

## hp data sheet



### hp disk prospector software

**Disk Prospector software, a component of the HP Performance Management Bundle for NonStop servers, provides graphic analysis of disk volumes and files.**

#### features at a glance

- Disk analysis
- File analysis
- What-if analysis
- Graphing and export functions

Effective business operations depend on the efficient use of system resources. Analyzing disk and file usage is a laborious and time-consuming task that can tax resources and hinder productivity. Disk Prospector (DiskPro) software improves productivity and reduces cost of ownership by providing graphic analysis of HP NonStop disk volumes and files.

DiskPro is a component of the HP Performance Management Bundle for NonStop servers. Another component of this same bundle is Open Database (ODB). You can use the Performance Management Console (PMC) function of ODB to schedule, collect, retrieve, and load system, disk, and file metrics into ODB on a personal computer. ODB is the source of data for analysis by DiskPro, itself a Microsoft® Windows operating system-based client application.

DiskPro allows you to review disk and file usage and activity, produce graphs, and perform what-if analysis based on the ODB data for one or more collected samples. With DiskPro software, you can open and view multiple samples simultaneously and perform all available functions in an interactive format.

To examine disk and file activities, you can analyze many different disk and file states and statistical metrics in both numeric and graphic formats. File I/O distributions are displayed clearly across multiple processors and disks. Furthermore, the graphic tools in DiskPro software enable you to perform what-if analysis to estimate how system performance and load balancing may be affected if selected files are moved to other disk drives or are given new partition characteristics. Finally, DiskPro data can be exported to Microsoft Excel and Word for further analysis or integration into presentations and reports.





## disk analysis

DiskPro software allows you to perform the following disk analysis functions:

- *Space usage analysis:* Display, in graphic and numeric formats, the space used and free for each disk volume.
- *Fragmentation review:* Display, in graphic and numeric formats, disk fragmentation for each disk volume. Fragment location or page size and count information is not available.
- *Space allocation:* Display a list of files for each volume with different sort orders, such as largest file or busiest file.
- *I/O busy:* Display in graphic and numeric formats the total I/O busy for each disk volume.
- *Drill-down format:* Click an icon or a graph for a disk and drill down to
  - Receive detailed information on the disk
  - Display file list (varying sort orders)
  - Display process access list (varying sort orders)

## file analysis

DiskPro software allows you to perform the following file analysis functions:

- *Space allocation:* Receive full file label information on a file.
- *List by I/O busy, space allocation, and so on:* For files on a disk volume or across the node, identify and list files according to user-selected criteria.
- *Partition analysis:* For a partitioned file, display statistical information (for example, access rate, I/O rate, and space usage) for all of its partitions.
- *File to process:* For any file, show a list of processes that accessed that file.
- *Drill down, up, and sideways.*
  - For a file, drill down to show file label data, processes that accessed it, and process information.
  - Drill up to show disk volume information and to follow any of the functional paths available for a disk volume.
  - Drill sideways to see files of the same volume in close proximity according to size, I/O rate, and so on (for example, show the next busiest file).

## what-if analysis on partitioned files

DiskPro software allows you to perform the following what-if analysis functions on files that are partitioned across multiple disks.

### manual analysis

- *File movements:* Simulate the movement of an entire partition (or part of any partition) of a partitioned file from one volume to the next and view the impact on overall disk space usage, I/O busy rate, and so on.
- *Repertition analysis:* Assuming a linear access for any given partition, introduce new partitions or change key ranges and display the impact on the file, disk and overall system space usage, and I/O rate.

## automated partition analysis

- *Space optimization:* Given the percentage of space used in the overall system, ask DiskPro to identify the disks that are the best candidates to receive the entire storage load of a partition or a portion of the load. Based on the movement instructions, DiskPro software will show the redistributed list and the procedure's effect on I/O and space usage rates.
- *I/O optimization:* Given the disk and file I/O load distribution in the overall system, ask DiskPro to identify the disks that are the best candidates to receive the entire I/O load of a partition or a portion of the load. Based on the movement instructions, DiskPro software will show the redistributed list and the procedure's effect on I/O and space usage rates.

## graphing and export functions

DiskPro software allows you to perform the following graphing and export functions:

- *Graphs:* Graph any displayed numeric data.
- *Export to Word:* Export any displayed data to Microsoft Word.
- *Export to Excel:* Export any displayed data to Microsoft Excel.

## using DiskPro software

DiskPro software lets you view and analyze disk- and file-related ODB data from a set of predefined performance and statistical metrics in both numeric and graphic formats. You can open multiple windows to review different metrics side by side, or quickly change your selection of displayed metrics in any open window (see figure 1).

### view file metrics from a disk

From a list of disks displayed, select a disk to view a list of file metrics. For any given file, a list of processes that opened it is displayed (see figure 2). This allows you to quickly identify files and processes that may adversely affect the performance of any given disk.

### view disk and file metrics from a processor

A single window can show processor usage by disks directed by specific processors. Select one or more processors to view the metrics associated with the disks controlled through them. When you select one or more disks, metrics associated with their file are displayed (see figure 3). When you select a file, metrics are displayed on any and all processes that have opened that file during the collection period.

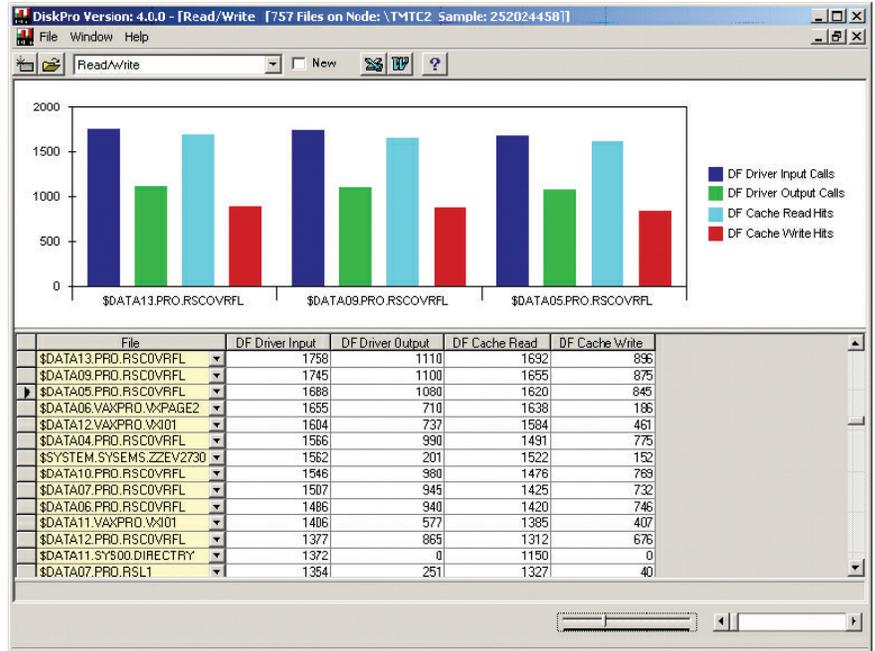


Figure 1. View ODB data in DiskPro software.

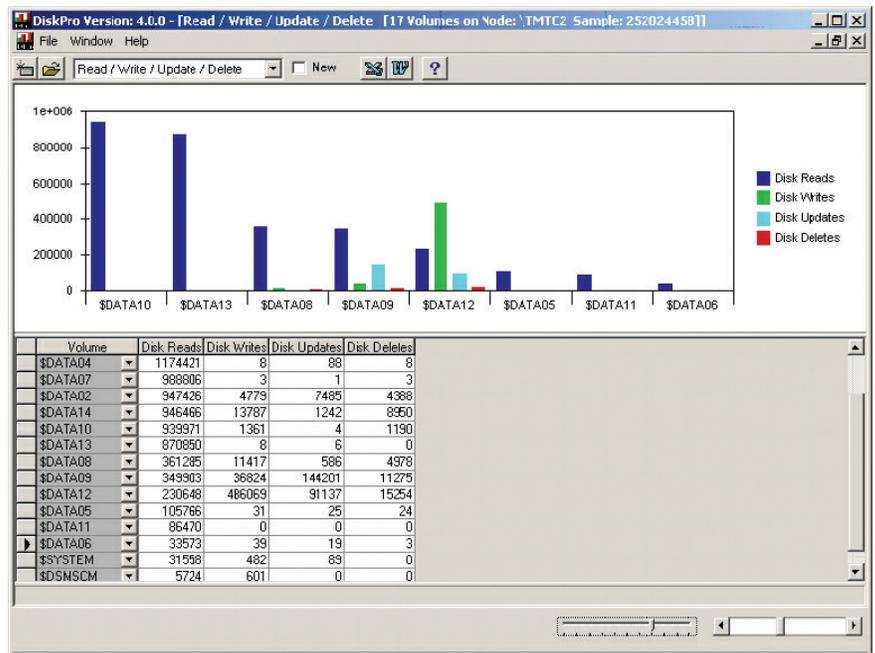


Figure 2. View metrics for all files of a disk.

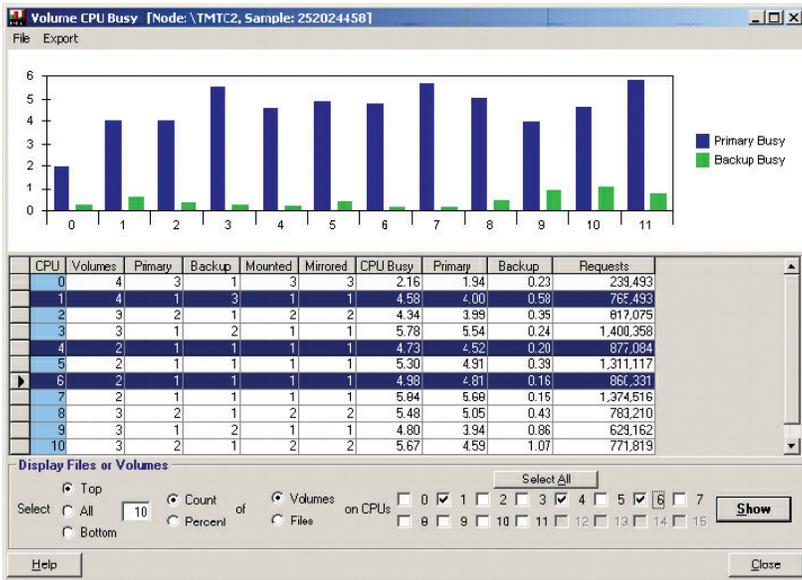


Figure 3. View disk and file metrics by processor.

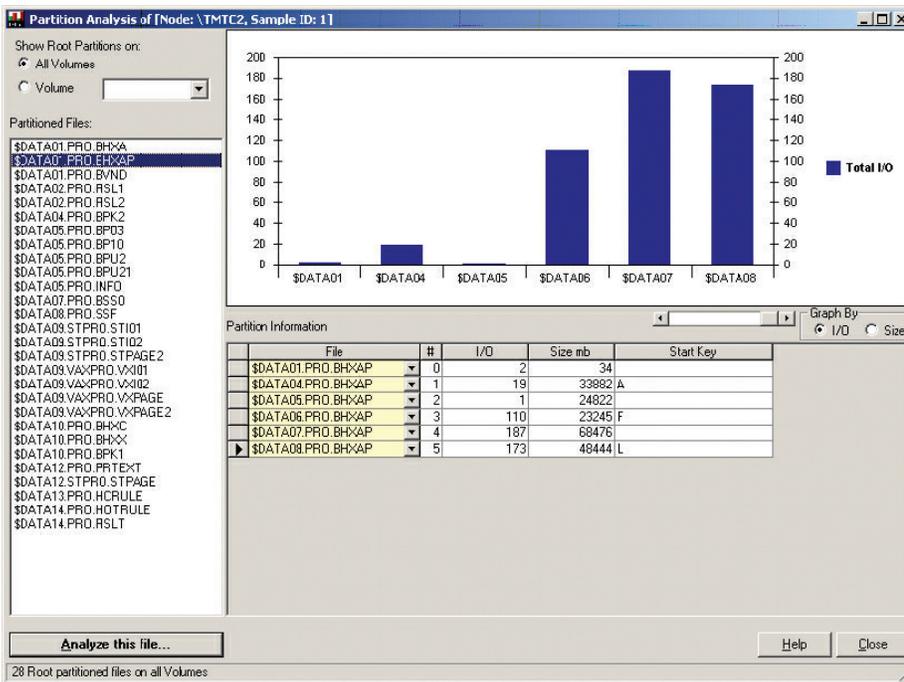


Figure 4. View I/O distribution of partitioned files.

## partition analysis

Poorly partitioned files often present a bottleneck to active systems. DiskPro software can quickly show the I/O distribution of any set of partitioned files (see figure 4). Furthermore, a graphical tool enables you to perform what-if analysis to see the impact on the associated disks if you were to repartition the file across the same or a different volume set. A recorder mechanism keeps track of all your file movements and allows you to take a snapshot of the system at any time. These snapshots enable you to compare alternative file movement strategies and decide which one to choose. Once a choice is made, an instructional log gives you a step-by-step partition instruction to achieve the desired state.

## ordering information

product ID	description
SJ50v2	Disk Prospector software

## specifications

system requirements	
Hardware	PC with Intel Pentium® processor (or later version) with 128 megabytes of RAM and a 32-megabyte disk
PC software	Windows Me, 2000, or XP, or Windows NT 4.0 operating system; and Open Database (SJ47v4)
Host software	Either the Performance Management Bundle Host (SA30), or Measure (9086) and Tandem Performance Data Collector (SJ42)



For more information, go to [www.hp.com/go/nonstop](http://www.hp.com/go/nonstop).

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