# Compare Diskeeper® with the built-in Defragmenter in Windows® 2000 and Windows XP

	DISKEEPER FOR WINDOWS 95/98/ME/NT®/2000/XP	DISK DEFRAGMENTER IN WINDOWS 2000	DISK DEFRAGMENTER IN WINDOWS XP
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2	Fastest Windows defragmenter ever built. Defragments drives much more thoroughly than the disk defragmenter in Windows 2000/XP and is able to do so 300% to 500% faster! (See NSTL tests at www.nstl.com)	Slow: Runs at normal priority and will compete head-to-head with any application running at the same time.	Slow: Runs at normal priority and will compete head-to-head with any application running at the same time.
S	CHEDULING		
	Full "Set It and Forget It" <sup>®</sup> automatic operation for any number of volumes/ disks simultaneously across the network. Diskeeper includes a wide range of scheduling options includ- ing Screen Saver mode.	Not available. Manual operation only. No scheduling capability.	Limited fixed scheduling possibilities (difficult to learn, manage, execute and monitor) requiring the develop- ment and use of scripts/batch files. Longer run times lead to disk "thrashing" during run processes.
S	MART SCHEDULING™		
0	Smart scheduling goes beyond the limitations of fixed scheduling and eliminates fragmented files based on the actual needs of your disks. It defragments your disks as often as needed – no more and no less – to produce and maintain peak system speeds. This is a technical evolution of Executive Software's "Set It and Forget It" philosophy to cut operating costs for IT adminis- tration. For any defragmenter, this is the most ideal operating basis to eliminate fragmentation and produce top system performance.	Not available. Manual operation only. No scheduling capability. This lack can result in resource-con- suming defragmentation runs when none are needed.	Not available. This lack can result in resource-consuming defragmen- tation runs when none are needed, or excessive waits between defrag- mentation runs.

## DISK DEFRAGMENTER IN WINDOWS 2000

AUTOMATICALLY RE-SCHEDULES MISSED DEFRAGMENTATION			
With Smart Scheduling set, a defragmentation job skipped while the system is powered down is taken up an hour after the system is powered back up.	Not available. No inherent schedul- ing capability.	Not available. No inherent schedul- ing capability.	
REMOTE SCHEDULING			
Remote Scheduling allows defrag- mentation schedules to be set on remote systems. Diskeeper can be scheduled to run across mixed Windows networks (95/98/Me/NT/ 2000/XP). Schedules set on remote machines are easily checked.	Not available. Manual operation only. No scheduling capability.	Use of the Windows XP scheduler is required. With the XP Built-in Command Line, you can set a sim- plistic* schedule remotely for XP systems, but is not user-friendly, especially in cases where the Administrator has to schedule multi- ple systems. Administrator must know the names of all the systems and the volume configuration of the systems and manually update as they change. It can be difficult to tell if the schedule has been erased or changed by the local user. *XP Built-in jobs have to run one at a time and there are no exclusion peri- ods the Administrator can set.	

EXCLUSION PERIODS			
Yes. Exclusion periods allow you to restrict the times during which defragmentation will take place. This feature can be used in conjunc- tion with Smart Scheduling, so Diskeeper will automatically sched- ule only as needed, but will exclude user-determined block out periods.	Not available.	Not available.	

R	REQUIRES ADMINISTRATOR LEVEL LOG-IN				
	Once scheduled (by administrator), Diskeeper runs as a service in the background independent of the user level log-in.	Mandatory and must be manually run by someone with Adminis- trative Privileges.	Usually runs manually requiring Administrative Privileges but if scripted requires extensive knowl- edge outside the scope of defrag- mentation.		

DISKEEPER FOR WINDOWS 95/98/ME/NT®/2000/XP

N	ETWORKING		
	Superlative networking functionality. Can schedule groups of disks of any size on any and all disk volumes on computers, workgroups or domains throughout the network. Also enables direct connection to a spe- cific computer on the network and remote execution of all Diskeeper operations including analyzing and defragmenting disk volumes, setting schedules, configuring exclusion lists and setting run priorities.	Not available. Cannot be remotely launched or controlled.	Not available.
Λ	NODE OF OPERATION		
	Fully remote, automatic operation and optional manual mode. Designed to easily defragment multiple drives/volumes simultaneously.	Manual operation only. Can only locally defragment one drive vol- ume on a machine at a time.	Manual operation only. Can only locally defragment one drive volume on a machine at a time.
D	EFRAGMENTATION MODE		
	Diskeeper has three defragmentation method algorithm options: Maximum Disk Performance (recommended), Quick Defragmentation and Improved Free Space.	Only one defragmentation algo- rithm, which is resource intensive and does not consolidate free space or work well in low-free space conditions.	Only one defragmentation algorithm, which is resource intensive and does not consolidate free space or work well in low-free space conditions.
S	VSTEM RESOURCE USE		
	Low: Designed to run in the back- ground unnoticed by end-users. Does not lock disk volume and runs by default as a low priority process.	High: System performance impacted if applications run during defrag.	High: System performance impacted if applications run during defrag.
S	IMULTANEOUS OPERATION		
	Yes: Can be run on one or more volumes simultaneously.	Not available. Can only defragment one volume at a time.	Not available. Can only defragment one volume at a time.
F	RAG GUARD <sup>®</sup>		
	Yes. Frag Guard helps prevent frag- mentation in your MFT and Paging Files, greatly reducing the need to defrag at Boot Time. Note: The "Frag Guard" boot-time fea- ture can be resource intensive and is designed for specialized situations.	Not available.	Not available.

## DISK DEFRAGMENTER IN WINDOWS 2000

#### DISK DEFRAGMENTER IN WINDOWS XP

MASTER FILE TABLE (MFT) PAGING FILE DEFRAGMENTATION			
Yes. Diskeeper includes schedula- ble, lightning-fast Boot Time defragmentation technology to safely defragment system files, including the Paging File and MFT. This is the only safe Microsoft <sup>®</sup> recommended method.	Not available. Can not defragment the Paging File or MFT.	Not available. Can not defragment the Paging File(s).	
PRIORITY SETTINGS			
Yes. Five (5) priority settings to accommodate any workload. Priority Setting: By default, scheduled defragmentation processes run at a low priority. This ensures that all of the user's applications are serviced before Diskeeper is serviced. As a result, Diskeeper does not interfere with the applications you use every day. Diskeeper also allows adjusting the default priority of the defragmen- tation processes to meet specific needs of the user.	Not available.	Not available. The XP built-in defrag- mentation process runs at the same process priority as the users, so defragmentation competes with your applications for the system's resources. As a result, the applica- tions you use every day will run slower while defragmentation is being done.	

**BOOT TIME DEFRAGMENTATION** 

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	Yes. Boot Time defragmentation is the only Microsoft recommended way to defragment the Paging File and certain system files. Without it, system performance degrades. These cannot be done safely on- line, however they must still be defragmented to prevent system performance degrades. This is par- ticularly true for XP, as it requires a large Paging File to operate optimal- ly. When the Paging File is in a frag- mented state, performance can be severely affected.	Not available.	Not available. Can defragment the MFT online due to changes in the XP file system. Cannot defragment the Paging File – which Microsoft recommends should be defrag- mented, as it is particularly impor- tant to system performance on the Windows XP operating system.
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REMOTE BOOT TIME SCHEDULING			
Remote Boot Time Scheduling allows Boot Time defragmentation to be scheduled on remote machines. The schedule set on the remote machine is easily checked.	Not available.	Not available.	

DISKEEPER	FOR	WINDO	)WS
95/98/ME	/NT®	/2000/	ΧP

## DISK DEFRAGMENTER IN WINDOWS 2000

EXCLUSION LISTS		
Exclusion Lists allow user-spec files and directories to be excl ed from the defragmentation process. This is especially use when large numbers of tempor files are created and deleted of an ongoing basis.	ified Not available. ud- ful ary on	Not available.
<b>REMOTE INSTALLATION (PU</b>	SHINSTALLER <sup>™</sup> )	
Diskeeper PushInstall <sup>™</sup> enable easy installation of Windows X 2000 and NT 4.0 Diskeeper Workstation versions across th network with just a few clicks. (Available in Diskeeper Server Version only.)	es Not available. P, ne	Not available.
CONTROL TO PAUSE/RESU	ME DEFRAGMENTATION JOBS	
Control over the defragmentati jobs allows Administrators the ity to pause and resume existi run times/jobs locally or over network.	on Not available. abil- ng the	Not available.
	AENTATION	
Diskeeper can be easily run and scheduled across mixed Window networks (95/98/Me/NT/2000	Not available. /x /XP).	Not available.
COMMAND LINE INTERFACE		
Command Line Interface is avail to start defragmentation operati	able Not available.	Command Line Interface is available to start defragmentation operation.
PARALLEL DEERAGMENTATI	ON	
Parallel defragmentation allows multiple disk volumes to be de mented at the same time. No ume must wait for any other volume. Running multiple jobs the same time takes advantag of the power that is available w the new systems.	Restricted to a single volume time. Defragmentation proce 3–5x slower than Diskeeper disk volumes must be defrag serially. Delays between seq disk defragmentation jobs m required as there is no simp to discover if/when a defrag tion job has been completed	e at a ss is and gmented uential ay be le way menta- 1.

## DISKEEPER FOR WINDOWS 95/98/ME/NT®/2000/XP

## DISK DEFRAGMENTER IN WINDOWS 2000

P	PARTIAL DEFRAGMENTATION			
	On full disks, it is not always possi- ble to fully defragment the volume. In this case, Diskeeper will defrag- ment the volume as much as pos- sible. Some files may remain frag- mented but fragmentation is reduced to the extent possible.	Unable to reduce fragmentation when full defragmentation is not possible. Limited free disk space can cause fragmentation to become worse and the defrag operation gives up.	Unable to reduce fragmentation when full defragmentation is not possible. Limited disk space can cause fragmentation on a file to become worse in some cases.	
	ARGE DISK PERFORMANCE			
	Defragmentation process resists slowdown as the number of files on the volume grows.	Defragmentation speed slows dra- matically as the number of files on a volume increases.	Not well suited for large disks. Defragmentation run times increase and speed slows dramatically as the number of files on a volume increases. The increase in time required to defragment a volume is far greater than the increase in the number of files needing to be defragmented.	
A	NALYSIS REPORT			
	Enhanced Analysis Report will dis- play a pop-up message indicating the state of fragmentation on the volume and what defragmentation processing is needed.	Administrator must manually view a report and determine what defragmentation processing is needed.	Administrator must manually view a report and determine what defrag- mentation processing is needed. A report is not available if command- line defragmentation performed through XP scheduler.	