NAME

disks – adds /dev entries for hard disks attached to the system

SYNOPSIS

/usr/sbin/disks [–**r** *rootdir*]

AVAILABILITY

SUNWcsu

DESCRIPTION

disks creates symbolic links in the **/dev/dsk** and **/dev/rdsk** directories pointing to the actual disk device special files under the **/devices** directory tree. It performs the following steps:

1. **disks** searches the kernel device tree to see what hard disks are attached to the system. It notes the **/devices** pathnames for the partitions on the drive and determines the physical component of the corresponding **/dev/dsk** or **/dev/rdsk** name.
2. The **/dev/dsk** and **/dev/rdsk** directories are checked for disk partition entries – that is, symbolic links with names of the form **c***N*[**t***N*]**d***N***s***N*, where *N* represents a decimal number. **c***N* is the logical controller number, an arbitrary number assigned by this program to designate a particular disk controller. The first controller found on the first occasion this program is run on a system, is assigned number 0. **t***N* is the bus-address number of a subsidiary controller attached to a peripheral bus such as SCSI or IPI (the **target** number for SCSI, and the **facility** number for IPI controllers). **d***N* is the number of the disk attached to the controller, and **s***N* is the partition, or *slice*, number of the entry.
3. If only some of the disk partition entries are found in **/dev/dsk** for a disk that has been found under the **/devices** directory tree, **disks** creates the missing symbolic links. If none of the partition entries for a particular disk are found in **/dev/dsk, disks** checks to see if any entries exist for other disks attached to the same controller, and if so, creates new entries using the same controller number as used for other disks on the same controller. If no other **/dev/dsk** entries are found for partitions of disks belonging to the same physical controller as the current disk, **disks** assigns the lowest-unused controller number and creates entries for the disk partitions using this newly-assigned controller number.

disks is called each time the system is reconfiguration-booted. **disks** can only be run after **drvconfig**(1M) is run, since **drvconfig**(1M) builds the kernel data structures and the **/devices** tree.

Of interest to device driver writers are the devices that **disks** considers disk devices. Device nodes of type DDI_NT_BLOCK, DDI_NT_BLOCK_CHAN, DDI_NT_CD, and DDI_NT_CD_CHAN are considered disk devices (see **ddi_create_minor_node**(9F) for more information on node types).

OPTIONS

–**r** *rootdir* Cause **disks** to presume that the **/dev/dsk**, **/dev/rdsk** and **/devices** directory trees are found under *rootdir*, not directly under **/**.

ERRORS

If **disks** finds entries of a particular logical controller linked to different physical controllers, it prints an error message and exits without making any changes to the **/dev** directory, since it cannot determine which of the two alternative logical-to-physical mappings is correct. The links should be manually corrected or removed before another reconfiguration-boot is performed.

FILES

/dev/dsk/* **/dev/rdsk/***	entries for the hard disk for general use
/devices/*	device nodes

SEE ALSO

devlinks(1M), **drvconfig**(1M), **ports**(1M), **tapes**(1M), **ddi_create_minor_node**(9F)