NAME

scsi_probe – utility for probing a scsi device

SYNOPSIS

```
#include <sys/scsi/scsi.h>
int scsi_probe(struct scsi_device *devp, int (*waitfunc)());
```

INTERFACE LEVEL

Solaris DDI specific (Solaris DDI).

ARGUMENTS

devp	Pointer to a **scsi_device**(9S) structure
waitfunc	**NULL_FUNC** or **SLEEP_FUNC**

DESCRIPTION

scsi_probe( ) determines whether a *target/lun* is present and sets up the **scsi_device** structure with inquiry data.

scsi_probe( ) uses the SCSI Inquiry command to test if the device exists. It may retry the Inquiry command as appropriate. If **scsi_probe( )** is successful, it will allocate space for the **scsi_inquiry** structure and assign the address to the **sd_inq** member of the **scsi_device**(9S) structure. **scsi_probe( )** will then fill in this **scsi_inquiry**(9S) structure and return **SCSIPROBE_EXISTS**.

scsi_unprobe(9F) is used to undo the effect of **scsi_probe( )**.

If the target is a non-CCS device, **SCSIPROBE_NONCCS** will be returned.

waitfunc indicates what the allocator routines should do when resources are not available; the valid values are:

NULL_FUNC	Do not wait for resources. Return **SCSIPROBE_NOMEM** or **SCSIPROBE_FAILURE**
SLEEP_FUNC	Wait indefinitely for resources.

RETURN VALUES

scsi_probe( ) returns:

SCSIPROBE_BUSY	Device exists but is currently busy.
SCSIPROBE_EXISTS	Device exists and inquiry data is valid.
SCSIPROBE_FAILURE	Polled command failure.
SCSIPROBE_NOMEM	No space available for structures.
SCSIPROBE_NONCCS	Device exists but inquiry data is not valid.
SCSIPROBE_NORESP	Device does not respond to an INQUIRY.

CONTEXT

scsi_probe( ) is normally called from the target driver's **probe**(9E) or **attach**(9E) routine. If *waitfunc* is **SLEEP_FUNC**, then this routine may only be called from user-level code. Otherwise, it may be called from either user or interrupt level.

EXAMPLE

```
switch (scsi_probe(devp, NULL_FUNC)) {
default:
case SCSIPROBE_NORESP:
case SCSIPROBE_NONCCS:
case SCSIPROBE_NOMEM:
case SCSIPROBE_FAILURE:
case SCSIPROBE_BUSY:
        break;

case SCSIPROBE_EXISTS:
        switch (devp->sd_inq->inq_dtype) {
        case DTYPE_DIRECT:
                rval = DDI_PROBE_SUCCESS;
                break;
        case DTYPE_RODIRECT:
                rval = DDI_PROBE_SUCCESS;
                break;
        case DTYPE_NOTPRESENT:
        default:
                break;
        }
}
scsi_unprobe(devp);
```

SEE ALSO

attach(9E), **probe**(9E), **scsi_slave**(9F), **scsi_unprobe**(9F), **scsi_unslave**(9F), **scsi_device**(9S), **scsi_inquiry**(9S)

ANSI Small Computer System Interface-2 (SCSI-2)

Writing Device Drivers

NOTES

A *waitfunc* function other than **NULL_FUNC** or **SLEEP_FUNC** is not supported and may have unexpected results.