

**NAME**

`archive_entry_clear`, `archive_entry_clone`, `archive_entry_free`, `archive_entry_new` — functions for managing archive entry descriptions

**LIBRARY**

Streaming Archive Library (`libarchive`, `-larchive`)

**SYNOPSIS**

```
#include <archive_entry.h>

struct archive_entry *
archive_entry_clear(struct archive_entry *);

struct archive_entry *
archive_entry_clone(struct archive_entry *);

void
archive_entry_free(struct archive_entry *);

struct archive_entry *
archive_entry_new(void);
```

**DESCRIPTION**

These functions create and manipulate data objects that represent entries within an archive. You can think of a `struct archive_entry` as a heavy-duty version of `struct stat`: it includes everything from `struct stat` plus associated pathname, textual group and user names, etc. These objects are used by *libarchive*(3) to represent the metadata associated with a particular entry in an archive.

**Create and Destroy**

There are functions to allocate, destroy, clear, and copy *archive\_entry* objects:

**archive\_entry\_clear()**

Erases the object, resetting all internal fields to the same state as a newly-created object. This is provided to allow you to quickly recycle objects without thrashing the heap.

**archive\_entry\_clone()**

A deep copy operation; all text fields are duplicated.

**archive\_entry\_free()**

Releases the `struct archive_entry` object.

**archive\_entry\_new()**

Allocate and return a blank `struct archive_entry` object.

**Function groups**

Due to high number of functions, the accessor functions can be found in man pages grouped by the purpose.

*archive\_entry\_acl*(3)      Access Control List manipulation

*archive\_entry\_paths*(3)   Path name manipulation

*archive\_entry\_perms*(3)   User, group and mode manipulation

*archive\_entry\_stat*(3)    Functions not in the other groups and copying to/from *struct stat*.

*archive\_entry\_time*(3)    Time field manipulation

Most of the functions set or read entries in an object. Such functions have one of the following forms:

**archive\_entry\_set\_XXXX()**

Stores the provided data in the object. In particular, for strings, the pointer is stored, not the referenced string.

**archive\_entry\_copy\_XXXX()**

As above, except that the referenced data is copied into the object.

**archive\_entry\_XXXX()**

Returns the specified data. In the case of strings, a const-qualified pointer to the string is returned.

String data can be set or accessed as wide character strings or normal *char* strings. The functions that use wide character strings are suffixed with *\_w*. Note that these are different representations of the same data: For example, if you store a narrow string and read the corresponding wide string, the object will transparently convert formats using the current locale. Similarly, if you store a wide string and then store a narrow string for the same data, the previously-set wide string will be discarded in favor of the new data.

**SEE ALSO**

*archive\_entry\_acl(3)*, *archive\_entry\_paths(3)*, *archive\_entry\_perms(3)*, *archive\_entry\_time(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>.