

# *Ext2 file system*

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## *Standard Features*

- Standard Unix file types : regular files, directories, etc.
- Extended maximal file system size to 4 TB from 2 GB
- Long file names (255 chars), variable length directories
- Reserves blocks (5%) for superuser(root)

## *Advanced Features*

- Allows users to set attributes on a file/directory
- Administrator can choose logical block size at filesystem creation time
- Implements fast symbolic links
- Keeps track of filesystem state
- Mount counter maintained in super block
- Requesting secure deletion on files

# Physical Structure

Super Block	FS Descriptors	Block Bitmaps	Inode Bitmaps	Inode Table	Data Blocks
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Figure 1: Physical Structure of an Ext2 file system

Inode Number	Entry Length	Name Length	Filename
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Figure 2: Structure of a block group

i1	16	05	file 1	i2	40	14	long_file_name	i3	12	02	f 2
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## References

- <http://e2fsprogs.sourceforge.net/ext2intro.html>
- <http://mm.iit.uni-miskolc.hu/Data/texts/Linux/SAG/node89.html>
- <http://www.nondot.org/sabre/os/files/FileSystems/ext2fs/>