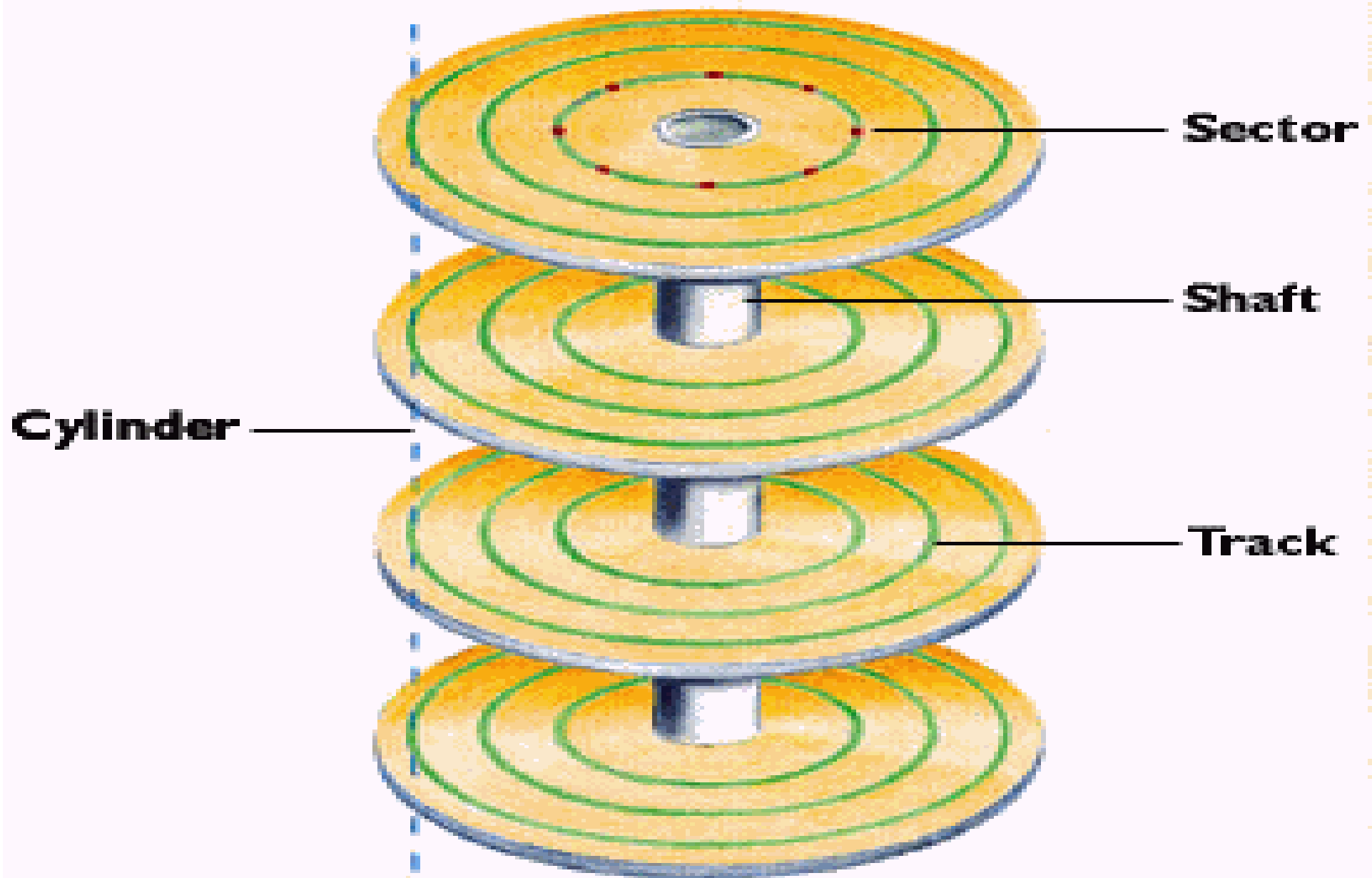


SIR
SONS IN RETIREMENT
Computer User Group





Tracks, Cylinders, and Sectors



HARD DRIVE FORMATTING

- LOW-LEVEL FORMATTING
- PARTITIONING
- HIGH-LEVEL FORMATTING
 - ERASER: <http://heidi.ie/eraser>

FILE ALLOCATION SYSTEMS

- FAT (FILE ALLOCATION TABLE)
- FAT32
- NTFS (NEW TECHNOLOGY FILE SYSTEM)

USER INTERFACE DIFFERENCES

| FEATURES | FAT | NTFS |
|-----------------|--|--|
| Security | Vulnerable | Includes built-in security measures |
| Recoverability | Likely to fail if a sector containing data is lost | Highly reliable. Uses redundant storage. |
| File Size | Can handle file size <4 GB | Handles files up to 64 GB |

NTFS vs FAT

| Criteria | NTFS5 | NTFS | FAT32 | FAT16 |
|----------------------------|---------------------------------------|--|--|---|
| Operating System | Windows 2000 Windows XP | Windows NT Windows 2000 Windows XP | Windows 98 Windows ME Windows 2000 Windows XP | DOS All versions of Microsoft Windows |
| Limitations | | | | |
| Max Volume Size | 2TB | 2TB | 2TB | 2GB |
| Max Files on Volume | Nearly Unlimited | Nearly Unlimited | Nearly Unlimited | ~65000 |
| Max File Size | Limit Only by Volume Size | Limit Only by Volume Size | 4GB | 2GB |
| Max Clusters Number | Nearly Unlimited | Nearly Unlimited | 268435456 | 65535 |
| Max File Name Length | Up to 255 | Up to 255 | Up to 255 | Standard - 8.3 Extended - up to 255 |
| Overall Performance | | | | |
| Built-In Security | Yes | Yes | No | No |
| Recoverability | Yes | Yes | No | No |
| Performance | Low on small volumes High on Large | Low on small volumes High on Large | High on small volumes Low on large | Highest on small volumes Low on large |
| Disk Space Economy | Max | Max | Average | Minimal on large volumes |
| Fault Tolerance | Max | Max | Minimal | Average |

WHY?

- HARD DRIVES FAIL
- PROGRAMS BECOME CORRUPT
- OPERATING SYSTEMS FAIL
- LOST, STOLEN, OR DAMAGED COMPUTER
- PROBLEMS RESULTING WHEN INSTALLING NEW SOFTWARE
- MALWARE

WHAT?

!!!EVERYTHING!!!

WHEN?

**HOW MANY DAYS OF DATA CAN YOU
AFFORD TO LOSE?**

WHERE?

- **BACKUP MEDIUM**
 - **TAPE**
 - **REMOVABLE DISC DRIVES**
 - **CD & DVD R R/W**
 - **ONLINE STORAGE**
 - **INTERNAL/EXTERNAL DISC DRIVE**
- **MINIMUM AMOUNT OF BACKUP STORAGE**
3 TIMES AMOUNT NEEDED FOR SINGLE BACKUP

HOW?

- ARCHIVING
 - MORE TRADITIONAL
 - SELECT FILES TO BACKUP/RETRIEVE
 - GENERALLY SLOWER
- DRIVE IMAGING
 - IDENTICAL COPY
 - AVOID PRODUCT RE-ACTIVATION

POWERQUEST'S USER GROUP

- <http://www.ugr.com/order>
- USER GROUP NAME:
SIR AREA 2 COMPUTER USER GROUP
- ORDER CODE: UGXMS03

HOW - METHODOLOGY

- TWO INTERNAL DRIVES
 - MASTER AND SLAVE
- MASTER HARD DRIVE PARTITIONS
 - WINDOWS 98SE OPERATING SYSTEM
 - WINDOWS XP OPERATING SYSTEM
 - PROGRAM FILES
 - BACKUP FOR MY DOCUMENTS DATA FILES FROM DRIVE 2

HARD DRIVE 2 - SLAVE

- MY DOCUMENTS
- BACKUP FILES
 - DRIVE IMAGE BACKUP
 - JUNE/DECEMBER BACKUP
 - MARCH/SEPTEMBER BACKUP
 - EVEN MONTH ARCHIVES
 - NORMAL BACKUP
 - INCREMENTAL BACKUP
 - ODD MONTH ARCHIVES
 - NORMAL BACKUP
 - INCREMENTAL BACKUP

HOW - METHODOLOGY

- **TWO INTERNAL DRIVES**
 - **MASTER AND SLAVE DRIVES**
- **MASTER HARD DRIVE PARTITIONS**
 - **WINDOWS 98SE OPERATING SYSTEM**
 - **WINDOWS XP OPERATING SYSTEM**
 - **PROGRAM FILES**
 - **BACKUP FOR MY DOCUMENTS DATA FILES FROM DRIVE 2**
 - **EVEN MONTH ARCHIVES**
 - **NORMAL BACKUP**
 - **INCREMENTAL BACKUP**
 - **ODD MONTH ARCHIVES**
 - **NORMAL BACKUP**
 - **INCREMENTAL BACKUP**

WHEN BACKING UP FILES

- SHUT DOWN ALL RUNNING PROGRAMS
- HAVE A BOOTABLE FLOPPY OR CD

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