

**NAME**

**pwcache**, **user\_from\_uid**, **group\_from\_gid** - cache password and group entries

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

```
#include <pwd.h>
```

*const char \**

```
user_from_uid(uid_t uid, int nouser);
```

*int*

```
uid_from_user(const char *name, uid_t *uid);
```

*int*

```
pwcache_userdb(int (*setpassent)(int), void (*endpwent)(void),  
  struct passwd * (*getpwnam)(const char *), struct passwd * (*getpwuid)(uid_t));
```

```
#include <grp.h>
```

*const char \**

```
group_from_gid(gid_t gid, int nogroup);
```

*int*

```
gid_from_group(const char *name, gid_t *gid);
```

*int*

```
pwcache_groupdb(int (*setgroupent)(int), void (*endgrent)(void),  
  struct group * (*getgrnam)(const char *), struct group * (*getgrgid)(gid_t));
```

**DESCRIPTION**

The **user\_from\_uid()** function returns the user name associated with the argument *uid*. The user name is cached so that multiple calls with the same *uid* do not require additional calls to **getpwuid(3)**. If there is no user associated with the *uid*, a pointer is returned to a string representation of the *uid*, unless the argument *nouser* is non-zero, in which case a NULL pointer is returned.

The **group\_from\_gid()** function returns the group name associated with the argument *gid*. The group name is cached so that multiple calls with the same *gid* do not require additional calls to **getgrgid(3)**. If there is no group associated with the *gid*, a pointer is returned to a string representation of the *gid*, unless

the argument *nogroup* is non-zero, in which case a NULL pointer is returned.

The **uid\_from\_user()** function returns the uid associated with the argument *name*. The uid is cached so that multiple calls with the same *name* do not require additional calls to `getpwnam(3)`. If there is no uid associated with the *name*, the **uid\_from\_user()** function returns -1; otherwise it stores the uid at the location pointed to by *uid* and returns 0.

The **gid\_from\_group()** function returns the gid associated with the argument *name*. The gid is cached so that multiple calls with the same *name* do not require additional calls to `getgrnam(3)`. If there is no gid associated with the *name*, the **gid\_from\_group()** function returns -1; otherwise it stores the gid at the location pointed to by *gid* and returns 0.

The **pwcache\_userdb()** function changes the user database access routines which **user\_from\_uid()** and **uid\_from\_user()** call to search for users. The caches are flushed and the existing **endpwent()** method is called before switching to the new routines. *getpwnam* and *getpwuid* must be provided, and *setpassent* and *endpwent* may be NULL pointers.

The **pwcache\_groupdb()** function changes the group database access routines which **group\_from\_gid()** and **gid\_from\_group()** call to search for groups. The caches are flushed and the existing **endgrent()** method is called before switching to the new routines. *getgrnam* and *getgrgid* must be provided, and *setgroupent* and *endgrent* may be NULL pointers.

## ERRORS

If insufficient memory is available, **user\_from\_uid()** and **group\_from\_gid()** may return NULL pointers. *errno* is set to ENOMEM.

## SEE ALSO

`getgrgid(3)`, `getgrnam(3)`, `getpwnam(3)`, `getpwuid(3)`

## HISTORY

The **user\_from\_uid()** and **group\_from\_gid()** functions first appeared in 4.4BSD.

The **uid\_from\_user()** and **gid\_from\_group()** functions first appeared in NetBSD 1.4.

The **pwcache\_userdb()** and **pwcache\_groupdb()** functions first appeared in NetBSD 1.6 and FreeBSD 10.0.