. To access the Program Settings interface, click **Program Settings tab from the Settings interface.** 



#### It has two areas:

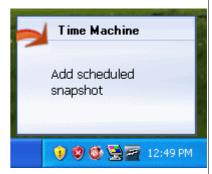
- Program Appearance
- Advanced Settings



#### 8.1.1 Program Appearance

You can configure the general start up options, pop-up messages and interface language from this area. You can select the options you want by selecting the check box beside them. The options available are:

- Do not show icon in the system tray Does not display the system tray icon of Comodo Time Machine.
- **Do not show program logo during startup** The Comodo Time Machine logo is splashed on every startup of the application. When this option is selected, the logo will not be displayed and the application is started directly.
- Do not show last user name in logon screen If the Access Control is enabled in the User Settings, the application displays a logon screen for entering the username and password. By default, the last user name will be displayed in the logon screen. When this option is selected, the last user name will not be displayed.
- Do not show pop-up message when taking scheduled snapshot Whenever Comodo Time Machine takes a scheduled snapshot of your
  system, a pop-up will be displayed at the bottom right corner of the
  screen indicating the 'Taking Snapshot' action as shown in the right. If
  this option is selected, the pop-up will not be displayed.
- Do not allow user to cancel scheduled tasks Does not allow you to remove the scheduled tasks by clicking the 'Delete' button from the 'Scheduled Tasks' interface. This provides protection against accidental





- deletion of the scheduled tasks.
- Disable the mouse in the subsystem Does not displays the mouse cursor and does not permit the
  operation using mouse in the sub-console that appears on starting the system. <u>Click here</u> for more details
  on the sub console.
- Interface Language Comodo Time Machine is available in multiple Languages. You can select the
  interface language from the language drop-down menu that appears below 'Disable the mouse in the
  subsystem'.

### 8.1.2 Advanced Settings

You can configure the settings related to the general management of snapshots, scheduled tasks, file synchronization and mounting of the snapshots. The options available are:

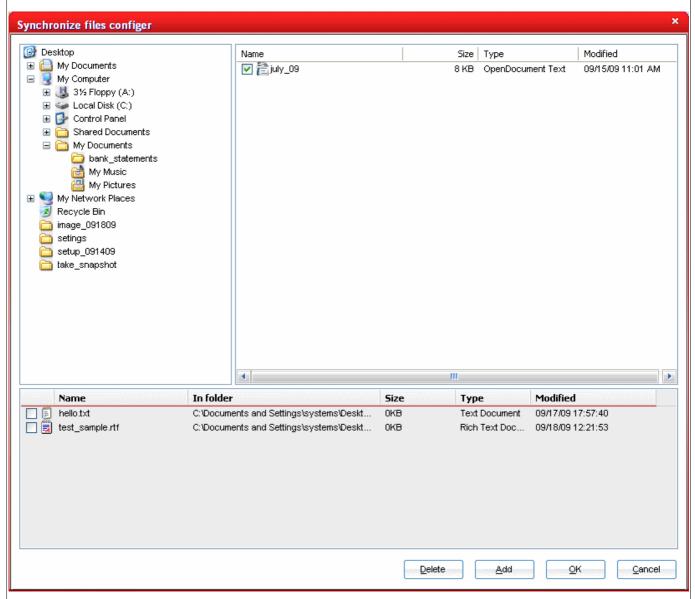
- Enable system security, Require password authentication to start Windows Provides an additional layer of safety to your system by controlling Windows Startup. If selected, a Comodo Time Machine logon screen is displayed to enter the username and password before Windows starts. You have to enter the username and password as set in the User Settings interface. Comodo Time Machine allows the system to startup only when the correct username and password are entered. Note This option is enabled only if Access Control is enabled in the User Settings interface.
- Remind me to run missed scheduled tasks If your was switched-off at the time when a Take Snapshot or Restore System task was scheduled. the task could not be executed. On the next start of the system a reminder screen will be displayed to prompt you to run the task, if this option has been selected.
- Delete unlocked <type> snapshots of <days> days old - Removes the unlocked snapshots of specified type, and which are taken before specified days. You can select to remove all the unlocked snapshots, manually taken snapshots or the snapshots taken taken on hourly, daily, weekly etc. schedules by selecting from the drop-down menu and specify the days in the days drop-down combo box as shown in the right.
- Always take a snapshot of the current system before restoring system - Instructs
   Comodo Time Machine to take
- Advanced Settings Enable system security, Require password authentication to start windows Remind me to run missed scheduled tasks ☑ Delete unlocked Д∥ snapshots of 10 🚔 days old Always take a s system before restoring system User Restart Defrag snapsho eting snapshots One time Hourly Defrag snapshol ng 10 snapshots Daily Weekly Take a snapshot ltup Monthly Do not take snap ਦ snapshot has been taken that day Synchronize these files or folders when restoring system to another snapshots Mount snapshot into NTFS directory
- a snapshot of the current system whenever you restore your system to a previously taken snapshot.
- Defrag snapshots on startup after deleting <number> snapshots Defragments all the remaining snapshots when the cumulative number of manually or automatically removed snapshots reaches the specified number, to reclaim the disk space.
- Defrag snapshots on startup after taking <number> snapshots Defragments all the existing snapshots when the cumulative number of manually or automatically taken snapshots reaches the



- specified number, to reclaim the disk space.
- Take a snapshot of the system on startup Takes a snapshot every time your system is started.
- Do not take a snapshot on startup if one snapshot has been taken that day If a snapshot has been taken manually or by another schedule previously on the same day, a new snapshot will not be taken on successive startups of the system even if the previous option is selected.
- Synchronize these files or folders when restoring system to another snapshots You can select
  important files/folders to be synchronized with the system whenever you are restoring your system to a
  previously taken snapshot. This prevents you from losing important files even on restoring your system to a
  previous date in the event of system crash, virus attacks etc.

#### To select the files/folders to be synchronized

1. Click the (...) button. The 'Synchronize files configure' dialog will appear.



- 2. Navigate to the file/folder from the left hand pane. The contents are displayed in the right hand pane.
- 3. Choose the item(s) by selecting the checkbox beside the item and click 'Add' button. The selected item will be added to the bottom pane.



4. Repeat the process for adding more items and click OK. The selected file(s)/folder(s) will be available in the current system even if you roll back your system to an older snapshot.

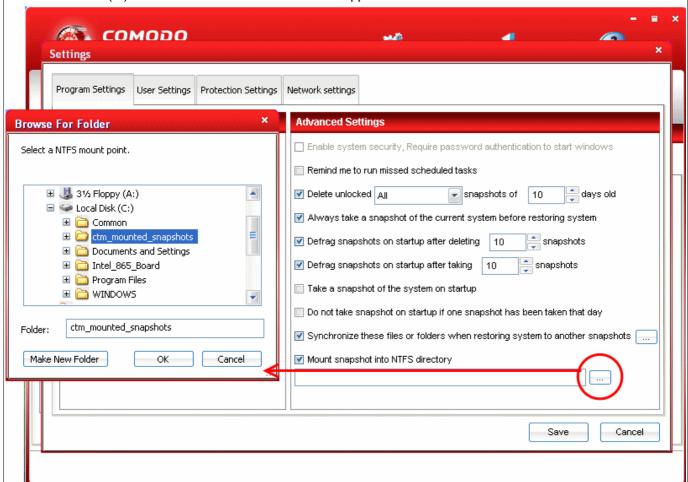
**Note:** On the reverse, if you want to roll back the current version of a file/folder to an older version, e.g. when you want to recover a corrupted file, you can do it by right clicking on the file/folder from Windows Explorer. <u>Click here</u> for more details.

Mount snapshot into NTFS directory - When this option is selected, instead of mounting the snapshot as
a virtual drive, Comodo Time Machine will mount the snapshot inside the folder you specify in future. <u>Click</u>
here for more details on Mounting a Snapshot.

**Note:** By default, the selected snaphot is mounted as a virtual drive with an unused drive letter such as Y or Z. If you have used up all drive letters from C to Z, you cannot mount successfully unless you specify an NTFS directory as the mount point. A side benefit of this option is that the new drive created by default mount is in current user's view, and will deny access when the user is switched in Windows Vista or Windows 7.

#### To specify the folder

1. Click the (...) button. The 'Browse For Folder' will appear.



2. Navigate to the required drive/folder. If you want to create a new folder, click 'Make New Folder' and type a name for the new folder.

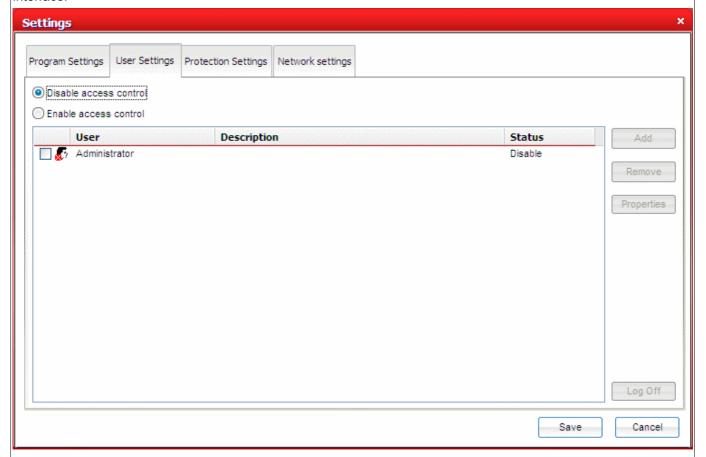


- 3. Click OK.
- Click 'Save' for your settings to take effect.

## 8.2 User Settings

The User Settings interface allows you to configure the user accounts for Comodo Time Machine. CTM is pre-configured with one default user 'Administrator' with full rights to access all the functionalities of the application.

The Administrator can create any number of users and grant full/limited access to the functionalities of the application through this interface. To access the User Settings interface, click User Settings tab from the Settings interface.



- **Disable access control** No user access control will be implemented. CTM will not require username or password to be entered to access the functionalities to the application.
- Enable access control User access control will be implemented. CTM will require a registered username
  or password to login to main console, quick console and the sub-console that appears during system
  startup. The user will be allowed to access only the functionalities as assigned by the Administrator. Note You can add or edit Administrator and user accounts, only if you select 'Enable access control'.

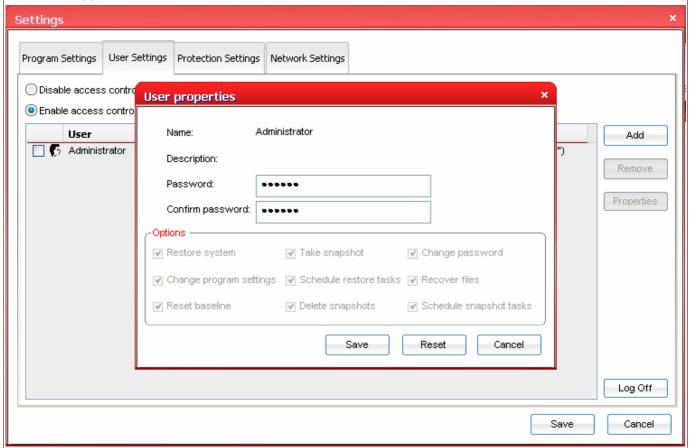
**Important Note:** Comodo Time Machine is pre-configured with a default user 'Administrator' and is not specified with a password. When you select 'Enable access control' for the first time, you MUST specify a password for the



Administrator account, otherwise you will not be able to access CTM on the next restart of the application. The specified password applies for all the operating systems with which your system is bootable.

#### To edit Administrator account and set a password

1. Select 'Enable access control', select the 'Administrator' and click 'Properties'. The User Properties dialog will appear.



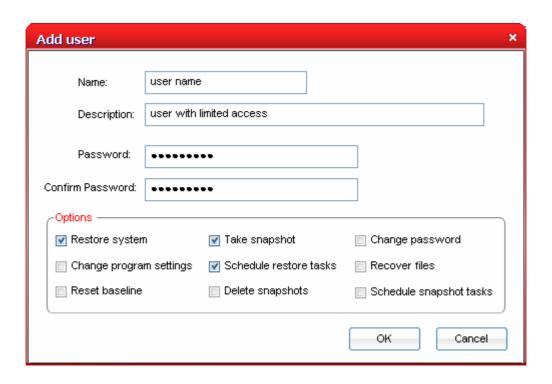
- 2. Type your preferred password in the Password text box and retype the same in the Confirm Password text box.
- 3. By default, the Administrator is provided access to all the functionalities of the application. If you want to change those, select only the functionalities to be granted access to the Administrator and deselect the others in the Options area.
- 4. Click OK to save your settings.

### 8.2.1 Adding and Editing Users

To add a new user account

- 1. Click Settings > User Settings tab.
- 2. Click the 'Add' button. The Add User dialog will appear.





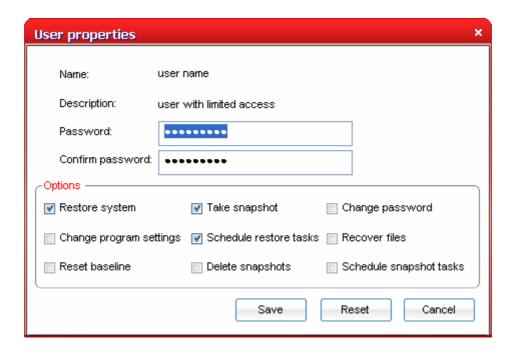
- 3. Type the user name and a description for the user in the 'Name' and 'Description' text boxes.
- 4. Type the preferred password for the new user in the Password text box and retype the same in the Confirm Password text box.
- 5. Select the functions to be given access to the new user in the 'Options' area.
- 6. Click OK to save your settings.

**Important Note:** If you have a dual or multi-boot system, the User account with a specified username and password created in one Operating System will apply to all the Operating Systems with which your computer is bootable - meaning the new user has to enter the same username and password to log into the CTM application even if the computer is booted with different Operating Systems.

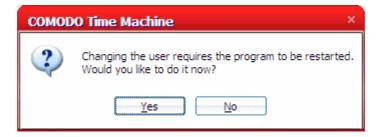
#### To edit an existing user

1. Select the user from the list and select 'Properties'. The User Properties dialog will appear.





- 2. Make the necessary changes and click OK.
  - · To delete an user account, simply select the user and click 'Remove'.
  - · Click 'Save' for your settings to take effect.
  - To log off and enable another user to logon, click 'Log Off'. A confirmation dialog will be displayed.



· Click 'Yes'. The application will restart and a log on screen will appear.

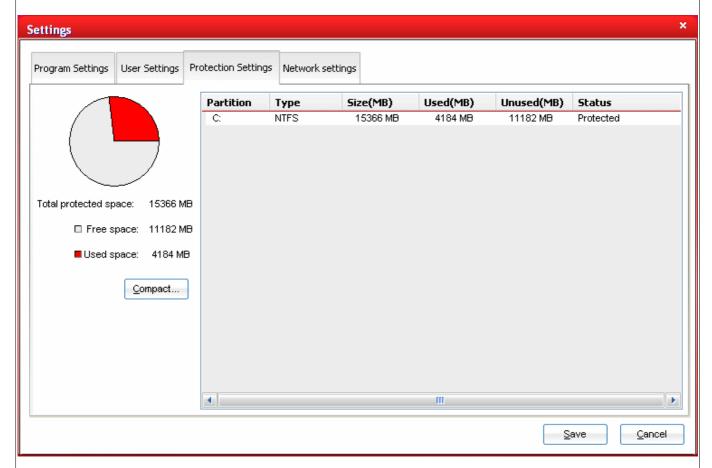


The new user can logon with his/her username and password and can access only those functionalities for which they are granted access.



## 8.3 Protection Settings

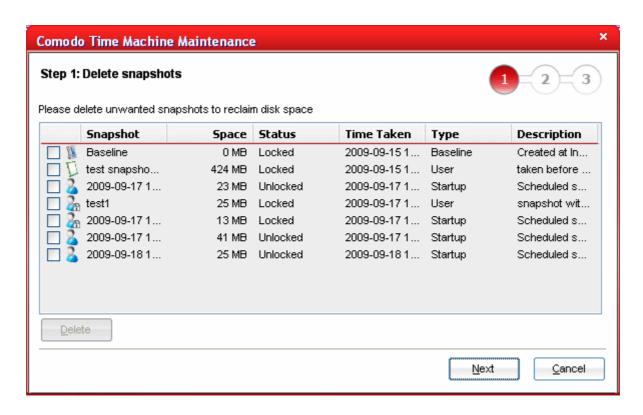
The Protection Settings interface displays the current protection state of the disk drives in your system and enables you to compact the preserved snapshots to reclaim the disk space. To access the Protection Settings interface, click Protection Settings tab from the Settings interface.



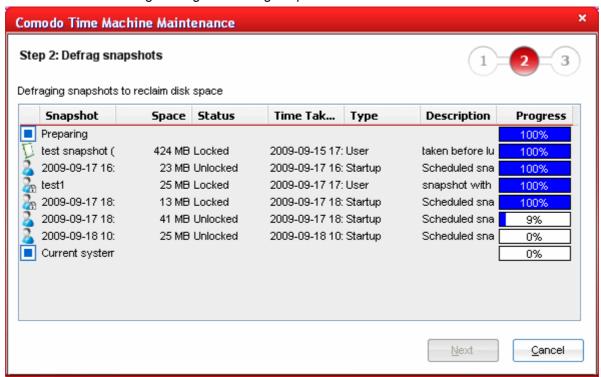
The left hand side pane displays a pie chart indicating the usage of disk space in the partition selected in the right hand side pane. The right lists the disk drives in your system with their details like Type, Size, Used space, Free space and the protection status.

To compact the preserved snapshots

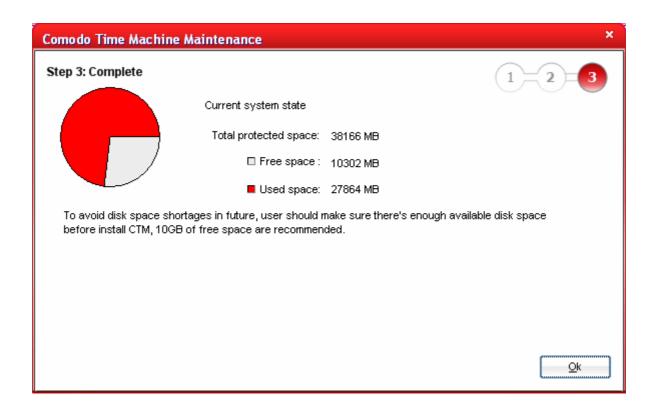
1. Click the 'Compact' button. You will be prompted to select the unwanted snapshots to be deleted.



Select the unwanted snapshots and click 'Delete'. Click Next on completion of deletion operation. If you do
not want to delete any snapshots, click 'Next' button without selecting any snapshots. Comodo Time
Machine will start defragmenting the existing snapshots.



3. Click 'Next' on completion. The 'Defragmentation Complete' dialog will be displayed. It will again display a pie chart indicating the disk space usage state in your system.

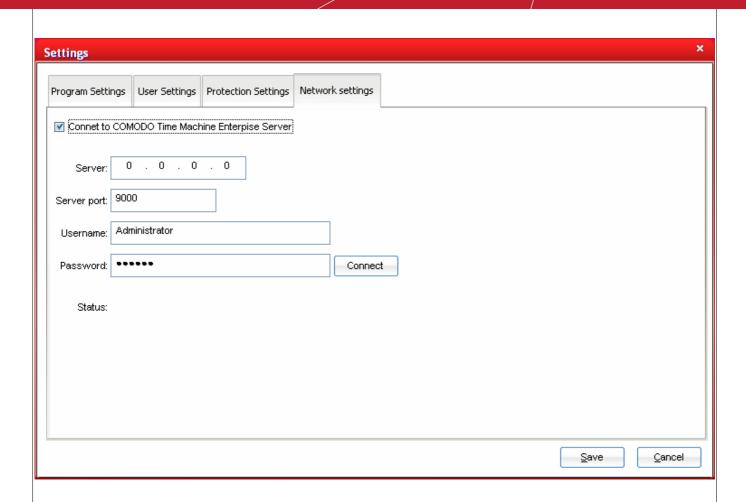


## 8.4 Network Settings

The Network Settings interface allows you to configure the connection settings for Comodo Time Machine for remote management of Comodo Time Machine when you are in an enterprise network.

To access the Network Settings interface, click Network Settings tab from the Settings interface.





To connect to your network server to enable remote management by the Administrator

- 1. Select the check box 'Connect to COMODO Time Machine Enterprise Server'.
- 2. Enter the IP address of the server in the Server field.
- 3. Enter the access port number of the server in the Server port field.
- 4. Enter the user name and password of the Administrator in the Username and Password fields and click 'Connect'.

Your connection status will be displayed in the 'Status' field.

· Click 'Save' for your settings to take effect.

## 9 Check for Updates

Comodo Time Machine contains an inbuilt update checker for checking the availability of the program updates from the Comodo servers.

To check for updates, click the 'Update' link from the title bar.

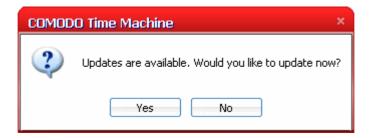


The updater will be started and connected to Comodo server and check for product updates.





If any updates are available, you will be prompted to download and install them.



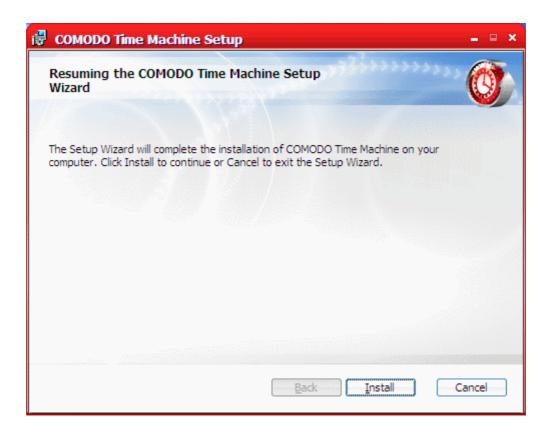
• Click 'Yes'. The updates will be downloaded.



A confirmation dialog will appear.



· Click 'Yes'. The setup wizard will start.

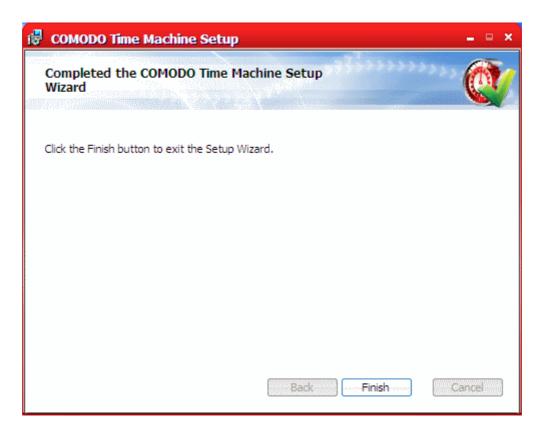


• Click Install to continue. The setup status box will be displayed. You will see a progress bar indicating that files are being installed.



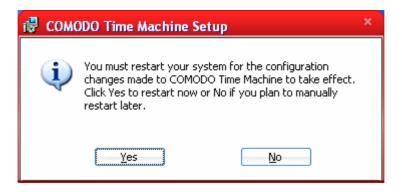


The Installation Complete dialog will be displayed indicating the successful completion of installation.



· Click 'Finish'.

For the installation to take effect, the system has to be restarted.

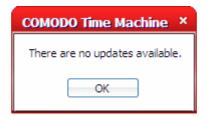


• Please save any unsaved data and click 'Yes' to restart the system. If you want to restart the system at a later time, click 'No'.

**Note:** The installation will take effect only on the next restart of the computer.

If no updates are available, it will be indicated.





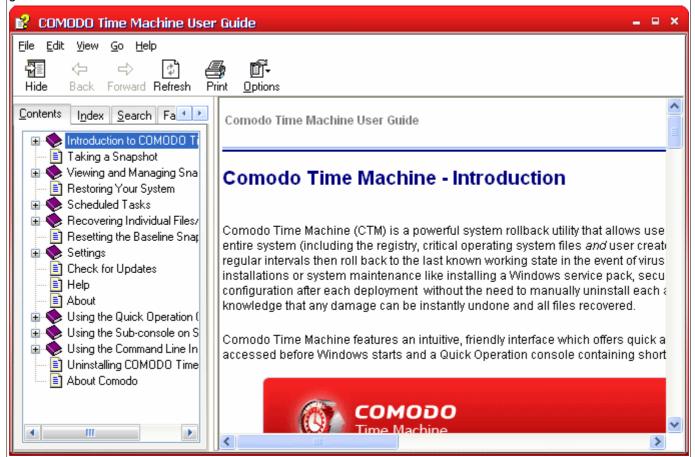
## 10 Help and About Comodo Time Machine

## 10.1 Getting Help

Clicking the 'Help' link from the title bar opens the inbuilt help guide.



Each functionality of the application has its own dedicated page containing detailed descriptions of it in the help guide.



**Tip:** You can also access the help documentation from the Windows Command Line interface. <u>Click here</u> for more details.

#### **Comodo Forums**

The fastest way to get further assistance on Comodo Time Machine is by posting your question Comodo Forums, a message board exclusively created for our users to discuss anything related to our products. The Comodo Forums can be accessed at <a href="http://forums.comodo.com">http://forums.comodo.com</a>.

Registration is free and you'll benefit from the expert contributions of developers and fellow users alike.

### 10.2 About Comodo Time Machine

Clicking the Comodo Time Machine icon from the title bar of the main interface opens the About dialog.



The About dialog displays the version and copyright information of Comodo Time Machine.





## 11 Using the Quick Operation Console

Comodo Time Machine features a Quick Operation Console that can be easily accessed by double clicking the system tray icon or right clicking the system tray icon and selecting 'Open'. The console provides shortcuts for the important functionalities of the application.

#### From this interface you can:

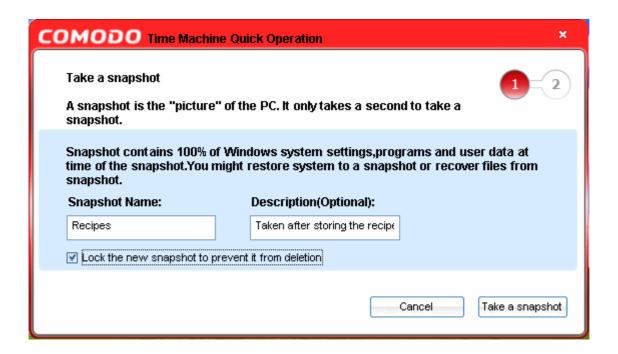
- Take a snapshot of the current state of the system;
- · Roll back your system to a previously taken snapshot;
- · Access the main interface.



## 11.1 Taking a Snapshot

- 1. Double click on the system tray icon.
- 2. Click 'Take SnapShot' button from the Quick Operation Console. The 'Take a Snapshot' dialog will appear.

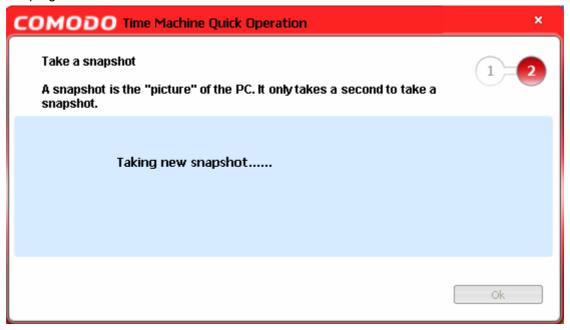




- 3. Type a name for the snapshot to be created in the 'Snapshot Name' text box. (you can give a name to indicate the situation when the snapshot is taken e.g. before installing the xyz application. This enables you to identify the snapshot easily when you want to roll back your system to the present configuration at a later time)
- 4. Type a description for the backup in the 'Description' text box. (This is optional).
- 5. Select the check box 'Lock the new snapshot' if you want to protect the snapshot from accidental deletion.

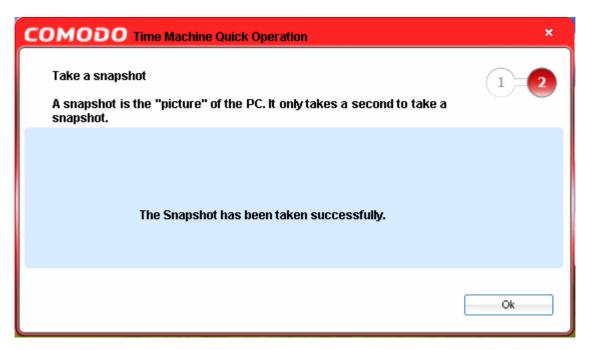
  Note You can also lock or unlock any snapshot from the <u>View Snapshots</u> interface.
- 6. Click 'Take a snapshot'.

The snapshot progress will be indicated...



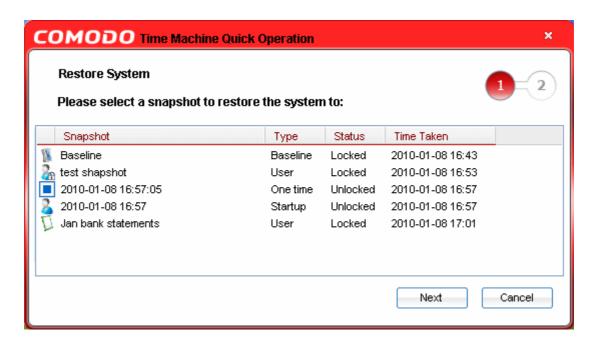
...and the completion dialog will be displayed.





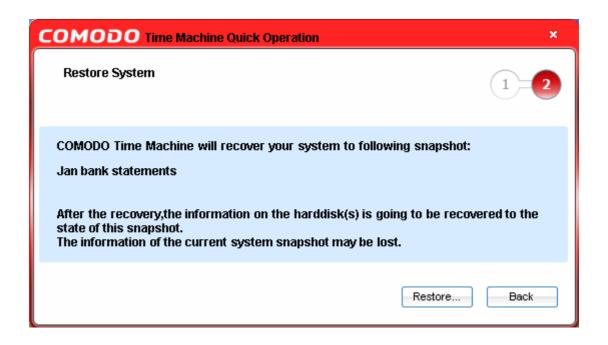
## 11.2 Rolling Back Your System to a Previous Snapshot

- 1. Double click on the system tray icon.
- 2. Click 'Restore System' button from the Quick Operation Console. The 'Restore System' dialog will appear.

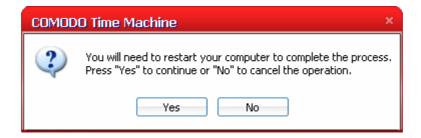


3. Select the snapshot you want to restore to and click 'Next'. A confirmation dialog will be displayed.





4. Click 'Restore'. In order to revert your system to the selected snapshot, your system has to be restarted. A restart confirmation dialog for restarting your system will be displayed.



5. Click 'Yes' to restart your system and to roll back to the selected snapshot.

Your system will restart and reverted to the selected snapshot. All the changes made after the time of taking the selected snapshot will be discarded. If you want to recover any file/folder that was created after the snapshot, you can do the same by using the <u>Recover Files</u> feature of Comodo Time Machine.

## 11.3 Accessing the Main Interface

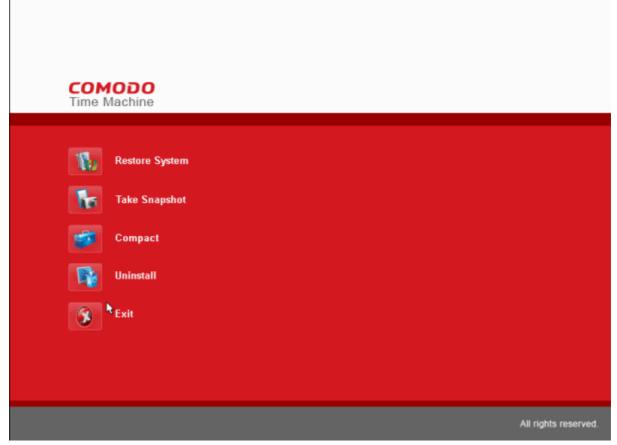
- 1. Double click on the system tray icon.
- 2. Click 'Advanced' button from the Quick Operation Console. The <u>Main interface</u> of Comodo Time Machine will be opened.



## 12 Using the Sub-Console on System Start up

Comodo Time Machine features a convenient sub console that can be accessed before Windows starts on your system. The sub console is fully functional and is of immense help in rescuing your system if you encounter a crash and Windows will not start. The sub console can be accessed during system boot up (before Windows loads) and used to restore your system to a 'healthy' snapshot. Once you have chosen the alternate 'boot' snapshot, your system will start normally without any trace of the crash. From this interface you can also take new snapshots, compact existing snapshots and even uninstall Comodo Time Machine.

Comodo Time Machine displays a splash screen immediately after you switch on your system and prompts you to press the 'Home' key to enter the sub console. If you do not press the 'Home' key, Windows starts normally. To access the sub console, press the Home key when you are prompted during your system start up.



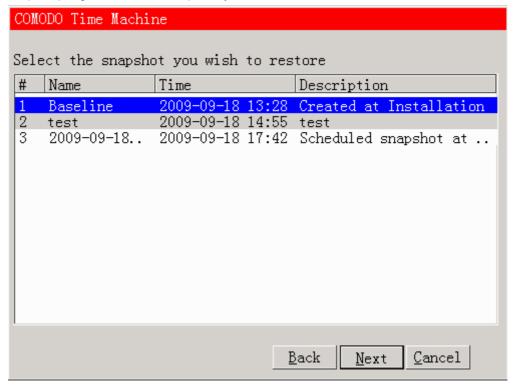
From this interface, you can:



- Restore your system to a healthy snapshot;
- Take a new snapshot;
- Compact the preserved snapshot;
- <u>Uninstall Comodo Time Machine</u>.

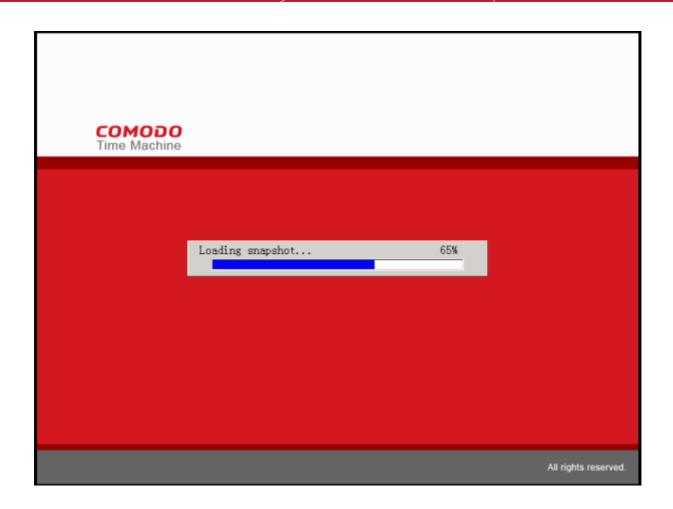
## 12.1 Rolling Back Your System to a Selected Snapshot

If you wish to roll back your system to a selected snapshot before Windows starts in your system especially when you encounter a system crash, enter the sub console as <u>explained above</u> and click 'Restore System'. A pop-up dialog will appear, prompting to select the snapshot you wish to roll back to.



 Select the snapshot and click 'Next'. The selected snap shot will be loaded and the progress will be indicated.



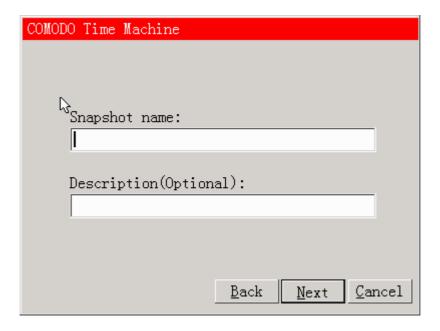


On Completion, the system will start from the selected snapshot.

#### 12.2 Taking a Snapshot

If you want take a snapshot of the current system before Windows starts, enter the sub console as <u>explained above</u> and click 'Take Snapshot'. A pop-up dialog will appear, prompting to enter a name and description for the snapshot to be taken.



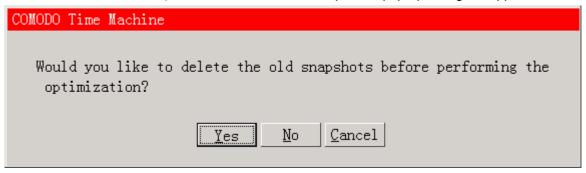


- Type a name for the snapshot to be created in the 'Snapshot Name' text box. (you can give a name to
  indicate the situation when the snapshot is taken e.g. before installing the xyz application. This enables you
  to identify the snapshot easily when you want to roll back your system to the present configuration at a later
  time)
- Type a description for the backup in the 'Description' text box. (This is optional).
- · Click 'Next'. Comodo Time Machine creates a snapshot of your system and starts your system normally.

#### 12.3 Compacting Preserved Snapshots

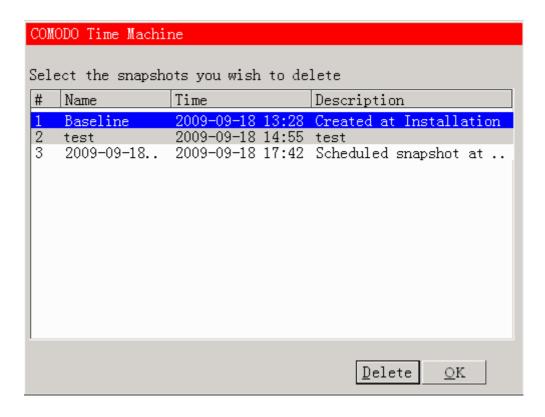
You can delete unnecessary snapshots and defragment the required snapshots to reclaim disk space from the sub console.

1. Enter the sub console as explained above and click Compact . A pop-up dialog will appear.



2. Click Yes if you want to delete unwanted snapshots. You will be prompted to select the snapshots you wish to delete. If you do not want to delete any snapshots, click NO, the process moves to step 4.





- 3. Select the snapshots to be deleted and click Delete. On completion, click OK.
- 4. Comodo Time Machine will start defragmenting the existing snapshots.

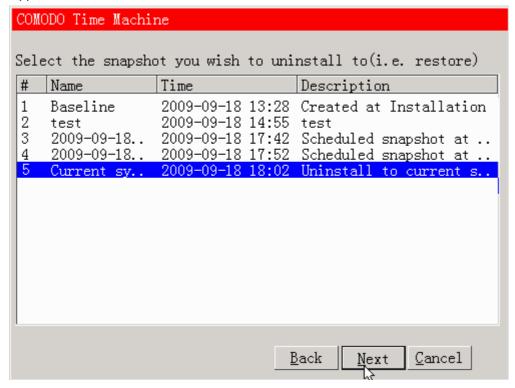




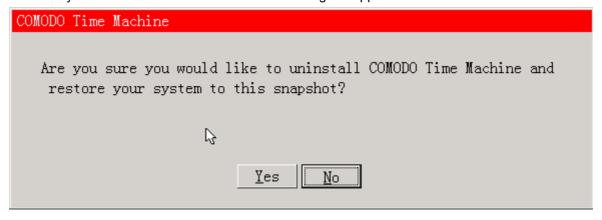
On completion, the system starts normally.

#### 12.4 Uninstall Comodo Time Machine

If you want to uninstall Comodo Time Machine before starting Windows, enter the sub console as <u>explained above</u> and click 'Uninstall'. You will be prompted to select the snapshot to which your system has to be rolled back before uninstalling the application.



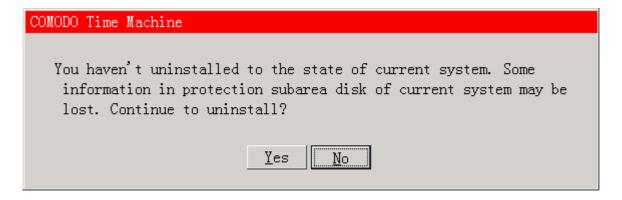
• If you want to keep the current state of the system intact and uninstall Comodo Time Machine, select the 'Current system' and click 'Next'. A confirmation dialog will appear.



- Click Yes. Comodo Time Machine will be uninstalled and your system will start normally.
- If you want to roll back your system to a previous snapshot before uninstalling Comodo Time Machine, select the snapshot you want and click 'Next'. A confirmation dialog will appear.



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- Click Yes. Your system will be rolled back to the selected snapshot, Comodo Time Machine will be
  uninstalled and your system will start from the selected snapshot. Note All the changes and data saved
  after the snapshot will be lost.
- · To exit the sub console and start Windows normally, click 'Exit'.



## 13 Using the Windows Command Line interface

Comodo Time Machine allows users to take a snapshot of the current system state, roll back the system to a previously taken snapshot and other important functionalities from the Windows command line interface, without the need of opening the application.

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

The commands are to be specified in the format

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

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

- Take a snapshot of the current state of the system;
- Roll back your system to a previously taken snapshot;
- Reset Baseline snapshot;
- Compact preserved snapshots:
- Hide/Show System tray icon;
- Uninstall Comodo Time Machine;
- Show Help.

#### 13.1 Taking a snapshot

- Open the Windows command line interface as mentioned above.
- Specify the Command

<installation path>/ctmcmd/n/ /name "name of the snapshot" /d "description for the snapshot"/user "username"/pass "password"

The path to the executable will be followed by commands for the configuration of the snapshot task in sequence with space between each switch command. For example, if Comodo Time Machine has been installed to the default directory, the format would be:

C:\Program Files\COMODO\Time Machine\ctmcmd /n /name "name of the snapshot" /d "description for the snapshot" /user "username" /pass "password"

Note: The description for the snapshot is optional. The Username and the Password are required only if Access Control is enabled in <u>User Settings</u> area of <u>Settings</u> interface.



# 13.2 Rolling Back Your System to a Previous Snapshot

· Open the Windows command line interface as mentioned above.

To restore your system to the Baseline snapshot

· Specify the Command

<installation path>/ctmcmd/r /baseline /user "username" /pass "password"

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

C:\Program Files\COMODO\Time Machine\ctmcmd/r /baseline /user "username" /pass "password"

To restore your system to the latest snapshot

· Specify the Command

<installation path>/ctmcmd/r /current /user "username" /pass "password"

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

C:\Program Files\COMODO\Time Machine\ctmcmd/r /current /user "username" /pass "password"

To restore your system to the snapshot closest to a certain time

Specify the Command
 <installation path>/ctmcmd/r /time <date & time> /user "username" /pass "password"

#### **Example:**

If the Comodo Time Machine has been installed to the default directory, user name is 'Administrator' and the password is '12345678' and the user wants to restore the system to the snapshot closest to the time 10:00 am on 15th November 2009, the command would be:

C:\Program Files\COMODO\Time Machine\ctmcmd/r /time 2009-11-15 10:00 /user "Administrator" /pass "12345678"

**Note**: The date has to be specified in yyyy-mm-dd format and the time has to be specified in 24 hr format. The Username and the Password are required only if Access Control is enabled in <u>User Settings</u> area of <u>Settings</u> interface.

#### 13.3 Resetting the Baseline Snapshot

- Open the Windows command line interface as mentioned <u>above</u>.
- · Specify the Command

<installation path>/ctmcmd/rb /user "username" /pass "password"

The path to the executable will be followed by commands for the configuration of the reset baseline task in sequence with space between each switch command. The current state of the system will be set as the Baseline Snapshot on execution of this command. For more details refer to Resetting the Baseline Snapshot.



For example, if Comodo Time Machine has been installed to the default directory, the format would be: C:\Program Files\COMODO\Time Machine\ctmcmd/rb /user "username" /pass "password"

**Note**: The Username and the Password are required only if Access Control is enabled in <u>User Settings</u> area of <u>Settings</u> interface.

#### 13.4 Compacting the Preserved Snapshots

- Open the Windows command line interface as mentioned <u>above</u>.
- · Specify the Command
  - <installation path>/ctmcmd/d /user "username" /pass "password"

The path to the executable will be followed by commands for the configuration of the defragmentation task in sequence with space between each switch command. All the preserved snapshots will be defragmented to reclaim disk space.

For example, if Comodo Time Machine has been installed to the default directory, the format would be: C:\Program Files\COMODO\Time Machine\ctmcmd/d /user "username" /pass "password"

**Note**: The Username and the Password are required only if Access Control is enabled in <u>User Settings</u> area of <u>Settings</u> interface.

#### 13.5 Hiding/Unhiding System Tray Icon

· Open the Windows command line interface as mentioned above.

To hide the Comodo Time Machine icon displayed in the system tray

· Specify the Command

<installation path>/ctmcmd/h /user "username" /pass "password"

The path to the executable will be followed by commands for the configuration of the hide task in sequence with space between each switch command. The Comodo Time machine System tray icon will be hidden. For example, if Comodo Time Machine has been installed to the default directory, the format would be: C:\Program Files\COMODO\Time Machine\ctmcmd/h /user "username" /pass "password"

To show the Comodo Time Machine icon displayed in the system tray

Specify the Command

<installation path>/ctmcmd/s /user "username" /pass "password"

The path to the executable will be followed by commands for the configuration of the show task in sequence with space between each switch command. The Comodo Time machine System tray icon will be displayed.

For example, if Comodo Time Machine has been installed to the default directory, the format would be: C:\Program Files\COMODO\Time Machine\ctmcmd/s /user "username" /pass "password"

**Note**: The Username and the Password are required only if Access Control is enabled in <u>User Settings</u> area of <u>Settings</u> interface.

#### 13.6 Uninstalling Comodo Time Machine

Open the Windows command line interface as mentioned <u>above</u>.



• If you want to keep the current state of the system intact and uninstall Comodo Time Machine, Specify the Command

<installation path>/ctmcmd/u /current /user "username" /pass "password"

• If you want to roll back your system to the Baseline Snapshot (the snapshot taken at the time of installation of Comodo Time Machine), Specify the Command

<installation path>/ctmcmd/u /baseline /user "username" /pass "password"

The path to the executable will be followed by commands for the configuration of the uninstallation task in sequence with space between each switch command. The Comodo Time machine will be uninstalled and the system will be restarted on execution of this command. See <a href="Uninstalling Comodo Time Machine">Uninstalling Comodo Time Machine</a> for more details. For example, if Comodo Time Machine has been installed to the default directory, and you want roll back to the baseline Snapshot, the format would be:

C:\Program Files\COMODO\Time Machine\ctmcmd/u /baseline /user "username" /pass "password"

**Note**: The Username and the Password are required only if Access Control is enabled in <u>User Settings</u> area of <u>Settings</u> interface.

#### 13.7 Opening the Help

- · Open the Windows command line interface as mentioned above.
- · Specify the command

<installation path>/ctmcmd/?

For example, if Comodo Time Machine has been installed to the default directory, the format would be:

C:\Program Files\COMODO\Time Machine\ctmcmd/?

The built-in help will be opened on execution of this command.



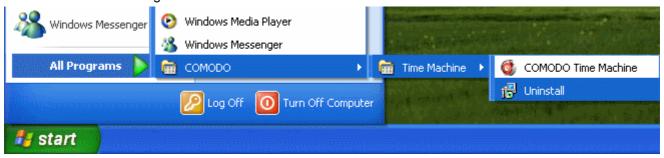
### 14 Uninstalling COMODO Time Machine

#### To uninstall COMODO Time Machine

- 1. Click Start > Settings > Control Panel
- 2. In the Control Panel, double-click Add/Remove Programs
- 3. In the list of currently installed programs, click COMODO Time Machine
- 4. Click the 'Remove' button.

Or

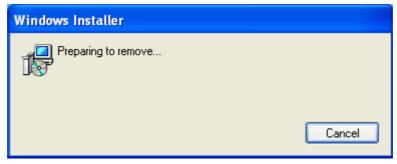
• Click Start > All Programs > COMODO > Time Machine > Uninstall.



A dialog box will appear to confirm that you want to un-install COMODO Time Machine. Click 'Yes'.



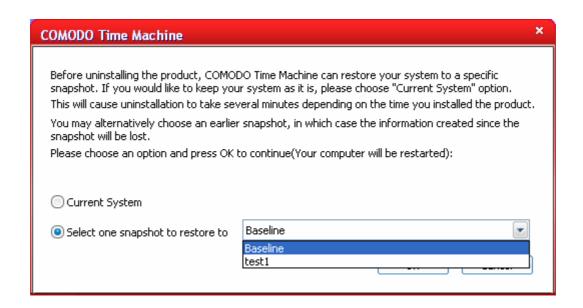
A progress dialog box will appear, indicating the Uninstallation process.



You will be prompted to select the snapshot to which your system has to be rolled back before uninstalling the application.

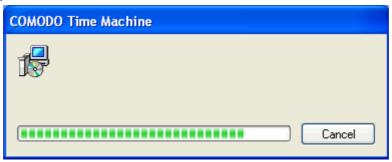


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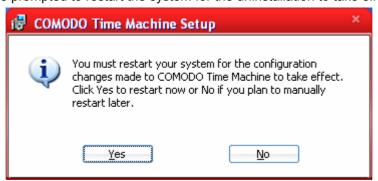


- **Current System** If you want to keep the current state of the system intact and uninstall Comodo Time Machine, select the 'Current system' and click 'OK'.
- Select one snapshot to restore to If you want to roll back your system to a previous snapshot before uninstalling Comodo Time Machine, select the radio button 'Select one snapshot to restore to' and choose the snapshot you want to roll back to, from the drop-down menu and click 'OK'.

A progress dialog will appear.



On Completion, you will be prompted to restart the system for the uninstallation to take effect.



• Click Yes to restart your system. If you plan to restart the system at a later time, click No. The uninstallation will be effective only on next restart.

On the restart, your system will be rolled back to the snapshot you selected and the Comodo Time machine will be removed.

#### **About Comodo**

The Comodo companies provide the infrastructure that is essential in enabling e-merchants, other Internet-connected companies, software companies, and individual consumers to interact and conduct business via the Internet safely and securely. The Comodo companies offer PKI SSL, Code Signing, Content Verification and E-Mail Certificates; award winning PC security software; vulnerability scanning services for PCI Compliance; secure email and fax services.

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 secures and authenticates online transactions and communications for over 200,000 business customers and has over 10,000,000 installations of desktop security products.

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