

NAME

`acl_get_qualifier` — retrieve the qualifier from an ACL entry

LIBRARY

Linux Access Control Lists library (libacl, -lacl).

SYNOPSIS

```
#include <sys/types.h>
#include <sys/acl.h>

void *
acl_get_qualifier(acl_entry_t entry_d);
```

DESCRIPTION

The **`acl_get_qualifier()`** function retrieves the qualifier from the ACL entry indicated by the argument *entry_d* into working storage and returns a pointer to that storage.

If the value of the tag type in the ACL entry referred to by *entry_d* is `ACL_USER`, then the value returned by **`acl_get_qualifier()`** is a pointer to type *uid_t*. If the value of the tag type in the ACL entry referred to by *entry_d* is `ACL_GROUP`, then the value returned by **`acl_get_qualifier()`** is a pointer to type *gid_t*. If the tag type in the ACL entry referred to by *entry_d* is a tag type for which a qualifier is not supported, **`acl_get_qualifier()`** returns a value of `(void *)NULL` and the function fails. Subsequent operations using the returned pointer operate on an independent copy of the qualifier in working storage, and will not change the qualifier of the ACL entry.

This function may cause memory to be allocated. The caller should free any releasable memory, when the new qualifier is no longer required, by calling **`acl_free()`** with the `void *` value returned by **`acl_get_qualifier()`** as an argument.

The argument *entry_d* and any other ACL entry descriptors that refer to entries within the ACL containing the entry referred to by *entry_d* continue to refer to those entries. The order of all existing entries in the ACL containing the entry referred to by *entry_d* remains unchanged.

RETURN VALUE

On success, the function returns a pointer to the tag qualifier that was retrieved into ACL working storage. On error, a value of `(void *)NULL` is returned and *errno* is set appropriately.

ERRORS

If any of the following conditions occur, the **`acl_get_qualifier()`** function returns `(void *)NULL` and sets *errno* to the corresponding value:

- | | |
|----------|--|
| [EINVAL] | The argument <i>entry_d</i> is not a valid descriptor for an ACL entry. |
| | The value of the tag type in the ACL entry referenced by the argument <i>entry_d</i> is neither <code>ACL_USER</code> nor <code>ACL_GROUP</code> . |
| [ENOMEM] | The value to be returned requires more memory than is allowed by the hardware or system-imposed memory management constraints. |

STANDARDS

IEEE Std 1003.1e draft 17 (“POSIX.1e”, abandoned)

SEE ALSO

`acl_create_entry(3)`, `acl_free(3)`, `acl_get_entry(3)`, `acl_get_permset(3)`, `acl_get_tag_type(3)`, `acl_set_permset(3)`, `acl_set_qualifier(3)`, `acl_set_tag_type(3)`, `acl(5)`

AUTHOR

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