NAME

prop_op – report driver property information

SYNOPSIS

#include <sys/types.h>
#include <sys/ddi.h>
#include <sys/sunddi.h>

int *prefix* **prop_op(dev_t** *dev*, **dev_info_t** **dip*, **ddi_prop_op_t** *prop_op*, **int** *flags*,
char **name*, **caddr_t** *valuep*, **int** **lengthp***)**

INTERFACE LEVEL

Solaris DDI specific (Solaris DDI). This entry point is **required**, but it can be **ddi_prop_op**(9F).

ARGUMENTS

dev Device number associated with this device.

dip A pointer to the device information structure for this device.

prop_op Property operator. Valid operators are:

PROP_LEN
Get property length only. (valuep unaffected)

PROP_LEN_AND_VAL_BUF
Get length and value into caller's buffer. (valuep used as input)

PROP_LEN_AND_VAL_ALLOC
Get length and value into allocated buffer. (valuep returned as pointer to pointer to allocated buffer)

flags The only possible flag value is:

DDI_PROP_DONTPASS
Don't pass request to parent if property not found.

name Pointer to name of property to be interrogated.

valuep If *prop_op* is **PROP_LEN_AND_VAL_BUF,** this should be a pointer to the users buffer. If *prop_op* is **PROP_LEN_AND_VAL_ALLOC,** this should be the *address* of a pointer.

lengthp On exit, **lengthp* will contain the property length. If *prop_op* is **PROP_LEN_AND_VAL_BUF** then before calling **prop_op( )**, *lengthp* should point to an **int** that contains the length of callers buffer.

DESCRIPTION

prop_op( ) is an entry point which reports the values of certain "properties" of the driver or device to the system. Each driver must have an *xx*prop_op entry point, but most drivers which do not need to create or manage their own properties can use **ddi_prop_op( )** for this entry point. Then the driver can use **ddi_prop_create**(9F) to create properties for its device.

RETURN VALUES

prop_op( ) should return:

DDI_PROP_SUCCESS	Property found and returned.
DDI_PROP_NOT_FOUND	Property not found.
DDI_PROP_UNDEFINED	Prop explicitly undefined.
DDI_PROP_NO_MEMORY	Property found, but unable to allocate memory. *lengthp* has the correct property length.
DDI_PROP_BUF_TOO_SMALL	Property found, but the supplied buffer is too small. *lengthp* has the correct property length.

EXAMPLES

```
static int
xxprop_op(dev_t dev, dev_info_t *dip, ddi_prop_op_t prop_op,
        int flags, char *name, caddr_t valuep, int *lengthp)
{
        int  instance;
        struct xxstate *xsp;

        if (dev == DDI_DEV_T_ANY)
                goto skip;

        instance = getminor(dev);
        xsp = ddi_get_soft_state(statep, instance);
        if (xsp == NULL)
                return (DDI_PROP_NOTFOUND);

        if (!strcmp(name, "nblocks")) {
                ddi_prop_modify(dev, dip, "nblocks", flags,
                &xsp->nblocks, sizeof(int));
        }
                /*        other cases...     */

        skip:
                return (ddi_prop_op(dev, dip, prop_op, flags, name,
                valuep, lengthp));
}
```

SEE ALSO

ddi_prop_create(9F), **ddi_prop_op**(9F)

Writing Device Drivers