Linux MACB Timestamps

| М | Last data Modification | | | |
|------------|--|--|--|--|
| Α | Last data Access | | | |
| С | Last file status Change | | | |
| В | Birth | | | |
| Resolution | 1 nanosecond | | | |
| M/A/C/B | M/A/C/B is updated to current time | | | |
| m/a/c/b | M/A/C/B is inherited from m/a/c/b of source file/dir | | | |
| | M/A/C/B is not modified | | | |

| Mount Option | Description | | | | |
|-----------------------|--|--|--|--|--|
| (default) | MCB updates are all performed | | | | |
| relatime (default) | A updates are performed if A was earlier or equal to M or C, or at least 1 day old | | | | |
| noatime nodiratime | A updates are never performed A updates are never performed for directories | | | | |
| strictatime | A updates are always performed | | | | |

| | New File/Dir | File Read /Execute | Symlink Read/Follow | File Write | File/Dir Change | New/Delete Hardlink | Local File/Dir Move | Volume File/Dir Move | File/Dir Copy (new) | File Copy (existing) |
|---|-----------------|-----------------------|------------------------|---------------|--------------------|------------------------|------------------------|-------------------------|------------------------|-------------------------|
| | touch, mkdir | cat, exec() | readlink | >, >> | chmod, chown | ln, rm | m∨ | m∨ | ср | ср |
| M | M | • | • | M | • | • | • | m | M | M |
| A | A | A | A | • | • | • | • | a | A | • |
| С | С | • | • | С | С | С | С | С | С | С |
| В | В | • | • | • | • | • | • | В | В | • |

| | Dir Traversal | Dir Listing | Dir : New/Rename Child (File/Dir/Hardlink) | Dir : Delete Child (File/Dir/Hardlink) | Dir : Child Read/Exec/Write/Change |
|---|-------------------------|-----------------------|--|--|--|
| | cd | ls | touch, mkdir, ln, mv, cp | rm, mv | cat, readlink, >> |
| M | • | • | M | M | • |
| A | • | A | • | • | • |
| С | • | • | С | С | • |
| В | • | • | • | • | • |