

Evidence of Folder Renaming using the MFT Standard Information Attribute and FileName Attribute

If you look at the MFT entry for a folder you'll see the normal four dates/times that match what you would see in EnCase and Windows Explorer. These are from the Standard Information Attribute (SIA). Following that there is also a FileName attribute (FN). If the file or folder has a long filename you will see an entry for the short filename and an entry for the long filename (unless the user has turned off recording of the short filename, which almost no one does, but I digress...). Each of these entries also has a set of four dates/times associated.

For folders, the SIA times change as we would normally expect. Generally speaking the FN will record four identical times at folder creation and not change again. Renaming the folder is an exception to this. The SIA updates all fields to rename time except for creation. The FN updates all fields to match the original SIA. **There may be other exceptions**, but this is the important one for your case.

Here's an example:

In Figure 1, the FN times all match, and match the creation time of the folder.

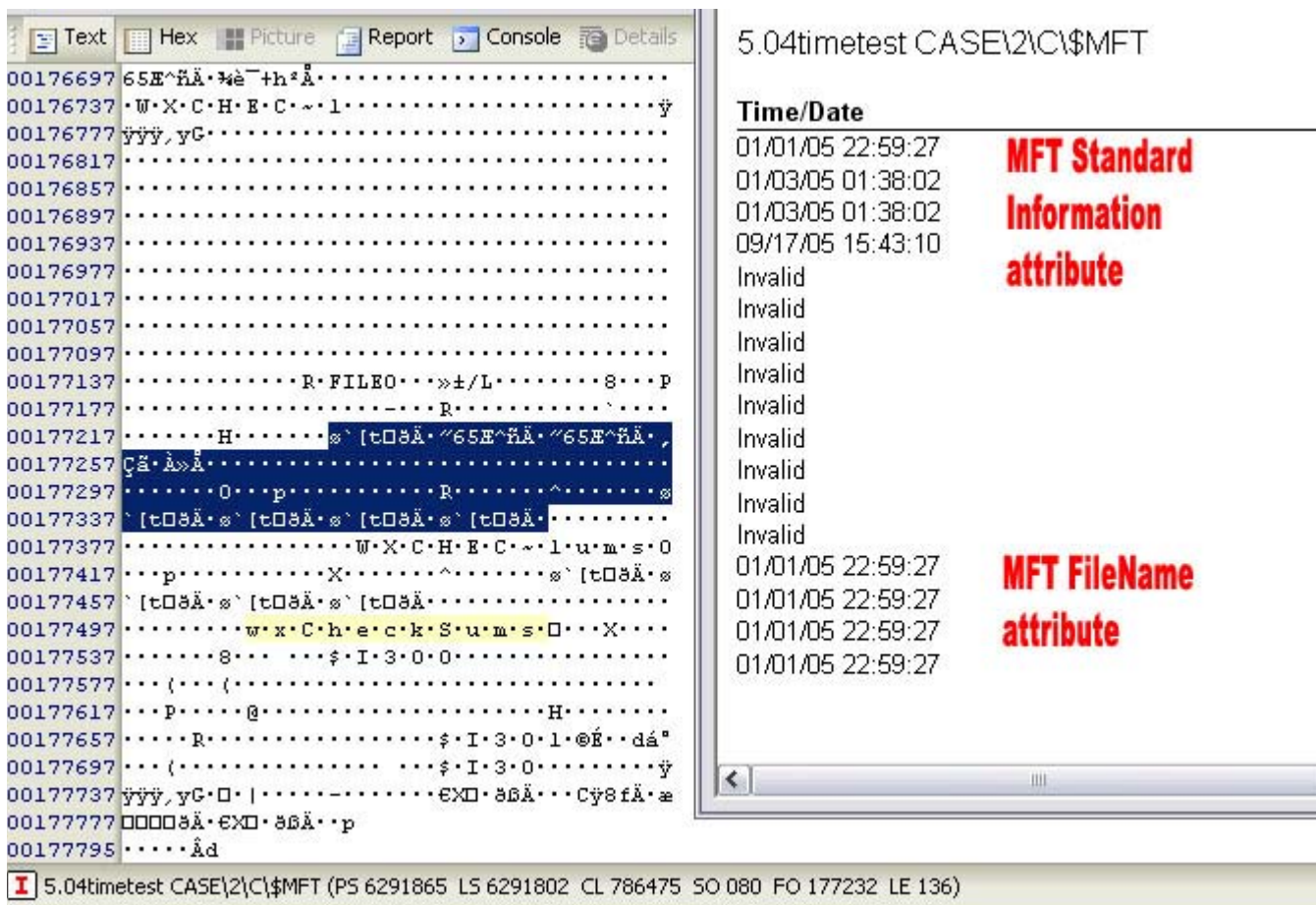


Figure 1

In Figure 2, the folder has been renamed and as you can see the FN times match what the SIA was before it was renamed. The SIA Entry Modified has updated to the renaming time (ending in 16).

5.04timetest CASE\2\C\MFT

| Time/Date | Attribute |
|-------------------|------------------------------------|
| 01/01/05 22:59:27 | MFT Standard Information attribute |
| 01/03/05 01:38:02 | |
| 09/17/05 16:32:16 | |
| 09/17/05 16:32:12 | MFT FileName attribute |
| Invalid | |
| Invalid | |
| Invalid | |
| Invalid | |
| Invalid | |
| Invalid | |
| Invalid | |
| Invalid | |
| Invalid | |
| 01/01/05 22:59:27 | |
| 01/03/05 01:38:02 | |
| 01/03/05 01:38:02 | |
| 09/17/05 15:43:10 | |

5.04timetest CASE\2\C\MFT (PS 6291865 LS 6291802 CL 786475 SO 080 FO 177232 LE 136)

Figure 2