

NAME

`acl_check` — check an ACL for validity

LIBRARY

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

SYNOPSIS

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

int
acl_check(acl_t acl, int *last);
```

DESCRIPTION

The **`acl_check()`** function checks the ACL referred to by the argument *acl* for validity.

The three required entries `ACL_USER_OBJ`, `ACL_GROUP_OBJ`, and `ACL_OTHER` must exist exactly once in the ACL. If the ACL contains any `ACL_USER` or `ACL_GROUP` entries, then an `ACL_MASK` entry is also required. The ACL may contain at most one `ACL_MASK` entry.

The user identifiers must be unique among all entries of type `ACL_USER`. The group identifiers must be unique among all entries of type `ACL_GROUP`.

If the ACL referred to by *acl* is invalid, **`acl_check()`** returns a positive error code that indicates which type of error was detected. The following symbolic error codes are defined:

<code>ACL_MULTI_ERROR</code>	The ACL contains multiple entries that have a tag type that may occur at most once.
<code>ACL_DUPLICATE_ERROR</code>	The ACL contains multiple <code>ACL_USER</code> entries with the same user ID, or multiple <code>ACL_GROUP</code> entries with the same group ID.
<code>ACL_MISS_ERROR</code>	A required entry is missing.
<code>ACL_ENTRY_ERROR</code>	The ACL contains an invalid entry tag type.

The **`acl_error()`** function can be used to translate error codes to text messages.

In addition, if the pointer *last* is not `NULL`, **`acl_check()`** assigns the number of the ACL entry at which the error was detected to the value pointed to by *last*. Entries are numbered starting with zero, in the order in which they would be returned by the **`acl_get_entry()`** function.

RETURN VALUE

If successful, the **`acl_check()`** function returns 0 if the ACL referred to by *acl* is valid, and a positive error code if the ACL is invalid. Otherwise, a value of -1 is returned and the global variable *errno* is set to indicate the error.

ERRORS

If any of the following conditions occur, the **`acl_check()`** function returns -1 and sets *errno* to the corresponding value:

[EINVAL]	The argument <i>acl</i> is not a valid pointer to an ACL.
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STANDARDS

This is a non-portable, Linux specific extension to the ACL manipulation functions defined in IEEE Std 1003.1e draft 17 (“POSIX.1e”, abandoned).

SEE ALSO

acl_valid(3), *acl*(5)

AUTHOR

Written by Andreas Gruenbacher <andreas.gruenbacher@gmail.com>.