

**NAME**

**vput**, **vrele**, **vunref** - decrement the use count for a vnode

**SYNOPSIS**

```
#include <sys/param.h>
```

```
#include <sys/vnode.h>
```

*void*

```
vput(struct vnode *vp);
```

*void*

```
vrele(struct vnode *vp);
```

*void*

```
vunref(struct vnode *vp);
```

**DESCRIPTION**

Decrement the *v\_usecount* field of a vnode.

*vp* the vnode to decrement

The **vrele()** function takes an unlocked vnode and returns with the vnode unlocked.

The **vput()** function should be given a locked vnode as argument, the vnode is unlocked after the function returned. The **vput()** is operationally equivalent to calling VOP\_UNLOCK(9) followed by **vrele()**, with less overhead.

The **vunref()** function takes a locked vnode as argument, and returns with the vnode locked.

Any code in the system which signified its use of a vnode by usecount should call one of the listed function to decrement use counter. If the *v\_usecount* field of the non-doomed vnode reaches zero, then it will be inactivated and placed on the free list.

The **vrele()** function may lock the vnode. All three functions may sleep.

The hold count for the vnode is always greater or equal to the usecount. Non-forced unmount fails when mount point owns a vnode that has non-zero usecount, see vflush(9).

**SEE ALSO**

vget(9), vnode(9), vref(9), vrefcnt(9)

**AUTHORS**

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