**XFS** is a high-performance 64-bit file system created by Silicon Graphics in 1993.

Maximum Partition Size is 16 exbibytes

Maximum file size is 8 exbibytes

It was the default file system in the SGI's IRIX operating system starting with its version 5.3, the file system was ported to the Linux kernel in 2001. As of June 2014, XFS is supported by most Linux distributions, some of which use it as the default file system.

To reduce fragmentation and increase performance, XFS implements delayed allocation*,* reserving file system blocks for data in the buffer cache, and allocating the block when the operating system flushes that data to disk.

An important feature is the allocation group, which makes XFS a highly scalable file system that allows you to store large numbers of files, and very large files.

Delayed allocation is another helpful feature of XFS. When a file is first created, its contents are normally written to the buffer cache, and then it normally is flushed to disk.

XFS has some options for times when delayed allocation is not optimal. The direct I/O option guarantees that a file is not buffered in buffer cache, but written to disk immediately after it has been committed.

XFS has some unique features that make it an excellent file system for environments that need to support either large amounts of files, or large files. But if you consider using XFS, you need to make a plan to implement it with the optimal performance settings for your Linux server environment.