



PerfectDisk Version 6.0 Getting Started Guide

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Welcome to PerfectDisk

What is PerfectDisk?

Congratulations! You have selected **PerfectDisk®**, the fastest and most complete disk defragmenter ever. PerfectDisk ensures that your Windows® 2003, Windows 2000 and Windows XP systems maintain the best performance possible. PerfectDisk's advanced Smart Placement™ defragmentation technology provides fast, efficient and complete defragmentation of even your largest drives with minimal system resource usage. PerfectDisk's Perfect Management™ technology integrates with Active Directory® to provide for powerful and highly scalable network deployment, configuration and scheduling. As a Certified for Windows 2000 and Designed for Windows XP – Optimized application, PerfectDisk maintains your system performance according to Microsoft®'s highest standards of safety and reliability.

Versions of PerfectDisk Available

PerfectDisk is available as both a workstation product and a server product. Both PerfectDisk Workstation and PerfectDisk Server offer the exact same features including network scheduling, Smart Placement optimization, single pass consolidation of free space, single pass defragmentation of files and offline defragmentation of system files.

PerfectDisk Workstation

PerfectDisk Workstation will only install on workstation versions of Windows.
PerfectDisk Workstation will not install on server versions of Windows.

PerfectDisk Server

PerfectDisk Server will install on both workstation and server versions of Windows.

PerfectDisk and Windows Version Support

PerfectDisk V6.0 for Windows Server 2003, Windows 2000 and Windows XP
PerfectDisk V6.0 runs on Windows Server 2003, Windows 2000 (Professional and Server) and Windows XP (Home and Professional). PerfectDisk V6.0 includes built-in network scheduling and management and boot time defragmentation capabilities as well as support for drives up to 1TB in size and larger. PerfectDisk V6.0 includes Perfect Management technology to integrate with Active Directory.

PerfectDisk V4.0 for NT4.0, Windows Me, 98 and 95

PerfectDisk V4.0 is for those users running Windows NT 4.0 (Workstation and Server), Windows Me, Windows 98 and Windows 95(OSR2). PerfectDisk V4.0 includes built-in network scheduling and management capabilities, the ability to perform boot time defragmentation (necessary under Windows NT 4.0 only), and configurable file placement strategy.

PerfectDisk Personal Edition

PerfectDisk Personal Edition is a “lite” version of PerfectDisk for users running Windows 95(OSR2), 98, Me, NT4 Workstation, Windows 2000 Professional or Windows XP Home/Professional who do not require the advanced defragmentation capabilities or network management/scheduling capabilities of the full version of PerfectDisk.

PerfectDisk V6 For Exchange

This is a separate component for PerfectDisk V6.0/Server running on Windows 2003/2000 Server and allows you to automate/schedule the offline compaction/defragmentation of Microsoft Exchange 2000 and Exchange 5.5 data stores. This offline compaction/defragmentation recovers disk space and improves Exchange performance.

PerfectDisk V4 For Exchange

This is a separate component for PerfectDisk V4.0/Server running on NT4 Server and allows you to automate/schedule the offline compaction/defragmentation of Microsoft Exchange 5.5 data stores. This offline compaction/defragmentation recovers disk space and improves Exchange performance.

What is fragmentation?

What is the Cause of Fragmentation?

Disk fragmentation occurs when files are broken into hundreds or even thousands of pieces and scattered across your hard drive. This occurs naturally whenever files get created, deleted, or extended and even when the operating system is first installed. Even if you have plenty of free space, Windows will still fragment files and before you know it, your once fast system starts to slow down. Microsoft recognizes fragmentation as a problem and recommends defragmenting your drives regularly.

What Does Fragmentation Do To My System?

File fragmentation causes a huge degradation in system performance, and over time can bring your system to a near crawl. Fragmentation causes your computer to use excessive resources (memory and CPU time) to complete tasks related to reading and writing files. This unnecessarily increases the work your computer must do to support the applications you are running. In cases of severe fragmentation, some applications may not run at all. Fragmentation can cause applications to launch more slowly, file access to take longer, system boot/shut down to slow, videos to drop frames and music to skip.

How Does PerfectDisk Solve My Fragmentation Problem?

PerfectDisk defragments a disk by locating all parts of a file and bringing them together so that they are contiguous. As a result, the system has only one place to look to find a file. Your system will use less CPU and memory to perform disk operations, which significantly enhances your system performance. Applications will launch faster, access to files will be faster, Windows will boot and shutdown quickly and watching videos and listening to music will be a pleasurable experience.

Issues to Consider When Selecting a Disk Defragmenter

Safety

Microsoft provides disk defragmenters with a safe way to defragment most files online, while Windows is running. Microsoft's defragmentation Application Programming Interfaces (APIs) allows safe defragmenting of files on NTFS, FAT16 and FAT32 file systems. These defragmentation APIs are a part of the native Windows file systems and have been coded, tested and certified by Microsoft to ensure that no data loss or corruption occurs when a file is moved. The defragmentation APIs are fully synchronized with all file I/O and memory management functions of Windows 2000 and Windows XP. Microsoft's defragmentation APIs even allow defragmenting files that are open and currently being modified. For safety reasons, PerfectDisk uses Microsoft's defragmentation APIs. This ensures that peak system performance is maintained in a safe manner.

As a Certified for Windows 2000 and Designed for Windows XP – Optimized application, PerfectDisk has been tested and found to meet Microsoft's highest standards for safety and reliability.

Large Drive Support

Large drives are becoming increasingly common in today's operating environments – even for home users. Drives that range in size from 100 gigabytes to over a terabyte in size can now be found. PerfectDisk was designed with the goal of being able to quickly and completely defragment large drives. PerfectDisk is able to completely defragment

large drives 2 to 3 times faster than other defragmenters can – all while using minimal system resources.

Available Free Space

While a certain amount of usable free space is required for any disk defragmenter to work, PerfectDisk performs well with as little as 5% usable free space. Other disk defragmentation products may suggest that you have at *least* 20% usable free space in order to effectively defragment a disk. PerfectDisk can defragment disks with little free space and lots of fragmentation – disks where other disk defragmenters will simply give up.

Single Pass Consolidation of Free Space

Defragmenting files is just one part of maintaining peak disk performance. Another important part is free space consolidation. Consolidating free space ensures that new files will be created quickly and contiguously – ensuring that peak performance is realized from the beginning. PerfectDisk's advanced defragmentation technology ensures that free space is as consolidated as possible. With less advanced disk defragmenters, either there is no effort made to consolidate free space or free space consolidation occurs slowly over a long period of time. Either way, the disk will quickly refragment – immediately reducing performance and requiring more frequent defragmentation passes – each consuming a significant amount of system resources.

Single Pass Defragmentation of Files

The purpose of running a disk defragmenter is so that when it completes, the majority of the files on the disk – including system files - are defragmented and the free space is consolidated. Only a technologically advanced defragmenter like PerfectDisk can defragment a disk in a single pass. Other less advanced disk defragmenters may require or recommend multiple defragmentation runs – with each pass slowly reducing the number of fragmented files. With other disk defragmenters, after a defragmentation pass has completed, you may have not solved your fragmentation issue(s). With PerfectDisk, your disk fragmentation issues are solved after the 1st pass.

Completeness of Defragmentation

Each drive contains different types of files – depending on the file system used and what the drive is used for. It may include directories, system files and data files. The expectation when you run a defragmentation utility is that it will defragment all of the files on the drive. PerfectDisk can defragment all file types, including all system files. Less advanced disk defragmenters can not defragment all file types and not all system files, leaving your disk still fragmented and free space scattered all over the place.

Patented File Placement Strategy

PerfectDisk has a patented file placement strategy called SMART Placement that is designed to slow down the rate of refragmentation and to speed up future defragmentation passes. PerfectDisk accomplishes this via consolidation of free space and by identifying both rarely modified and frequently modified files, and grouping them together. This SMART Placement of files results in your drive maintaining its peak performance longer and reduces the need to frequently run defragmentation passes.

Enterprise Scheduling and Management – Integration with Active Directory

With Perfect Management technology, PerfectDisk can easily be scheduled and managed throughout your entire network. PerfectDisk can be enterprise scheduled/managed from *any* system that has PerfectDisk installed. Other enterprise defragmenters restrict enterprise scheduling/management to single systems, which limits your ability to make changes if you are not working at that system. PerfectDisk's Network Schedule Wizard makes it easy to quickly query your network to find out when PerfectDisk is scheduled to run on computers and when it last ran. Integration with Active Directory Group Policy allows for quick and easy deployment of PerfectDisk and any PerfectDisk software updates. PerfectDisk's Active Directory Administrative Template provides for quick and easy configuration of PerfectDisk, allowing you to customize access to PerfectDisk features according to Active Directory Organizational Units. With 5 pre-defined Group Policy schedules per Active Directory Organization Unit, enterprise scheduling has never been easier.

How is PerfectDisk Better Than the Built-in Defragmenter?

Local Scheduling

The built-in disk defragmenter in Windows is a very basic disk defragmenter with limited or no scheduling capabilities. Scheduling the built-in defragmenter under Windows requires programming knowledge to write scripts to run a defragmentation pass. PerfectDisk provides comprehensive scheduling capabilities that quickly and easily allow defragmentation passes to be run in the background without user interaction.

Network Scheduling

The Windows built-in defragmenter does not provide network management or network scheduling capabilities. PerfectDisk provides both network management and network scheduling capabilities. This allows PerfectDisk defragmentation passes to be managed from a central place.

Free Space Requirements

The Windows built-in defragmenter requires at least 15% usable free space in order to effectively defragment. While this is the minimum free space recommended, it only works effectively with far more free space. PerfectDisk is able to defragment effectively with as little as 5% usable free space.

Completeness of Defragmentation

The Windows built-in defragmenter is limited in the types of files that it can defragment. While it can defragment most data files, it is not able to defragment directories on FAT16 or FAT32 drives. It is also unable to defragment the pagefile and hibernate file. Under Windows 2000, the built-in defragmenter is unable to defragment any of the metadata on NTFS drives. Under Windows 2003/XP, the built-in defragmenter is unable to defragment most of the metadata on NTFS drives. PerfectDisk not only defragments data files, it is also able to completely defragment directories, the pagefile and hibernate file, as well as *ALL* of the metadata on NTFS drives. No other defragmenter provides this ability.

Advanced Scheduling, Administration and Customization Capabilities

The Windows built-in defragmenter offer limited customization and administration capabilities. The built-in defragmenter can not be managed or scheduled remotely. It doesn't offer the ability to specifically exclude files. For further information about the advanced customization and administration capabilities of PerfectDisk, please see the **Advanced Features of PerfectDisk** section of this guide.

Installing PerfectDisk V6.0

System Requirements

PerfectDisk V6.0 requires Windows Server 2003, Windows 2000 Professional/Server or Windows XP Home/Professional. A minimum of 64MB of RAM is suggested with at least 128mb of RAM recommended. When installed, PerfectDisk V6.0 requires 2.5MB of disk space.

Installing PerfectDisk on a Single System

CDROM

To install PerfectDisk V6.0 on a single system, simply insert the CDROM containing the PerfectDisk software into the CDROM drive. The installation program for PerfectDisk will automatically run.

Electronic Download

To install PerfectDisk V6.0 on a single system, simply double click on the PerfectDisk installation file that you have downloaded. This will launch the installation program for PerfectDisk.

Installing PerfectDisk on Remote Systems

PerfectDisk can easily be deployed on remote systems by using one of the following methods:

Remote Deployment Using Active Directory Group Policy

With Perfect Management technology, PerfectDisk can be deployed using Active Directory Group Policy. Please see ***How to Deploy Software to a Specific Group By Using a Group Policy (Q302430)*** at <http://support.microsoft.com/default.aspx?scid=kb;en-us;Q302430> for further information on how to deploy software using Active Directory Group Policy. The PerfectDisk Help file also contains information on how to create a software deployment package as well as information on how to deploy via Active Directory Group Policy.

Remote Deployment Using Microsoft Windows Installer

Please see **Windows Installer: Benefits and Implementation for System Administrators** at <http://www.microsoft.com/windows2000/docs/wininstaller.doc> for more information about deploying applications using Microsoft Windows Installer.

Remote Deployment Using Systems Management Server (SMS)

PerfectDisk can be remotely deployed using Microsoft Systems Management Server (SMS). Please see ***Deploying Windows Installer Setup Packages with Systems Management Server 2.0*** at <http://www.microsoft.com/smsserver/docs/deploymsi.doc> for detailed information on how to deploy software packages using SMS.

Integration with 3rd Party Installation Software

PerfectDisk can be remotely deployed by most 3rd party deployment software through the PerfectDisk command line installation interface. Please see ***Use Windows Installer from the command line*** at http://www.microsoft.com/windows2000/en/server/help/default.asp?url=/windows2000/en/server/help/sag_WinInstall_default_topnode.htm?id=3631 for more information on how install to PerfectDisk using the command line.

How Badly Fragmented is My System?

Performing an Initial Analyze

It is helpful to know how badly fragmented a drive is prior to running a defragmentation pass. PerfectDisk provides very detailed statistics regarding the fragmentation level of a drive. To analyze a drive, highlight a drive and click on the **Analyze** button. PerfectDisk will then begin a comprehensive analysis of that drive and when finished will provide detailed information on the fragmentation status of that drive.

Drive Health

After you perform a drive analysis, PerfectDisk's **Drive Health** will display what it thinks about the fragmentation levels on the drive and provide a visual indication of the severity of fragmentation for free space, files, directories, pagefile and NTFS metadata.

Defragmentation Recommendation

PerfectDisk's **Defragmentation Recommendation** will recommend the type of defragmentation pass to be performed on the drive (if any). Depending on the amount of free space fragmentation, PerfectDisk may recommend that you perform a Smart Placement Defrag or a Defragment Only Defrag. If there is a significant amount of fragmentation in the pagefile or the Master File Table and other related files have not been placed for the best performance, PerfectDisk may recommend that you perform an offline defragmentation pass on that drive.

Understanding Statistics (Printing / Saving)

Once you have analyzed a drive, Raxco Software suggests that you save the detailed statistics to a file and/or print them out. That way, you can refer back to them later to see the difference that PerfectDisk was able to make. Take note of the following information:

Number of Total Files

This is the total number of files that PerfectDisk analyzed on the drive.

Fragmented Files

This is the total number of fragmented files found on the drive. This total does not include fragmented directories, fragmented metadata, or fragmented pagefile/hibernate file. The more fragmented files you have on the system, the worse the system will perform.

Fragmented Directories

This is the total number of fragmented directories found on the drive. The lower this number is, the faster the system will be able to access files.

Percent Fragmented

This is the overall fragmentation percentage on the drive. The lower this percentage is, the better your system will perform.

Largest Contiguous Free Space

This is the largest piece of contiguous free space on the drive (in megabytes). The larger this number is, the faster the system will be able to create new files and the easier it will be for the system to create new files contiguously - ensuring peak performance for your newly created files. Typically, this is greater with PerfectDisk than with other disk defragmenters.

Most Fragmented Files

This is a list of the 100 most fragmented files. It includes path and file name, file size and number of fragments.

Excluded Files

This list is comprised of files excluded during an online pass only. These files can and will be defragmented during a boot time defragmentation pass. This list is typically System files – which include the pagefile, hibernate file and the NTFS metadata. This list is important because it shows the fragmentation level of **ALL** of the NTFS metadata. Other disk defragmenters claim to defragment the NTFS metadata. However, they don't provide any information about the fragmentation level of **ALL** of these files. Typically, they only provide fragmentation information about the Master File Table (\$MFT). The \$MFT, however, is only 1 of the many metadata files on NTFS drives. Only PerfectDisk provides this information, as PerfectDisk is the only defragmenter with the advanced defragmentation technology capable of defragmenting all of these metadata files.

Running Your 1st Defragmentation Pass

After you have gathered some initial statistics, it is time to perform a defragmentation pass. Because certain files can not be safely defragmented online while Windows is running, this will involve performing both a boot time as well as an online defragmentation pass.

Performing a Boot Time Defragmentation Pass

A boot time defragmentation pass needs to be performed in order to defragment files that can not safely be defragmented online and to optimize the file system (per Microsoft's recommendations) for fastest performance. Raxco Software recommends that you perform an initial boot time defragmentation pass even if files are not fragmented. Performing a boot time defragmentation pass allows PerfectDisk to ensure that the Master File Table/NTFS metadata and other system files are optimized for the best possible drive performance. PerfectDisk provides several different ways for the boot time defragmentation pass to be performed. Before a boot time defragmentation can be done, you must first configure PerfectDisk for boot time defragmentation runs. To configure PerfectDisk, double click on a drive to bring up the ***Drive Properties Notebook***. Select the ***Offline Defrag Settings*** tab and select which types of files you wish to defragment at boot time. After you have selected which types of files to defragment at boot time, click the ***OK*** button to save. This process will need to be repeated for each drive that you wish to defragment at boot time.

Scheduling a Boot Time Defragmentation On Every Boot

To perform a boot time defragmentation pass on every system boot, double click on a drive to bring up the ***Drive Properties Notebook***. Select the ***Offline Defrag Settings*** tab and check ***Defragment selected offline file types on EVERY Reboot*** and click the ***OK*** button. This will configure PerfectDisk to perform a boot time defragmentation pass on this particular drive on every system boot. This process will need to be repeated for each drive that you wish to defragment at system boot time.

Scheduling Boot Time Defragmentation

To schedule a boot time defragmentation pass on a drive, click on the ***Schedule*** button on the PerfectDisk toolbar or select ***Create Local Schedule*** from the PerfectDisk menu. The ***PerfectDisk Schedule Wizard*** will guide you through the process of creating a defragmentation schedule. When prompted, select the drive(s) that you wish to defragment at boot time and ***Defragment files offline*** for the File Type. The PerfectDisk Schedule Wizard will ask for the date and time to perform the boot time defragmentation pass. After you have answered all of the necessary questions, PerfectDisk will schedule the boot time defragmentation pass to occur at the specified date and time. At that time, PerfectDisk will automatically reboot your system, performing a boot time defragmentation pass on the drive(s) and files type(s) selected. This process is completely automatic and you do not have to be logged on to your computer or manually shut down the system. If you are logged on at the time the boot time defragmentation pass is scheduled, you will be notified and given the option of canceling the boot time defragmentation pass.

Performing a One-Time Only Boot Time Defragmentation

To perform a one-time only boot time defragmentation pass, right mouse click on the drive letter and choose **Offline Defragment**. You may see a message about the drive not being able to be locked and may be prompted to allow PerfectDisk to perform the offline defragmentation pass at next reboot. If you click **Yes**, the next time you reboot your system, PerfectDisk will perform a boot time defragmentation pass on the drive.

Performing an Online Defragmentation Pass

PerfectDisk provides several ways to perform an online defragmentation pass.

Performing a Manual Defragmentation Pass

To perform a manual defragmentation pass on a drive, you can highlight the drive and then click the **Defragment** button on the toolbar or right mouse click and select **Defragment** or select **Defragment** from the PerfectDisk menu bar. PerfectDisk will immediately begin to defragment the selected drive.

Scheduling an Online Defragmentation Pass

To schedule a defragmentation pass, click on the **Schedule** button on the PerfectDisk toolbar or select **Create Local Schedule** from the PerfectDisk menu. The **PerfectDisk Schedule Wizard** will guide you through the process of creating a defragmentation schedule. When prompted, select the drive(s) that you wish to defragment and if you want them to be defragmented all at the same time (in parallel) or one after another (serial). In general, defragmenting in series will result in faster overall defragmentation performance and less use of system resources. When prompted, select **Defragment files online** for the File Type. The PerfectDisk Schedule Wizard will ask for the date and time to perform the online defragmentation pass. After you have answered all of the necessary questions, PerfectDisk will schedule the online defragmentation pass to occur at the specified date and time. At that time, PerfectDisk will automatically defragment the drive(s) selected. This process is completely automatic and you do not have to be logged on. If you are logged on or working at the time that PerfectDisk starts its defragmentation pass, you can still continue to work and will likely not even notice that PerfectDisk is even running. See the **Safety** section of this guide for more information about how PerfectDisk is able to safely defragment files even though they are being updated.

Scheduling Defragmentation on Remote Systems

Through PerfectDisk's powerful network management features, you can remotely schedule defragmentation passes from a central location. This can be done with both the Workstation **AND** Server versions of PerfectDisk. PerfectDisk's advanced network scheduling capabilities allow you to quickly and easily schedule both online and boot time defragmentation passes on many systems at the same time.

PerfectDisk will first need to be installed on each of the systems that you wish to defragment. For more information about deploying PerfectDisk, please see the **Installing PerfectDisk on Remote Systems** section of this guide.

Network Schedule Wizard

Select *Create Network Schedule* from *Schedule* on the PerfectDisk menu bar. The *PerfectDisk Network Schedule Wizard* will guide you through the process of scheduling PerfectDisk defragmentation passes on remote systems.

Active Directory Group Policy

PerfectDisk can also be scheduled using Active Directory Group Policy. Please see the *Integration with Active Directory* section of this guide for more information on how to add the PerfectDisk Administrative Template to Active Directory and on how to use Active Directory Group Policy to configure and manage PerfectDisk.

Maintaining Peak System Performance

Monitoring Fragmentation

Each and every system is unique. One system may have different applications installed and be used differently than another system. This also means that each system has a unique fragmentation profile. This fragmentation profile includes how quickly drives become fragmented and the frequency that the drives need to be defragmented. File and Print servers may need to be defragmented more frequently than Web servers or Database servers. Monitoring fragmentation on a drive allows you to determine the best way to keep fragmentation minimized on that drive. Please see the **Understanding Statistics** section of this guide for more information about gathering statistics on fragmentation.

Disk Trending

PerfectDisk has a **Disk Trending** feature that allows you to collect detailed fragmentation statistics for a system over a period of time. The collection of fragmentation statistics occurs in the background on a scheduled basis. Fragmentation statistics are stored in a comma delimited file that can be imported into spreadsheet software like Microsoft Excel[®] or database software like Microsoft Access[®]. In an enterprise environment, this file can be stored on a network share. Using these statistics, you can better determine how quickly your system(s) become re-fragmented and make better informed decisions on how frequently to defragment. Raxco Software has created a sample Microsoft Access database with several pre-defined reports. You can download this sample database from <http://www.raxco.com/support/windows/pd60>.

How Often Should I Defragment My System(s)?

One of the most frequently asked questions concerning disk defragmentation is how often it should be run. Once you have determined for a particular system how quickly a drive becomes fragmented (see the **Monitoring Fragmentation** and **Disk Trending** sections of this guide), you can create the optimal defragmentation solution for a system. With systems having a large amount of file creation/extension activity, a daily online/weekly boot time defragmentation schedule may be necessary to keep the system performing its best. With systems having very little file creation/extension activity, a monthly online/quarterly boot time defragmentation schedule may be best. With typical home or office systems, a weekly online/monthly boot time defragmentation schedule is usually sufficient to keep fragmentation to a minimum and the system performing full speed.

Scheduling PerfectDisk for Unattended Operation

Once you have determined the best defragmentation schedule for a system, PerfectDisk can quickly and easily be scheduled to perform this task unattended. Please see the **Scheduling a Defragmentation Pass** section of this guide for more information on how to schedule PerfectDisk to run unattended.

Advanced Features of PerfectDisk

Command Line Interface

PerfectDisk provides a full-featured and powerful command line interface that allows you to easily integrate PerfectDisk into your own scripts or other applications. Please see the PerfectDisk online help for more information about PerfectDisk's Command Line Interface.

Threshold Based Defragmentation

PerfectDisk includes Raxco's exclusive Perfect-Time™ technology. Perfect-Time™ provides threshold based defragmentation so that PerfectDisk will only defragment a drive when a certain level of fragmentation on that drive is reached.

Scheduling Wizard

PerfectDisk's Scheduling Wizard takes the confusion out of scheduling defragmentation for unattended operation. With just a few mouse clicks, PerfectDisk will maintain your system performance in the background with no interaction required.

Network Scheduling

PerfectDisk's powerful network scheduling capabilities allow you to easily schedule both online as well as boot time defragmentation runs throughout your network. You can even cancel or change schedules with a few mouse clicks. Through PerfectDisk's exclusive Schedule Query Wizard, finding out when PerfectDisk is scheduled to run on any system in your network is easy to do.

Standalone / Network Mode

PerfectDisk has the ability to run in either Standalone mode or Network mode. While in Network mode, you must have Administrator rights in order to run PerfectDisk. While in Network mode, if you have Administrator rights on remote systems, you can schedule/manage PerfectDisk on those remote systems. While in Standalone mode, a non-administrator (normal user) can run PerfectDisk but will not be able to see or schedule/manage PerfectDisk on remote systems. While PerfectDisk is in Standalone mode, it can be scheduled and managed by another system running in PerfectDisk's Network mode.

AutoUpdate

PerfectDisk has the ability to keep itself up to date through its exclusive AutoUpdate feature. When enabled, PerfectDisk will periodically check Raxco's support site to see if it is running the latest version of PerfectDisk. If there is a newer update available, PerfectDisk can notify the user or can even install the update without requiring interaction with the user. PerfectDisk's AutoUpdate feature can be customized so that AutoUpdate can look to someplace other than Raxco Software to see if any updates are available. Of course, PerfectDisk's AutoUpdate can also be easily turned off. Please contact Raxco Software for assistance in setting up and configuring your own AutoUpdate server.

Integration with Active Directory

With Perfect Management, PerfectDisk is tightly integrated with Active Directory. Active Directory provides highly scalable centralized management of PerfectDisk – including deployment, scheduling and controlling access to PerfectDisk features.

Deployment

PerfectDisk can be deployed using Active Directory Group Policy. Please see *How to Deploy Software to a Specific Group By Using a Group Policy (Q302430)* at <http://support.microsoft.com/default.aspx?scid=kb;en-us;Q302430> for further information on how to deploy software using Active Directory Group Policy.

Adding the PerfectDisk Administrative Template to Active Directory

In order to use Active Directory Group Policy to manage PerfectDisk, you will first need to add the PerfectDisk Administrative Template to Active Directory. The PerfectDisk Administrative Template (PerfectDisk.adm) can be found in the PerfectDisk installation folder.

1. Copy PerfectDisk.adm file to the folder containing .inf files (typically C:\winnt\inf).
2. Using Active Directory, access the Group Policy Object which you are going to use to control PerfectDisk (or create a new one).
 - a. Launch the Active Directory Users and Computers Applet.
 - b. Select an Organizational Unit.
 - c. Right click and chose Properties.
 - d. Go to the Group Policy tab and select an existing template or create a new one, and click EDIT.
3. Right click on Administrative Templates, and chose Add/Remove Template.
4. Add the PerfectDisk.adm file

Scheduling

With 5 pre-defined Group Policy schedules per Active Directory group, a large number of systems can easily be scheduled. Changes to schedules are deployed quickly as Group Policy replicates changes to these systems. As new systems or users are added to a group, they automatically inherit the PerfectDisk schedules and configurations defined in that Group Policy.

Access to PerfectDisk Features

Access to PerfectDisk features at both the system level as well as the user level can be controlled through Group Policy through Administrative Templates.

Computer Settings

The following PerfectDisk configuration options can be set at the computer level:

- Network Enabled
- Boot File Optimization Settings
- Defragmentation Threshold
- Log Error Messages
- Log Informational Messages
- Log to PerfectDisk's Log
- Log to Application Event Log
- Configure Auto Update

- Group Policy Schedule

User Settings

The following PerfectDisk configuration options can be set at the user level:

- Allow Access to PerfectDisk
- Allow Advanced Configuration
- Allow Analyzing drives
- Allow starting an online defragmentation pass
- Allow Starting an offline defragmentation pass
- Allow Stopping a defragmentation pass
- Allow modification of Drive Properties
- Allow creating or changing schedules
- Allow scheduling a boot time defrag pass
- Allow starting a scheduled defragmentation pass

Please see the PerfectDisk help file for a description of each of the above configuration options and appropriate settings.

Disk Trending

PerfectDisk has a **Disk Trending** feature that allows you to collect detailed fragmentation statistics for a system over a period of time. The collection of fragmentation statistics occurs in the background on a scheduled basis. Fragmentation statistics are stored in a comma delimited file that can be imported into spreadsheet software like Microsoft Excel[®] or database software like Microsoft Access[®]. In an enterprise environment, this file can be stored on a network share. Using these statistics, you can better determine how quickly your system(s) become re-fragmented and make better informed decisions on how frequently to defragment. Raxco Software has created a sample Microsoft Access database with several pre-defined reports. You can download this sample database from <http://www.raxco.com/support/windows/pd60>.

Microsoft Management Console (MMC) Interface

PerfectDisk provides its own GUI as well as a Microsoft Management Console (MMC) snap-in. The MMC provides a common look and feel interface for a number of Windows Tools. The PerfectDisk MMC interface presents this same look and feel.

Where Can I Find More Information About PerfectDisk?

Raxco Software Web Site

The Raxco Software web site can be found at <http://www.raxco.com>. At the Raxco Software web site you can find white papers, reviews of PerfectDisk, companies that chosen PerfectDisk for their enterprise defragmentation needs and more.

Frequently Asked Questions

Frequently Asked Questions and Answers can be found at the Raxco Software's support site at <http://www.raxco.com/support/windows>.

Contacting Raxco Software

Raxco Software can be contacted at the following address:

6 Montgomery Village Avenue
Suite 500
Gaithersburg, MD 20879
Phone: (301) 527-0803
Toll Free: 1-800-546-9728
Fax: (301) 519-7711

Technical Support

If you have technical questions or issues with PerfectDisk, please visit the Raxco Software support site at <http://www.raxco.com/support/windows>. Raxco Software's support site has a searchable knowledge base, product updates, an active user support forum and lots of other useful information. You can also contact technical support at:

Phone: (800) 836-3844
Email: nttech_support@raxco.com

Customer Service

If you have non-technical questions about PerfectDisk, including volume licensing or would like more information about Raxco Software's Diskeeper trade in offer, please contact Raxco Software at:

Phone: (301) 527-0803
Toll Free: 1-800-546-9728

Fax: (301) 519-7711
Sales: sales@raxco.com

Additional contact information for Raxco Software can be found at <http://www.raxco.com/company>.

Purchasing PerfectDisk

Purchasing From Raxco Software

PerfectDisk can be purchased directly from Raxco Software via our web site at <http://www.raxco.com>. You can also contact Raxco Software at (800) 546-9728 to speak directly with a customer service representative.

Purchasing From a Raxco Software Reseller

Raxco Software has an extensive list of worldwide resellers. Please visit the Raxco Software web site at http://www.raxco.com/partners/reseller_list.cfm for a list of our resellers. If you use a reseller that is not on Raxco's list, please let them know that they can get PerfectDisk from Ingram Micro.

Volume and Educational Discounts

For volume or educational pricing, please contact Raxco Software at (800) 546-9728 or one of our resellers for a quote customized for your needs.