

Windows File Structure

1. Unallocated space

What happens when you delete a file in DOS or Windows?

The pointer to the file is deleted and replaced with a sigma (σ) sign to indicate that the space that was occupied by the previous file can be overwritten. This space is referred to as UNALLOCATED space.

2. Drive Slack

The space between the end of a file (EOF) and the end of a cluster. It consists of RAM slack and File Slack.

RAM Slack

The space between the end of a file and the end of the last sector. In older Windows systems, Windows 95, ME, the space was filled with contents RAM. But with Windows NT upwards, the space is filled with zeros (0).

File Slack

The space between the end of a file and the end of a cluster. This space consists of unallocated space if there was a file that was deleted or could be blank (containing formatted tracks).

Suppose a Windows system has clusters of size 512 B, also suppose you have got a file of size 1240B and that you have 8 sectors per cluster.

- i. How many clusters are needed to store this file
- ii. What is the size of each sector?
- iii. Calculate the Size of RAM slack.
- iv. Calculate the size of File slack.