



Software Version 4.0

# User Guide

Guide Version 4.0.111114

Comodo Security Solutions 1255 Broad Street Clifton, NJ 07013

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# 1. Comodo System Utilities - Introduction

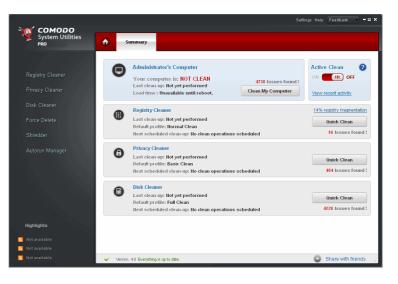
Comodo System Utilities is a suite of utilities designed to improve the security, performance and usability of Windows 7, Windows Vista and Windows XP computers.

It allows users of all experience levels to thoroughly clean their systems of damaging and/or wasteful files and generally enhance the performance of the system. The application also features additional privacy utilities such as a tool that deletes files permanently a tool to shut down applications that are preventing you from deleting a file and a tool to configure programs and services that should start up with Windows to improve Windows boot-up time.

### **Comodo System Utilities Features:**

### Clean-up Tasks:

- Registry Cleaner Optimizes and repairs your Windows registry by running an in-depth scan to identify, remove or repair any unnecessary or corrupted entries. After running a scan, Windows will be able to access the information it needs from the registry much more quickly - meaning your computer will get an immediate performance and stability boost.
- Privacy Cleaner Obliterates your digital paper trail by cleaning history, cache, cookies and usage records from Internet browsers, Windows locations and popular software.



- **Disk Cleaner** Over time your disk drives become cluttered with temporary Internet files, logs, needless archives, unused icons and duplicate files. Apart from eating up disk space, these junk files can make your computer work slower. Comodo Disk Cleaner takes care of this by identifying and deleting all unnecessary files on your computer.
- Force Delete Often when you want to delete or move a file you will see a message stating 'You cannot perform the action because this file is used by another application'. 'Force Delete' solves this annoying problem by scheduling the file for deletion whenever the computer is next restarted.
- Shredder When you delete a file from Windows, it is not really gone in the sense that you might think. The operating
  system just marks the area where the file was located as available so that it can write to it in future. However, the file
  itself can still be recovered by a variety of specialist software possibly for malicious purposes. The 'Shredder' utility
  enables you to overcome this potential threat to your privacy by permanently deleting files so that they can never be
  recovered.
- Autorun Manager Enables you to control exactly which programs, services and drivers to start with Windows to improve Windows boot up time and overall system performance.

Comodo System Utilities product is available in free and Pro versions. Both Free and Pro versions contain have the same core functionality but the Pro version also contains advanced security features such as registry protection and active clean. A trial version of Pro is also available. **Click here** to view a table comparing the versions.

### **Guide Structure**

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

- · Comodo System Utilities Master Introduction An overview of the application.
  - System Requirements Minimum required Hardware and Software for the installation
  - Installing Comodo System Utilities A brief outline of the installation procedure
  - Starting Comodo System Utilities How to start the application



- The Main Interface Description of Menus and Options in the main interface.
- The Summary Area Description of the Summary screen
- · Understanding Profiles Description of the default and custom scan and clean profiles

### Registry Cleaner

- Clean How to clean your Windows registry
- Filter Entries How to remove specific entries
- Restore How to restore the registry to previous state
- Settings Description of the Registry Cleaner options
- Schedule How to schedule scans to run at a specific date and time.

### Privacy Cleaner

- Clean How to clean and maintain your privacy
- Restore How to restore the folders/ files to their original locations
- Settings Description of the Privacy Cleaner options
- Schedule How to schedule scans to run at a specific date and time.

#### Disk Cleaner

- Clean How to remove unnecessary files from your computer
- Filter Entries How to remove specific entries
- Duplicates How to find and remove duplicate files on the computer
- Restore How to restore the folders/ files to their original locations
- Settings Description of the Privacy Cleaner options
- Schedule How to schedule scans to run at a specific date and time
- Force Delete
  - Pending Operations How to delete or move a file being locked by other applications.
  - Recent Activity The Recent Activity tab contains a list of all deleted files.
- Shredder Description how to permanently delete files and folders so that they can never be recovered.
- Autorun Manager Description how to choose which programs and services are loaded at startup
  - Startup How to set programs that are automatically loaded into the system during system start-up
  - Services How to add programs to be executed without requiring user intervention
  - Drivers How to view, add and configure drivers in your system at start-up
  - Boot Execute How to add programs to be executed during system Boot-up
  - Schedule Tasks How to schedule to run program in Windows.
- Comodo System Utilities Settings Details on configuration of overall behavior of the application.
  - General Settings Description of Comodo System Utilities global settings
  - Backup Settings Description of Comodo System Utilities backup settings
- Using Live Help Guidance on configuration and usage of Comodo GeekBuddy.
- Uninstalling Comodo System Utilities A brief outline detailing how to uninstall the application
- Getting Support Guidance on how to get support technical support
- Appendix 1 The Windows Registry Explained A brief description on Windows Registry
- Appendix 2 GeekBuddy A brief account on GeekBuddy
- Appendix 3 Encryption Algorithms Details on Encryption Algorithms used by Comodo System Utilities for encrypting and storing your backup files
- Appendix 4 Comodo System Utilities Profiles Details on areas scanned and cleaned by Registry Cleaner, Privacy
   Cleaner and Disk Cleaner on selecting the default scan and clean profiles shipped with the application
  - Table of Default Profiles of Registry Cleaner
  - Table of Default Profiles of Privacy Cleaner
  - Table of Default Profiles of Disk Cleaner



- Appendix 5 Comodo System Utilities versions
- About Comodo.

### 1.1. System Requirements

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

### Comodo System Utilities - 32 bit and 64 bit versions

### **Supported Operating Systems**

- Windows 7 32 or 64 bit version
- Windows Vista 32 or 64 bit version
- Windows XP 32 or 64 bit version
- Windows 2003 Server 32 or 64 bit version

### Minimum Hardware

- 32 MB RAM
- 20 MB Disk Space

### 1.2. Installing Comodo System Utilities

Before you install Comodo System Utilities, please make sure to quit all other Windows Programs.

Comodo System Utilities installer requires administrative privileges. After downloading the setup file to your local drive, double click on it to start the installation wizard.

### Step 1 - Choosing the Interface Language

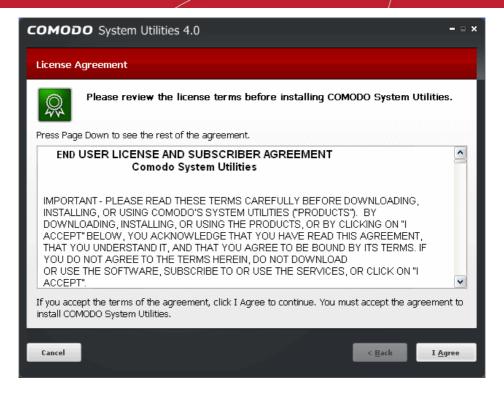
The set up program will start automatically and the language selection dialog will be displayed. The default language is English. If you wish to install using a different language then make your choice from the drop down and click 'OK'.

COMODO Installer	
Select the language	
English	•
OK Cancel	

### Step 2 - End User License Agreement

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

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Read the agreement and click the 'I Agree' button to continue installation. If you want to cancel the installation, click 'Cancel'.

### Step 3 - Registration

The next screen allows you to register your installation.

COMODO System Utilities 4.0		- 🗆 ×
Registration for COMODO System Utilities.		
Registration		
Install trial version		
© Enter license key		
	Activate	
Cancel	< <u>B</u> ack N	ext >

- If you want to use the Free Trial Version of the software, select 'Install Trial Version' and click Next. The installation will move to Step 4.
- If you have purchased the Pro version of the software, select 'Enter License Key', enter the license key you received through email and click 'Activate'.

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COMODO System Utilities 4.0		- = ×
Registration for COMODO System Utilities.		
Registration		
© Install trial version		
Enter license key	Activate	
Please wait		
Cancel	< <u>B</u> ack	<u>N</u> ext >

The installer will connect to Comodo servers and activate your license.

Note: You must be connected to Internet for activating your license.

On completion, the' Activation Successful' message will be displayed.

COMODO System Utilities 4.0		- ¤ ×
Registration for COMODO System Utilities.		
Registration		
🗇 Install trial version		
Enter license key		
AD(7030-022-486-9417-0487538.400	Activate	
Activation successful.		
Cancel	< <u>B</u> ack <u>N</u> ext	>

Click 'Next' to continue.

### Step 4 - Select Destination Folder for Installation

The next screen allows you to select the installation folder. The default path is C:\Program Files\COMODO\COMODO System

Utilities. You can choose to install to a different location by clicking the 'Browse' button and navigating to the desired folder.

COMODO System Utilities 4.0	- • ×
Choose Install Location	
Choose the folder in which to install COMODO System Utilities.	
Setup will install COMODO System Utilities in the following folder. To install in a different folder, Browse and select another folder. Click Install to start the installation.	click
Destination Folder	
C:\Program Files\COMODO\COMODO System Utilities Browse	
Space required: 24 MB	
Space available: 78692 MB	
Cancel < <u>B</u> ack <u>I</u> n	istall

Once you have made your choice, click 'Install'.

### Step 5 - Setup Progress

A setup status dialog box is displayed. You will see a progress bar indicating that the files are being installed.

COMODO System Utilities 4.0	×
Installing	
Please wait while COMODO System Utilities is being installed.	
Installing This may take several minutes	
Cancel < <u>B</u> ack	<u>N</u> ext >

### **Step 6 - Product Registration**

If you have opted for Free Trial version in step 3, the product registration dialog will be displayed on completion of setup.

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COMODO System Utilities 4.0	- = ×
Registration for COMODO System Utilities .	
Registration	
We will register your copy for COMODO System Utilities .	
OPTIONAL: Please provide us with your email address if you want to receive e-mail communications from COMODO on new products, services and special promotions.	
E-mail address (optional)	_
Sign me up for news about COMODO products(optional)	
Cancel < Back	ext>

The free version of Comodo System Utilities is activated free of cost for lifetime usage. If you wish to sign up for news about Comodo products then enter your email address in the space provided and select 'Sign me up for news about Comodo products'. This is optional.

Click 'Next' to continue.

### Step 7 - Finalization

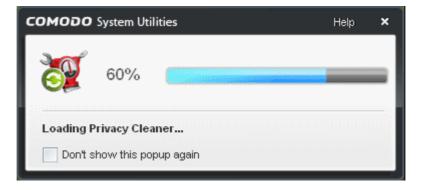
An Installation complete screen will be displayed.

СОМОЕ	OO System Utilities 4.0	- = ×
Completi	ng the COMODO System Utilities Setup	
Ø	COMODO System Utilities has been installed. Press Finish to complete the instalation.	,
Cancel	< <u>B</u> ack <u>F</u> i	nish

Click 'Finish'. The installation is complete.

After successful completion of installation, the application starts scanning your system and updates its database.

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## 1.3. Starting Comodo System Utilities

You can access Comodo System Utilities through the Windows Start Menu or through the desktop shortcut.

### 1. Start Menu

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

🜔 Windows Media Playe	칠 Remote Assistance	
	🕑 Windows Media Player	
MSN	🔏 Windows Messenger	Carling and the set of
	🎕 Windows Movie Maker	States and the second
All Programs 👂	💼 соморо 🛛 🔸	💼 COMODO System Utilities 🔹 🦉 COMODO System Utilities
	🖉 Log Off 🛛 🗿 Turn Off Compute	🛅 Dragon 🔸 🐹 Uninstall & Repair
🛃 start		

### 2. Desktop Shortcut

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



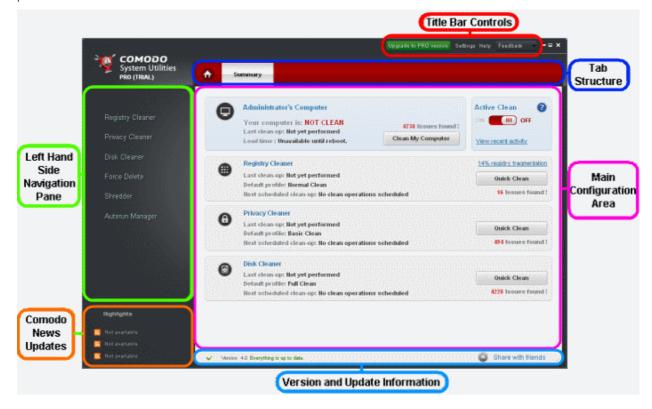
### 1.4. The Main Interface

Comodo System Utilities has a streamlined interface that provides fingertip access and control over all functional areas of the software.

The left-hand side navigation pane contains shortcuts to each major area - Registry Cleaner, Disk Cleaner, Privacy Cleaner, Force Delete, Shredder and Autorun Manager.

The main configuration area shows a dashboard style summary of recent scans and also allows you to view, launch and

configure tasks. Just above the main configuration are you will notice is the Home button (returns you to the Summary window anytime). The tabs above the main configuration area vary according to the functionality selected in the left hand side navigation pane.



### 1. The Left Hand Side Navigation Pane

The Left Hand Side Navigation pane has five tabs:

- Registry Cleaner Opens the Registry Cleaner Interface and allows you to start or schedule Windows registry cleaning operations with different cleaning profiles, restore your registry, configure Registry Cleaner and configure schedules.
- **Privacy Cleaner** Opens the Privacy Cleaner Interface and allows you to start or schedule cleaning your privacy entries with different cleaning profiles, restore your entries, configure Privacy Cleaner and configure schedules.
- Disk Cleaner Opens the Disk Cleaner interface and allows you to start or schedule your disk cleaning operations with different cleaning profiles, restore your files, find and remove duplicate files, configure Disk Cleaner and configure schedules.
- Force Delete Opens the Force Delete interface for the forcibly deleting inaccessible files and checking pending
  operations and recent activities.
- Shredder Opens the Shredder interface to shred unwanted Files and Folders, Drive and Disk.
- Autorun Manager Opens the interface for configuring Programs, Services, Drivers to be loaded during Windows Start-up, applications, services and commands to be executed during boot-up and to schedule tasks.

### 2. The Tab Structure

The tab structure contains a persistent tab:



Home Tab - Returns the user to the main Summary area at any time;

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

### 3. Main Configuration Area

The information and controls displayed in the main configuration area will change dynamically depending on the options selected from the left hand side pane. By default, this area will display the Summary screen.

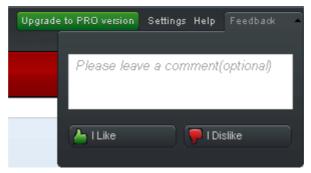
#### 4. The Title Bar Controls

The title bar contains controls for:

- Update to PRO version Users of CSU free or PRO trial version can update to CSU PRO version by clicking this link.
- Settings Opens the interface for performing miscellaneous configuration options.
- Help Opens the Comodo System Utilities 'About' dialog. The About dialog contains the copyright information, version
  information and links to Comodo System Utilities online help guide and Geek Buddy client to get help from Comodo
  certified technicians.
  - The 'Upgrade' link allows the user to purchase CSU Pro version.
  - Clicking the 'Check for updates' link connects with Comodo update server to get the latest updates.
  - **Help online** Opens the online help guide. Each functionality of the application has its own dedicated page containing detailed descriptions of it in the help guide.
  - Get help from a Geek Buddy Launches the GeekBuddy client. Refer to the chapter Using Live Help for more.



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



### 5. Version and Update Information and Share Link

The lower part of the interface contains an at-a-glance summary of update and version information.

- Version Info Indicates the version of Comodo System Utilities currently installed in your system.
- Update Info Indicates whether the version you have installed is the latest or a new version is available
- Share with friends Allow users to post their views, comments and suggestions about Comodo products via Facebook.

Facebook Login	T AT	
Log in to use your Facebook accour	it with Comodo Round the Clock.	
Email: Password:	Keep me logged in	
	Forgot your password?	
Sign up for Facebook Log In C	ancel	
S		
Comodo System Utilities to keep your computer running at peak performance.	To: Email are using Comodo Check this out: Comodo System Utilities. Optimize your	
Share	Send	
<ul> <li>Version 4.0 Everything is up to date.</li> </ul>	Share with 1	frie

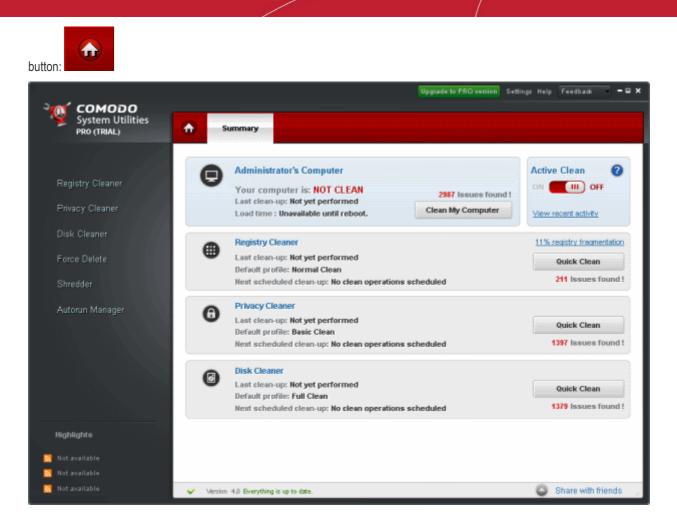
### 6. Comodo News Updates

The Comodo News Updates area contains links to view the updated RSS News feeds and Videos from Comodo.

## 1.5. The Summary Area

The Summary Area is a dashboard style interface that displays overall information about each type of cleaner. It also contains controls that allow the user to initiate common tasks.

The Summary Area is displayed by default whenever the application is started and can also be accessed by clicking the 'Home'



The remainder of this section describes each element in the summary screen in more detail:

### **Clean My Computer**

Automatically cleans the user's computer based on the default **Profiles** and user-defined settings for each scanning module. It performs consecutive Registry, Privacy and Disk cleaning scans and is a fast and convenient way to thoroughly clean your computer. There are no separate settings for 'Clean My Computer'. The cleaning operation is performed as per the settings pre-configured for each module.

### Active Clean (Pro/Pro Trial versions only)

'Active Clean' is a new, always-on, file and Registry and Disk monitor that keeps your system clean at all times. If enabled, 'Active Clean' scans your system in real-time to identify and delete invalid, corrupt and redundant files as soon as they are created. Apart from keeping your system in a continuous state of operational efficiency, it also makes the regular 'scan and clean' operations faster because many of the issues will already have been dealt with. You can configure Active Clean to perform Registry, Disk and Privacy cleaning operations from the General Settings interface accessible by clicking Settings > General Settings.

### View recent activity

Comodo System Utilities maintains a log of events, i.e. the files deleted by its Registry Cleaner, Disk Cleaner and by the Active Clean feature. Clicking the 'View recent activity' link opens the log window that shows the list of files deleted.

Jelet	Deleted files list			
Index	Name	Deleted via	Date	
1	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersi	Normal clean	01.04.2011 10:08	
2	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersi	Normal clean	01.04.2011 10:08	
3	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersi	Normal clean	01.04.2011 10:08	
4	HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersi	Normal clean	01.04.2011 10:08	
5	HKEY_LOCAL_MACHINE\Software\Classes\MIME\Database\Content	Normal clean	01.04.2011 10:08	
6	HKEY_LOCAL_MACHINE\Software\Classes\MIME\Database\Content	Normal clean	01.04.2011 10:08	
7	HKEY_LOCAL_MACHINE\Software\Classes\MIME\Database\Content	Normal clean	01.04.2011 10:08	
8	C:\Documents and Settings\Administrator\Recent\AVVFT.Ink	Active clean	01.04.2011 10:15	
9	C:\Documents and Settings\Administrator\Recent\BITStester.Ink	Active clean	01.04.2011 10:15	
10	C:\Documents and Settings\Administrator\Recent\CCE_20110210_1	Active clean	01.04.2011 10:15	
11	C:\Documents and Settings\Administrator\Recent\conv.exe.lnk	Active clean	01.04.2011 10:15	
12	C:\Documents and Settings\Administrator\Recent\database.Ink	Active clean	01.04.2011 10:15	
13	C: 'Documents and Settings'Administrator'Recent/Desktop.ini	Active clean	01.04.2011 10:15	
14	C'Documents and Settings\Administrator\Recent\eicarcom2.lnk	Active clean	01 04 2011 10:15	

You can also configure the application to include the log of files deleted by Privacy Cleaner by clicking **Settings** > **General Settings** and selecting the option 'Show recent activity for Privacy Cleaner'.

### **Registry Cleaner, Privacy Cleaner and Disk Cleaner**

Display the information about the Last clean-up, when the next clean-up is scheduled and what is the default profile selected for each cleaner.

### **Quick Clean**

Is basically a shortcut for each module. It takes you to the page for the selected module.

### **Registry fragmentation**

Displays the fragmentation percentage of the registry. It also enables the user to schedule for the next Registry defragmentation on the next boot, by clicking on it.

## 1.6. Understanding Profiles

## The Registry Cleaner, Privacy Cleaner and Disk Cleaner scans are profile based. Each time you run a scan, it will be according to the profile selected for that module.

For example, the 'Quick Clean' buttons next to each scan type on the 'Summary' screen will run the 'Quick Clean Profile'. Each profile is comprised of a set of elements that will be scanned along with overall scan settings that apply to all profiles. Comodo System Utilities ships with a set of predefined profiles that have been designed to anticipate user demands. These 'default' profiles will be permanently updated with new features added and modified according with to feedback provided by Comodo System Utilities users. Users can, of course, create their own custom profiles and assign these as the 'default'. Various profiles available for each scan module can be viewed and modified by clicking the Registry/Privacy/Disk Cleaner links in the left hand navigation panel of the main interface.

For a detailed list of the elements and settings that are contained in each 'default' profile, see Appendix 4: Comodo System Utilities Profiles.

### **Creating a Custom Profile**

For example, to create a custom profile for Registry Cleaner, first click the 'Registry Cleaner' button in the left hand navigation. This will list the set of currently available scan profiles in the main pane on the right. By default, these are 'Quick Clean', 'Normal Clean' and 'In depth Clean'.

You can create a new profile by clicking the 'Create profile' link at the bottom of the interface.

			Upgrade to PRO versio	n Settings Help	Feedback X
System Utilities PRO (TRIAL)	Clean Restore	Settings	Schedules		
Registry Cleaner Privacy Cleaner	Quick Clean Clean invalid entries from common registry locations.	7 Issues se Total size: 206.	· · · · · ·	[] ⊕•	Clean
Disk Cleaner Force Delete Shredder	Normal Clean (Default) Clean invalid entries from your entire registry.	<b>29 Issues se</b> Total size: 1.68	· · · · ·	6.	Clean
Autorun Manager	In Depth Clean Clean your entire registry using heuristics.	<b>113 Issues se</b> Total size: 1.98	<b>•</b>	6.	Clean
				Create	profile hport profile

The interface for creating custom profile will open:

Restore ♠ Clean Settings Schedules Custom Profile Create a new custom profile by Save Cancel choosing which of the following items will be cleaned. Select defaults Select none Select all Filter Entries +Applications Paths + COM ActiveX + File Extensions  $\pm$ Font Locations +Help Locations +Menu Order +**Registry Filter Entries** +Shared Dlls + Shared Folders +Software V Version 4.0 Everything is up to date. Share with friends ~

- Select the items according to your preferences.
- · Click the 'Select defaults' link to select items from the default profile that is currently set.
  - Select or deselect items according to your preferences. Tables containing the full list of default scanned elements for each profile are available in Appendix 4 Comodo System Utilities Profiles
  - Registry Cleaner defaults Refer to Table of Default Profiles of Registry Cleaner.
  - Privacy Cleaner defaults Refer to Table of Default Profiles of Privacy Cleaner.
  - Disk Cleaner defaults Refer to Table of Default Profiles of Disk Cleaner.
- When you are satisfied with your custom profile, name it and click 'Save'.

When you click the 'Registry Cleaner' button in the left hand navigation, your custom profile will be in listed in the 'Custom Profiles' section.

Clean Restore Settings ♠ Schedules Quick Clean Clean invalid entries from 7 Issues selected ! 1 £3-0 Clean common registry locations. Total size: 206.00 B Normal Clean (Default) Clean invalid entries from your 29 Issues selected ! 23 83 -Clean entire registry. Total size: 1.68 KB In Depth Clean Clean your entire registry 113 Issues selected ! Clean using heuristics. Total size: 1.98 KB Custom profiles Create profile Import profile Cleaning Shared dlls and No Issues selected ! 0 £83 **-**Clean Total size: 0.00 B Version 4.0 Everything is up to date. Share with friends  $\checkmark$ 

### **Profile Options:**

To manage and edit your profile, click the profile options button

	113 Issues selected ! Total size: 1.98 KB		Clean
ustom profiles			Create profile Import profil
Cleaning Shared dlls and	No Issues selected ! Total size: 0.00 B	0	Clean Make Default
			Delete profile
			Rename
			Import profile Export Profile

There are two options for predefined profiles and six options for custom profiles:

- Make default This profile will be used as cleaning profile for Clean my computer and Active clean
- Delete profile You can delete this profile
- Rename You can rename this profile

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- Import profile You can import this profile from a custom file
- Export profile You can export this profile to a custom file

For a predefined profile you have the following options:

- Make default
- Export profile

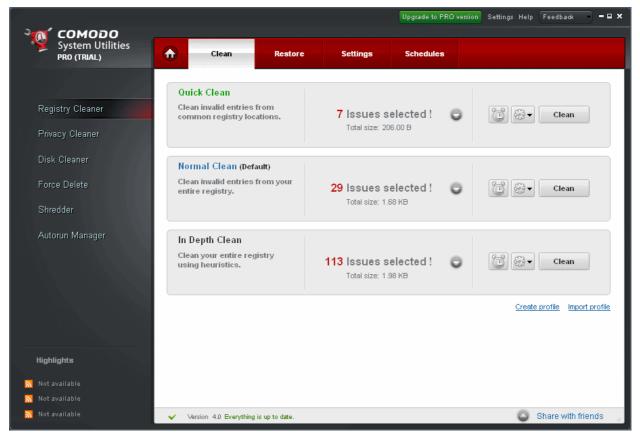
# 2.Registry Cleaner

Comodo System Utilities features a fully functional Registry Cleaner. Its purpose is to remove obsolete or unwanted items from the Windows registry in order to improve the stability and performance of your computer.

Problems with the Windows Registry can make a Windows system slower, less reliable and in extreme cases can only be fixed by reinstalling the operating system. Comodo Registry Cleaner optimizes the performance of Windows OS by deleting invalid entries and fixing registry errors. The Registry Cleaner module also allows the user to back-up the registry before cleaning and/or using special features like Registry Protection and real time registry monitoring.

- The Registry Cleaner conducts a deep scan of your Windows Registry to remove corrupt and unnecessary entries that cause system slow down and other errors.
- Comprehensive backup system allows you to easily undo any changes.
- You can Schedule Scans to run automatically at a time you prefer.

The Registry Cleaner can always be accessed by clicking the Registry Cleaner button in the left hand side pane of the main interface.



### Instant scan (Pro/Pro Trial only)

In CSU Pro, the registry is continually scanned and monitored by a background service. This means users see results as soon

as they open the interface and can run a 'Clean' operation without first having to click 'Scan'.

Click the links below to see the detailed explanations on each option that can be accessed by clicking respective tabs in Registry Cleaner.

- Clean
  - Filter Entries
- Restore
- Settings
- Schedule

## 2.1.Clean

Comodo System Utilities ships with three default scan profiles for Registry Cleaner:

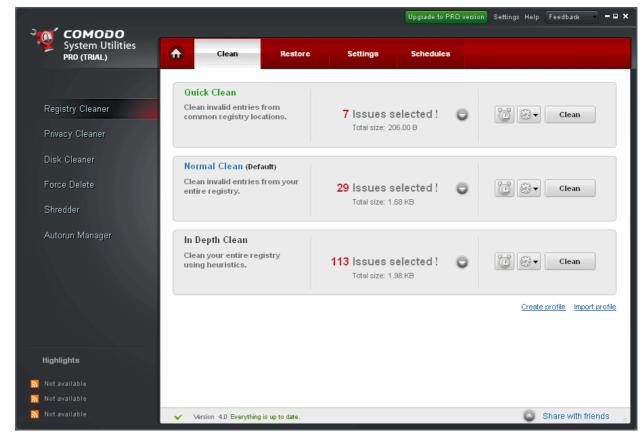
- Quick Clean Scans only those registry locations that most typically contains errors.
- Normal Clean Scans Quick Clean profile locations and also the important registry areas predefined by Comodo Research Lab.
- In Depth Clean Executes a full scan of all registry areas for possible errors.

For more information on default profiles of Registry Cleaner and Definitions of Registry Areas, refer to **Appendix 4 Comodo System Utilities Profiles > Table of Default Profiles of Registry Cleaner**.

For more information on creating custom profiles in Registry Cleaner, refer to Understanding Profiles section.

### Running an On-Demand Registry Scan and Clean

 Click the 'Registry Cleaner' link in the Left Hand Side Navigation pane. The application starts scanning the Registry locations in your system and displays the number of errors found for each type of the profile.



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 Click the Clean button against the profile of your choice.
 In Depth Clean Clean your entire registry using heuristics.
 113 Issues selected ! Total size: 1.98 KB

You can see the cleaning status of your profile in the progress bar.

In Depth Clean			
Clean your entire registry using heuristics.	79 % Cleaning	0	Cancel

On completion of the cleaning process, the cleaning results will be displayed.

In Depth Clean			
Clean your entire registry using heuristics.	Clean Complete 113 of 113 entries deleted	0	Cancel

### Use Registry Defrag

The Registry Defrag option performs physical defragmentation of the Windows registry file. The Registry Defrag option will improve your computer performance by reducing the amount of memory your registry takes up.

After defragmentation your registry will acquire linear structure which will reduce application response time and registry access time.

Computer users should use the Registry Defrag regularly, because registry's linear structure is quickly lost and as the time runs on it only becomes more non-linear.

### 2.1.1. Filter Entries

## The 'Filter Entries' feature allows users to create custom scan and clean operations by adding or removing scanned elements.

This feature is most suitable for advanced users with a working knowledge of the registry that wish to scan and clean specific areas.

The Filtered Entries list can be:

- Scanned in addition to the areas selected in the main pane.
- Used to perform a targeted scan on certain keys.

### To add a new filter entry in your Registry Cleaner profile

- 1. Choose a Registry Cleaner profile.
- 2. Click on Down Arrow button.
- 3. Click on Down Arrow button from Filter Entries.
- 4. In the dialog that appears, select the registry key name, from the Registry tree that you want to add.

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In Depth Clean Clean your entire registry using heuristics.	88 Issues selected ! O Clean Total size: 1.83 KB Select none Select all	
Filter Entries		
Applications Paths	No Issues found	
COM _ActiveX	59 Issues found 59 selected (156.00 B)	~

- 5. Click on Add D button.
- 6. Repeat steps 4 and 5 to add more entries
- 7. To Save click Apply.

	Filter Entries - buttons				
Menu Element	Element Icon	Description			
Expand	0	Enables the user to open the selected tab			
Shrink	0	Enables the user to close the current open tab			
Add	>	Enables the user to add a new registry key			
Remove	×	Enables the user to remove an existing registry key			

• To remove a registry key from the Filter Entries list, simply select the key name from the right side pane and click on the Remove button.

## 2.2. Restore

## The Registry Cleaner has a Restore function which creates a back-up of the Windows Registry before every on-demand and scheduled scan and clean.

The backups are stored in date and time stamped folders in the location of your choice. You can store the backup files in your computer locally, on a computer in your network or even in an FTP server. This back-up function enables you to restore the registry to a previous state in case you encounter some system failure or if you want to undo any changes To understand and manage your Comodo System Utilities backups please visit **Settings** > **Backup Settings** section. You can also disable this option in Settings of the Registry Cleaner.

Note: Comodo strongly recommends not to disable back-up option.

### To restore Windows Registry from backup

- 1. Click Registry Cleaner > Restore.
- 2. Select the Registry Clean type to view the backups from it from the 'View backups from' drop-down.
  - Normal Clean Files that were backed up for on-demand cleaning or scheduled cleaning.
  - Active Clean Files that were backed up during Active Clean process.
  - Safe delete Clean Files that were backed up when the safe delete options were enabled in Registry Cleaner settings, Privacy Cleaner settings and Disk Cleaner settings.

The backup files stored at various time points are listed. The file names of the backup files are suffixed with the date and time at which the backup was taken.

3. Select the backup file that you need to restore...

♠ Clean Restore Settings Schedules Restore Select from the following backups those you want to restore. View backups from : Normal Clean -Backup content Backup size Backup name 🖃 🗹 📑 HKEY\_USERS Registry Cleaner 18-11-2011 16-06-36 Image: S-1-5-21-1214440339-448539723-682003330Image: S-1-5-21-1214440339-448539723-682003330Image: S-1-5-21-1214440339-448539723-682003330Image: S-1-5-21-1214440339-448539723-682003330-Registry Cleaner 18-11-2011 16-09-50 Registry Cleaner 18-11-2011 16-10-24 < > Total size: Delete Restore Version 4.0 Everything is up to date. Share with friends  $\sim$ 

... and click 'Restore'.

4. Confirm your choice in the confirmation dialog.



The deleted registry entries will be restored to their original locations.

## 2.3. Settings

The Settings option in the Registry cleaner interface allows you to configure various options related to the operation of the Registry Cleaner.

The Settings panel can be accessed by clicking the 'Settings' tab in the Registry Cleaner interface.

 Clean
 Restore
 Settings
 Schedules

Set for the following options those you want to be used.

 Create restore point before clearing registry
 Create backup before clearing registry
 Store logs for registry Clean
 Show logs
 Use registry protection

Apply

### **Create Restore Point before Clearing Registry**

Selecting this option creates a Windows restore point prior to the registry cleaning operation. A Windows restore point is a snapshot of your system as it currently stands. This is useful because it allows you to roll back your system to its last known working state in the event of system failure or performance problems following software or hardware re-configuration. Comodo System Utilities provides this essential fail-safe feature in all cleaning modules (for example, you also have the option to create a restore point before running Disk Cleaner and Privacy Cleaner operations).

### **Create Backup before Clearing Registry**

If enabled, full backup of your Window's Registry will be created before EACH cleaning of the registry. This is the default and highly recommended setting. You can use this backup file to restore the registry to the current status in case you encounter any system issues or if you want to undo any changes. See **Restore** section for more details. You can store the backup files compressed, encrypted and password protected, providing an additional level of safety. You have to enter this password every time you restore the registry entries from the backup created by the Registry Cleaner. For more details on location, compression and encryption settings of the backup files, see **Settings** > **Backup Settings** section.

### Use Registry Protection (Pro / Pro Trial versions only)

Provides an additional level of security to Registry Cleaning operations:

- The Windows Registry hives will be backed up prior to any cleaning operation.
- Should your system fail to restart after a cleaning operation then the Windows Registry will be automatically rolled back to its previous state and your system automatically rebooted.
- On rebooting your system after any cleaning operation, Registry Protection provides you with the option of finalizing

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the changes or restoring the registry to its previous state.

### Store Logs for Registry Clean

If enabled, the Registry Cleaner logs events history about each scan action and result.

### Show logs

Allows the user to view a history of previous scans.

• Click 'Apply' for your settings to take effect.

### 2.4. Schedule

### The Registry Cleaner scans and cleans can be scheduled to run at a specific date and time:

### To schedule Registry scan and clean

• Select a profile from Registry Cleaner > Clean tab and click on alarm clock button beside the desired profile.

Quick Clean Clean invalid entries from common registry locations.	<b>7 Issues selected</b> Total size: 206.00 B	. 0	Clean
Normal Clean (Default) Clean invalid entries from your entire registry.	<b>29 Issues selected</b> Total size: 1.68 KB	. 0	Clean
In Depth Clean			
Clean your entire registry using heuristics.	88 Issues selected Total size: 1.83 KB	0 11	Clean

· Configure your scan and clean schedule in the next screen

Clean Restore Settings ♠ Schedules Schedule a clean Select the date and time when a clean will be performed. Frequency: Monthly Once Daily Weekly Time: Monthly Day of month: 30 V Run schedule in silent mode Back Save Schedule Version 4.0 Everything is up to date. Share with friends

- Daily Scan and clean are performed daily at the specified time;
- Weekly Weekly once scan and clean are performed on the specified day (e.g.: If you set the weekly scan and clean on Sunday, this operation will be performed each Sunday at the specified time since the moment have enabled it).
- Every Month Monthly once scan and clean are performed on the specified day (e.g.: If you set the monthly scan and clean on July, 20th, this operation will be performed each 20th day at the specified time of the successive months since the moment you have enabled it).
- Once Single time at the specific time and date.
- Run schedule in silent mode Scan and clean is run at the background at the scheduled time.
- Click on 'Save Schedule' button so save your settings.

You can manage your schedules from the 'Schedule' tab.

Clean ♠ Schedules Restore Settings Manage Schedules Here you can view all scheduled cleans and remove them as needed Task name Profile Trigger Registry Cleaner 18-11-2011 16-5... Medium At 20:00:00 every Monday, Sunday of every w... Registry Cleaner 18-11-2011 16-5... Basic At 19:30:00 every day, starting on 18-11-2011 Registry Cleaner 18-11-2011 16-5... Advanced At 23:00:00 on day(s) 30 of month(s) January, ... Remove Share with friends Version 4.0 Everything is up to date

• To delete a schedule, select the schedule and click 'Remove'.

# 3. Privacy Cleaner

Windows applications often keep a record or history of your recent usage and activity. These records can represent a threat to your privacy as they could be accessed and viewed by unauthorized personnel. Comodo Privacy Cleaner keeps your personal details safe and sound by comprehensively clearing all traces of private data from Internet browsers, Instant Messenger and Windows software.

The Privacy Cleaner can always be accessed by clicking Privacy Cleaner link in the left hand side navigation.

#### Upgrade to PRO version Settings Help Feedback - 🗆 🗙 сомодо System Utilities ♠ Clean Restore Settings Schedules PRO (TRIAL) Basic Clean (Default) Clean common usage traces 2-8 2455 Issues selected ! @3 **-**0 Clean from your computer. Total size: 30.97 MB Normal Clean Clean all traces and common 1 S-2465 Issues selected ! 0 Clean personal information. Total size: 31.29 MB Aggressive Completely remove all your privacy information. 2531 Issues selected ! 0 £3.▼ Clean Total size: 31.94 MB Create profile Import profile Highlights 😽 Not available R. Share with friends Version 4.0 Everything is up to date

Click the links below to see the detailed explanations on each option in Privacy Cleaner.

- Clean
- Restore
- Settings
- Schedule

## 3.1.Clean

Privacy Cleaner profiles allow you to quickly erase your browser cache, cookies, Internet history, typed URLs, temporary Internet files, and other records that may have been created by Windows. If configured, the cleaner will also remove other privacy concerns such as media player play lists, recently opened Office, Adobe Acrobat and WinZip documents. Regularly clearing your history of documents is a very good practice for all users but is especially recommended for shared computers.

Comodo maintains a constantly updated database of applications which are known to retain some form of usage history. When Comodo System Utilities is run for the first time, it checks which applications are installed on your PC then downloads the appropriate list of areas that need to be cleaned (including any registry keys and folders buried within the software's installation directory).

All applications and categories which we scan are taken from a database. This ensure a safe clean, scan for some fixed locations where we know we can remove it and not based on a heuristic algorithm that could go wrong.

Comodo Privacy Cleaner ships with three default profiles : Basic Clean, Normal Clean and Aggressive.

- Basic Clean will scan only those privacy locations that are most vulnerable.
- Normal Clean will scan Basic Clean profile locations and also the important privacy areas predefined by Comodo Research Lab.
- Aggressive profile executes a full scan of all privacy areas for any traces of privacy issues.

For more information on default profiles of Privacy Cleaner, refer to Appendix 4 Comodo System Utilities Profiles > Table of Default Profiles of Privacy Cleaner.

For more information on creating custom profiles in Privacy Cleaner, refer to Understanding Profiles section.

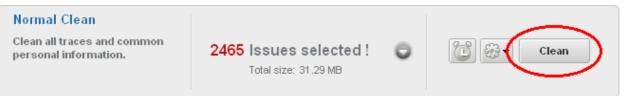
### Running an On-Demand Privacy Scan and Clean

• Click the 'Privacy Cleaner' link in the Left Hand Side Navigation pane. The application starts scanning the files in the Browsers/Applications in your system and displays the number of errors found for each type of the profile.

		Upgrade to PRO versio	n Settings Help Feedback – 🗖 🗙
System Utilities PRO (TRIAL)	Clean Restore	Settings Schedules	
Registry Cleaner Privacy Cleaner	Basic Clean (Default) Clean common usage traces from your computer.	2455 Issues selected !	Clean
Disk Cleaner Force Delete Shredder	Normal Clean Clean all traces and common personal information.	2465 Issues selected !	Clean
Autorun Manager	Aggressive Completely remove all your privacy information.	2531 Issues selected !	Clean
			Create profile Import profile
Highlights			
💦 Not available 💦 Not available			
<u>N</u> Not available	✓ Version 4.0 Everything is up to date.		🚳 Share with friends 📡

Click the Clean button against the profile of your choice.

•



You can see the cleaning status as per the selected profile in the progress bar.

Normal Clean			
Clean all traces and common personal information.	65 % Cleaning	0	Cancel

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Clean

On completion of the cleaning process, the cleaning results will be displayed.

#### Normal Clean

Clean all traces and common personal information.

Clean Complete 2465 of 2465 entries deleted

9-2 6	2	
	33 <b>*</b>	

## 3.2. Restore

Comodo Privacy Cleaner generates a backup of the folders/files deleted during the privacy cleaning operations if the option 'Backup files before cleaning' in the Privacy Cleaner > Settings menu is selected.

The backups are stored in date and time stamped folders in the location of your choice. You can store the backup files in your computer locally, on a computer in your network or even in an FTP server. You can restore the folders/ files to their original locations at any time, if you have accidentally chosen vital contents while setting up a privacy cleaning operation. The Backup option in the Privacy Cleaner interface allows you to view the list of files backed up and to restore the folders/files. To understand and manage your Comodo System Utilities backup please visit Settings > Backup Settings section.

You can disable this option in Settings of the Registry Cleaner.

Note: Comodo strongly recommends not to disable back-up option.

### Restoring your folders/files from backup

- 1. Click Privacy Cleaner > Restore.
- 2. Select the Privacy Clean type to view the backups from it, from the 'View backups from' drop-down.
  - Normal Clean Files that were backed up for on-demand cleaning or scheduled cleaning.
  - Active Clean Files that were backed up during Active Clean process.
  - Safe delete Clean Files that were backed up when the safe delete options were enabled in Registry Cleaner settings, Privacy Cleaner settings and Disk Cleaner settings.

The backup files stored at various time points are listed. The file names of the backup files are suffixed with the date and time at which the backup was taken.

3. Select the backup file that you need to restore...

♠ Clean Settings Restore Schedules Restore Select from the following backups those you want to restore. View backups from : Normal Clean ٠ Backup content Backup size Backup name C: -Privacy Cleaner Registry 18-11-2011 1... 5 KB Documents and Settings Privacy Cleaner Disk 18-11-2011 17-17... 18 MB <u>i</u>... Administrator Privacy Cleaner Registry 18-11-2011 1... 5 KB Ð Local Settings Privacy Cleaner Disk 18-11-2011 17-17... 17 MB Ð Cookies Application Data Ė Privacy Cleaner Registry 21-11-2011 1... Sound Converter -Privacy Cleaner Disk 21-11-2011 14-06... SCR 9031888527.tvc P 931888527.tvc Total size: 36 MB Delete Restore Share with friends Version 4.0 Everything is up to date

... and click 'Restore'.

3. Confirm your choice in the confirmation dialog.



## 3.3. Settings

The Settings option in the Privacy Cleaner interface allows you to configure various options related to the operation of the Privacy Cleaner.

The Settings panel can be accessed by clicking the Settings tab in the Privacy Cleaner interface.

 Clean
 Restore
 Settings
 Schedules

Set from the following options those you want to be used.

 Create restore point before cleaning
 Backup files before cleaning
 Store logs for Privacy Cleaner Show logs
 Wipe files before delete
 Uses SAFE DELETE/REGISTRY PROTECTION

 Apply

### Create restore point before cleaning

Selecting this option creates a Windows restore point prior to the privacy cleaning operation. A Windows restore point is a snapshot of your system as it currently stands. This is useful because it allows you to roll back your system to its last known working state in the event of system failure or performance problems following software or hardware re-configuration. Comodo System Utilities provides this essential fail-safe feature in all cleaning modules (for example, you also have the option to create a restore point before running Registry Cleaner and Disk Cleaner operations).

### Backup files before cleaning

Selecting this option instructs the Privacy Cleaner to preserve backup for folders/files deleted during any privacy cleaning operation. This way you can use the backup to restore the files at any time on necessity, in case you have accidentally selected some vital files during the cleaning operation. You can store the backup files in compressed, encrypted and password protected, providing an additional level of safety. In this way you are protected from others from maliciously restoring the files you deleted. You have to enter this password every time you restore files from the backup created by the Privacy Cleaner. For more details on location, compression and encryption settings of the backup files, see Settings > Backup Settings section.

### **Store logs for Privacy Cleaner**

If enabled, the Privacy Cleaner logs events history about each scan action and result.

### Show logs

Allows to view logs history.

### Wipe files before delete

When you delete folders/files from your hard disk or even empty your Recycle Bin, Windows retains the contents of these files in the disk and it only deletes the references to these files from the files system tables. The contents of all deleted files remain on the disk and can be easily restored using any recovery utility, posing a high risk of identity theft, leak of confidential and sensitive data like Business data, Credit card information etc. To ensure the permanent deletion of the files, the files are to be wiped out of your system, i.e. the files are to be shredded and are to be rendered un-restorable. Selecting this option instructs the Privacy Cleaner to wipe the files before deleting.

### Use SAFE DELETE/REGISTRY PROTECTION (Pro/Pro Trial versions only)

Provides an additional level of fail-safe security to File Cleaning operations:

- · All files selected for removal will be backed up prior to any cleaning operation.
- Should your system fail to restart after a cleaning operation then the safe-deleted files will be automatically restored and your system rebooted.
- On rebooting your system after any cleaning operation, SAFE DELETE provides you with the option to either finalize the deletion or restore the deleted files.

Comodo recommends that users leave this setting enabled.

• Click 'Apply' for your settings to take effect.

## 3.4. Schedule

The Privacy Cleaner scans and cleans can be scheduled to run at a specific date and time:

### To schedule Privacy scan and clean

• Select a profile from 'Privacy Cleaner' > 'Clean' tab and click on the alarm clock button beside the desired profile.

Basic Clean (Default) Clean common usage traces from your computer.	<b>Issues se</b> Total size: 30.5	0		<b>€</b> ; •	Clean
Normal Clean Clean all traces and common personal information.	<b>Issues se</b> Total size: 30.6	0		\$} <b>▼</b>	Clean
Aggressive					
Completely remove all your privacy information.	Issues se Total size: 31.5	0	6	<b>3</b> ▼	Clean

Configure your profile schedule in the next screen

♠ Clean Restore Settings Schedules Schedule a clean Select the date and time when a clean will be performed. Frequency: Weekly Once Daily Week Time: Monthly Monday 💙 Tuesday Wednesday Thursday Friday 💙 Saturday Sunday V Run schedule in silent mode Save Schedule Back Version 4.0 Everything is up to date. Share with friends

- Daily Scan and clean are performed daily at the specified time;
- Weekly Weekly once scan and clean are performed on the specified day (e.g.: If you set the weekly scan and clean on Sunday, this operation will be performed each Sunday at the specified time since the moment you have enabled it).
- Every Month Monthly once scan and clean are performed on the specified day (e.g.: If you set the monthly scan and clean on July, 20th, this operation will be performed each 20th day at the specified time of the successive months since the moment you have enabled it).
- Once Single time at the specific time and date.
- Run schedule in silent mode When this option is selected, scan and clean is run at the background at the scheduled time.
- Click on 'Save Schedule' button to save your schedule settings.

You can manage your schedules from the Schedule tab.

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Task name	Profile	Trigger
Privacy Cleaner 21-11-2011 14-49	. Advanced	At 23:00:00 on day(s) 30 of month(s) January,
Privacy Cleaner 21-11-2011 14-50	. Medium	At 22:00:00 every Tuesday, Saturday of every
Privacy Cleaner 21-11-2011 14-52	. Basic	At 21:30:00 every day, starting on 21-11-2011

To delete a schedule, select the schedule and click 'Remove'.

## 4. Disk Cleaner

Comodo System Utilities features a fully functional Disk Cleaner. Its purpose is to scan and remove junk or garbage files which occupy a considerable space in your hard disks.

These files include temporary files created by Windows, user, files retained in the Recycle bin, Windows log files, temporary lnternet files, temporary files created by Office Suite etc.

This functionality also scans the system for duplicate files stored elsewhere. Removal of unnecessary files from the hard drive provides more space for the applications in progress to store their data at an easy reach and improves the access speed. You can also schedule Scans to run automatically at the time you prefer.

The Disk Cleaner can always be accessed by clicking Disk Cleaner button in the left hand side pane of the main interface. The Disk Cleaner interface allows you to run on-demand scans, scheduling scans and cleans, configuring settings and so on.

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обомоо 🍿		Upgrade to PR(	Diversion Settings Help Feedback 🔹 🗕 🗆
System Utilities PRO (TRIAL)	Clean Duplicate	s Restore Settings	Schedules
	Quick Clean		
Registry Cleaner	Clean obsolete files from common folders.	No Issues selected !	Clean
Privacy Cleaner		Total size: 0.00 B	
Disk Cleaner	Full Clean (Default)		
Force Delete	Clean obsolete files from your computer.	3872 Issues selected !	Clean
Shredder	computer.	Total size: 788.35 MB	
Autorun Manager			Create profile Import profile
Autorum Manager			
Highlights			
🔪 Not available			
🔨 Not available			
📉 Not available	<ul> <li>Version 4.0 Everything is up to date.</li> </ul>		💿 Share with friends

Click the links below to see the detailed explanations on each option in Disk Cleaner.

- Clean
  - Filter Entries
- Duplicates
- Restore
- Settings
- Schedule

### 4.1.Clean

Comodo Disk Cleaner comes with two default profiles for Disk Cleaner: Quick Clean and Full Clean .

- Quick Clean will scan only those locations of your computer that most typically contain junk files (for example, Windows Temp Directory, the 'Recent Files' list, the 'Recycle Bin' etc).
- Full Clean will, as the name suggests, execute an in-depth scan of your entire computer.

For more information on default profiles of Privacy Cleaner, refer to Appendix 4 Comodo System Utilities Profiles > Table of Default Profiles of Disk Cleaner.

For more information on creating custom profiles in Disk Cleaner, refer to Understanding Profiles section.

#### Running an On-Demand Disk Scan and Clean

 Click the 'Disk Cleaner' in the Left Hand Side Navigation pane. The application starts scanning the disks in your system and displays the number of errors found for each type of the profile.

₼ Clean Duplicates Restore Settings Schedules Quick Clean Clean obsolete files from No Issues selected ! 0 *€*3 **-**Clean common folders. Total size: 0.00 B Full Clean (Default) Clean obsolete files from your 3872 Issues selected ! 23 0 £3-Clean computer. Total size: 788.35 MB Create profile Import profile Version 4.0 Everything is up to date. Share with friends  $\sim$ 

• Click the 'Clean' button against the profile of your choice.

Full Clean (Default)			$\sim$
Clean obsolete files from your computer.	<b>3872 Issues selected !</b> Total size: 788.35 MB	0	Clean

You can see the cleaning status of your profile in the progress bar.

Full Clean (Default)			
Clean obsolete files from your computer.	79 %	0	Cancel

On completion of the cleaning process, the cleaning results will be displayed.

Full Clean (Default)			
Clean obsolete files from your computer.	Clean Complete 3872 of 3872 entries deleted	0	Clean

### 4.1.1. Filter Entries

The 'Filter Entries' feature allows users to create custom scan and clean operations by adding or removing scanned elements. This feature is most suitable for advanced users with a working knowledge of the files and folders, that wish to scan and clean specific paths and locations.

The Filtered Entries list can be:

- Scanned in addition to the areas selected in the main pane.
- Used to perform a targeted scan on certain keys.

#### To add a new filter entry to your Disk Cleaner profile

- 1. Choose a Disk Cleaner profile.
- 2. Click on Down Arrow button.
- 3. Click on Down Arrow button from 'Filter Entries'.
- 4. In the next screen, select the file/folder 0r the path that you want to add, from the folder tree.

Filter Entries         Select path         Image: Default User         Image: Dragon         Image: Dragon	Full Clean (Default) Clean obsolete files from your computer.	<b>3847 Issues s</b> Total size: 76		Clean Select none Select all
Messenger     Image: Constraint of the selected path.       You can use wildcards for filter the selected path.     Apply	Select path	ice	C:\Program f	Files\Cuckoo MP
	Messenger	iiter the selected path.	Issues found	Apply

- 5. Click on 'Add' 🕑 button.
- 6. Enter the type of files you wish to add to the filter by typing their file extensions (example '.txt')
- 7. Repeat step 4, 5 and 5 to add more entries
- 8. To save the changes, click 'Apply'.



Filter Entries - buttons					
Menu Element	Element Icon	Description			
Expand	0	Enables the user to open the selected tab			
Shrink	0	Enables the user to close the current open tab			
Add	>	Enables the user to add a new registry key			
Remove	×	Enables the user to remove an existing registry key			

• To remove an entry from the Filter Entries list, simply select the entry from the right side pane and click on the 'Remove' button.

### 4.2. Duplicates

The 'Duplicates' scanner searches the selected drive, partition or path for copies of the same file stored in different locations on your drives.

This is useful in removing redundant, duplicate files stored obscure folders that you may have forgotten about. The files are identified as exact copies by calculating and comparing the checksums of all files in the search path. This means duplicate files can be detected even if they are named differently.

Click here for more information on How to discover and clean duplicate files.

#### Features and Benefits of Duplicates Finder

- · Identifies copies of the same file stored under different names in various locations on your hard drive
- Allows you to free up space by deleting needless copies that clutter up your disk.

€	Clean	Duplicates	Restore	Settings	Schedules	
Cle	Files an duplicate files nputer.	from your				Select
Clea	vies an duplicate movie r computer.	es from				Select
	i <b>sic</b> an duplicate musi nputer.	c from your				Select
Cle	<b>tures</b> an duplicate pictu ir computer.	res from				Select
✓ \	Arsion 4.0 Everything	is up to date.			6	Share with friends 🛛 😞

The Duplicate Files option in the Disk Cleaner enables you to run four types of scans.

- All Files Searches all files extensions for duplicate files (this search include 'Movies', 'Music' and 'Pictures' categories)
- Movies Searches for duplicate video files with popular extensions such as .avi, .mpeg, .mov.
- Music Searches for duplicate audio file extensions such as .wav, .mp3, .wma.
- Pictures Searches for duplicate pictures file extensions such as .bmp, .jpg, .png.

#### To clean duplicate files in your system

- 1. Click Disk Cleaner > Duplicates tab
- 2. Click 'Select' on desired category
- 3. Select the folders you want to search for duplicate files and click 'Scan'.

♠ Clean Duplicates Restore Settings Schedules Music Clean duplicate music from your Scan Collapse computer. Select location to scan: 🖃 📄 🚍 My Computer 🚊 🔚 🕒 C:\ BoneyM Config.Msi Documents and Settings Ð ٠ Dragon Ð **Program Files** Ð RECYCLER Share System Volume Information WINDOWS Ð Work E:\ È Version 4.0 Everything is up to date. Share with friends  $\mathbf{v}$ 

#### 4. The scan progress will be shown...

Music Clean duplicate music from your computer.	84%	Collapse 🕥	Cancel
Scanning			
C:\Documents and Settin	gs\Administrator\Templates\sndrec.wav ave_gone.mp3		

...and duplicate files will be listed. CSU identifies the following types of files as duplicates:

- · Files that have identical checksums and identical filenames
- · File that have identical checksums but different filenames

The duplicate finder will NOT display:

• Files that have different checksums but identical filenames

Identical files will be listed in groups. The name of the newest file is used as the name of the group. Expand the group to reveal the identical files by clicking the '+' symbol.

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Music Clean duplicate music from your computer.	2 Duplicates found ! 2 items selected 1.64 KB/3.29 KB	Collapse	G	Clean
C:\Documents and Set		sunny.mp3	Select none	Select all

5. Check the files you want to remove and click 'Clean'. This will delete the selected files.

Music		
Clean duplicate music from your computer.	Clean Complete 2 entries deleted	Select
-		

### 4.3.Restore

Comodo Disk Cleaner generates a backup of the folders/files deleted during Disk Cleaning operations if the option Backup Files before Cleaning in the Disk Cleaner > Settings is selected.

The backups are stored in date and time stamped folders in the location of your choice. You can store the backup files in your computer locally, on a computer in your network or even in an FTP server. This back-up function enables you to restore the registry to a previous state in case you encounter some system failure or if you want to undo any changes To understand and manage your Comodo System Utilities backup please visit Settings > Backup Settings section.

You can disable this option in Settings of the Disk Cleaner.

Note: Comodo strongly recommends not to disable back-up option.

#### Restoring your folders/files from backup

- 1. Click Disk Cleaner > Restore.
- 2. Select the Disk Clean type to view the backups from it, from the 'View backups from' drop-down.
  - Normal Clean Files that were backed up for on-demand cleaning or scheduled cleaning.
  - Active Clean Files that were backed up during Active Clean process.
  - Safe delete Clean Files that were backed up when the safe delete options were enabled in Registry Cleaner settings, Privacy Cleaner settings and Disk Cleaner settings.

The backup files stored at various time points are listed. The file names of the backup files are suffixed with the date

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and time at which the backup was taken.

3. Select file you want to restore...

Clean Clean Restore Select from the following ba	Duplicates ackups those you w	Restore	Settings	Schedules
View backups from :	Active clear	1 <del>,</del>		
Backup name		Backup size	Backup content	
Disk Cleaner 21-11-2				uments and Settings Administrator Local Settings Temp ish20645500 css defaultOffer form.bmp.Mask green_btn.png loader.gif loading.gif main.png offer-loader.gif
101010120.				Delete Restore
🗸 🗸 Version 4.0 Everything	is up to date.			🔤 Share with friends

... and click the 'Restore' button.

Click 'OK' in the confirmation dialog.



The progress of restoration will be displayed.

			 loading.gif main.png offer-loader.gif	~
		<		
Total size:				
Restoring	99%	Cancel	Delete Resto	re

... and the files will be restored to their original locations.

### 4.4. Settings

The Settings option in the Disk Cleaner interface allows you to configure various options related to the operation of the Disk Cleaner.

The Settings panel can be accessed by clicking the Settings tab in the Disk Cleaner interface.

٠	Clean	Duplicates	Restore	Settings	Schedules	
	ings from the following o	ptions those you wan	t to be used.			
	Create backup b	ooint before cleanir before cleaning dis sk clean <u>Show I</u> e delete	k			
		ETE to remove file	S			
						Apply
~	Version 4.0 Eventhing	is un to date			<b></b>	Share with friends

#### Create restore point before cleaning disk

Selecting this option creates a Windows restore point prior to the disk cleaning operation. A Windows restore point is a snapshot of your system as it currently stands. This is useful because it allows you to roll back your system to its last known working state in the event of system failure or performance problems following software or hardware re-configuration. Comodo System Utilities provides this essential fail-safe feature in all cleaning modules (for example, you also have the option to create a restore point before running Registry Cleaner and Privacy Cleaner operations).

#### Create backup before cleaning disk

Selecting this option instructs the Disk Cleaner to preserve backup for folders/files deleted during any privacy cleaning operation. This way you can use the backup to restore the files at any time on necessity, in case you have accidentally selected some vital files during the cleaning operation. You can store the backup files in compressed, encrypted and password protected, providing an additional level of safety. In this way you are protected from others from maliciously restoring the files you deleted. You have to enter this password every time you restore files from the backup created by the Privacy Cleaner. For more details on location, compression and encryption settings of the backup files, see Settings > Backup Settings section.

#### Store Logs for disk Clean

If enabled, the Disk Cleaner logs events history about each scan action and result.

#### **Show Logs**

Opens the Disk Cleaner logs window.

### Wipe files before delete

When you delete folders/files from your hard disk or even empty your Recycle Bin, Windows retains the contents of these files in the disk and it only deletes the references to these files from the files system tables. The contents of all deleted files remain on the disk and can be easily restored using any recovery utility, posing a high risk of identity theft, leak of confidential and sensitive data like Business data, Credit card information etc. To ensure the permanent deletion of the files, the files are to be wiped out of your system, i.e. the files are to be shredded and are to be rendered un-restorable. Selecting this option instructs the Privacy Cleaner to wipe the files before deleting.

### Use SAFE DELETE to remove files (Pro/Pro Trial versions only)

Provides an additional level of fail-safe security to File Cleaning operations:

- · All files selected for removal will be backed up prior to any cleaning operation.
- Should your system fail to restart after a cleaning operation then the safe-deleted files will be automatically restored and your system rebooted.
- On rebooting your system after any cleaning operation, SAFE DELETE provides you with the option to either finalize the deletion or restore the deleted files.

Comodo recommends that users leave this setting enabled.

• Click 'Apply' for your settings to take effect.

### 4.5. Schedule

The Disk Cleaner scans and cleans can be scheduled to run at a specific date and time.

#### To schedule disk scan and clean

Select a profile from Disk Cleaner > Clean tab and click on alarm clock button beside the desired profile.

Quick Clean				
Clean obsolete files from common folders.	No Issues selecte Total size: 0.00 B	d! 🜍	Ci Br Ci	ean
Full Clean (Default) Clean obsolete files from your computer.	<b>3833 Issues selecte</b> Total size: 42.79 MB	d! 🔘	Cle Cle	ean

Configure your profile schedule in the next screen

₼ Clean Duplicates Restore Settings Schedules Schedule a clean Select the date and time when a clean will be performed Weekly Frequency: Once Daily Week Time: Monthly Monday Tuesday Wednesday Thursday Friday Saturday Sunday Run schedule in silent mode. Save Schedule Back Share with friends Version 4.0 Everything is up to date.

- Daily Scan and clean are performed daily at the specified time;
- Weekly Weekly once scan and clean are performed on the specified day (e.g.: If you set the weekly scan
  and clean on Sunday, this operation will be performed each Sunday at the specified time since the moment
  have enabled it);
- Every Month Monthly once scan and clean are performed on the specified day (e.g.: If you set the monthly scan and clean on July, 20th, this operation will be performed each 20th day at the specified time of the successive months since the moment you have enabled it);
- Once Single time at the specific time and date.
- Run schedule in silent mode Scan and clean is run at the background at the scheduled time.
- Click on the 'Save Schedule' button so save your settings.

You can manage your schedules from the 'Schedule' tab.

• To delete a schedule, select the schedule and click 'Remove'.

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rofile	Trigger
asic	At 20:00:00 every day, starting on 22-11-2011
edium	At 22:00:00 on day(s) 30 of month(s) January,
2	asic

### 5. Force Delete

#### The Force Delete utility allows you to delete or move locked and inaccessible files.

Files may be 'locked' for many reasons, including because the current user is not logged in as the administrator. Also, deletion or movement may not be possible because the file is currently being used by another process. For example - when trying to delete an unwanted file you may encounter an error message "Cannot delete <filename>: It is being used by another person or program. Close any programs that might be using the file and try again." Sometimes it is difficult to identify the program using the file even from the task manager or it might be used by some program running at the background. Force Delete allows you to schedule the deletion of inaccessible files or move the file to a folder of your choice on next reboot.

The Force Delete interface can be accessed by clicking the Force Delete button in the left hand side Navigation.

Click the links below to see the detailed explanations on each option in the Force Delete Interface.

- Pending Operations
- Recent Activity

### 5.1. Pending Operations

The Pending operations option in the Force Delete allow you to 'Add Files to Delete', 'Add Registry to Delete' and 'Add Files to Move'.

#### - = × COMODO System Utilities PRO ₼ Recent Activity Pending No operations pending 0 Add operations from the panels below Add Files to Delete Ô 🖻 🔝 🚐 My Computer C:\ Force Delete Add Add Registry to Delete a Highlights Add Files to Move ë Not available 就 Not available 📉 Not available Share with friends Version 4.0 Everything is up to date. ~

All the files that have to be "Force Deleted", are not deleted immediately. They are added in to the **pending list**, and deleted when the user chooses apply. The files that cannot be deleted, are scheduled to be deleted at the next restart. From this area, you can:

- Add files/folders to be deleted;
- Add Registry entries to be deleted;
- Add files to be moved.

The files/Registry entries that you have have added for deletion or moving will be added to the **Pending List**. You can execute the deletion/moving operations by accessing the pending list.

#### **Adding Files to Delete**

To add a new file to delete click on "Add Files to Delete" expand button, select the files you wish to delete from the folder tree structure and click 'Add'.

€	Pending	Recent Activity	
	operations pe Loperations from	nding n the panels below	O
Ade	d Files to Dele	te	0
8		CUnite_Setup_3.0.0.0_XP_Vista_x32 RECYCLER System Volume Information 18.txt CPM_SETUP_1.3.1.5_xp_vista_server2003_win7.rar ink_dragon_features.txt Q823980i.EXE WindowsXP-KB823980-x86-ENU.exe	
			Add
Ade	d Registry to D	elete	0
Ade	d Files to Mov	e	0
V V	Arsion 4.0 Everythir	ng is up to date.	Share with friends

#### Adding Registry to Delete

To add a new registry keys to delete click on 'Add Registry to Delete' expand button, select the registry keys you wish to delete from the folder tree structure and click 'Add'.

Pending ₼ **Recent Activity** No operations pending Add operations from the panels below Add Files to Delete Add Registry to Delete ODBC Ē٠ ^ Ð Policies ٠ Program Groups ÷ RegisteredApplications ٠ Schlumberger Secure Trolltech Ð Windows 3.1 Migration Status Ė٠ IniFiles REG.DAT **B**-SYSTEM HKEY\_USERS ÷ ٠ Add Add Files to Move Share with friends Version 4.0 Everything is up to date.

#### **Adding Files to Move**

To add a new file to delete click on 'Add Files to Move' expand button, select the files you wish to move from the folder tree structure. Select the destination folder, from the folder tree structure in the right hand side pane and use the arrow button to add the operation the pending list.

#### ₼ Pending **Recent Activity** 2 operations pending 0 2 remove operations Add Files to Delete Add Registry to Delete Add Files to Move 🖃 📔 🚍 My Computer ~ 😑 🚞 My Computer ~ 🖻 🔳 🕒 C:\ 🖨 🕒 C:\ ÷ CUnite\_Setup\_3.0.0.0\_XP\_Vista CUnite\_Setup\_3.0.0.0\_XP\_Vista\_x32 ٠ Documents and Settings ė Documents and Settings 😑 🔛 abill Program Files Ð RECYCLER 😑 🦲 Application Data ٠ > System Volume Information ÷-Adobe WINDOWS ٠ COMODO Ð AUTOEXEC.BAT ICQ ۲ boot.ini ۲ Identities CONFIG.SYS ÷ Macromedia CUnite\_Setup\_3.0.0.0\_XP\_Vista ۲ Microsoft ٠ fileimage.dat Mozilla Th IO.SYS ٠ Sun 🖹 kevs.dat Conkies < > < > Share with friends -Version 4.0 Everything is up to date.

#### **Pending List**

All the files that are to be force-deleted or moved or the registry entries that are to be force deleted, are not deleted/moved immediately. They are added in to the pending list, and executed on the next restart of the machine.

To view the pending list, click on the expand button in the Operations Pending bar.

operations pending remove operations and one move operation		6
Path	Status	
G:\Music\Miles Davis - Evolution Of A Genius 1945 - 1954 MP	Pending	
D:\DragonSetup.exe	Pending	
${\sf HKEY\_LOCAL\_MACHINE\SOFTWARE\Clients\Contacts\Addr.}$	Pending	
Clear list Remove from list		Apply
add Files to Delete		6
Add Registry to Delete		(
dd Files to Move		6

To execute the tasks immediately

• Select the task from the list, click 'Apply...'



...and click 'Yes' in the confirmation message.

The removal process will start.

Pending Recent Activity		
3 operations pending 2 remove operations	19 %	O
Add Files to Delete		0
Add Registry to Delete		0 0
Add Files to Move		0
<ul> <li>Version 4.0 Everything is up to date.</li> </ul>	Sha	re with friends

The files will be deleted/moved immediately. The tasks that could not be executed at the moment, will be executed on the next restart of the system.

• To remove a task from the pending list, select the task and click 'Remove from list'.

### 5.2. Recent Activity

The Recent Activity area displays a list of the activities that are executed and the activities that are scheduled for the next start-up of the system.

Operation	Item
B Delete	D:\Install\DragonSetup_13.0
Move	G:\Music\Miles Davis - Evolution Of A Genius 1945 - 1954 MP3
Delete	HKEY_LOCAL_MACHINE\SOFTWARE\Clients\Contacts\Address Book\Protocols\.group\Content Type
Delete	D:\DragonSetup.exe

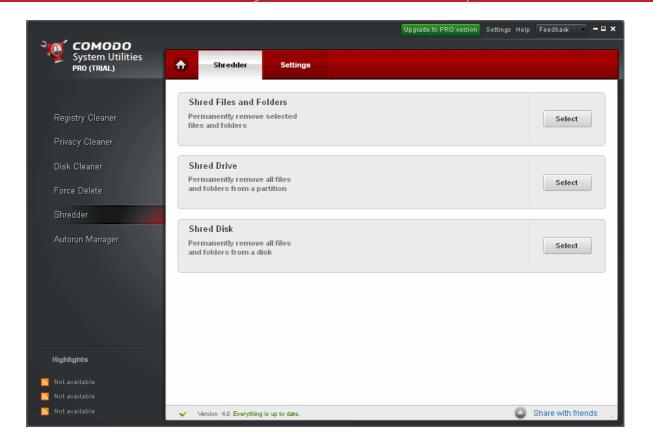
## 6.Shredder

When you delete files and folders from your hard disk, Windows does not really remove them. The files remain on your drive - Windows merely deletes the reference to these files from the system table.

The contents of all deleted files remain on the disk and can be easily restored using any recovery utility, posing a high risk of identity theft, leak of confidential and sensitive data like Business data, Credit card information etc. To ensure the permanent deletion of the files, the files are to be shredded and are to be rendered un-restorable and then wiped-off. The Shredder utility in the Comodo System Utilities, totally removes the deleted files from your disks and protects leak of your confidential information. While wiping the files, the powerful shredder application overwrites the contents of the files with zeros or random numbers to a number of times you specify, so that all the contents of the files are overwritten entirely, eliminating even the traces of the original contents in the file before deletion.

#### Features and Benefits of using Shredder:

- Deletes files permanently so that it is impossible for anyone to recover deleted information.
- Prevents business, credit card or personal data from being retrieved and stolen.
- Unwanted files can be easily and conclusively removed with a few clicks of the mouse.
- · Gain peace of mind knowing that nobody can access your confidential files once they have been permanently deleted.



Comodo Shredder comes with three options:

- Shred Files and Folders Enables to permanently delete specific files/folders;
- Shred Drive Enables to wipe a specified partition in your hard disk. Provides options for wiping the free space so
  that it will not contain information that can be recovered or to wipe the data stored in the selected partition;
- Shred Disk Enables to wipe entire hard disk. Provides options for wiping the free space so that it will not contain information that can be recovered or to wipe the data stored in the entire hard disk.

#### **Shredding Files and Folders**

- 1. Click the 'Select' button in the 'Shred Files and Folders' bar.
- 2. Select the files/folders you wish to delete from the folder tree structure and click the 'Shred' button.

♠ Shredder Settings Shred Files and Folders Permanently remove selected Collapse Shred - 62 files and folders Select files and folders you want to permanently remove: 🖃 📃 📄 My Computer 🛓 📄 🕒 🔄 apps\_folder Config.Msi Ð Documents and Settings Ė Old Man Files 📄 give\_a\_dog\_a\_bone.txt nack.txt knick.txt paddy\_whack.txt Program Files ٠ Ð RECYCLER Ð share System Volume Information VritualRoot WINDOWS È AUTOEXEC.BAT boot.ini CONFIG.SYS IO.SYS Share with friends Version 4.0 Everything is up to date

Warning: Make sure that you have correctly selected the files and folders to be deleted and you are not selecting the files/folders, deletion of which, may impair the system. Once the files/folders are deleted permanently, they are not recoverable.

3. Select the checkbox 'I have read, understand and agree to execute this action' and click 'Yes' in the confirmation dialog.



The selected files/folders will be deleted and a 'Shred Complete' message will be displayed.

 Shredder
 Settings

 Shred Files and Folders
 Shred Complete
 Collapse
 Shred

 Permanently remove selected files and folders
 Shred Complete
 Collapse
 Shred

 Select files and folders you want to permanently remove:
 Image: My Computer image: Complete image: Collapse i

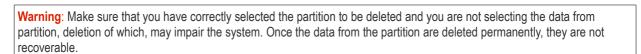
The shredder cannot delete the files locked by other users or programs running in your system at this moment. They will be shredded on the next restart automatically. If any of the files from the selection is found locked, the message will be displayed.

	Shredder	Settings		
0	Some files could not	be shredded. The	y will be shredded after restart	ок
	Shred Files and F	olders		
1 100000	Permanently remove files and folders	selected	Collapse 🚫	Shred

#### **Shredding Drive**

- 1. Click the 'Select' button in the 'Shred Drive' bar.
- 2. Select the partition to be wiped and then select whether only the free space, the stored data or both to be wiped from the partition(s) and click the 'Shred' button.

Shredder Settings		
Shred Drive Permanently remove all files and folders from a partition	Collapse 🕥 Shred	]
Select Drive(s) you want to permanently wipe:		
C:\( Free space only )		



3. Click 'Yes' in the confirmation dialog.



The deletion progress will be indicated...

Shred Drive			
Permanently remove all files and folders from a partition	75 %	Collapse 🔘	Cancel
Select Drive(s) you want to pe	rmanently wipe:		

... and the Shred Complete message will be displayed.

Shred Drive			
Permanently remove all files and folders from a partition	Shred Complete	Collapse 🔘	Shred
Select Drive(s) you want to permar	nently wipe:		
Select Drive(s) you want to permar	nently wipe:		

### **Shredding Disk**

1. Click the 'Select' button in the 'Shred Disk' bar.

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2. Select the disk mounted in your system from which all the data is to be wiped.

Shredder Settings	
Shred Disk Permanently remove all files and folders from a disk	Collapse Shred
Select Disk(s) you want to permanently	3 Gb, Free space: 20.05 Gb
Disk1 (G:\) - Total size: 3.67 Gb, Disk2 (F:\) - Total size: 7.44 Gb,	

**Warning**: Make sure that you have selected the disk to be wiped correctly and you are not selecting the disk in which the Operating System is installed, which may impair the system. Once the data from the disk are deleted permanently, they are not recoverable.

Click 'Yes' in the confirmation dialog.



The Disk shredding progress will be displayed followed by 'Shred Complete' message on successful completion.

Shred Disk     Permanently remove all files and folders from a disk     Shred Complete     Collapse     Shred
Select Disk(s) you want to permanently wipe:



# 7. Autorun Manager

The number of services and programs that are loaded when your system boots-up can have a significant impact on the operating speed of your system. Certain programs and services must be loaded at start-up because they are essential to the security and smooth operation of your system. Unfortunately, most 3rd party software that you install will automatically add it's own programs and services to this list of start-up items. Quite often these additional services are non-essential and are not required until you actually use the application they belong to. For the rest of the time they just run in the background, unnecessarily consuming system resources.

The Autorun Manager allows you to choose precisely which programs and services are to be loaded at start-up - helping to improve overall system performance and speed. The interface also allows you to add new start-up items, set the priority of a particular service and to create scheduled tasks which will run every time you start your system. The interface also informs you of each item's malware status (whether or not it is infected), whether or not it is digitally signed and how long it took to load at start. This vital information can help you arrive at an informed decision when choosing start-up items.

System Utilities PRO	٠	Autoru	un Manager								
			Manager time by selec	ting which	application	ns run at :	startup.			Settings	Ę
Registry Cleaner		Startu	- qu	Servio	es	Dri	vers	Boot Execute	Sch	nedule task	
Privacy Cleaner											
Disk Cleaner		Name			Search	Q	Malware statu	s Signature	Priority	Load time	
Disk Cleaner		💌 🎎 i	2Gis Update I	lotifier			Unknown	Signed		Unknown	
Force Delete		💌	Lingvo Launo	her:			Unknown	Unsigned		Unknown	
Shredder		💌 😰 i	Tutor.exe				Unknown	Unsigned		Unknown	
Olliebbei		💽 🔀 .	Adobe ARM				Unknown	Signed		Unknown	
Autorun Manager		👽 🚨	SunJavaUpda	teSched			Unknown	Signed		Unknown	
		29	quickstart.ex	e			Unknown	Unsigned		Unknown	1
		20	Snaglt32.exe				Unknown	Signed		Unknown	
		👻 🐇	msnmsgr				Unknown	Signed		Unknown	
		V 🖓	COMODO				Unknown	Signed		Unknown	
			CPA				Unknown	Signed		Unknown	
			Sidebar				Unknown	Unsigned		Unknown	
Highlights		<b>V</b> 🔝 .	Adobe Reade	r Speed La	uncher		Unknown	Signed		Unknown	4
nignagnus											
Not available									+ Add	Apph	1

Click the links below to see the detailed explanations on each option that can be accessed by clicking respective tabs in Autorun Manger:

- Startup
- Services
- Drivers
- Boot Execute
- Schedule Task

#### Advanced Features of Autorun Manager (Pro/Pro Trial only)

Pro users get the following additional functionality:

- Boot Time Measurement;
- Load Time Measurement;

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- Ability to set priority level of startup applications;
- Faster load times of all autorun manager items.

### 7.1. Startup

The 'Startup' tab displays a list of the programs that are automatically loaded into the system during Windows start-up and running at the background. You can identify the programs which you do not want to be loaded automatically during system startup and disable them from this interface. Blocking unwanted programs from running in the background saves system resources and improves the performance of the system. This interface also allows you to add new items that you would like to see opened when your computer boots-up.

- To view the 'Startup' interface, click 'Autorun Manager' then 'Startup' tab. The list of current startup programs are displayed with the following details:
  - The name of the program
  - The malware affected status of the program;
  - Whether the program contains the digital signature of the publisher digitally signed programs ensure that you
    received the program from the authentic publisher and the program was not altered during transit from the
    publisher to you;
  - Priority level of the program;
  - Load time the time taken to load this program during the last Windows start-up.

ove boot time by s	electing which applicatio	ns run at :	startup.			Settings	- 6
Startup	Services	Dri	vers B	oot Execute	Sch	edule task	
Name	Search	Q	Malware status	Signature	Priority	Load time	
💽 🍂 2Gis Upda	te Notifier		Unknown	Signed		Unknown	000
💌 顲 Lingvo La	uncher		Unknown	Unsigned		Unknown	
💌 🦻 Tutor.exe			Unknown	Unsigned		Unknown	
💌 🔀 Adobe AR	IM		Unknown	Signed		Unknown	
💟 🙆 SunJavaU	pdateSched		Unknown	Signed		Unknown	
💌 🥯 quickstar	t.exe		Unknown	Unsigned		Unknown	1
🔽 🤤 Snaglt32.e	exe		Unknown	Signed		Unknown	1
💽 🗳 msnmsgi	r		Unknown	Signed		Unknown	
💌 🔯 соморо			Unknown	Signed		Unknown	
💌 🚰 CPA			Unknown	Signed		Unknown	
💌 🛒 Sidebar			Unknown	Unsigned		Unknown	
🔽 🔝 Adobe Re	ader Speed Launcher		Unknown	Signed		Unknown	
Mobe Re	ader Speed Launcher		Unknown	Signed		Unknown	1

From this interface, you can:

- Disable programs from startup
- Enable all or disable all startup items at once
- · Add programs to the list of startup items
- · View details, edit the priority level and remove a startup program

#### To disable a program from Start-up

De-select the checkbox next to the program and click 'Apply'.

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orun Manager	ecting which application	ns run at :	startup.			Settings	6
Startup	Services	Dri	vers B	oot Execute	Sch	edule task	
						<u>L</u>	Jn
Name	Search	Q	Malware status	Signature	Priority	Load time	
マ 🎊 2Gis Update	Notifier		Unknown	Signed		Unknown	
💌 顲 Lingvo Laur	ncher		Not Infected	Unsigned		Unknown	
👽 🦻 Tutor.exe			Not Infected	Unsigned		Unknown	
📄 🔀 Adobe ARM			Not Infected	Signed		Unknown	
🛃 🛃 SunJavaUpd	late Sched		Not Infected	Signed		Unknown	
🛃 🧐 quickstart.e	exe		Not Infected	Unsigned		Unknown	
Snaglt32.exe	e		Not Infected	Signed		Unknown	
🛃 ॷ msnmsgr			Not Infected	Signed		Unknown	
💌 🖹 СРМ			Not Infected	Unknown		Unknown	
💌 🛒 Sidebar			Not Infected	Unsigned		Unknown	
V 🖉 FlashPlayer	Update		Unknown	Signed		Unknown	
🛃 🔝 Adobe Read	ler Speed Launcher		Unknown	Signed		Unknown	
				ſ	+ Add	Apply	

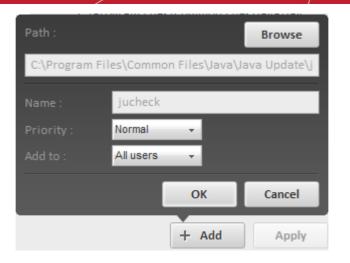
#### **Enabling or Disabling All Start-up Items**

All the startup items in the list are enabled by default. You can disable all at once by clicking the 'Disable all' button so that you will be able to select only those items to be started along with Windows by selecting the check boxes beside them. To enable all the items at once, click 'Enable all' button.

#### Adding a Program to the List of Start-up Items

- Click '+Add' near the bottom-right corner of the interface
- Click 'Browse' in the pop-up and navigate to the desired application or file.

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• Set the priority level for the program from the 'Priority' drop-down.

Priority :	Normal 🚽	i.
Add to :	Low Normal	
	High	

High - Startup programs with priority set 'High', will be started first during system start-up.

Normal - Startup programs with priority set 'Normal', will be started after starting the Programs with 'High' priority during system start-up.

Low - Startup programs with priority set 'Low', will be started after starting the Programs with 'Normal' priority during system start-up.

Set the users of the computer for whom the program has to be added as a start-up item

Add to :	All users 👻
	Current user
	All users

Click OK.

Current user - The program will be added to the start-up list of the current user and will be started only whenever the currently logged-on user logs in to the computer in future.

All Users - The program will be started irrespective of any user logging-in to the computer.

torun Manager rove boot time by sele	cting which application	ons run at :	startup.			Settings	43
Startup	Services	Dri	vers Bo	oot Execute	Sch	edule task	
Name	Search	Q	Malware status	Signature	Priority	Load time	•
💽 🎊 2Gis Update	Notifier		Unknown	Signed		Unknown	
🔽 🜆 Lingvo Laun	cher		Not Infected	Unsigned		Unknown	-
💽 🦻 Tutor.exe			Not Infected	Unsigned		Unknown	
🗹 🔏 Adobe ARM			Not Infected	Signed		Unknown	W BILLING
🛃 🛃 SunJavaUpd	ateSched		Not Infected	Signed	and the second	Unknown	
🔽 🧐 quickstart.e	xe		Not Infected	Unsigned		Unknown	
🔽 🤤 Snaglt32.exe	,		Not Infected	Signed		Unknown	li nom
💽 🗳 msnmsgr			Not Infected	Signed		Unknown	
💌 🖹 СРМ			Not Infected	Unknown		Unknown	
💽 👼 Sidebar			Not Infected	Unsigned		Unknown	
🛃 🔼 FlashPlayert	Jpdate		Unknown	Signed		Unknown	
🛃 🔝 Adobe Read	er Speed Launcher		Unknown	Signed		Unknown	

The item will be added to the list. The program will start along with Windows Startup, from the next re-boot of the computer.

### Viewing Details, Editing the Priority Level and Removing a Startup Program

Clicking on a start-up program in the list opens a details panel at the right hand side.

Startup	Services	Drivers	Boot Execute	Schedule task
Name	Search	^ ۹	Adobe ARM	ł
💌 🎼 2Gis Update	Notifier		1.5.5.0	
💌 툂 Lingvo Laun	cher		Adobe Systems Inco	
👽 🦻 Tutor.exe			Signed by VeriSign C	Class 3 Code Signing
< 🔀 Adobe ARM			Path	
🔽 🛃 SunJavaUpd	ateSched		C:\Program Files (x8	36)\Common Files\Ado
v 🧐 quickstart.e	xe	E	Priority : Normal	
Snaglt32.exe	•	1	Load time : Unknow	'n
🗸 🐳 msnmsgr				
🔽 শ срм			Disable	Remove
V 🗐 Sidebar			(automation and a state of the	Lapuremente
V 🖉 FlashPlayert	Jpdate			
	or Speed Laupabor	÷		

The details panel displays the following:

- The full name of the program with the version and the publisher
- The digital signature information of the program;
- The installation path of the program;
- Priority level of the program;
- Load time the time taken to load this program during the last Windows start-up.

These valuable information assist you in deciding on whether or not you wish to have the program in the start-up list. Also, you can:

- Change the priority level of the program
- Disable or remove the program from the start-up list

from the same interface.

• To change the priority level of a program, select the level from the 'Priority' drop-down.

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Priority : Normal + Load time : U <mark>Normal</mark> High	Path C:\Program	Files\Test Programs\knad	ck.exe
	Priority :	Normal 🚽	
i ngri	Load time :		

High - Startup programs with priority set 'High', will be started first during system start-up.

Normal - Startup programs with priority set 'Normal', will be started after starting the Programs with 'High' priority during system start-up.

Low - Startup programs with priority set 'Low', will be started after starting the Programs with 'Normal' priority during system start-up.

- To disable the program, simply click the Disable button;
- To remove the program from the list of start-up programs, click Remove.

**Note**: Removing a program from the start-up list does not uninstall the program from your computer. You can add the same program to the start-up list at a later time. **How to add a start-up program**.

Tip: You can also revert the command by clicking on 'Undo' link in the upper right corner of Autorun Manager. This command available only before the settings take effect.

### 7.2. Services

A Windows service is an executable that performs program and operating system specific functions without requiring user intervention. Services are loaded during system boot up before any log-in of any use, configured to start when Windows is started and run in the background as long as Windows is running. Most services are required for the stable operation of your operating system or are required for the correct operation of software that you have installed.

The 'Services' interface in Autorun Manager allows you view all services that are currently running on your system and to modify their behavior.

- To view the 'Services' interface, click 'Autorun Manager' > 'Services' tab. The list of currently loaded services are displayed with the following details:
  - The name of the service. The services that are currently running are indicated with a green indicator and those currently stopped are indicated by red indicator;
  - The malware affected status of the service;
  - Whether the service contains the digital signature of the publisher digitally signed programs/services ensure that
    you received the program from the authentic publisher and the program was not altered during transit from the
    publisher to you;
  - Load time the time taken to load this service during the last Windows start-up;
  - The installation path of the application/program/executable that is associated with the service.

#### ♠ Autorun Manager Autorun Manager Settings 🛞 🛪 Improve boot time by selecting which applications run at startup Startup Drivers **Boot Execute** Schedule task Services Name Search 0 Malware status Signature Path Load time Ħ, 2GISUpdateService Unknown C:\Program Files (x86)\2gis... Unknown Signed TeamViewer5 Unknown Signed C:\Program Files (x86)\Tea... Unknown Cleaner\_Validator Unknown Unsigned C:\Program Files\COMODO\... Unknown CLPSLS Unknown Signed C:\Program Files\COMODO\... Unknown EzVpnSvc Unknown C:\Program Files\COMODO\... Unknown Signed WMPNetworkSvc Unknown C:\Program Files\Windows ... Unknown Unsigned ehRecyr Unknown Unsigned C:\Windows\ehome\ehrecv... Unknown ehSched Unknown Unsigned C:\Windows\ehome\ehsch... Unknown clr\_optimization\_v2.0.50727\_64 C:/Windows/Microsoft.NET\... Unknown Unknown Signed idsvc Unknown C:\Windows\Microsoft.NET\... Unknown Signed **NetTcpPortSharing** Unknown C:\Windows\Microsoft.NET\... Unknown Signed FontCache3.0.0.0 Unknown Signed C:\Windows\Microsoft.Net\... Unknown + Add Apply Share with friends Version 4.0 Everything is up to date

From this interface, you can:

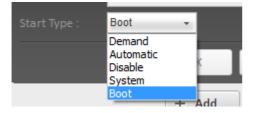
- Add a new service to the list of services
- · View details, edit the status of a service and remove/uninstall a service

#### **Adding a New Service**

- · Click the "+Add" button near the bottom-right corner the 'Services' interface
- Click 'Browse' in the pop-up that appears and navigate to the desired application/program/executable that you want to run as Windows service

Path :		Browse
Path		
	Name	
Start Type :	Automatic 🚽	
	ОК	Cancel
	+ A0	dd Apply

- Enter a name for the service. This name will appear in the service list after addition.
- Select how the service should start from the 'Start Type' drop-down.



 Demand - The service will be started as required or when called by the associated process or application

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- Automatic The service will be started at system start-up.
- Disable The service and its dependencies are completely disabled and prevented from running.
- System The service is started after the boot devices such as the boot file system and disk driver have been initialized.
- Boot The service is started by the operating system loader.

Click OK.

The new service will be added to the list and will start from the next restart of the system as per the option selected from the Start Type drop-down.

#### Viewing Details, Edit the Status and Remove/Uninstall a Service

Clicking on a service in the list opens a details panel at the right hand side.

Startup	Services	Drivers	Boot Execute	Schedule task
Name 2GISUpdateServ TeamViewer5 Cleaner_Validat EzVpnSvc WMPNetworkSv ehRecvr ehSched clr_optimization	or rc		Load time : Unkno	nown matic +
<ul> <li>idsvc</li> <li>NetTcpPortShar</li> </ul>	ina		Uninstall	Remove
FontCache3.0.0.	_			
er ontimization		-		

The details panel displays the following:



- The full name of the service with the version and the publisher
- The current status of the service
- The start type of the service
- · Load time the time taken to load this program during the last Windows start-up.

This interface also allows you to:

- Change the run status of the service
- Change the start type of the service
- Uninstall or remove the service

#### To change the status of the service

- Double click on the service from the list. The Details panel will open. The current status is indicated below 'Status'.
  - To start a stopped Service, click the 'Start' button. The Start button appears only for the services with 'Stopped' status.
  - To stop a running Service, click the 'Stop' button. The Stop button appears only for the services with 'Started' status.
  - To temporarily stop a running service, click the 'Pause'. The Pause button appears only for the services with 'Started' status.
  - To resume a paused service, click the Resume button. The Resume button appears only for the services with 'Paused' status.

#### To change how a Service has to be started

- Double click on the service from the list. The Details panel will open.
- Select how the service has to be started from the Start Type drop-down.

Started	Stop		Pause
Start Type :	Demand	-	
Load time : U	Demand Automatic Disable System		
	System Boot		

- Demand The service will be started as required or when called by the associated process or application
- Automatic The service will be started at system start-up.
- Disable The service and its dependencies are completely disabled and prevented from running.
- System The service is started after the boot devices such as the boot file system and disk driver have been initialized.
- Boot The service is started by the operating system loader.
- Click 'Apply' for your changes to take effect.

#### To uninstall or remove service

- Double click on the service from the list. The Details panel will open.
  - To uninstall the service, click 'Uninstall'. The service will be uninstalled from your system but will remain in the Services list. The Service will be automatically removed on next restart of the application. If you want to reinstall the service immediately, in case you accidentally uninstalled a service, you can click the 'Install' button that appears immediately after uninstallation.
  - To remove the service from the list, click 'Remove'. The service will be uninstalled from your system and removed from the Services list immediately.
- Click 'Apply' for your changes to take effect.

Tip: You can also revert the command by clicking on 'Undo' link in the upper right corner of Autorun Manager. This command available only before the settings take effect.

### 7.3. Drivers

A driver is a small piece of software that acts as an interface between hardware devices or other programs and the higher-level computer programs that interact with it. Your Windows operating system requires that a driver is installed for each and every piece of hardware or device on your system (for example, your video card or your web cam). This driver enables the device to communicate with the software that is using it and with the operating system in general. Drivers are usually loaded at Windows start-up and are required for the seamless operation of all the connected hardware devices.

The 'Drivers' section of 'Autorun Manager' allows you to view all drivers currently installed and running in your system and to modify their behavior. It also allows you to quickly find out if any of your drivers are infected with malware; to view digital signatures associated with a particular driver; to add another driver if required and to edit the behavior/configuration of a particular driver.

- To view the 'Drivers' interface, click 'Autorun Manager' > 'Drivers' tab. The list of currently loaded drivers are displayed with the following details:
  - The name of the driver. The drivers that are currently running are indicated with a green indicator and those currently stopped are indicated by red indicator;
  - The malware affected status of the service;
  - Whether the driver contains the digital signature of the publisher digitally signed programs/services/drivers ensure that you received the program from the authentic publisher and the program was not altered during transit from the publisher to you;

Itorun Manager prove boot time by selecting which applications run at startup.							Settings 🗧	
Startup		Services Drive		ers	Boot Execute	Schedule task		
Name	Search	Q	Malware status	Signature	Path		į	
Beep			Unknown	Unknown			1	
\varTheta exfat			Unknown	Unknown				
\varTheta fastfat			Unknown	Unknown				
Msfs			Unknown	Unknown				
MsRPC			Unknown	Unknown				
NDProxy			Unknown	Unknown				
Npfs			Unknown	Unknown				
\varTheta Ntfs			Unknown	Unknown				
Null			Unknown	Unknown				
RDPWD			Unknown	Unknown				
secdrv			Unknown	Unknown				
spidr			Unknown	Unknown			01111 A	
						F Add	Apply	

• The installation path of the driver.

#### From this interface, you can:

- Add a new driver
- View details and edit the configuration of a driver

### Adding a New Driver

- Click the '+Add' button near the bottom-right corner the 'Drivers' interface
- Click 'Browse' in the pop-up that appears and navigate to the desired .sys file that you want to add as driver and to be loaded during Windows start-up
- Enter a name for the driver. This name will appear in the drivers list after addition.
- Select how the driver has to be started from the start Type drop-down.

	Name	
Start Type :	Automatic	Ŧ
	Demand Automatic	
	Disable System	
	Boot	

- Select the Driver type from the 'Type' drop-down.
  - Driver Select this when you are adding a Windows NT device driver.
  - File System Select this when you are adding a Windows NT file system driver.
  - MiniFilter Select this when you are adding a Windows file system mini-filter driver.

Driver

Normal

Normal

Ignore

Critical

5evere

•	Demand - The device driver will be started by the
	service control manager when a program/process
	calls the Start function.

сомодо

- Automatic The device driver will be started by the service control manager automatically during system start-up.
- Disable The device driver will be disabled and will not be started can no longer be started.
- System The device driver will be started by the I/O system after boot devices such as the boot file system and disk driver have been initialized. Select this option for drivers that are not critical to the system boot. This value is valid only if the service type is Driver or File System.
- Boot The device driver will be started by the operating system loader. This value is valid only if the service type is Driver or File System.

ł		Automatic	÷
	Туре	Driver	-
		Driver File System MiniFilter	

• Select the severity for the error generated if this service fails to start during system startup and to determine the action to be taken by the associated start-up program if such failure occurs, from the 'Error' drop-down.

•	Ignore -	Ihe	associated	start-up	(boot)	program
	logs the er	ror bu	ut continues	the start-	up ope	eration.

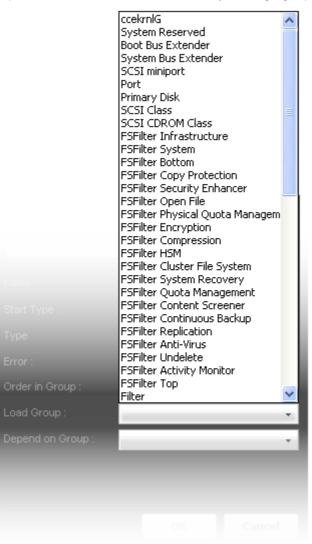
- Normal The associated start-up program logs the error and displays a message but continues the start-up operation.
- Severe The associated start-up program logs the error. If the last-known-good configuration is being started, the start-up operation continues. Otherwise, the system is restarted with the last-known-good configuration.
- Critical The associated start-up program logs the error, if possible. If the last-known-good configuration is being started, the start-up operation fails. Otherwise, the system is restarted with the lastknown-good configuration.
- Set the order at which the Driver has to be loaded in the Load Ordering Group in which the Driver is a member by

selecting the registry key 'NT ServiceGroupOrder key' for the Driver from 'Order in Group' drop-down.

#### Background Note:

If multiple drivers are configured to access the same device then the driver that is loaded first will claim 'ownership' of the device. This driver is then allowed to dictate the terms of shared ownership with other drivers or can retain exclusive control for itself. Therefore, the order in which drivers are loaded will play an important role in the control of the device. If ownership is exclusively claimed by a Driver (because it was loaded first), any further attempts by other drivers to access the device will be denied. The order in which the driver loads with respect to the other drivers is specified by the registry key 'ServiceGroupOrder key.', set for that driver. If you do not specify the 'Order in Group', the driver will be loaded after all the other drivers are loaded.

Set the Load Order Group to which the driver has to be a member, by selecting a group from 'Load Group' drop-down.



### Background Note:

The Load Group specifies the Load Ordering Group in which the Driver is a member. The list of Load Ordering Groups in order is stored in the Windows registry at:

HKEY\_LOCAL\_MACHINE\System\CurrentControlSet\Control\ServiceGroupOrder.

The startup program uses this list to Load Ordering Groups of Drivers in a specified order with respect to the other groups in the list. You can place a Driver in a group so that another Driver can depend on the group.

The order in which a Driver starts is determined by the following criteria:

- The order of groups in the registry's Load Ordering Group list. Drivers of the groups in the list are started first, followed by Drivers in groups not in the list and then Drivers that do not belong to a group.
- The Driver's dependencies listed in the 'Depend on Group' parameter and the dependencies of other Drivers dependent on the Driver.

Set the other Driver or the 'Load Ordering Group' that must be loaded before the Driver from the 'Depend on Group' drop-down.

#### **Background Note:**

Dependency on a Driver/Service means that this Driver can run only if the Driver/Service it depends on is running. Dependency on a group means that this Driver can run if at least one member of the group is running after an attempt to start all members of the group.

If no 'Depends On Group' is specified, the Driver will not depend on any other Driver/Service/Group.

· Click OK. The Driver will be added to the list and will be loaded as per the 'Start Type' specified while adding it.

### Viewing Details, Editing Parameters and Unregistering/Removing a Driver

Startup	Services	Drivers	Boot Execute	Schedule task
Name Beep exfat fastfat Msfs MsRPC NDProxy NDFs Ntfs Null	Search		Beep Version unknown Manufacturer unknow Unsigned Start Type : S Error : N Type : D Order in Group : Load Group : B Depend on Group :	ystem • ormal • river •
RDPWD     secdrv     ande     III		•		egister Remove

Clicking on a service in the list opens a details panel at the right hand side.

The details panel displays the following:

- The full name of the Driver with the version and the publisher
- The digital signature information of the Driver
- The start type and other parameters of the Driver
- The current status of the service

This interface also allows you to:

• Change the run status of the Driver

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- Edit the Start type and other parameters of the Driver
- Unregister or remove the driver

### To change the run status of a Driver

- Click on the Driver from the list. The Details panel will open. The current status is indicated beside 'Status'.
  - To start a stopped Driver, click the 'Start' button. The Start button appears only for the Drivers with 'Stopped' status.
  - To stop a running Driver, click the 'Stop' button. The Stop button appears only for the Drivers with 'Started' status.
- Click 'Apply' for your changes to take effect.

### To edit the Start type and other parameters of the Driver

• Click on the Driver from the list. The Details panel will open. The parameters of the driver will be displayed.

Start Type :	System 👻
Error :	Normal 🚽
Туре :	Driver 👻
Order in Group :	-
Load Group :	PNP_TDI
Depend on Group :	

The interface is similar to Adding a New Driver interface. Refer to the section **To add a new Drive**r for the explanations of the parameters and how to modify them.

• Click 'Apply' for your changes to take effect.

### To unregister or remove a Driver

- Click on the Driver from the list. The Details panel will open.
  - Clicking on 'Unregister' will remove the driver from the registry but will be kept in the list until the application is closed, enabling you to register the driver again by clicking the 'Register' button.
  - Clicking on 'Remove' will remove the Driver both from the Registry and the list of Drivers.
- Click 'Apply' for your changes to take effect.

Tip: You can also revert the command by clicking on Undo link in the upper right corner of Autorun Manager. This command available only before the settings take effect.

### 7.4. Boot Execute

Boot Execute specifies the applications, services, and commands executed during the time period between the system boot-up and the user log-on. For example Windows runs the 'Check Disk' routine as a Boot Execute. Some of the applications are configured to add themselves as a Boot Execute during their installation, and will be started along with system boot-up.

The Boot Execute interface in the Autoruns Manager displays the list of programs, applications and commands configured as Boot Executes in your system and allows you to disable/remove the applications, services and commands which need not be executed during start-up. This makes your system to start-up quickly. Also you can add any needed applications, services and commands, like antivirus scans to be executed during system start-up in order to increase the security of your system.

- To view the 'Boot Execute' interface, click 'Autorun Manager' then 'Boot Execute' tab. The list of current Boot Executes is displayed with the following details:
  - The name of the program/application
  - The malware affected status of the program/application;
  - Whether the program contains the digital signature of the publisher digitally signed programs ensure that you

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received the program from the authentic publisher and the program was not altered during transit from the publisher to you;

	Autorun Manag	er				
Registry Cleaner	Improve boot time by s		lications run at sta		Boot Execute	Settings G
Privacy Cleaner	- North Contraction					
Nole Classes	Name	earch P	Malware status	Signature	Path	
Disk Cleaner	autochk		Not Infected	Unsigned	C:\Windows\Syste	m32\autochk.exe
Force Delete	💟 cpmnat		Not Infected	Unknown	C:\Windows\syste	m32\cpmnat.exe
Shredder						
Autorun Manager						
ighlights						

Installation location of the program/application.

From this interface, you can:

- Disable programs from Boot Execute list
- Enable or disable all Boot Execute items at once
- Add programs to the list of Boot Execute items
- View details and remove a program from Boot Execute list

#### To disable a program from Boot Execute list

• De-select the checkbox next to the program and click 'Apply'.

### **Enabling or Disabling All Boot Execute Items**

All the Boot Execute items in the list are enabled by default. You can disable all at once by clicking the 'Disable all' button so that you will be able to select only those items to be started along with Boot-up by selecting the check boxes beside them. To enable all the items at once, click 'Enable all' button.

### Adding a Program to the List of Boot Execute items

- Click '+Add' near the bottom-right corner of the interface
- Click 'Browse' in the pop-up and navigate to the desired application or file.





• Click 'OK'. The program will be added to the Boot execute list and will be executed from the next restart of the system.

### Viewing Details and Removing a Program from Boot Execute List

Clicking on a Boot Execute item in the list opens a details panel at the right hand side.

Startup	Services	Drivers	Boot Execute	Schedule task
Name autochk cpmnat	Search		autochk 6.1.7600.16385 Microsoft Corporation Unsigned Disable	Remove

The details panel displays the following:

- The full name of the program with the version and the publisher
- The digital signature information of the program.
- · Clicking on 'Disable' prevents the program from starting during system Boot-up.
- Clicking on 'Remove' removes the program from the list of Boot Execute items.
- Click 'Apply' for your changes to take effect.

Tip: You can also revert the command by clicking on Undo link in the upper right corner of Autorun Manager. This command available only before the settings take effect.

### 7.5. Schedule Task

The Autorun Manager enables you to schedule any script, program, or document to run at your convenient time in a recurrent manner easily, which is otherwise hard to do through Windows Task Scheduler . For example, you may schedule to run Antivirus scans at the end of each day, defragment your disks every week etc. You may even schedule to play your favorite music at the start of each day. The scheduled task will be executed at the scheduled time without your intervention.

The Schedule Task tab in Autorun Manager displays a list of scheduled tasks and enables you to add new tasks and edit/remove existing tasks.

- To view the 'Schedule Tasks' interface, click 'Autorun Manager' then 'Schedule Tasks' tab. The list of currently Scheduled Tasks is displayed with the following details:
  - The name of the scheduled task
  - · The malware affected status of the program scheduled to run;
  - The date and time of next run of the scheduled task;
  - The date and time of previous run of the scheduled task.

System Utilities	Autorun Mana	ger			
	Autorun Manag	er electing which applications ru	n at startup.		Settings
Registry Cleaner	Startup	Services	Drivers	Boot Execute	Schedule task
Privacy Cleaner					
	Name	Search D	Malware status	Next Run Time	Last Run Time
Disk Cleaner	💽 🕒 соморо	Updater	Unknown	20-09-2011 13:11:00	19-09-2011 13:11:00
orce Delete	📰 🕒 AD RMS R	ights Policy Template Manage	Unknown	21-09-2011 03:47:53	Never
	💽 🕒 AD RMS Ri	ights Policy Template Manage	. Unknown	Never	Never
Shredder	📃 🕒 PolicyCon	verter	Unknown	Never	Never
Autorun Manager	💹 🕒 VerifiedPu	IblisherCertStoreCheck	Unknown	Never	Never
	💽 🕒 AitAgent		Unknown	21-09-2011 02:30:00	20-09-2011 11:23:05
	💽 🕒 Program0	ataUpdater	Unknown	21-09-2011 00:30:00	20-09-2011 11:23:05
	💽 🕒 Proxy		Unknown	Never	19-09-2011 18:45:34
	💽 🕒 UninstallD	eviceTask	Unknown	Never	Never
	💽 🕒 SystemTa	sk	Unknown	Never	20-09-2011 11:43:25
	💽 🕒 UserTask		Unknown	Never	20-09-2011 11:43:25
	📃 🕒 UserTask	Roam	Unknown	Never	Never
ighlights				NUMBER OF A DESCRIPTION OF	
iot available	Enable all Di	sable all		+	Add Apply
eot available					

From this interface, you can:

- Disable a Scheduled Task
- Enable or disable all Scheduled Tasks at once
- Add a new Scheduled Task
- View details, edit/remove a Scheduled Task

To disable a Schedule Task

De-select the checkbox next to the Scheduled Task and click 'Apply'.

### Enabling or Disabling All Scheduled Tasks

All the Scheduled Tasks in the list are enabled by default. You can disable all at once by clicking the 'Disable all' button so that you will be able to select only those items to be run on scheduled time by selecting the check boxes beside them. To enable all the items at once, click 'Enable all' button.



### Adding a New Scheduled Task

- Click '+Add' button.
- Click 'Browse' and navigate to the application/program to be added to the Scheduled Task.
- Enter a name and a short description for the Scheduled Task in the 'Name' and 'Description' fields. After addition, the Scheduled Task will be displayed with the name entered here in the Scheduled Tasks interface.
- Select the Frequency or recurrence of the Scheduled Task.
  - Once The task will be run only once on the set date and time.
  - Daily The task will be run daily on the set time since the moment you have it.
  - Weekly The task will be run every week on the set day and set time since the moment you added it. (e.g.: If you select the Sunday for a weekly schedule and set a time, this operation will be performed on each Sunday at the specified time since the moment you added it);
  - Monthly The task will be run every month on the set day and set time since the moment you added it. (e.g.: If you select the date as 20 and set a time, this operation will be performed on each 20th of the successive months day at the specified time since the moment you added it. You can select a date between 1 and 28);

Path :	Path : Browse							
Path	Path							
Name :		Name						
Descripti	ion :	Description						
Frequen	cy:	Once	_	-				
Time:		12:00:00 AM 🔶						
•		Ma	arch 2(	011		•		
sun								
27		1	2	3	4	5		
6	7	8	9	10	11	12		
13	14	15	16	17	18	19		
20	21	22	23	24	25	26		
27	28	29	30	31				
			C	OK	С	ancel		

- At startup The task will be run every time Windows is started, irrespective of the user that logs-in.
- At log on The task will be run every time the user that has scheduled this task is logging-in.
- Click OK. The Scheduled Task will be added to the list and will be executed on the scheduled date and time.

### Viewing Details, Editing/Removing a Scheduled Task

Clicking on a Scheduled Task in the list opens a details panel at the right hand side.

Autorun Manager ♠ Autorun Manager Settings 🔗 🗸 Improve boot time by selecting which applications run at startup. Startup Services Drivers **Boot Execute** Schedule task Undo х Q Name Search 6 PeriodicScanRetry ObjectStoreRecoveryTask Author : Unknown OCURActivate Actions Triggers OCURDiscovery Details Trigger BDADiscovery Ξ Once At 17:33:00, on 09-09-2006 BDADiscoveryW1 PBDADiscoveryW2 V 🕒 PeriodicScanRetry PvrRecoveryTask PvrScheduleTask RecordingRestart <. 111 ь RegisterSearch + Disable Remove Doindoy Coarob Doot Enable all Disable all + Add Apply **R** Share with friends Version 4.0 Everything is up to date

The details panel displays the following:

- The full name of the Scheduled Task;
- The user that has created the Scheduled Task;
- Details on the scheduled times and actions to be executed as per scheduled task under the two tabs 'Trigger' and 'Actions'.

😳 wmj Autho	player pr: Administrator	1	٢	wmp Author	-	* Administrator
Triggers	Actions		Tri	ggers	Actions	
Trigger	Details		Acti	on	Details	
Once	At 15:30:00, on 30-03-2011		S	tart a pro	C:\Prog	ram Files Windows Med
			<			
+ -	Disable Remove		+	-	D	isable Remove

• The 'Triggers' tab displays the trigger frequency and the scheduled time for the task to run. Clicking on the 🕩

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button enables you to add more time schedules for the same task. Selecting a trigger and clicking the 💻 button removes the item from the list.

- The 'Actions' tab displays the action to be executed and the application/program to be run as per the Scheduled Task. Clicking on the button enables you to add more actions for the same task. Selecting an action and clicking the button removes the item from the list.
- Clicking on 'Disable' stops the Scheduled Task to run on the trigger time but retains the task in the list, enabling you to enable it at a later time.
- Clicking 'Remove' removes the Scheduled Task from the list.
- Click 'Apply' the settings take effect.

# 8. Comodo System Utilities Settings

The 'Settings' area in Comodo System Utilities allows you to configure the miscellaneous settings concerning the overall behavior of the application.

The Settings interface can be accessed by clicking the 'Settings' tab from the title bar.

		Settings Help Feedback – 🗆 >
System Utilities PRO	General Backup	
Registry Cleaner	Settings Select from the following options those you want to be used.	
Privacy Cleaner	Run application when Windows starts	
Disk Cleaner	Disable recent activity logging	
Force Delete	Show recent activity for Privacy Cleaner Update applications in silent mode	
Shredder	Select language : English -	
Autorun Manager	Update settings  Automatically check for update	
	Active clean settings	
	✓ Include registry clean in active clean	
	🔟 Include privacy clean in active clean	
	Include disk clean in active clean	
Highlights		
Not available	Use Defaults	Back Apply
Not available		
Not available	<ul> <li>Version 4.0 Everything is up to date.</li> </ul>	Share with friends

The Settings interface has two tabs:

- General Settings
- Backup Settings

### 8.1. General Settings

The General tab in the Settings interface allows you to configure various options related to the operation of the Comodo System Utilities globally.

The settings configured in this interface overrules the corresponding settings made individually for each of the modules like Registry Cleaner, Privacy Cleaner and the Disk Cleaner.

General Backup	
Settings Select from the following options those you want to be used.	
<ul> <li>Run application when Windows starts</li> <li>Disable recent activity logging</li> <li>Show recent activity for Privacy Cleaner</li> <li>Update applications in silent mode</li> <li>Select language :</li> </ul>	
Update settings ✓ Automatically check for update	
Active clean settings	
✓ Include registry clean in active clean	
Include privacy clean in active clean	
Include disk clean in active clean	
Use Defaults Back Aj	ply
Version 4.0 Everything is up to date.	h friends 🛛 🚕

### **Common Settings**

- Run application when Windows starts Instructs Comodo System Utilities to start automatically every time you start your computer.
- Disable recent activity logging Comodo System Utilities maintains a log of of events, i.e. the files deleted by its Registry Cleaner, Disk Cleaner and by the Active Clean feature. The logs can be viewed by clicking the 'View recent activity' link from the Summary screen. Selecting this option stops Comodo System Utilities from recording the log of activities.
- Show recent activities for Privacy Cleaner By default, the log of files deleted by Privacy Cleaner are not recorded. Selecting this option enables logging of Privacy Cleaner events for displaying under 'View recent activity'
- Update applications in silent mode This option allows you to configure whether or not to show application update. Choosing 'Update applications in silent mode' will minimize disturbances. If you choose to update in silent mode then you have a choice of default updates that CSU should automatically take. (Default = Disabled)

### **Active Clean Settings**

- Include registry clean in active clean The registry scan and clean will be performed at real time by Active Clean only if this option is enabled. (Default = Enabled)
- Include privacy clean in active clean The privacy scan and clean will be performed at real time by Active Clean only if this option is enabled. (Default = Disabled)
- Include disk clean in active clean The disk scan and clean will be performed at real time by Active Clean only if

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this option is enabled. (Default = Enabled)

### **Update Settings**

- Automatically check for update Instructs Comodo System Utilities to automatically check for availability of program updates and newer version whenever it is started. If there is an update available, a notification will be displayed at the bottom of the interface. By default, this option is enabled.
- To reset to the default states, click 'Use Defaults' button.
- · Click 'Apply' for the settings to take effect.

### 8.2. Backup Settings

### The Backup Settings option in the Settings interface allows you to configure the backup functionality of the Registry Cleaner, Disk Cleaner and the Privacy Cleaner.

You can set the location at which the backup files are to be stored during the cleaning operations and the level of compression and so on. You can also configure for encryption and password protection for the backup files for an additional level of safety. Setting a password protection requires the password to be entered every time a backup file is restored and prevents others from maliciously restoring the files you deleted.

General Ba	ckup	
Backup		
Change backup settings and location		
Compression:	Medium 👻	
Password Protection		
Encription algorithm:	AES +	
Password:		
Confirm password:		
Backup Location:	My Computer	
Create folder		Apply
<ul> <li>Version 4.0 Everything is up to d</li> </ul>	ste.	Share with friends

You can configure for the following:

- Compression Level
- Encryption Algorithm
- Backup Location

### **Compression Level**

Comodo Faster Master is capable of compressing all backup files and store them with the file name having extension .cbu (e.g. CDC.cbu) inside the date stamped folders, in the destination of your choice. You can choose the compression level for the backup files from 'None' to 'Maximum'. Higher the compression level, lower the backup disk space requirement. Select the level you want to use from the 'Compression' drop-down menu.

Compression:	Medium	-
Password Protection	None	
Password Protection	Low	
	Medium	
Encription algorithm:	High	
	Highest	
Password:	Maximum	

### **Encryption Settings**

You can choose to store your backup files encrypted and password protected by selecting an encryption algorithm and setting a password.

To encrypt the backup files

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

AES	
AES	
3DES	
AES 3DES XOR	

Encryption Algorithms: AES - 128bit / strongest 3DES - 168-bit/ strong Xor - Variable block size / weak

For more details on Encryption Algorithms, see Appendix 3 Encryption Algorithms.

Type a password in the Password text box and retype the password in the Confirm Password text box. You have to
enter this password every time you are restoring files/registry entries from a backup file.

### Selecting a Location for Storing the Backup Files

You can choose the destination for storing your backup files from the 'Backup Location' drop-down menu. Depending on the requirement you can choose the destinations from:

- My Computer Saves your backup files on your local hard drive.
- Network Computer Saves your backup files on another computer in the network.
- FTP server Saves your backup file on a FTP server.

After selecting the Destination for backup you want from the drop-down menu, you will need to make a further selection from the lower panel.

### **My Computer**

If you wish to store the backup files in your local hard disk, select 'My Computer' from the drop-down menu.

The disk drives and folders in your computer are displayed as a tree structure in the lower panel.

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

Backup Location:	My Computer 👻	
E:\		
Create folder		Apply

The folder you selected will be displayed in the text box at the bottom of the pane.

- If you want to create a new sub folder under the selected drive/folder, click Create Folder button. You will be prompted to enter a name for the new folder.
- Type a name for the new folder. A new folder with the given name will be created under the selected folder. To store the backup in the new folder, select it from the tree structure in the lower panel.

**Tip:** If you wish to have your backup in a removable media like a CD, DVD, select a destination in your hard disk drive. On completion of a clean-up job, you can copy the backup files to a CD/DVD using your preferred CD/DVD authoring program.

### **Network Computer**

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

To save your backup files on another computer on your network select the 'Network' from the 'Backup Location' drop-down menu.

Backup Location:	Network 👻	
\\JBVM2\		
		Apply

All the computers connected in your network are displayed. (It may take a few seconds to list all the computers. Please wait)

- Select the computer in which you want to save the backup.
- You will be prompted to enter the user name and password for the computer you selected, if the computer is 'accessprotected'. Enter the login User name and password for the computer you selected.

You will be able to navigate through the folder tree structure of the selected computer.

- Select the destination folder you want to save the backup
- If you want to create a new sub folder under the selected drive/folder, click Create Folder button. You will be prompted to enter a name for the new folder.

Type a name for the new folder. A new folder with the given name will be created under the selected folder. To store the backup in the new folder, select it from the tree structure in the lower panel.

### **FTP Server**

.

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

To save your backup in an FTP server, select 'FTP' from the 'Backup Location' drop-down menu.

Backup Location:	FTP +
Server:	
Port:	
Username:	
Password:	
Sign In	Apply

The lower pane displays the login page for your FTP server

- Type the name of your FTP server in the Server text box (The prefix ftp:// is optional)
- Enter the port number of the server for connection (default = 21).
- Type your Username for the FTP server in the Username text box
- Type your password for accessing the FTP server.
- Click 'Sign In'.

On successful login, you can browse the server and create new folders for storing your backup.

- · Select the destination folder you want to save the backup
- If you want to create a new sub folder under the selected drive/folder, click Create Folder button. You will be prompted to enter a name for the new folder.
- Type a name for the new folder. A new folder with the given name will be created under the selected folder. To store the backup in the new folder, select it from the tree structure in the lower panel.
- Click 'Apply' for your settings to take effect. From the next Registry Clean, Disk Clean or Privacy Clean operations, the backup files will be stored as per the settings made in this interface.

# 9. Using Live Help

### Comodo GeekBuddy is the quickest, most comprehensive way of getting help with your computer problems.

You can launch GeekBuddy client by clicking 'Get help from a Geek Buddy' tab in the About dialog.

This will open a chat window and you will be immediately connected to a Comodo technical support expert. Just describe your problem and our operative will provide expert advice and can even remote desktop into your computer and fix your computer in front of your eyes.

сомодо

#### = H X COMODO System Utilities ♠ Summary PRO ive Clean 0 соморо III OFF System Utilities L v recent activity Version 4.0.216251.7 Everything is up to date ragmentation lev ⊞ L Copyright @ 2007-2011 Comodo Security Solutions, Inc. All Rights **Ouick** Clean De Ile Pr 6 Help online La Quick Clean D Get help from a Geek Buddy He **Disk Cleaner** 6 Last clean-up: Not yet performed **Ouick** Clean Default profile: Full Clean llext scheduled clean-up: Ho clean operations scheduled Highlights Not available Version 4.0 Everything is up to date Share with friends V

For more details, refer to:

- Installing GeekBuddy Client;
- Launching and Using the Service.

More details on GeekBuddy can be found in Appendix 2 GeekBuddy.

### 9.1. Installing GeekBuddy Client

Getting the GeekBuddy service requires the GeekBuddy client installed in your system.

### To install the GeekBuddy client

If Geekbuddy is not installed, clicking 'Get help from a GeekBuddy' link in the About dialog will install the GeekBuddy' client.

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#### = H X COMODO System Utilities ♠ Summary PRC ve Clean 0 соморо III OFF System Utilities L v recent activity Version 4.0.216251.7 Everything is up to date fragmentation le ⊞ L Copyright @ 2007-2011 Comodo Security Solutions, Inc. All Rights **Ouick** Clean De Ile PI 6 Help online La **Quick Clean** D Get help from a Geek Buddy He **Disk Cleaner** 6 Last clean-up: Not yet performed Ouick Clean Default profile: Full Clean llext scheduled clean-up: Ho clean operations scheduled Highlights Not available Share with friends Version 4.0 Everything is up to date ~

The application detects whether the client is installed in your system and starts downloading and installing the client.

						Settings Help		- = x
N.	COMODO System Utilities PRO	٢	Summary					
			MODO GeekBuddy	is downloading	2%		Cance	



Once the installation is completed, the shortcut icon GeekBuddy appears on your desktop and a GeekBuddy quick launch icon appears in the system tray. The installation is a one time process. Once installed, clicking the GeekBuddy tab in the About dialog, 'Speak to Certified Technician' link the main interface or the desktop shortcut icon automatically launches the application enabling you to chat with a Comodo Computer Support Technician any time.

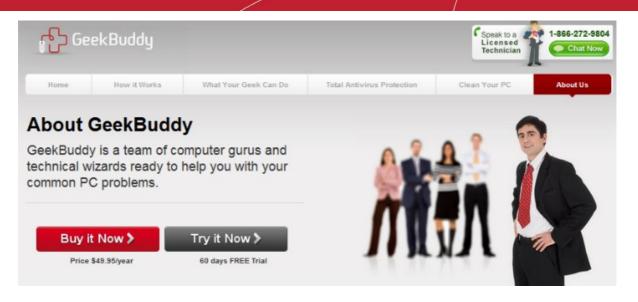
In order to get the GeekBuddy services, you need to sign up for a 60 day free trial account.

To signup for a 60 day free trial.

• visit http://www.geekbuddy.com/about.php

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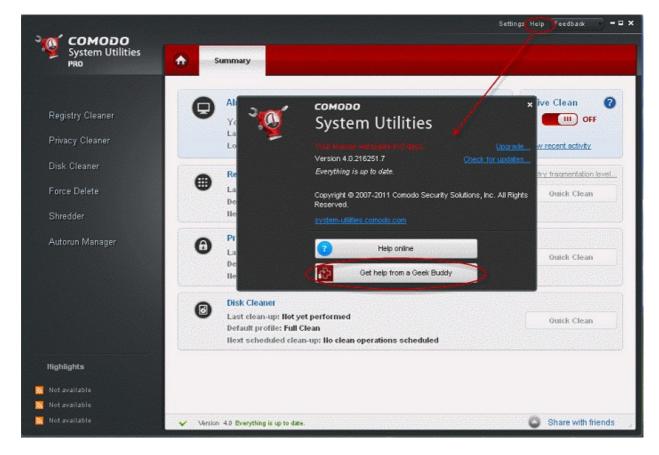
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• Click on Try it Now button to start the free download of Comodo GeekBuddy trial.

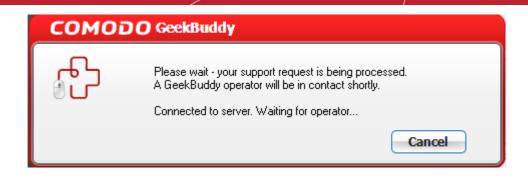
### 9.2. Launching and Using the Service

Once the GeekBuddy client is installed in your system, you can launch the service by clicking 'Get help from a GeekBuddy' tab in the About dialog.

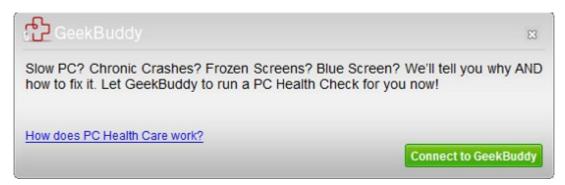


You will be connected to the GeekBuddy service.





Occasionally, you will see friendly messages from GeekBuddy which offer to perform useful services such as improving the performance of your computer:



And within seconds, a Comodo Support Technician will respond in a chat window and ask you to describe the problem.

СОМО	D O GeekBuddy	_ = ×
🔏 Operator Ch	at	Show Log 🕨
	Name: Oliver Profile:	<u>View more</u>
Oliver (09/09 you?	/11 17:06:41): Hi , welcome to Comodo Support	, How can I help
,		
		-
🍒 Client	Т	
Status:	Session started	

Start chatting! Use the chat window to explain any problems you are having with your computer, or to request any of the GeekBuddy services.

OR



- Double click on the shortcut icon to GeekBuddy from the desktop;
- Click on the 'GeekBuddy' system tray icon or launch GeekBuddy from the Start Menu. Click 'All Programs > COMODO > GeekBuddy > Comodo GeekBuddy'. The GeekBuddy options dialog will be displayed.

СОМ	ODO GeekBuddy _ ×
	Welcome to GeekBuddy
To cont	inue, choose one of the following actions:
-	Activate your service. If you already have a License Key, just get in contact.
	Need help activating? Connect to an operator for assistance getting started.
Speak to a li	icensed technician 1-866-272-9804

- Need help activating? a Comodo Support Technician will respond in a chat window and ask you to describe the problem.
- Click the 'Activate your service' link and enter the same license key that you used for activating CFM or the license key that you received via email after registering and click 'Next'.

	- ×
GeekBuddy	
Please enter your License Key to connect to a PC expert. Your License Key is included in your order confirmation.	
Please enter your License Key:	
acc87380-50eb-486c-8a12-0bf4b24fa486	$\supset$
<sup>°</sup> If you can't find your License Key, please send an email to: geekbuddysupport@comodo.com Speak to a licensed technician <b>1-866-272-9804</b>	
Next Cancel	

- You account will be verified and activated. The verification and activation is a one time process. You need not enter the License Key again.
- Following activation, you will be connected to the GeekBuddy service.
- Within seconds, a Comodo Support Technician will respond in a chat window and ask you to describe the problem.

# 10. Uninstalling Comodo Faster Master

- Click Start > Control Panel
- In the Control Panel, double-click Add/Remove Programs
- In the list of currently installed programs, click Comodo Faster Master
- Click the 'Remove' button.

### OR

Click Start > All Programs > Comodo > Comodo Faster Master> Uninstall & Repair.



The configuration screen will appear. Select 'Uninstall'.

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COMODO Faster Master 4.0	- 🗆 ×
Configure	
Select the operation you wish to perform	
© Repair	
Select this option to repair COMODO Faster Master from your computer.	
O Uninstall	
Select this option to completely remove COMODO Faster Master from your computer	
Delete settings and backup files	
Cancel	<u>N</u> ext >

If you plan to reinstall Comodo Faster Master at a later time and wish to retain the configuration of the application and the backup files as if they were before uninstallation, leave the checkbox 'Delete settings and backup files' unchecked, else, select the checkbox.

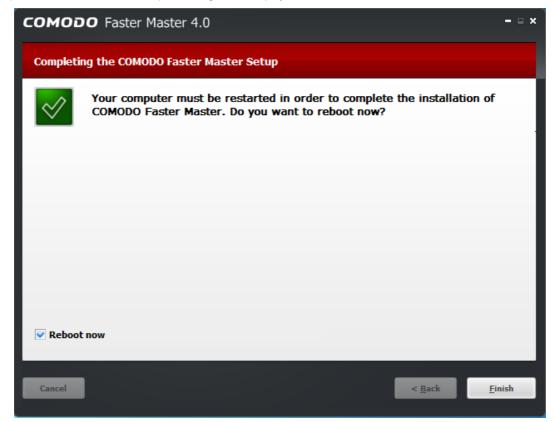
Click 'Next' to continue.

The uninstallation wizard will start and the progress will be displayed.

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COMODO Faster Master 4.0	- • ×
Uninstalling	
Please wait while COMODO Faster Master is being uninstalled.	
Uninstalling This may take several minutes	
	_
	_
	_
Cancel < Back	<u>N</u> ext >

On Completion, the Uninstallation Complete dialog will be displayed.



The uninstallation requires restart of your computer to complete. To restart your system immediately, leave the checkbox 'Reboot now' selected and click 'Finish'. If you plan to restart the system at a later time, unselect the checkbox 'Reboot now' selected and click 'Finish'.



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

# 11. Getting Support

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

#### **Comodo Forums**

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

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

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

#### **Email Support**

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

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

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

# Appendix 1 The Windows Registry Explained

### Introduction

Whenever a user installs a software program/application, a hardware or a device driver for a newly connected hardware in a Windows based computer system, the initial configuration settings of these are stored as keys and values in a system defined, central hierarchal database repository called Windows Registry. During the usage of the software or the hardware, the changes made to these configurations are updated in the registry. Also, the changes made to Control Panel settings, file associations, Windows components and so on, during the use of the computer, are updated in the registry.

The software and the system components retrieve their latest configuration from the registry during their runtime to continue their operation as per the settings made by the current user. The registry also serves as an index to the operation of the kernel, revealing runtime information of the system.

Registry is a critical factor for stability, reliability and performance of a computer. Most of the computer problems are caused by system registry errors. Invalid registry keys left as traces by applications that are no more used or uninstalled from the computer, and so on, may cause troubles including degradation in system performance in terms of operating speed, reliability etc., crashes, stalls and so on.

### **Purpose**

The Windows Registry serves as an archive for collecting and storing the configuration settings of Windows components, installed hardwares/softwares/applications etc. in the computer system. A Windows component, hardware or a software, retrieves the registry entries or keys relating to it, every time it is invoked, to start its functionality with its last modified settings according to the currently logged user. It also modifies the registry entries or keys corresponding to it, in its course of execution. When keys are added to the registry, the data are sorted as computer-specific data or user-specific data in order to support multiple users.

### Location

In Windows NT based operating systems like Windows XP, 2000, and 2003, the Registry files are stored in the Windows\System32\Config folder. These files are named:

- Software;
- System;
- SAM;
- Security;
- Default; and
- UserDiff.

These files do not have a file extension. The information contained in these files are explained later.

Apart from this, in the Documents and Settings folder corresponding to each user of the system, one more Registry file named NTuser.dat is stored. The NTuser.dat file stores all the preferences/settings specific to the user. These settings will override settings default settings of the system when the user logs-in.

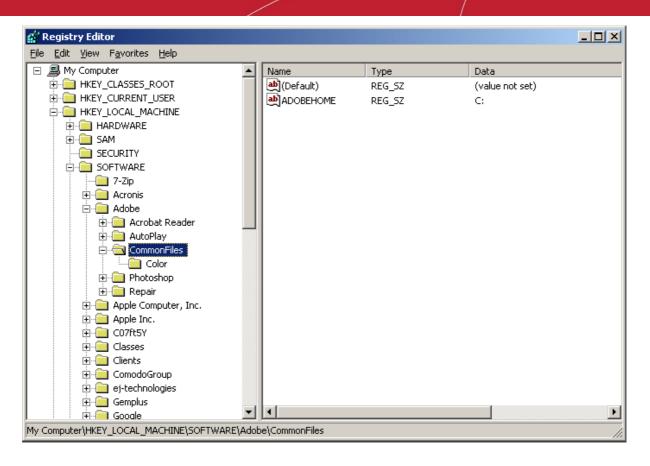
### Accessing the Windows Registry

You can view the registry files by running the regedit command.

### To view the registry files

- 1 Click Start > Run...
- 2 Type regedit in the Open: box.
- 3 Click 'OK'.

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### Structure of the Windows Registry

The Windows Registry has a structure similar to Windows folders and files. Each main folder is named as a Hive. Each hive contains sub folders called Keys. These keys contain subkeys with configuration values for each software program/system component of the computer. There are five main Hives, whose descriptions are listed below:

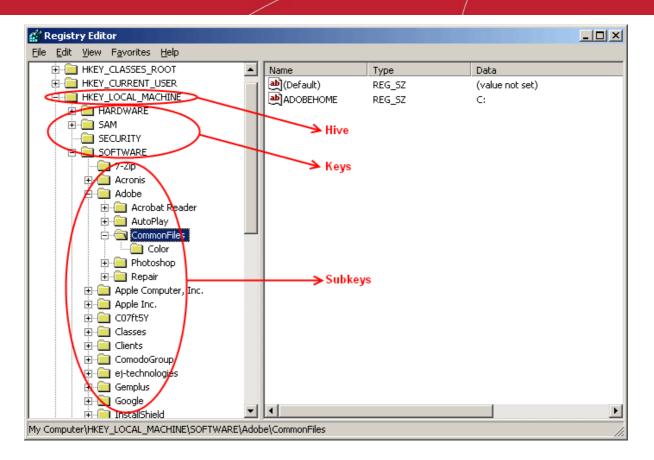
HKEY\_CLASSES\_ROOT - The software settings about the file system, shortcut information, information on file associations and other user interface information are stored in this hive. The file association information are essentially used by Windows to invoke the correct program when a file is opened using Windows Explorer.

HKEY\_USERS - The configuration settings for each hardware and software item in the computer system, corresponding to each of the users of the computer system are stored in this hive. The information on the user's folders, user's choices of themes, colors and Control Panel settings are stored here as user's profile. This hive has a subkey for each user storing his/her user's profile.

HKEY\_CURRENT\_USER - The configuration settings for each hardware and software item in the computer system, corresponding to the currently logged-on user are stored in this hive. This hive is dynamic, i.e. whenever a user logs-on into the system, the settings corresponding to the user are retrieved from the respective subkey of H\_KEY\_USERS as user profile and stored in this hive. If a currently active item modifies a registry entry in its course of operation, the change will affect only the current user.

HKEY\_LOCAL\_MACHINE - The configuration settings for hardware and software for all users of the computer are stored in this hive. The information stored here is computer specific and not user specific.

HKEY\_CURRENT\_CONFIG - The current hardware configuration settings, pointing to HKEY\_LOCAL\_MACHINE\Config are stored in this hive. This hive is dynamic, meaning it is built on the run.



Windows\System32\Config folder and their associations with the hives			
File Name	Associated Hive	Information Contained	
Software	HKEY_LOCAL_MACHINE\SOFTWARE	Information about all the software items in the system, Windows performance parameters and the default Windows settings.	
System	HKEY_LOCAL_MACHINE\SYSTEM	Information about all the hardware items in the system.	
Sam	HKEY_LOCAL_MACHINE\SAM	Information about the Security Accounts Manager service.	
Security	HKEY_LOCAL_MACHINE\SECURITY	Information about security. Neither of Security and SAM, can be viewed using Regedit, unless you reset the permissions.	
Default	HKEY_USERS\.DEFAULT	Default user settings. But the Ntuser.dat file corresponding to the currently logged-on user overrides the default user settings.	
Userdiff	Not associated with any hive.	Information about the corresponding subkeys in the HKEY_USERS Hive for each registered user.	

The files in the Windows\System32\Config folder and their associations with the hives are shown below.

### How Problems with the Registry can Occur

The Windows Registry keeps accumulating a large number of unwanted, obsolete, and incorrect data which are mostly left by

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uninstalled programs. The most common reasons for accumulation of the junk entries are:

Installing and uninstalling software programs, particularly video, audio, photo, graphics and games softwares frequently;

Browsing through Internet sites that automatically install components like Active X and accessing unsolicited mails with malicious attachments;

- Adding too many programs into the system;
- Altering Control Panel settings frequently;
- Altering hardware, hard disk, memory, joysticks, monitor, printer or scanner frequently;
- Installing programs with embedded spyware;
- Viruses, Trojan horses and key loggers and so on.
- The adding up of too much of junk entries over time increases the size of the registry and makes it fragmented and corrupted.

### How do the Registry Problems Affect Your System

The Windows registry which in increased in size due to accumulation of junk entries, fragmented and corrupted due to the traces left by improperly uninstalled programs leads to:

- Degradation in performance of the computer system. The operating speed of the system will be notably reduced, as
  each active process/application takes a longer time to refer to registry and acquire/modify its registry entry. The timeout problem also leads to frequent program error messages;
- Reduction in reliability. The active process/application may not be able to reach its respective registry entry due to
  fragmentation of registry of increased size, resulting in unexpected termination of the programs. This makes the user
  to lose any unsaved data;
- Reduction in stability. The fragmented, slow registry takes a long time to fulfill requests sent to it by the active programs and hardware devices and causes system freezes and rebooting.
- System crash. Excessive damage to the Registry can even make the system unbootable.

### Why do you need a Registry cleaner

When you notice a reduction in the operating speed of your computer, repeated freezes or taking a longtime to startup, you can take the indication as starting of degradation of your registry. Your registry needs a clean-up, meaning that the obsolete, unwanted and invalid entries must be identified from your registry and to be deleted. You can manually edit your registry and fix these problems yourself, if you're a computer expert.

As a word of caution, performing a registry cleanup using the Registry Editor is not so easy and safe. The probability of unknowingly altering or deleting a registry entry, vital for the healthy operation of your system, is incomparably higher than that of deleting the entry to be actually deleted. Your system may be irreparably damaged.

It is always recommended to use a Registry cleaner software regularly to tidy up your systems registry. A registry cleaner scans your registry and detects the unwanted entries to be removed. It deletes the unwanted entries only after your confirmation and leaves the vital registry entries intact. This ensures that you can restore your systems health and performance within a few mouse clicks without the fear of damaging your system. There are no chances for removing any vital entries and hence is safe.

### **Benefits of Using a Registry Cleaner**

The registry cleaner software not only scans your systems registry for detecting and cleaning any unwanted registry entries but also defragments your systems registry, making it compact and leaving some available free space in your hard drive.

- The active processes/applications are enabled to seamlessly access their corresponding registry entries, both for acquisition of the configuration settings and to alter them in the course of their execution. The operating speed of the system increases and the system is restored to its highest level of performance. The annoying error messages can be avoided.
- The active processes/applications can reach their corresponding registry quickly and without fail avoiding unexpected termination of programs. The users need not lose any unsaved data and system is rendered reliable.
- The clean, compact and fast registry can cater to the requests sent to it by the active programs and hardware devices promptly, avoiding system freezes and rebooting. This adds up to the stability of the system.
- The newly installed software programs can easily create registry entries and store their configuration settings in a clean registry.

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Prevention is better than cure. Instead of waiting for your Registry to build up debris and cleaning it, regular cleaning of it at a set frequency maintains the health of the system consistently. The Registry cleaner software offer scheduling facility, wherein you can set scheduled scans and clean your registry. Even if you forget to start registry cleaning, the registry cleaner automatically runs a scan and cleans your registry at scheduled times. Regular cleaning of your registry does not give a room for registry damage and your system is totally protected from system crash.

The registry cleaner software also backs-up your systems registry before performing every clean-up, providing you with an option of reverting your system to an early stage, in case you need do it.

Apart from cleaning your registry, Registry cleaner software also helps optimize your systems performance. One of the reasons for slow start-up and reduction in your systems operating speed other than the registry problems, is number of start-up programs. Even though, there are certain start-up programs which are essential for your computer to function, there are some that are usually configured to load at start-up when you install those applications. These programs are usually not required until you actually use the application they belong to, and the rest of the time they run in the background unnecessarily, consuming system resources.

# Appendix 2 GeekBuddy

**GeekBuddy** offers the quickest, most comprehensive way of getting help with your computer problems. GeekBuddy is carried out by Comodo computer experts establishing a remote desktop connection to your machine and fixing your computer's problems right in front of your eyes. No longer do you need to make time consuming calls to impatient help desk support staff. Instead, just sit back and relax while our friendly technicians do the work for you.

GeekBuddy includes the following services:

- Virus Diagnosis / Removal Scanning your PC to check for viruses and spyware. Automatic/manual removal of the detected viruses.
- **PC Tune Up** Running full scans to evaluate issues affecting your computer's performance. Fine Tuning key areas and improving speed and stability.
- Internet Login Protection Activating your computer's basic security settings to prevent loss of sensitive data and identity theft.
- Email Account Set Up Setting up your Internet-based email account any provider, any account. Great for new computers and novice email users.
- Software Installation Installing your Comodo products and customizing configuration for maximum security protection and efficiency.
- **Printer Set Up and Troubleshooting** Installing or updating software and printer drivers, checking ink levels and configuring your printer to work on a wireless or wired network.
- Green PC Optimizing your power management setting based on how you use your computer. Go green and save money on your electric bill.
- Computer Troubleshooting Checking basic hardware conflicts in Windows.

### Features:

- Our experts are available 24 hours per day
- Unlimited incidents on an unlimited number of computers.
- 60 day Free Trial !!
- Enjoy using your problem-free computer once again !!

Please visit http://www.GeekBuddy.com for more details.

The service requires the GeekBuddy client installed in your system.

### To download and install the GeekBuddy client

• Click the 'Help' link at the top of the main interface to open the About dialog.

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Click the Get help from a Geek Buddy tab.

### OR

• Click the 'Speak to a Certified Technician' link in the left pane of the main interface.



This automatically installs and launches the client. Within seconds, a Comodo Support Technician responds in a chat window and asks you to describe the problem. After you do, our computer expert takes over! GeekBuddy enables our experts to actually tap into your computer and make the changes necessary to solve your problem, and get your PC working perfectly.

If you once install the client, you can initiate the chat at any time by clicking any of the links mentioned above.

For technical product questions please visit: https://support.comodo.com/ (Comodo's Customer Service management system requires you to establish a free service account. Your service account provides access to Comodo's extensive Knowledgebase, Customer Forums, and Live Chat support and offers the ability to submit support requests into our service management system).

Encryption Algorithms			
Algorithm	Block Size / Encryption level / Speed	Brief Description	Recommendation
AES (Advanced Encryption Standard)	128 bits/Strongest	Also known as Rijndael. This cipher is used for encryption by default.	Ideal for both domestic and exportable use.
3DES	168 bits/strong/Slow	Applies Data Encryption Standard (DES) cipher three consecutive times to the message to form the message digest. Offers protection against meet-in-the-middle attacks.	Suitable for domestic use.
3XOR	Variable block size /very weak / very fast	160 bit key. 3XOR encryption is a trivially simple symmetric cipher which is used in many applications where security is not a defined requirement	Not recommended

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# Appendix 4 Comodo Faster Master Profiles

The locations scanned and cleaned by The Registry Cleaner, the Privacy Cleaner and the Disk Cleaner modules of Comodo Faster Master are pre-configured with respective sets of default scanning and cleaning profiles. The areas scanned and cleaned when selecting different Default Profiles are explained in this chapter. For detailed information on default profiles of Registry Cleaner, Privacy Cleaner and Disk Cleaner, click the links below:

- Table of Default Parameters for Registry Cleaner;
- Table of Default Parameters for Privacy Cleaner;
- Table of Default Parameters for Disk Cleaner.

### Table of Default Profiles of Registry Cleaner

Registry Cleaner Default Clean Profiles			
	Quick Clean	Normal Clean	In-Depth Clean
Registry areas covered	Filter Entries Start-up Locations Font Locations Uninstall Locations Help Locations	Filter Entries Start-up Locations Shared DIIs Font Locations Uninstall Locations File Extensions Help Locations Shared Folders Menu Order	Filter Entries Start-up Locations Shared Dlls Font Locations Uninstall Locations File Extensions COM and ActiveX Help Locations Shared Folders Menu Order

Registry Cleaner Definitions of Registry Areas			
Area Name	Definitions		
Ignore List	Some registry locations can be specified here using their names, so that the Comodo Registry Cleaner ignores those registry locations during scanning. Click here for more details.		
Filter Entries	The Registry Cleaner searches the registry for a specific name entered by the user. After the search, Registry Cleaner can remove all the references for the specific name found in the registry. Click here for more details.		
Start-up Locations	Windows Registry items that are set to run at Windows startup in this section of the registry. These registry entries contain references to the locations of these items on the hard drive. Comodo Registry Cleaner removes startup items from the registry that no longer exist at their specified locations on the hard drive.		
Application Paths	The Windows system supports 'per application' paths. If an application registers a path, Windows sets the PATH environment variable as the registered path when it starts that application. When		



	Registry Cleaner Definitions of Registry Areas
	the application no longer exists, related information may be deleted safely - Comodo Registry Cleaner searches for such entries and removes them.
Shared Dlls	Libraries that offer some form of sharing, allowing the same library to be used by multiple programs at the same time. Comodo Registry Cleaner removes share control files entries from the registry that no longer exist.
Font Locations	Fonts that are registered in the fonts folder of the Windows operating system. Comodo Registry Cleaner detects the registry entries which reference fonts that no longer exist in the Windows fonts folder and removes them.
Uninstall Locations	After you have uninstalled and application, the references to the uninstall file may remain in the registry. Comodo Registry Cleaner removes such entries
File Extensions	File extensions that are usually registered in the registry during installation of the application. Comodo Registry Cleaner removes Windows file extensions that are no longer associated with applications installed on your system.
COM and ActiveX	The Registry Cleaner scans for COM/ActiveX object that refer to a non-existing file. This reference is considered invalid and it is removed.
Help Locations	All installed application should register their help files in this section of Windows Registry. Comodo Registry Cleaner identifies those references to help files that no longer exist.
Shared Folders	The Registry Cleaner checks every path in the Shared Folders section. If a folder referenced by a path doesn't physically exist, Registry Cleaner removes the path from this registry key.
System Services	The Registry Cleaner checks every path in the System Services section. If a path doesn't physically exist, Registry Cleaner removes the path from this registry key.
Menu Order	The Registry Cleaner checks every entry in the Menu Order section. If the entry doesn't physically exist at Start-> Programs, Registry Cleaner removes the entry from this registry key.

### Table of Default Profiles of Privacy Cleaner

Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Google Chrome	Cache, Cookies, History	Cache, Cookies, History, Thumbnails	Cache, Cookies, History, Thumbnails
Total Commander	Command Line History, Reset Left Path, Reset Right Path, MkDir History, Search	Command Line History, Reset Left Path, Reset Right Path, MkDir History, Search Name,	Command Line History, Reset Left Path, Reset Right Path, MkDir History, Search Name,

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Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
	Name, Search In, Search Text, Right History, Left History, Selection	Search In, Search Text, Right History, Left History, Selection	Search In, Search Text, Right History, Left History, Selection
Pidgin	lcons	lcons	Icons, Cache
OpenOffice.org 3.0	Cache, Temp	Cache, Temp	Cache, Temp
WinRAR	Archive Names, Archive History, Extract Paths, Last Folder	Archive Names, Archive History, Extract Paths, Last Folder	Archive Names, Archive History, Extract Paths, Last Folder
Download Accelerator Plus (DAP)	History, Temporary Files, Search History	History, Logs, Temporary Files, Search History	History, Logs, Temporary Files, Search History
Adobe Acrobat Reader 9	Recently Used Files, Cache	Recently Used Files, Install Informations, Logs, Cache	Recently Used Files, Install Informations, Logs, Cache
WinAce	Most Recent Used Items	Most Recent Used Items	Favorites, Most Recent Used Items
WinZip	Extract Paths, Directories, Job History, Archive History	Extract Paths, Filemenu, Directories, Job History, Archive History	Extract Paths, Filemenu, Directories, Job History, Favorites, Archive History
CuteFTP	Recent	Logs, Cache, Recent	Logs, Cache, Recent
PhotoImpact X3	Recently Used Files, Recent Folder History	Recently Used Files, Recent Folder History	Recently Used Files, Recent Folder History
BearFlix	Temporary Files	Temporary Files, Logs	Temporary Files, Logs
ZoneAlarm	-	Internet Logs	Internet Logs
BitComet	-	Torrents Archive	Torrents Archive
GetRight	Most Recent Used Items, Typed URLs, Typed Descs	Download History, Most Recent Used Items, Typed URLs, Typed Descs	Download History, Most Recent Used Items, Typed URLs, Typed Descs
DC++	-	Logs, File Lists	Logs, File Lists
oDC	-	Logs, File Lists	Logs, File Lists



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Internet Download Manager	Download History, URL History	Download History, URL History	Download History, URL History
LimeWire	Cache	LWS Files, Cache	LWS Files, Cache
FlashGet	-	Logs	Logs, Backups
RealPlayer	Temp, Cookies, Last Open Folder	Cache Database, Messages, Error Logs, History, Temp, Cookies, Install Log, Last Open Folder	Cache Database, Messages, Error Logs, History, Temp, Cookies, Install Log, Last Open Folder, Favorites
Adobe Acrobat Reader 8	Recently Used Files, Cache	Recently Used Files, Logs, Remembered Views, Cache	Recently Used Files, Logs, Server Settings, Remembered Views, Cache
Microsoft Visual Studio 2008	Recent Files List, Project Location Entries, Project Used Files List, Find History	Recent Files List, Logs, Project Location Entries, Project Used Files List, Find History	Recent Files List, Logs, Last Loaded Solution, Project Location Entries, Project Used Files List, Find History
Trillian	Cache, Icon Cache	Logs, Cache, Icon Cache, Buddies	Logs, Cache, Icon Cache, Buddies
Mozilla Firefox	Cache, Cookies	Cache, Cookies, Download History, Update Logs	Cache, Cookies, Download History, Crash Reports, Update Logs
Internet Explorer	Cache, Cookies, Recent Url, Recent Streams	Cache, Cookies, History, Recent Url, Recent Streams	Cache, Cookies, History, Recent Url, Error Logs, Recent Streams
Netscape Navigator	Cache, Cookies, Browsing History	Cache, Cookies, Browsing History, Download History	Cache, Cookies, Browsing History, Download History, Crash Reports
Morpheus	Temporary Files, Recent Audio Files, Recent Video Files	Temporary Files, Recent Audio Files, Recent Video Files	Temporary Files, Download Informations, Recent Audio Files, Recent Video Files
Windows Temp Files	-	-	Windows Temp Directory
Windows Log Files	-	-	Recent Files List
Other	-	-	Unused Icons



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Recycle Bin	-	-	Recycle Bin
Microsoft Visual Studio 2005	Recent Files List, Project Location Entries, Project Used Files List, Find History	Recent Files List, Logs, Project Location Entries, Project Used Files List, Find History	Recent Files List, Logs, Last Loaded Solution, Project Location Entries, Project Used Files List, Find History
Yahoo! Messenger	Cache	Cache, Logs	Cache, Logs
Software	-	-	Windows
VLC Media Player	-	-	Bookmarks, Messages
Orbit	-	Download History	Download History
Windows Media Player	Recent Files List, Recent URL List, Last Opened Folder, Cache, Autocomplete	Recent Files List, Recent URL List, Last Opened Folder, Cache, Autocomplete	Recent Files List, Recent URL List, Last Opened Folder, Cache, Autocomplete
FreeCommander	Clear Left Path, Clear Right Path, Left History, Right History, Search Name, Search Text, Copy and Move History	Clear Left Path, Clear Right Path, Left History, Right History, Search Name, Search Text, Copy and Move History	Clear Left Path, Clear Right Path, Left History, Right History, Favorite Directories, Search Name, Search Text, Copy and Move History
Application log files	-	-	Files
Printers spool files	-	-	Files
Driver cache files	-	-	Files
RegEdit Favorites	-	-	Registry items
Memory dumps	-	-	Files
Registry Stream MRU	-	-	Registry items
Last Visited Locations	-	-	Registry items
Open Locations	-	-	Registry items
Run History	-	-	Registry items



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Find file History	-	-	Registry items
Start menu order history	-	-	Registry items
7-Zip	Clear Left Path, Clear Right Path, Copy and Move Path History, Folder History, Extract Paths, Archive Names	Clear Left Path, Clear Right Path, Copy and Move Path History, Folder History, Extract Paths, Archive Names	Clear Left Path, Clear Right Path, Copy and Move Path History, Folder History, Extract Paths, Archive Names, Favorite Directories
Vuze	Cache, Temp	Cache, Logs, Temp	Cache, Logs, Temp
Wordpad	Recent File List	Recent File List	Recent File List
iTunes	Cache	Cache	Cache, Library
OpenOffice.org 2.0	Temp, Cache	Temp, Cache	Temp, Cache
CyberLink PowerDVD 9	Recent Video Files, Last Folder	Recent Video Files, Last Folder	Recent Video Files, Last Folder
aTunes	Cache	Cache, Logs	Cache, Logs, Favorites
Microsoft SyncToy	Last Folder Pair, Temp	Last Folder Pair, Logs, Temp	Last Folder Pair, Logs, Temp
Inkscape	-	Errors Logs	Errors Logs
eMule	-	Downloads Log, Logs	Downloads Log, Logs
SRWare Iron	Cache, History, Cookies	Cache, History, Cookies	Cache, History, Cookies
MS Paint	Recent Files List	Recent Files List	Recent Files List
Avira	Temp	Log Files, Reports, Temp	Log Files, Reports, Temp
avast! Antivirus	-	Logs, Reports	Logs, Reports
InfraRecorder	-	Logs	Logs
Revo Uninstaller	-	Last Update Check	Last Update Check
Strong-DC++	-	Logs, File Lists	Logs, File Lists, Favorites

Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Skype	-	Logs	Logs
AmiBroker	Recent File List	Recent File List	Recent File List
O&O Defrag	-	Reports	Reports
BS.Player	Cache	Cache, Logs	Cache, Logs
MediaMonkey	URL History, Search, Last Path List	URL History, Search, Last Path List	URL History, Search, Last Path List
GIMP	Thumbnails, File History	Thumbnails, File History	Thumbnails, File History
aMSN	Cache, Display Picture	Cache, Logs, Display Picture	Cache, Logs, Display Picture
Nero 9	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, ShowTime Recent PlayLists, SoundTrax Recent File List, WaveEditor Recent File List	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, ShowTime Recent PlayLists, SoundTrax Recent File List, WaveEditor Recent File List, Thumbnails, Logs	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, ShowTime Recent PlayLists, SoundTrax Recent File List, WaveEditor Recent File List, Thumbnails, Logs
Mendeley Desktop	Last Documents Location	Last Documents Location, Logs	Last Documents Location, Logs
IZArc	Recent File List, Recent Used Paths	Recent File List, Recent Used Paths	Recent File List, Recent Used Paths, Favorites
Evernote	Last Login, Recent File List, Search History	Last Login, Log Files, Recent File List, Search History	Last Login, Log Files, Recent File List, Search History
ESET	-	Scan Logs	Scan Logs
eBoostr	-	-	Applications
Exact Audio Copy	Recent Paths	Recent Paths	Recent Paths
FL Studio 8	Most Recently Used Files, Search	Most Recently Used Files, Search	Most Recently Used Files, Search, Favorites
Capture One 4	-	Logs	Logs, History
ImgBurn	Most Recently Used Files	Log Files, Most Recently Used	Log Files, Most Recently Used



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
		Files, Queue Files, Project Files	Files, Queue Files, Project Files
Adobe Illustrator CS4	Recent File List	Recent File List	Recent File List
Windows Live	Recently Used Addresses	Recently Used Addresses, Logs	Recently Used Addresses, Logs
Total Uninstall	Cache	Analyzed Programs, Cache	Analyzed Programs, Monitored Programs, Cache
PDF-Viewer	Last Opened, Last View, Export, Last Used Fonts	Last Opened, Last View, Export, Find History, Last Used Fonts, URL History	Last Opened, Last View, Export, Find History, Last Used Fonts, URL History
Songbird	Icons & Cache	Icons & Cache	Icons & Cache
Adobe Photoshop CS4	Recent File List, Cache	Recent File List, Cache	Recent File List, Cache
Adobe InDesign CS4	Recent File List, Cache	Recent File List, Cache	Recent File List, Cache
Nero 7 Ultra Edition	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, SoundTrax Recent File List, SoundTrax Last Project Path, WaveEditor Recent File List, WaveEditor Last Project Path, Nero Vision Recent File List	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, SoundTrax Recent File List, SoundTrax Last Project Path, WaveEditor Recent File List, WaveEditor Last Project Path, Nero Vision Recent File List, Logs	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, SoundTrax Recent File List, SoundTrax Last Project Path, WaveEditor Recent File List, WaveEditor Last Project Path, Nero Vision Recent File List, Logs
Nero 8	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, SoundTrax Recent File List, SoundTrax Last Project Path, WaveEditor Recent File List, WaveEditor Last Project Path	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, SoundTrax Recent File List, SoundTrax Last Project Path, WaveEditor Recent File List, WaveEditor Last Project Path, Thumbnails	Burning ROM Recent File List, CoverDesigner Recent File List, PhotoSnap Recent File List, PhotoSnap Viewer Recent File List, SoundTrax Recent File List, SoundTrax Last Project Path, WaveEditor Recent File List, WaveEditor Last Project Path, Thumbnails
UltraVNC	-	Logs	Logs



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Foxit Reader	Recent File List	Recent File List	Recent File List
Media Player Classic	Recent File List, Recent Dub List	Recent File List, Recent Dub List	Recent File List, Recent Dub List, Favorites, Current Playlist
OpenOffice.org 3.1	Cache, Temp	Cache, Temp	Cache, Temp
AbiWord	Garbage	Garbage	Garbage
Ad-Aware	-	Logs, Scan Statistics	Logs, Scan Statistics
AVG	Тетр	Logs, Temp, History	Logs, Temp, History
Acronis	-	Logs	Logs
Alcohol 120%	Last Image File Path, Most Recent Used Images	Logs, Last Image File Path, Most Recent Used Images	Logs, Last Image File Path, Most Recent Used Images
CuteHTML	Recent File List, Navigation Pane Current Dir	Recent File List, Navigation Pane Current Dir, Install Log	Recent File List, Navigation Pane Current Dir, Install Log
The KMPlayer	Recent File List	Recent File List	Recent File List, Bookmarks
DVD Shrink	Last Opened Path, Import Folder	Last Opened Path, Import Folder	Last Opened Path, Import Folder
GOM Player	Last Opened Folder, Recent Url	Last Opened Folder, Recent Url	Favorites, Last Opened Folder, Recent Url
Google Video Player	CACHE	CACHE	CACHE
Picasa 3	-	Cache	Cache
PowerZip	Recent File List, Extract Paths, Last Used Folders	Recent File List, Extract Paths, Last Used Folders	Recent File List, Extract Paths, Last Used Folders
WildBit Viewer	Cache	Cache	Cache
IrfanView	Recent File List, Thumbnails	Recent File List, Thumbnails	Recent File List, Thumbnails
Ulead GIF Animator 5	Recent File List, Last Used Folders	Recent File List, Last Used Folders	Recent File List, Last Used Folders

Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Paint.NET	Recent File List, Last Opened Path	Recent File List, Last Opened Path	Recent File List, Last Opened Path
Windows Movie Maker	Recent File List, Last Opened Paths	Recent File List, Last Opened Paths	Recent File List, Last Opened Paths
Daemon Tools Lite	Recent File List	Recent File List	Recent File List
UltimateZip	Recent Files & Folders	Recent Files & Folders	Recent Files & Folders
Microsoft Office Word Viewer	Recent File List	Recent File List	Recent File List
Adobe DreamWeaver CS4	Recent File List	Recent File List	Recent File List
Microsoft Office Excel Viewer 2003	Recent Files	Recent Files	Recent Files
Microsoft Office Excel Viewer 2007	Recent Files	Recent Files	Recent Files
Easy GIF Animator	Last Opened Paths	Last Opened Paths	Last Opened Paths
Maxthon2	Temp, Recent URL, History, Search History	Temp, Recent URL, History, Search History, Log	Temp, Recent URL, History, Search History, Last Session, Log
FeedDemon	Typed URLs, Search Keywords	Typed URLs, Search Keywords	Typed URLs, Search Keywords
Norton 360	-	Log	Log
Rapidshare Auto Downloader	-	Logs	Logs, Completed Downloads List
WordPerfect Office X4	WordPerfect Lighting, WordPerfect Mail, Presentations X4, Quattro Pro X4, WordPerfect X4	WordPerfect Lighting, WordPerfect Mail, Presentations X4, Quattro Pro X4, WordPerfect X4, History	WordPerfect Lighting, WordPerfect Mail, Presentations X4, Quattro Pro X4, WordPerfect X4, History
Go!Zilla	Recent URLs, Most Recent Used	Recent URLs, Most Recent Used	Recent URLs, Most Recent Used, Download History
3GP Player 2009	-	Log	Log

Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Team Viewer	Last Connections, Temp	Logs, Last Connections, Temp	Logs, Last Connections, Temp
SmartFTP Client	History	Logs, History	Favorites, Logs, History
COWON Media Center - jetAudio	Convert Audio Recent Folder, Convert Audio Folder Entries, Convert Video Recent Folder, Convert Video Folder Entries, Rip CD Recent Folder, Rip CD Folder Entries, Record Recent Folder, Record Folder Entries, URL History, Recent File Folder Entries, Burn CD Recent Folder, JetCast Recent Folder, Recent Folder, Jet-Lyric Recent Folder, Jet-Lyric Recent Folder, Jet-Recorder Recent Used Files, Jet- Recorder Recent Used Folders, Jet-Trim Recent Used Folders, Jet Video Copy Recent Used Files, Jet Video Copy Recent Used Folders, Cache	Convert Audio Recent Folder, Convert Audio Folder Entries, Convert Video Recent Folder, Convert Video Folder Entries, Rip CD Recent Folder, Rip CD Folder Entries, Record Recent Folder, Record Folder Entries, URL History, Recent File Folder Entries, Burn CD Recent Folder, JetCast Recent Folder, JetCast Logs, Recent Folder, JetCast Logs, Recent Folder, Jet-Lyric Recent Folder, Jet-Recorder Recent Used Files, Jet-Recorder Recent Used Folders, Jet-Trim Recent Used Folders, Jet Video Copy Recent Used Files, Jet Video Copy Recent Used Folders, Cache	Convert Audio Recent Folder, Convert Audio Folder Entries, Convert Video Recent Folder, Convert Video Folder Entries, Rip CD Recent Folder, Rip CD Folder Entries, Record Recent Folder, Record Folder Entries, URL History, Recent File Folder Entries, Burn CD Recent Folder, JetCast Recent Folder, JetCast Logs, Recent Folder, JetCast Logs, Recent Folder, Jet-Lyric Recent Folder Jet-Recorder Recent Used Files, Jet-Recorder Recent Used Folders, Jet-Trim Recent Used Folders, Jet Video Copy Recent Used Files, Jet Video Copy Recent Used Folders, Cache
PrimoPDF	Recent Files	Recent Files	Recent Files
Babylon	Icons	Icons, Logs, History	Icons, Logs, History
Maxthon	Last Visited Url, SearchBar History	Browsing History, Last Visited Url, SearchBar History	Crash Log, Browsing History, Last Visited Url, SearchBar History
WordWeb	-	-	Bookmarks
FTP Voyager 15	Recent Files, Find History	Recent Files, Find History	Recent Files, Find History
SlimBrowser	SearchBar History, Recent Closed Websites	SearchBar History, Recent Closed Websites, Browsing History	SearchBar History, Recent Closed Websites, Browsing History
CoffeeCup	Recent Files, Projects, Links, Temp	Recent Files, Projects, Links, Install Log, Temp	Recent Files, Projects, Links, Install Log, Temp
Google Earth	Search History	Search History, Icons Cache	My Places, My Places Backup Search History, Icons Cache
ZipGenius	Paths	Paths	Paths

Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Google Toolbar	Search History	Search History	Search History
Pegasus Mail	Search History	Install Log, Search History	Install Log, Search History
Norton AntiVirus	-	Logs	Logs
Yahoo! Widgets	Recent Widgets	Recent Widgets	Recent Widgets, Loaded Widgets
Trend Micro Internet Security	Тетр	Logs, Temp	Logs, Temp
Macromedia	Recent Movies, Recent Casts	Recent Movies, Recent Casts	Recent Movies, Recent Casts
HyperSnap 6	Recent File List, Last Opened Path	Recent File List, Last Opened Path	Recent File List, Last Opened Path
FxFoto	Recent Files	Recent Files	Recent Files, Favorites
DVD Power Burner	Recent File List	Recent File List	Recent File List
Norton Internet Security	-	Logs	Logs
High-Logic FontCreator	Recent File List	Recent File List	Bookmarks, Recent File List
Safari	Cookies	Download History, Browsing History, Cookies	Download History, Browsing History, Cookies
AceFTP 3 Pro	Cache	Cache	Cache
Abrosoft FantaMorph	Recent Files	Recent Files	Recent Files
Camtasia Studio 6	MenuMaker Recent File List, MenuMaker Recent Used Paths, Recorder Recent Used Paths, Studio Recent File List, Studio Recent Used Paths, Theater Recent File List, Theater Recent Used Paths	MenuMaker Recent File List, MenuMaker Recent Used Paths, Recorder Recent Used Paths, Studio Recent File List, Studio Recent Used Paths, Theater Recent File List, Theater Recent Used Paths	MenuMaker Recent File List, MenuMaker Recent Used Paths, Recorder Recent Used Paths, Studio Recent File List, Studio Recent Used Paths, Theater Recent File List, Theater Recent Used Paths

Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
NoteTab Light	Find Dialog, Replace Dialog, Search Files	Find Dialog, Replace Dialog, Search Files	Favorites, AutoLoad, Find Dialog, Replace Dialog, Search Files
FileStream TurboZIP	Recent Used Paths, Recent File List	Recent Used Paths, Recent File List	Recent Used Paths, Recent File List
Zultrax P2P	Cache	Cache	Cache
BitZipper 2009	Recent Files & Folders	Recent Files & Folders	Recent Files & Folders, Favorites
Google Desktop	Last Wallpaper	Last Wallpaper	Last Wallpaper
The Print Shop 21	Recent Files	Install Log, Recent Files	Install Log, Recent Files
Quick Zip	Recent Files, Search History	Recent Files, Search History	Bookmarks, Recent Files, Search History
Flock	Cookies, Cache	Install Log, Download History, Browsing History, Cookies, Cache	Install Log, Download History, Browsing History, Cookies, Cache, Crash Reports
xplorerÂ <sup>2</sup> pro	Search History, Folder History, Scrap Recent File List	Search History, Folder History, Scrap Recent File List	Search History, Folder History, Scrap Recent File List, Favorites
Miro	-	-	Icon Cache
Inspic	-	History	History
MP3 Rocket	Cache	Cache, Logs	Cache, Logs
Video Download Toolbar	Search History	Search History	Search History
Active@ ISO Burner	Recent Files	Recent Files	Recent Files
FlashGot	-	Logs	Logs
AtomixMP3	-	History, Install Log	History, Install Log
MP3 To Ringtone Gold	Recent Files	Recent Files	Recent Files



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Core FTP	-	Logs	Logs
Sony Sound Forge 9.0	Recent Files & Folders	Recent Files & Folders	Recent Files & Folders
Audacity	Recent File List, Recent Used Paths	Recent File List, Recent Used Paths	Recent File List, Recent Used Paths
Advanced DVD Player	-	-	Playlists
DivX Player	Recent Files & Folders	Recent Files & Folders	Recent Files & Folders
Express Burn	Recent Used Paths	Recent Used Paths	Recent Used Paths
aMule	-	Logs	Logs
Emesene	-	Logs	Logs
SeaMonkey	Cache, Cookies	Cache, Cookies, Browsing History, Download History	Cache, Cookies, Browsing History, Download History
Adobe Flash Player	Cookies, Cache	Cookies, Cache	Cookies, Cache
EasyTAG	-	Logs	Logs, History
Cabos	Cache	Cache	Cache, Download Queue
FrostWire	Cache	Cache	Cache
Free YouTube	Last Output Folder Path	Logs, Last Output Folder Path	Logs, Last Output Folder Path
Spamihilator	-	-	Update Log
XChat 2		Logs	Logs
K-Meleon	Cache, Cookies	Cache, Cookies, Browsing History	Cache, Cookies, Browsing History
Free Download Manager 3.0	Search History	Search History, Download History, Deleted Downloads	Search History, Download History, Deleted Downloads
Ares	Search History	Search History	Search History



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
FeedReader	Cache	Cache	Cache
iMesh	IM Pictures, Thumbnails Cache, Search History	IM Pictures, Thumbnails Cache, Search History	IM Pictures, Thumbnails Cache, Search History
PDFCreator	Recent Files & Folders	Logs, Recent Files & Folders	Logs, Recent Files & Folders
SharpReader	Cache	Cache, Logs	Cache, Logs
MailWasher Free	-	Logs	Logs
LeechGet	Last Used Download Paths	Download History, Last Used Download Paths	Download History, Last Used Download Paths
AIMP2	Last Folder	Last Folder	Bookmarks, Last Folder
TeraCopy	Last Target Folder	Transfer Log, Last Target Folder	Transfer Log, Last Target Folder
Axialis IconWorkshop	Temp, Recent Files List, Recent Folders, Search Files, Last Drive Icon File	Temp, Recent Files List, Recent Folders, Search Files, Last Drive Icon File	Temp, Recent Files List, Favorites, Recent Folders, Search Files, Last Drive Icon File
dBpoweramp Music Converter	Last Accessed Folder, Last Output Paths	Last Accessed Folder, Last Output Paths	Last Accessed Folder, Last Output Paths
Google SketchUp 7	Recent Files List	Recent Files List	Recent Files List
Quintessential Media Player	URL History, Last Accessed Folder	URL History, Last Accessed Folder	URL History, Last Accessed Folder
Zoom Player	Last Accessed Folder	Last Accessed Folder, Cache	Last Accessed Folder, Cache
Corel Paint Shop Pro Photo X2	Recent File List, Cache, Thumbs	Recent File List, Cache, Thumbs	Recent File List, Cache, Thumbs
IsoBuster	Recent File List, Last Opened Paths	Recent File List, Last Opened Paths	Recent File List, Last Opened Paths
PowerArchiver	Recent Files	Recent Files	Favorites, Recent Files
Corel Paint Shop Pro Photo XI	Recent File List, Cache, Thumbnails, Recent Used Paths	Recent File List, Cache, Thumbnails, Recent Used Paths	Recent File List, Cache, Thumbnails, Recent Used Paths

Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Winamp	Recent URL	Recent URL	Bookmarks, Recent URL
CuteFTP 8 Lite	Recent Files	Cache, Logs, Recent Files	Cache, Logs, Recent Files
Universal Extractor	Recent File List, Destination Directory History	Recent File List, Destination Directory History	Recent File List, Destination Directory History
FantasyDVD Player	-	-	Favorites
Morpheus Music	Search History, Cache	Search History, Cache	Search History, Cache
Morpheus Photo Morpher	Recent Files	Recent Files, Mail History	Recent Files, Mail History
HiDownload	Recent Download Locations, Recent Downloaded URL	Recent Download Locations, Recent Downloaded URL	Recent Download Locations, Recent Downloaded URL
IncrediMail	Last Emoticon File	Last Emoticon File, Logs	Last Emoticon File, Logs
AI RoboForm	Cache, Recent Files List and Search History	Cache, Recent Files List and Search History	Cache, Recent Files List and Search History
BitDefender Free Edition	-	Logs	Logs
ClamWin Free Antivirus	-	Logs	Logs
Memeo Share	Cache	Cache, Logs	Cache, Logs
McAfee VirusScan	-	Logs	Logs
Virtual DJ		Search Log, Track History Log, Cache	Search Log, Track History Log, Cache
Panda Cloud Antivirus	-	Cache	Cache
Digsby	-	Logs	Logs
Real Alternative	Cookies	Cookies	Cookies
XBMC Media Center	Cache	Logs, Cache	Logs, Cache



Privacy Cleaner - Default Clean Profiles			
Program	Basic Clean	Normal Clean	Aggressive
Live	Cache	Cache, Logs	Cache, Logs
PhotoScape	-	-	Favorites
ACE Mega CoDecS Pack	GSpot Recent Files, Asf to Matroska Recorder Recent Files, VidCap Recent Files, abcAVI Tag Editor Last Opened Paths, WinDV Recent Files, AVIPreview Recent Files, ASF View Recent Files, File Merger Recent Files, GraphEdit Recent File List, GraphEdit URL History, AVI CoDecS Last Opened Path, LAMEdropXPd Recent Files	GSpot Recent Files, Asf to Matroska Recorder Recent Files, VidCap Recent Files, abcAVI Tag Editor Last Opened Paths, Windows Media Diagnostic Tools Logs, WinDV Recent Files, AVIPreview Recent Files, ASF View Recent Files, DivX Fix Log, File Merger Recent Files, GraphEdit Recent File List, GraphEdit URL History, AVI CoDecS Last Opened Path, LAMEdropXPd Recent Files	GSpot Recent Files, Asf to Matroska Recorder Recent Files, VidCap Recent Files, abcAVI Tag Editor Last Opened Paths, Windows Media Diagnostic Tools Logs, WinDV Recent Files, AVIPreview Recent Files, ASF View Recent Files, DivX Fix Log, File Merger Recent Files, GraphEdit Recent File List, GraphEdit URL History, AVI CoDecS Last Opened Path, LAMEdropXPd Recent Files
BitDefender Free	-	Logs	Logs
CloneDVD4	Recent Files & Folders	Recent Files & Folders	Recent Files & Folders
DVDFab 6	Recent Files List	Logs, Recent Files List	Logs, Recent Files List
AnyDVD	Recent Files List	Recent Files List	Recent Files List
AVG Free	Temp	Logs, Temp, History	Logs, Temp, History
OpenOffice.org 3.2	Cache, Temp	Cache, Temp	Cache, Temp
avast! Free Antivirus	-	Logs, Reports	Logs, Reports

#### Table of Default Profiles of Disk Cleaner

Disk Cleaner Default Clean Profiles				
	Quick Clean	Full Clean		



Disk Cleaner Default Clean Profiles				
Locations covered	Recycle Bin Windows Log Files / Recent file list Windows Temp Files / Windows temp Directory	Recycle Bin Windows Log Files / Recent file list Windows Temp Files / Windows temp Directory Other / Unused Icons		

Area Name			
	Definitions		
Ignore List	Some files/paths can be specified here using their names, so that the Comodo Disk Cleaner ignores them during scanning		
Filter Entries (list)	The Disk Cleaner searches the files/paths for a specific name entered by the user. After the search, Disk Cleaner can remove all the references for the specific name found from your computer.		
Filter Entries	The Disk Cleaner searches the disk for a specific name entered by the user. After the search, the Disk Cleaner can remove all the references for the specific name found in the files		
Other	Selecting this option automatically selects all the types in this category. Unused Icons		
	Selecting this option checks for the icons and will attempt to open the program represented by the icon. If the program could not be opened, this means that the icon is junk and can be deleted. The icons will be added on a list and the user has the choice to unselect or select certain icons for deletion.		
Recycle Bin	The files held in the Recycle bin folder can be removed.		
Windows Log Files	Windows maintains Log files for various processes like scan disk etc. in respective folders. Selecting this option scans the selected paths for log and history files for removal. Selecting this option automatically selects all the types in this category.		
	Debug Memory Log Files		
	Windows generates log files when it makes memory debug. Selecting this option scans for this type of folders, and deletes them at user request.		
	Recent Files List		
	Windows stores the list of all the files that have recently been used by the user in the HKCU\Software\Microsoft\Windows\ CurrentVersion\Explorer\RecentDocs registry key. Selecting this option scans the path for this type of files for removal.		
Windows Temp Files	Many applications and windows create temporary files which can occupy a lot of space. windows, temporary files are represented by the extensions *.temp, *.\$\$\$, *.~mp. Selecting the option scans the selected paths for temporary files for removal. Selecting this option automatically selects all the types in this category.		
	Windows Temp Directory		



Disk Cleaner Definitions of Disk Cleaner Areas		
	Scans Temp directory of Windows and removes all the files that are not in use. Windows Update Temp Files	
	The Windows updates received from the server are stored in a temp directory for installation during shutdown. These files reside in the folder even after the updates are installed. Selecting this option scans the folder and deletes the files that are not in use.	

# Appendix 5 - Comodo System Utilities versions

Functionality	CSU FREE	CSU PRO	CSU PRO (trial)
Disk Clean	V	Ø	Limited to clean 25 items
Registry Clean			Limited to clean 25 items
Privacy Clean	$\checkmark$		Limited to clean 25 items
Constantly growing Database of entries for all the above	$\checkmark$	V	
Registry Defrag	$\checkmark$	$\checkmark$	
Disk Duplicates			
Force Delete			
Shredder	$\checkmark$		
Auto Run Manager	$\checkmark$		
Safe Delete	X		
Registry Protection	X		
Instant Scan	X	V	
Active Clean	×		Limited to clean 25 items
Advanced features in Auto Run Manager	X	V	Limited functionality

#### About Comodo

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

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

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