unix-cred

cptpcrd

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CHAPTER

ONE

CROSS-PLATFORM INTERFACES

For most use cases, these interfaces (in particular *get_peer_uid_gid()*) should be enough.

get_peer_uid_gid(*sock*)
Returns the `(uid, gid)` of the peer connected to the given **stream** socket.

get_peer_pid_uid_gid(*sock*)
Returns the `(pid, uid, gid)` of the peer connected to the given **stream** socket.

On some platforms, this function is not available. On other platforms, the returned PID may be `None` if the current version of that platform does not support retrieving the PID (for example, FreeBSD prior to version 13 does not, and will always return `None`).

Availability: Linux, OpenBSD, NetBSD, FreeBSD (PID only available on version 13+), macOS, Solaris, Illumos

CHAPTER

TWO

PLATFORM-SPECIFIC INTERFACES

In most cases, you should use the cross-platform interfaces. However, the platform-specific interfaces may be useful (for example, they may provide additional information).

get_peerpid(*sock*)
Returns the PID of the process that last accessed the given stream socket.

Availability: macOS

2.1 ucred

The `ucred` module provides an interface to the `ucred` interface on Linux, the `sockpeecred` interface on OpenBSD, or the `unpcbid` interface on NetBSD.

The reason that the interfaces for all three of these are in one module is that they are all essentially the same interface, with only minor implementation differences (such as the order of the fields in the C struct, or the name of the socket option used to retrieve them).

Note: This module is only here for completeness. In nearly all cases, you should use *get_peer_pid_uid_gid()* (which has slightly better cross-platform support) instead.

class ucred.**Ucred**
Availability: Linux, OpenBSD, NetBSD

pid

Type int

The PID of the connected peer.

uid

Type int

The effective UID of the connected peer.

gid

Type int

The effective GID of the connected peer.

ucred.**get_ucred**(*sock*)
Returns a *Ucred* object representing the credentials of the peer connected to the given socket.

Availability: Linux, OpenBSD, NetBSD

2.2 xucred

The `xucred` module provides an interface to the `xucred` interface on FreeBSD, DragonflyBSD, and macOS.

class xucred.**Xucred**

Availability: FreeBSD, DragonFlyBSD, macOS

pid

Type int or None

The PID of the connected peer.

This attribute is only set on FreeBSD 13+. On macOS/DragonFlyBSD, and on previous versions of FreeBSD, it is always `None`. Always make sure to check for a `None` value.

To get the PID on macOS, use *get_peerpid()*.

Availability: FreeBSD 13+

uid

Type int

The effective UID of the connected peer.

gid

Type int

The effective GID of the connected peer.

groups

Type list[int]

The supplementary groups of the connected peer.

Note: On macOS, the value placed in this attribute differs from that of os.getgroups(). Effectively, it always behaves as if the deployment target is less than 10.5.

Note: On FreeBSD, this group list is truncated to the first 16 supplementary groups. (Technically, it's also truncated on DragonflyBSD and macOS, but they only support 16 groups normally.)

xucred.**get_xucred**(*sock*)

Returns a *Xucred* object representing the credentials of the peer connected to the given socket.

Availability: FreeBSD, DragonFlyBSD, macOS

2.3 peerucred

The `peerucred` module provides an interface to the `getpeerucred()` function on Solaris/Illumos.

> **Warning:** This module is experimental and has undergone no testing whatsoever. Use with caution.

class peerucred.**Ucred**

Availability: Solaris, Illumos

pid

Type int

The PID of the connected peer.

ruid

Type int

The real UID of the connected peer.

euid

Type int

The effective UID of the connected peer.

suid

Type int

The saved UID of the connected peer.

rgid

Type int

The real GID of the connected peer.

egid

Type int

The effective GID of the connected peer.

sgid

Type int

The saved GID of the connected peer.

groups

Type list[int]

The supplementary groups of the connected peer.

peerucred.**getpeerucred**(*sock*)

Returns a *Ucred* object representing the credentials of the peer connected to the given socket.

Availability: Solaris, Illumos

CHAPTER

THREE

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