NAME

aclcheck – check the validity of an ACL

SYNOPSIS

#include <sys/acl.h>

int aclcheck(aclent_t **aclbufp*, **int** *nentries*, **int** **which***);**

DESCRIPTION

aclcheck() checks the validity of an ACL pointed to by *aclbufp. nentries* is the number of entries contained in the buffer. *which* returns the index of the first entry that is invalid.

The function verifies that an ACL pointed to by *aclbufp* is valid according to the following rules:

There must be exactly one **group_obj** ACL entry.

There must be exactly one **user_obj** ACL entry.

There must be exactly one **other_obj** ACL entry.

If there are any **group** ACL entries, then the group ID in each group ACL entry must be unique.

If there are any **user** ACL entries, then the user ID in each user ACL entry must be unique.

If there are any **group** or **user** ACL entries, then there must be exactly one **class_obj** ACL entry.

If there are any default ACL entries, then the following apply:

> There must be exactly one default **group_obj** ACL entry.
>
> There must be exactly one default **other_obj** ACL entry.
>
> There must be exactly one default **user_obj** ACL entry.
>
> If there are any default **group** entries, then the group ID in each default **group** ACL entry must be unique.
>
> If there are any default **user** entries, then the user ID in each default **user** ACL entry must be unique.
>
> If there are any default **group** or **user** entries, then there must be exactly one default **class_obj** ACL entry.

If any of the above rules are violated, then the function fails with *errno* set to **EINVAL.**

RETURN VALUES

If the ACL is valid, **alcheck( )** will return **0**. Otherwise **errno** is set to **EINVAL** and return code is set to one of the following.

GRP_ERROR	There is more than one (default) **group_obj** ACL entry.
USER_ERROR	There is more than one (default) **user_obj** ACL entry.
CLASS_ERROR	There is more than one (default) **class_obj** ACL entry.
OTHER_ERROR	There is more than one (default) **other_obj** ACL entry.
DUPLICATE_ERROR	Duplicate (default) entries of **user** or **group**.
ENTRY_ERROR	The entry type is invalid.

MISS_ERROR Missing (default) **group_obj, user_obj, class_obj**, or **other_obj** entries. *which* returns **-1** in this case.

MEM_ERROR The system can’t allocate any memory. *which* returns **-1** in this case.

SEE ALSO

acl(2), **aclsort**(3)