

**NAME**

**archive\_entry\_atime**, **archive\_entry\_atime\_nsec**, **archive\_entry\_atime\_is\_set**,  
**archive\_entry\_set\_atime**, **archive\_entry\_unset\_atime**,  
**archive\_entry\_birthtime**, **archive\_entry\_birthtime\_nsec**,  
**archive\_entry\_birthtime\_is\_set**, **archive\_entry\_set\_birthtime**,  
**archive\_entry\_unset\_birthtime**, **archive\_entry\_ctime**,  
**archive\_entry\_ctime\_nsec**, **archive\_entry\_ctime\_is\_set**,  
**archive\_entry\_set\_ctime**, **archive\_entry\_unset\_ctime**, **archive\_entry\_mtime**,  
**archive\_entry\_mtime\_nsec**, **archive\_entry\_mtime\_is\_set**,  
**archive\_entry\_set\_mtime**, **archive\_entry\_unset\_mtime** — functions for manipulating  
times in archive entry descriptions

**LIBRARY**

Streaming Archive Library (libarchive, -larchive)

**SYNOPSIS**

```
#include <archive_entry.h>

time_t
archive_entry_atime(struct archive_entry *a);

long
archive_entry_atime_nsec(struct archive_entry *a);

int
archive_entry_atime_is_set(struct archive_entry *a);

void
archive_entry_set_atime(struct archive_entry *a, time_t sec, long nanosec);

void
archive_entry_unset_atime(struct archive_entry *a);

time_t
archive_entry_birthtime(struct archive_entry *a);

long
archive_entry_birthtime_nsec(struct archive_entry *a);

int
archive_entry_birthtime_is_set(struct archive_entry *a);

void
archive_entry_set_birthtime(struct archive_entry *a, time_t sec,
    long nanosec);

void
archive_entry_unset_birthtime(struct archive_entry *a);

time_t
archive_entry_ctime(struct archive_entry *a);

long
archive_entry_ctime_nsec(struct archive_entry *a);

int
archive_entry_ctime_is_set(struct archive_entry *a);
```

```
void
archive_entry_set_ctime(struct archive_entry *a, time_t sec, long nanosec);

void
archive_entry_unset_ctime(struct archive_entry *a);

time_t
archive_entry_mtime(struct archive_entry *a);

long
archive_entry_mtime_nsec(struct archive_entry *a);

int
archive_entry_mtime_is_set(struct archive_entry *a);

void
archive_entry_set_mtime(struct archive_entry *a, time_t sec, long nanosec);

void
archive_entry_unset_mtime(struct archive_entry *a);
```

## DESCRIPTION

These functions create and manipulate the time fields in an *archive\_entry*. Supported time fields are atime (access time), birthtime (creation time), ctime (last time an inode property was changed) and mtime (modification time).

libarchive(3) provides a high-resolution interface. The timestamps are truncated automatically depending on the archive format (for archiving) or the filesystem capabilities (for restoring).

All timestamp fields are optional. The **XXX\_unset()** functions can be used to mark the corresponding field as missing. The current state can be queried using **XXX\_is\_set()**. Unset time fields have a second and nanosecond field of 0.

## SEE ALSO

archive\_entry(3), libarchive(3)

## HISTORY

The **libarchive** library first appeared in FreeBSD 5.3.

## AUTHORS

The **libarchive** library was written by Tim Kientzle <kientzle@acm.org>.