auslogics®

DISK DEFRAG

FREE

Help Manual

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Contents

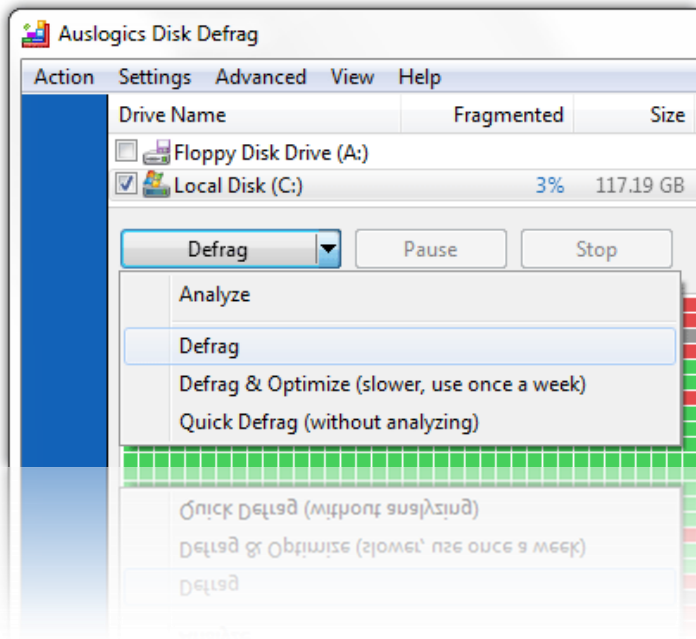
Introduction

Auslogics Disk Defrag Free is a fast and easy to use tool that will help you to eliminate file fragmentation and optimize your hard drives for maximum performance.

Its advanced disk optimization techniques guarantee the best possible results and its extensive features will satisfy both novice and experienced users.

High quality of this program has been proven by over **11,000,000** users worldwide.

Here is a brief overview of the features that allow the program to optimize and improve your system performance:



Feature	Description
File defragmentation	Defragments files and folders by merging their pieces together
Free space consolidation	Merges scattered pieces of free space into a contiguous block, preventing fragmentation of newly created files
System files smart placement	Moves system files to the faster part of the disk, minimizing the time needed for hard drive to access them
Clearing the MFT ReservedZone	Moves data files from the MFT Reserved Zone into the rest of the disk space, preventing MFT fragmentation
Single file defragmentation	Can save your time by defragmenting only files that you want to, instead of defragmenting an entire hard drive
Simultaneous defragmentation	Can defragment several drives at once, greatly reducing the time needed for defragmentation
VSS-optimized algorithm	Minimizes growth of the VSS storage area and reduces the chance of overwriting previous VSS snapshots
Auto-Defragmentation	Can defragment disks automatically in the background when your system goes idle

Feature	Description
Scheduled defragmentation	Has a flexible scheduler that allows you to set the most suitable time span for defragmenting disks
Resource usage management	You can restrict the use of system resources by the defrag process to minimize interference with your other activities
Clearing temporary files	Can clear current user and Windows temporary folders to lessen the time needed for defragmentation
File fragments viewer	Shows you the list of all fragmented files and their fragments location on the disk
File/Folder exclusion	If there is encrypted data or other files that should not be moved, they can be excluded from defragmentation
Large fragments handling	Can be configured to ignore large file fragments as their defragmentation doesn't increase file read speed much
Multi-terabyte volumes support	Has a powerful engine that allows the program to defragment large disks of several terabytes
Power saving for laptops	Can be configured to limit use of system resources when laptop runs on battery power
Command line support	Supplied with a command line tool - "cdefrag.exe", which can be found in the program folder once it is installed

Installing the Program

System Requirements

Before installing the program, check that your computer meets the following hardware and software requirements:

Operating System	Minimal Hardware Configuration
Windows 8 (32-bit and 64-bit supported)	25 MB of available hard-disk space
Windows 7 (32-bit and 64-bit supported)	32 MB RAM or more
Windows Vista (32-bit and 64-bit supported)	
Windows 2008 (32-bit and 64-bit supported)	
Windows XP (32-bit and 64-bit supported)	

Installation

It is recommended that you close all other applications when running the **Setup** so that they do not interfere with the installation.

1. Start the **Setup Wizard** by double-clicking on the downloaded file.

2. On the Welcome screen, click **Next**.

3. Read through the License Agreement on the screen that follows, select **I Accept the Agreement** and click **Next**.

4. Choose the destination folder where the program files will be placed. By default, the installer puts the program in *C:\Program Files\Auslogics\Auslogics Disk Defrag*, but you can click **Browse** and select a different destination, if you prefer. Click **Next** to continue.

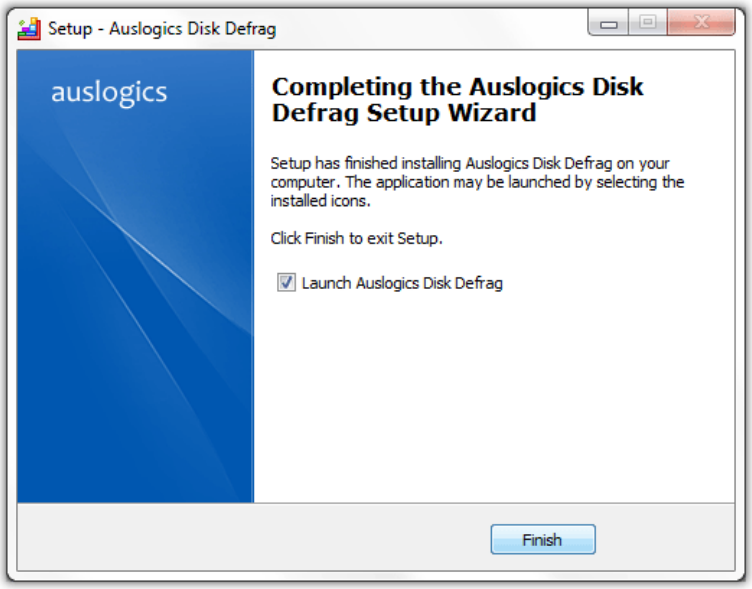
5. Select the Start menu folder the program shortcuts will be placed in. By default, they are placed in *Auslogics\Disk Defrag*, but you can specify a different folder, if you prefer.Click **Next** to continue.

6. If you would like to install the Auslogics Toolbar add-on for your web-browser and set Ask.com as a homepage, you can do so by checking appropriate boxes on the next screen (they are checked by default). If you prefer not to do this, please uncheck the boxes. Click **Next** to continue.

7. If you would like to create a desktop icon for the program, you can do so by checking the box on the next screen (it is checked by default). If you prefer not to install a desktop icon, uncheck the box. This is the last option you can adjust in the Setup Wizard. Once you click **Next** on this screen, the installation will begin. It will only take a few moments.

8. If you have an older version of Auslogics Disk Defrag Free, the installer will uninstall it automatically.

9. Once installation is complete, a screen will be displayed to confirm that Auslogics Disk Defrag Free was successfully installed. You can check a box to automatically launch the program after closing the Setup Wizard (it is checked by default) or uncheck it to later launch the program manually.



To launch the program later, click on the program icon on your Desktop, if an icon was installed. Alternatively, you can go to the **Start menu**, select **All Programs** > **Auslogics** > **Auslogics Disk Defrag** to launch the program.

Uninstalling the Program

1. To uninstall the program, open the **Control Panel** from the **Windows Start Menu**.

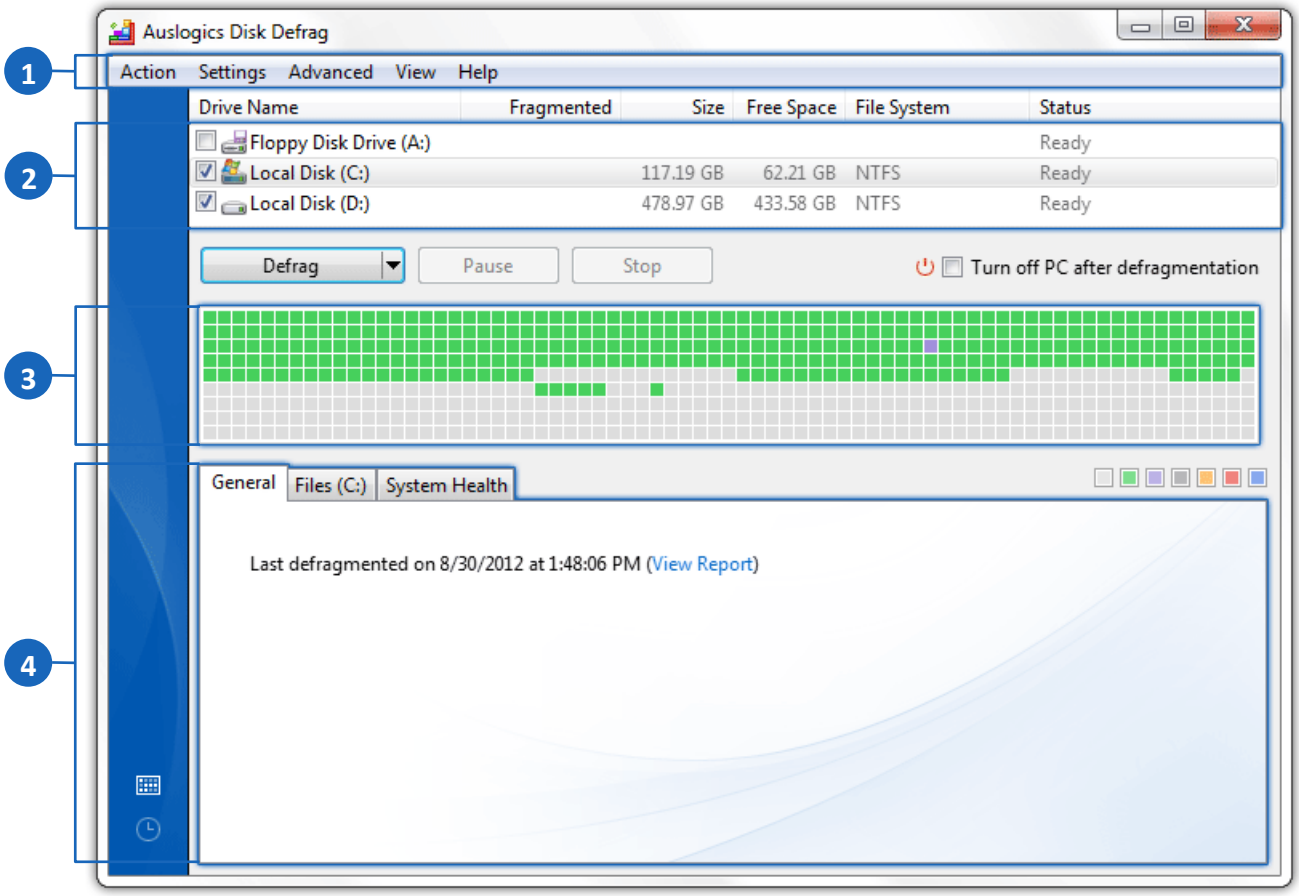
2. In Windows 7 or Vista double-click **Programs and Features**, or, if in category view, select **Programs** > **Uninstall a Program**, then select **Auslogics Disk Defrag** from the programs list and click **Uninstall**.

3. In Windows XP you will see **Add/Remove Programs** category instead of **Programs and Features** in the **Control Panel** - double-click on this category, select **Auslogics Disk Defrag** from the list and click **Remove** or **Add/Remove**, depending on what view you are using.

4. This will completely remove the program from your computer, including all associated files and folders.

Interface

The following picture shows the main program window and its components:



1	**Main Menu**
2	**Disks List**
3	**Cluster Map**
4	**Operation Results Summary Section**

Available Defrag Algorithms

To give you a general idea of what each type of operation does to improve system performance, here is a brief overview of each operation's functions:

Operation Type / Action	Analyze	Defrag	Quick Defrag	Defrag & Optimize	Check Selected	Check & Correct Selected
Analyzes disks for fragmentation	✓	✓	✗	✓	✗	✗
Defragments files and folders	✗	✓	✓	✓	✗	✗
Defragments free space on disks	✗	✗	✗	✓	✗	✗
Optimizes system files placement*	✗	✗	✗	✓	✗	✗
Moves data files from the MFT Reserved Zone	✗	✗	✗	✓	✗	✗
Checks disks for errors	✗	✗	✗	✗	✓	✓
Corrects errors found on disks	✗	✗	✗	✗	✗	✓

***Note.** *This feature is disabled by default. You can enable it under the "**Algorithms**" tab in the program settings.*

Basic Usage

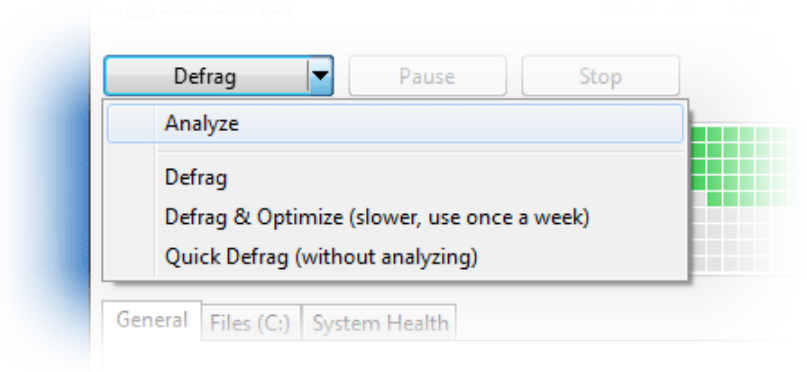
Analyzing Disks

Before you launch defragmentation or optimization, disk analysis is recommended. It reads disk information and shows you a true picture of the disk's condition and recommended actions.

To perform disk analysis, follow these steps:

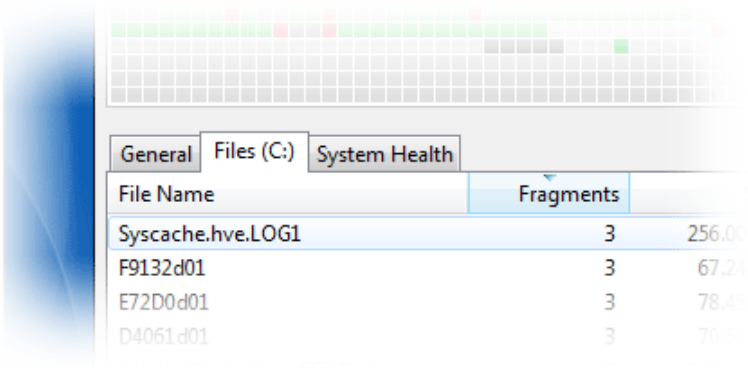
1. In the list of disks, select the disk you would like to analyze by checking the box next to its name.

2. Click on the arrow on the **Defrag** button andselect **Analyze** from the drop-down menu.



While the operation is underway, its current status is shown in the main pane, as well as in the disks list next to the name of the disk being analyzed.

3. Upon completion, analysis results will be displayed in the **Operation Results Summary Section**.You can switch to the **Files** tab to view a list of fragmented files and, if desired, select the files you want to defragment individually.



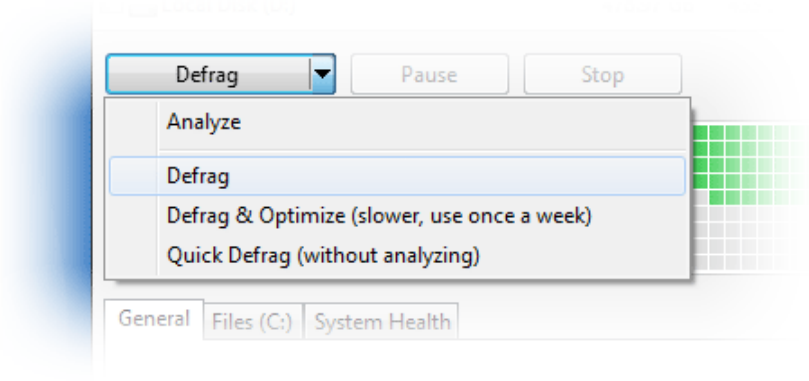
When you select a file from the list, the location of its fragments will be highlighted on the cluster map.

Clicking on a block on the cluster map will produce an additional tab - **Selected Files -** which will let you view lists of files in the block that you selected on the map.

Defragmenting

When you are ready to start defragmenting, follow these steps:

1. In the list of disks, select the disk you would like to defragment by checking the box next to its name and click the **Defrag** button below the disks list.



While the operation is underway, its current status is shown in the main pane, as well as in the disks list next to the name of the disk being defragmented.

2. Upon completion, defragmentation results will be displayed in the main pane with a brief description of the result shown in the list of disks.

Optimizing

Unlike simple defragmentation, "Defrag & Optimize" mode applies several optimization techniques:

- **Free space consolidation**
  Free space on a disk is often split into many small gaps between files. Windows fills these gaps with newly created or extended files. The more fragmented the free space is, the more fragmented new files will be. Disk Defrag merges free space into a large contiguous block during optimization process. This technology effectively prevents further files fragmentation and increases file write speed.

- **System files smart placement**
  System files are necessary for the operating system to perform its numerous functions. Commonly used by Windows, system files may be scattered all over the disk and intermixed with regular data files. Disk Defrag moves them to the faster part of the disk. Such intelligent way of defragmentation minimizes time needed for HDD to access system files and thus improves overall computer performance.

  Note. *This feature is disabled by default. You can enable it under the "**Algorithms**" tab in the program settings.*

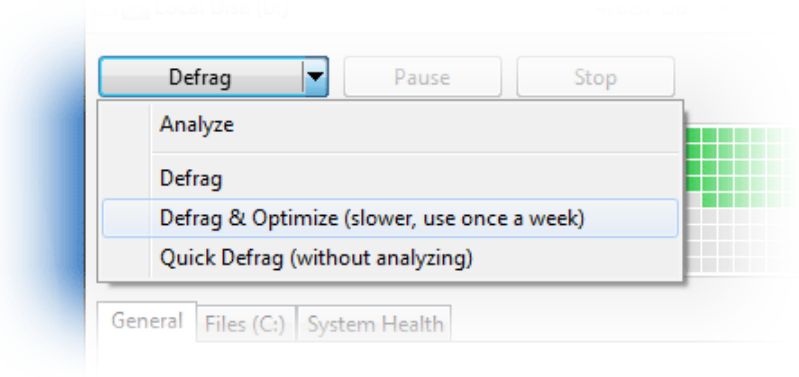
- **Clearing the MFT Reserved Zone**
  Normally, NTFS file system reserves about 12.5% of the disk volume for the MFT records (a place where information about every file and directory is stored). However, when the rest of the disk space is getting low, the MFT Reserved Zone will be used for storing regular files. This may lead to MFT fragmentation.

  Disk Defrag replaces regular files from the MFT Reserved Zone into the rest of the disk space, allowing NTFS to allocate contiguous space for the MFT records and thus to prevent its fragmentation.

To perform disk optimization, follow these steps:

1. In the list of disks, select the disk you would like to optimize by checking the box next to its name.

2. Click on the arrow on the **Defrag** button and select **Defrag & Optimize** from the drop-down menu.



This will launch optimization. While the operation is underway, its current status is shown in the main pane, as well as in the disks list next to the name of the disk being optimized.

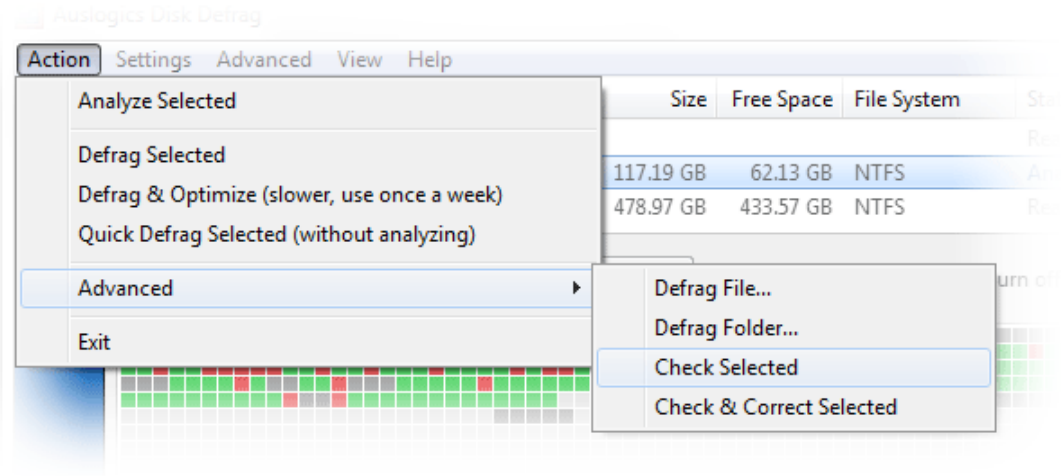
Checking Disks for Errors

Before you launch defragmentation, it is a good idea to check your disks for errors. Whenever a disk has errors, there is a risk that data may get corrupted during defragmentation. By checking for errors and fixing any errors that are found, you ensure that no data will get lost or corrupted when you launch defragmentation.

To check a disk for errors, follow these steps:

1. In the list of disks, select the disk you would like to scan for errors by checking the box next to its name.

2. Select the **Action** tab in the main menu and go to **Advanced** > **Check Selected**. This will launch a standard Windows disk check tool, called **Chkdsk** (Chkdsk.exe).



3. If errors were found during the check, you should try fixing them before you proceed to defragment the disk. To do this, select the **Action tab** in the main menu and go to **Advanced** > **Check & Correct Selected**.

Scheduling Defragmentation

In order to keep disk fragmentation in check and support good system health and consistent speed, it is important to run defragmentation regularly. Launching defragmentation manually when you remember to does not provide the level of maintenance needed for best results. This is why Disk Defrag Free comes equipped with the **Scheduler** tool that provides a wide array of options you can configure for scheduling. The **Scheduler** allows you to configure defragmentation by time or set Disk Defrag to run when your PC is in idle state.

Defragmentation by time, is designed to run exactly at the specified time, regardless of whether the program is running.

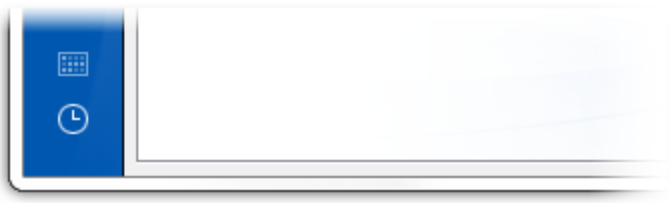
Idle-time defragmentation is launched only when the program is running. It is designed to work in the background for constant disk maintenance. It can be configured to start when the system remains idle for a period of time from 1 to 30 minutes, and to stop when a user resumes activity on the computer.

Here is a brief overview of each of these methods:

Defragmentation by Time	Idle-time Defragmentation
▪ Runs at the specified time even when the program is not running	▪ Runs when system remains idle for a specified period of time, and only when the program is running
▪ Runs in the background and does not interfere with other user activity	▪ Stops when user resumes activity on the computer
▪ Can put an icon in notification area to show when the operation is underway	▪ Runs not more often than once every 12 hours to prevent excessive launches

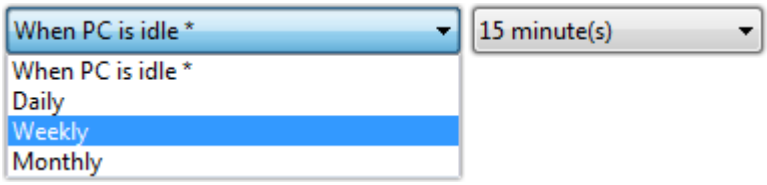
To configure scheduled defragmentation, please follow these steps:

1. Select **Settings** > **Scheduler** from the main menu.Alternatively, you can click on the clock icon in the bottom left corner:



2. In the window that pops up check the **Defragment automatically** box.

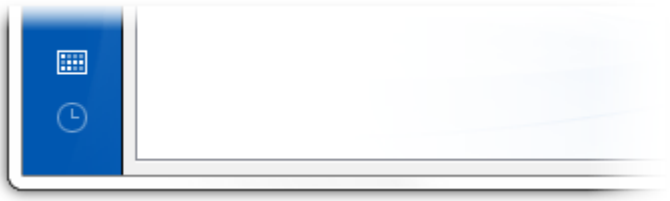
3. Specify frequency andthe time when you want defragmentation to be launched:



4. Select the disks that you want to enable the scheduler for by checking the boxes next to the disks' names.

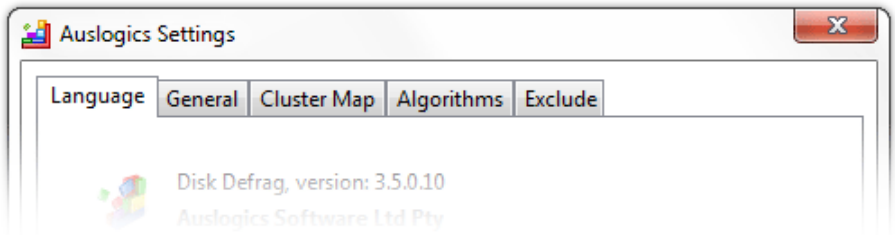
5. You can also set the program not to launch defragmentation when your PC is in battery power mode by checking the appropriate box.

2. When you are done configuring scheduler, you can go back to the main program window by selecting **View** > **List of Disks** from the main menu. Alternatively, click on the cluster icon in the bottom left corner:



Configuring Program Settings

The **Program Settings** manager allows you to change the program's language, looks and behavior, tweak algorithms and set exclusions.To launch the **Program Settings** manager, select **Settings** > **Program Settings** from the Program's main menu. A new window will appear, with settings divided into fivecategories: Language, General, Cluster Map, Algorithms and Exclusions.



Changing Language

Auslogics Disk Defrag Free can be run in the following languages:

English
German
French
Italian
Spanish (Spain)
Spanish (Argentina)
Danish
Dutch
Russian
Polish
Czech
Slovak
Hungarian
Serbian
Portuguese (Brazil)
Portuguese (Portugal)
Japanese
Korean
Chinese (Simplified, PRC)
Chinese (Traditional)
Indonesian
Malay
Turkish

By default, the program is installed in your operating system language, or in English, if your OS language is not supported. To change the program language, follow these steps:

3. Select **Settings** > **Program Settings** from the main menu.

4. Click on the **Language** tab and select the desired language from the drop-down menu.

5. When you are done, click **OK**, or proceed to another tab if you need to change other program settings.

Note. *Please keep in mind that changing program language requires you to restart the application for the changes to take effect.*

General Settings

The **General** tab is where you can specify the program's behavior (whether you want it to start at Windows logon, or be minimized on close, etc.).

Here you can also choose to integrate the program into Windows Explorer, which will add "**Defragment with Disk Defrag"** to its context menu. This will let you defragment files, folders or drives by right-clicking on them in Windows Explorer and selecting the required option from the menu.

To change any of these settings, follow these steps:

1. Select **Settings** > **Program Settings** from the main menu.
2. Click on the **General** tab and make the desired changes.
3. When you are done, click **OK**, or proceed to another tab if you need to change other program settings.

Cluster Map Appearance

Under the **Cluster Map** tab, you can specify the way your cluster map will look in the program window. To change these settings, follow these steps:

1. Select **Settings** > **Program Settings** from the main menu, and click on the **Cluster Map** tab.
2. In the first drop-down menu, choose between bars or squares for displaying cluster blocks.
3. In the next drop-down menu, select one of 12 color schemes for the cluster map.
4. When you are done, click **OK**, or proceed to another tab if you need to change other program settings.

Tweaking Algorithms

The **Algorithms** tab allows you to tweak defragmentation algorithms. The following options are available here:

- **Delete temporary files before defragmenting.**
  This option allows Disk Defrag to clear current user and Windows temporary folders before starting defragmentation. Often useless temporary files take up hundreds of megabytes of disk space. Their deletion will lessen the time needed for defragmentation.

- **Skip fragments larger than.**
  For faster defragmentation results, Disk Defrag allows you to specify not to defragment files whose fragments' sizes are greater than a user-specified size. Since reading large file fragments takes much longer than head positioning, their defragmentation is unnecessary.

- **Move system files to the beginning of the disk.**
  With this option enabled, Disk Defrag will move system files to the faster part of the disk during the optimization process. This minimizes the time needed for the hard drive to access system files.

- **Defragment in VSS compatible mode.**
  The VSS defrag algorithm is used to minimize growth of the VSS storage area caused by file movement during defragmentation. It also reduces the chance of overwriting previous VSS snapshots. We recommend using this option when defragmenting VSS-enabled volumes.

> **Note.** *The issue with loosing system restore points when defragmenting VSS-enabled volumes is exclusive to Vista and later versions of Windows, and does not exist in Windows XP. If you run Disk Defrag on Windows XP, you will not benefit from the VSS-compatible defrag algorithm. Therefore, this option is available only when Disk Defrag is installed on Vista or later Windows versions.*

To change any of these settings, follow these steps:

1. Select **Settings** > **Program Settings** from the main menu.

4. Click on the **Algorithms** tab and make the desired changes.

2. When you are done, click **OK**, or proceed to another tab if you need to change other program settings.

Specifying Exclusions

Under the **Exclude** tab, you can specify files or folders that you do not want the program to defragment. To do that, follow these steps:

1. Select **Settings** > **Program Settings** from the main menu and click on the **Exclude** tab.
2. Click on the **Add…** button and browse your computer for the needed items.
3. When you are done adding items to the list, click **OK**.

To remove a file or folder from the list of exclusions, select the item from the list and click **Delete**.

For any further help, please visit our technical support web page.

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