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

$ man multipathd.8

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

NAME

   multipathd - Multipath daemon.

SYNOPSIS

   multipathd [-d|-k] [-s] [-v verbosity] [-B] [-w]

DESCRIPTION

   The multipathd daemon is in charge of checking for failed paths. When

   this happens, it will reconfigure the multipath map the path belongs

   to, so that this map regains its maximum performance and redundancy.

   This daemon executes the external multipath tool when events occur. In

   turn, the multipath tool signals the multipathd daemon when it is done

   with devmap reconfiguration, so that it can refresh its failed path

   list.

   In this Linux distribution, multipathd does not run unless a /etc/mul?

   tipath.conf file exists.

OPTIONS

   -d   Foreground Mode. Don't daemonize, and print all messages to std?

          out and stderr.

   -s   Suppress timestamps. Do not prefix logging messages with a time?

          stamp.

   -v level

          Verbosity level. Print additional information while running mul?

          tipathd. A level of 0 means only print errors. A level of 3 or

greater prints debugging information as well.

-B   Read-only bindings file. multipathd will not write to the user_friendly_names bindings file. If a user_friendly_name doesn't already exist for a device, it will use its WWID as its alias.

-k   multipathd will enter interactive mode. From this mode, the available commands can be viewed by entering 'help'. When you are finished entering commands, press CTRL-D to quit.

-n   IGNORED. Use the option find_multipaths to control the treatment of newly detected devices by multipathd. See multipath.conf(5).

-w   Since kernel 4.14 a new device-mapper event polling interface is used for updating multipath devices on dmevents. Use this flag to force it to use the old event waiting method, based on creat? ing a seperate thread for each device.

COMMANDS

The following commands can be used in interactive mode:

list|show paths

Show the paths that multipathd is monitoring, and their state.

list|show paths format $format

Show the paths that multipathd is monitoring, using a format string with path format wildcards.

list|show maps|multipaths

Show the multipath devices that the multipathd is monitoring.

list|show maps|multipaths format $format

Show the status of all multipath devices that the multipathd is monitoring, using a format string with multipath format wild? cards.

list|show maps|multipaths status

Show the status of all multipath devices that the multipathd is monitoring.

list|show maps|multipaths stats

Show some statistics of all multipath devices that the multi? pathd is monitoring.

list|show maps|multipaths topology

    Show the current multipath topology. Same as 'multipath -ll'.

list|show topology

    Show the current multipath topology. Same as 'multipath -ll'.

list|show map|multipath $map topology

    Show topology of a single multipath device specified by $map,

    for example 36005076303ffc56200000000000010aa. This map could be

    obtained from 'list maps'.

list|show wildcards

    Show the format wildcards used in interactive commands taking

    $format.

list|show config

    Show the currently used configuration, derived from default val?

    ues and values specified within the configuration file /etc/mul?

    tipath.conf.

list|show config local

    Show the currently used configuration like show config, but lim?

    iting the devices section to those devices that are actually

    present in the system.

list|show blacklist

    Show the currently used blacklist rules, derived from default

    values and values specified within the configuration file

    /etc/multipath.conf.

list|show devices

    Show all available block devices by name including the informa?

    tion if they are blacklisted or not.

list|show status

    Show the number of path checkers in each possible state, the

    number of monitored paths, and whether multipathd is currently

    handling a uevent.

list|show daemon

    Show the current state of the multipathd daemon.

add path $path

Add a path to the list of monitored paths. $path is as listed in

/sys/block (e.g. sda).

remove|del path $path

Stop monitoring a path. $path is as listed in /sys/block (e.g.

sda).

add map|multipath $map

Add a multipath device to the list of monitored devices. $map

can either be a device-mapper device as listed in /sys/block

(e.g. dm-0) or it can be the alias for the multipath device

(e.g. mpath1) or the uid of the multipath device (e.g.

36005076303ffc56200000000000010aa).

remove|del map|multipath $map

Stop monitoring a multipath device.

resize map|multipath $map

Resizes map $map to the given size.

switch|switchgroup map|multipath $map group $group

Force a multipath device to switch to a specific path group.

$group is the path group index, starting with 1.

reconfigure

Reconfigures the multipaths. This should be triggered automati?

cally after anyi hotplug event.

suspend map|multipath $map

Sets map $map into suspend state.

resume map|multipath $map

Resumes map $map from suspend state.

reset map|multipath $map

Reassign existing device-mapper table(s) use use the multipath

device, instead of its path devices.

reload map|multipath $map

Reload a multipath device.

fail path $path

Sets path $path into failed state.

reinstate path $path

Resumes path $path from failed state.

disablequeueing maps|multipaths

Disable queueing on all multipath devices.

restorequeueing maps|multipaths

Restore queueing on all multipath devices.

disablequeueing map|multipath $map

Disable queuing on multipathed map $map.

restorequeueing map|multipath $map

Restore queuing on multipahted map $map.

forcequeueing daemon

Forces multipathd into queue_without_daemon mode, so that
no_path_retry queueing will not be disabled when the daemon
stops.

restorequeueing daemon

Restores configured queue_without_daemon mode.

map|multipath $map setprstatus

Enable persistent reservation management on $map.

map|multipath $map unsetprstatus

Disable persistent reservation management on $map.

map|multipath $map getprstatus

Get the current persistent reservation management status of
$map.

map|multipath $map getprkey

Get the current persistent reservation key associated with $map.

map|multipath $map setprkey key $key

Set the persistent reservation key associated with $map to $key
in the prkeys_file. This key will only be used by multipathd if
reservation_key is set to file in /etc/multipath.conf.

map|multipath $map unsetprkey

Remove the persistent reservation key associated with $map from
the prkeys_file. This will only unset the key used by multipathd
if reservation_key is set to file in /etc/multipath.conf.

path $path setmarginal

move $path to a marginal pathgroup. The path will remain in the

marginal path group until unsetmarginal is called. This command

will only work if marginal_pathgroups is enabled and there is no

Shaky paths detection method configured (see the multipath.conf

man page for details).

path $path unsetmarginal

return marginal path $path to its normal pathgroup. This command

will only work if marginal_pathgroups is enabled and there is no

Shaky paths detection method configured (see the multipath.conf

man page for details).

map $map unsetmarginal

return all marginal paths in $map to their normal pathgroups.

This command will only work if marginal_pathgroups is enabled

and there is no Shaky paths detection method configured (see the

multipath.conf man page for details).

quit|exit

End interactive session.

shutdown

Stop multipathd.

SYSTEMD INTEGRATION

When compiled with systemd support two systemd service files are in?

stalled, multipathd.service and multipathd.socket The multipathd.socket

service instructs systemd to intercept the CLI command socket, so that

any call to the CLI interface will start-up the daemon if required.

The multipathd.service file carries the definitions for controlling the

multipath daemon. The daemon itself uses the sd_notify(3) interface to

communicate with systemd. The following unit keywords are recognized:

WatchdogSec=

Enables the internal watchdog from systemd. multipath will send

a notification via sd_notify(3) to systemd to reset the watch?

dog. If specified the polling_interval and max_polling_interval

settings will be overridden by the watchdog settings.   Please

note that systemd prior to version 207 has issues which prevent

the systemd-provided watchdog from working correctly. So the watchdog is not enabled per default, but has to be enabled manu‐ally by updating the multipathd.service file.

OOMScoreAdjust=

Overrides the internal OOM adjust mechanism.

LimitNOFILE=

Overrides the max_fds configuration setting.

SEE ALSO

multipath(8), kpartx(8), sd_notify(3), system.service(5).

AUTHORS

multipath-tools was developed by Christophe Varoqui <christophe.varo‐qui@opensvc.com> and others.

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