Red Hat Enterprise Linux Release 9.2 Manual Pages on 'multipath.8' command

$ man multipath.8

MULTIPATH(8)   System Manager's Manual   MULTIPATH(8)

NAME

    multipath - Device mapper target autoconfig.

SYNOPSIS

    multipath [-v level] [-B|-d|-i|-q|-r] [-b file] [-p policy] [device]

    multipath [-v level] [-R retries] -f device

    multipath [-v level] [-R retries] -F

    multipath [-v level] [-l|-ll] [device]

    multipath [-v level] [-a|-w] device

    multipath [-v level] [-A|-W]

    multipath [-v level] [-i] [-c|-C] device

    multipath [-v level] [-i] [-u|-U]

    multipath [-h|-t|-T]

DESCRIPTION

    multipath is used to detect and coalesce multiple paths to devices, for

    fail-over or performance reasons.

ARGUMENTS

    The device argument restricts multipath's operation to devices matching

    the given expression. The argument may refer either to a multipath map

    or to its components ("paths"). The expression may be in one of the

    following formats:

    device node   file name of a device node, e.g. /dev/dm-10 or /dev/sda.

        If the node refers to an existing device mapper device

representing a multipath map, this selects the map or its

paths, depending on the operation mode. Otherwise, it se?

lects a path device.

device ID   kernel device number specified by major:minor numbers,

e.g. 65:16. This format can only be used for path de?

vices.

WWID   a World Wide Identifier matching a multipath map or its

paths. To list WWIDs of devices present in the system,

use e.g. the command "multipath -d -v3 2>/dev/null".

OPERATION MODES

The default operation mode is to detect and set up multipath maps from

the devices found in the system. Other operation modes are chosen by

using one of the following command line switches:

-f   Flush (remove) a multipath device map specified as parameter, if

unused. This operation is delegated to the multipathd daemon if

it's running.

-F   Flush (remove) all unused multipath device maps. This operation

is delegated to the multipathd daemon if it's running.

-l   Show ("list") the current multipath topology from information

fetched in sysfs and the device mapper.

-ll   Show ("list") the current multipath topology from all available

information (sysfs, the device mapper, path checkers ...).

-a   Add the WWID for the specified device to the WWIDs file.

-A   Add the WWIDs from any kernel command line mpath.wwid parameters

to the WWIDs file.

-w   Remove the WWID for the specified device from the WWIDs file.

-W   Reset the WWIDs file to only include the current multipath de?

vices.

-c   Check if a block device should be a path in a multipath device.

-C   Check if a multipath device has usable paths. This can be used

to test whether or not I/O on this device is likely to succeed.

The command itself doesn't attempt to do I/O on the device.

-u   Check if the device specified in the program environment should

be a path in a multipath device.

-U   Check if the device specified in the program environment is a multipath device with usable paths. See -C.

-h   Print usage text.

-t   Display the currently used multipathd configuration.

-T   Display the currently used multipathd configuration, limiting the output to those devices actually present in the system. This can be used a template for creating multipath.conf.

OPTIONS

-v level

Verbosity of information printed to stdout in default and "list" operation modes. The default level is -v 2.

    0   Nothing is printed.

    1   In default mode, Names/WWIDs of created or mod? ified multipath maps are printed. In list mode, WWIDs of all multipath maps are printed.

    2   In default mode, Topology of created or modi? fied multipath maps is printed. In list mode, topology of all multipath maps is printed.

    3   All detected paths and the topology of all mul? tipath maps are printed.

The verbosity level also controls the level of log and de? bug messages printed to stderr. The default level corre? sponds to LOG_NOTICE (important messages that shouldn't be missed in normal operation).

-d   Dry run, do not create or update devmaps.

-e   Enable all foreign libraries. This overrides the enable_foreign option from multipath.conf(5).

-i   Ignore WWIDs file when processing devices. If find_multipaths strict or find_multipaths no is set in multipath.conf, multipath only considers devices that are listed in the WWIDs file. This option overrides that behavior. For other values of find_multi? paths, this option has no effect. See the description of

find_multipaths in multipath.conf(5). This option should only

be used in rare circumstances.

-B   Treat the bindings file as read only.

-b file

Set user_friendly_names bindings file location. The default is

/etc/multipath/bindings.

-q   Don't unset the device mapper feature queue_if_no_path for mul?

tipath maps. Normally, multipath would do so if multipathd is

not running, because only a running multipath daemon guarantees

that unusable paths are reinstated when they become usable

again.

-p policy

Force new maps to use the specified policy, overriding the con?

figuration in multipath.conf(5). The possible values for policy

are the same as the values for path_grouping_policy in multi?

path.conf(5). Existing maps are not modified.

-r   Force a reload of all existing multipath maps. This command is

delegated to the multipathd daemon if it's running. In this

case, other command line switches of the multipath command have

no effect.

-R retries

Number of times to retry flushing multipath devices that are in

use. The default is 0.

SEE ALSO

multipathd(8), multipath.conf(5), kpartx(8), udev(8), dmsetup(8), hot?

plug(8).

AUTHORS

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