Title:
Secrets of Microsoft new file system revealed by Data Recovery Engineer

Word Count:
442

Summary:
I'm currently in the process of installing Windows Vista on a test machine in order to study the new file system Microsoft is releasing. To share this information with you, I will be writing various articles revealing all of my findings. This is the first of a very promising series of articles written from the perspective of a professional Data Recovery engineer.

Keywords:
Data Recovery Windows Future Storage File System Kepler WinFS

Article Body:
Hi friends, let’s talk this time about the new concept in file manager that will be introduced by Microsoft in its new Operating system Windows Vista. The name of this new file administration is “WinFS”.

WinFS is a new file system that it’s being developed by Microsoft to be used in its new operating system Windows Vista. At the begining this name means Windows Future Storage, but now is only Windows File System. Acctually, there is no clear information about what “WinFS” is. Some people say that is a complete new file system and others say that WinFS is only an extension of the actual system because many of the file system work is done by NTFS.

Necessity
With the evolution of Internet and the information technologies, working with big volumes of information has increasingly become more common. Hard disks represent the first half of the storage for personal information. They are commonly used to store personal contacts, work documents, etc. These information items usually keep certain relationship levels among them. So, when you work with a large number of these items, it is very important to organize them and provide a flexible search mechanism based on their properties and content.

Architecture
WinFS is a storage platform to organize, search and share a wide diversity of information.
Instead of a traditional tree in NTFS to organize information, WinFS uses a

direct acyclic graph of items (DAG). It is a set of stored items and their relationships whose physical storage is a relational database providing support to store any item hierarchy. Now it is possible to find items according to the value of their properties and even to the value of the properties of items related to them.The data-sharing capacities of WinFS come with a set of services such us synchronization, notification, a unified store and a common security model. The integration of these services to other technologies like Active Directory makes it possible for applications to share data in a flexible way.

Conclusions

WinFS data model expresses a set of modern storage concepts featuring a combination of the file system services and the relational system to provide a new powerful and enhancing storage platform. This actually elevates the file system conception to a higher level. The WinFS Item may be expressed in XML, object-oriented or tabular manner which allows the WinFS functionalities to be used in a variety of heterogeneous environments. In addition to this, WinFS features a powerful API to develop applications that use its potentialities. Due to its conception WinFS data model represents a step forward in the evolution of file systems and even of storage platforms.