



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

\$ man pvscan.8

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

NAME

pvscan ? List all physical volumes

SYNOPSIS

pvscan option_args position_args

[option_args]

[position_args]

-a|--activate y|n|ay

--autoactivation String

--cache

--checkcomplete

--commandprofile String

--config String

-d|--debug

--devices PV

--devicesfile String

--driverloaded y|n

-e|--exported

-h|--help

--ignorelockingfailure

--journal String

--listlvs

--listvg

--lockopt String
 --longhelp
 -j|--major Number
 --minor Number
 --nohints
 --nolocking
 --noudevsync
 -n|--novolumegroup
 --profile String
 -q|--quiet
 --reportformat basic|json|json_std
 -s|--short
 -t|--test
 --udevoutput
 -u|--uuid
 -v|--verbose
 --version
 --vgonline
 -y|--yes

DESCRIPTION

When called without the `--cache` option, `pvscan` lists PVs on the system, like `pvs(8)` or `pvdisplay(8)`.

When `--cache` is used, `pvscan` updates runtime lvm state on the system, or with `-aay` performs autoactivation.

`pvscan --cache device`

If `device` is present, lvm records that the PV on `device` is online. If

`device` is not present, lvm removes the online record for the PV. `pvs?`

can only reads the named device.

`pvscan --cache`

Updates the runtime state for all lvm devices.

`pvscan --cache -aay device`

Performs the `--cache` steps for the `device`, then checks if the VG using the `device` is complete. If so, LVs in the VG are autoactivated, the

same as `vgchange -aay vname` would do. (A device name may be replaced with major and minor numbers.)

`pvscan --cache -aay`

Performs the `--cache` steps for all devices, then autoactivates any com?

plete VGs.

`pvscan --cache --listvg|--listlvs device`

Performs the `--cache` steps for the device, then prints the name of the VG using the device, or the names of LVs using the device. `--checkcom?`

plete is usually included to check if all PVs for the VG or LVs are on?

line. When this command is called by a udev rule, the output must con?

form to udev rule specifications (see `--udevoutput`.) The udev rule

will use the results to perform autoactivation.

Autoactivation of VGs or LVs can be enabled/disabled using `vgchange` or

`lvchange` with `--setautoactivation y|n`, or by adding names to

`lvm.conf(5)` `activation/auto_activation_volume_list`

See `lvmautoactivation(7)` for more information about how `pvscan` is used for autoactivation.

USAGE

Display PV information.

`pvscan`

[`-e|--exported`]

[`-n|--novolumegroup`]

[`-s|--short`]

[`-u|--uuid`]

[`--ignorelockingfailure`]

[`--reportformat basic|json|json_std`]

[`COMMON_OPTIONS`]

?

Record that a PV is online or offline.

`pvscan --cache`

[`-j|--major Number`]

[`--ignorelockingfailure`]

[`--reportformat basic|json|json_std`]

[--minor Number]

[--noudevsync]

[COMMON_OPTIONS]

[String|PV ...]

?

Record that a PV is online and autoactivate the VG if complete.

`pvscan --cache -a|--activate ay`

[-j|--major Number]

[--ignorelockingfailure]

[--reportformat basic|json|json_std]

[--minor Number]

[--noudevsync]

[--autoactivation String]

[COMMON_OPTIONS]

[String|PV ...]

?

Record that a PV is online and list the VG using the PV.

`pvscan --cache --listvg PV`

[--ignorelockingfailure]

[--checkcomplete]

[--vgonline]

[--udevoutput]

[--autoactivation String]

[COMMON_OPTIONS]

?

Record that a PV is online and list LVs using the PV.

`pvscan --cache --listlvs PV`

[--ignorelockingfailure]

[--checkcomplete]

[--vgonline]

[COMMON_OPTIONS]

?

List LVs using the PV.

pvscan --listlvs PV

[COMMON_OPTIONS]

?

List the VG using the PV.

pvscan --listvg PV

[COMMON_OPTIONS]

?

Common options for lvm:

[-d|--debug]

[-h|--help]

[-q|--quiet]

[-t|--test]

[-v|--verbose]

[-y|--yes]

[--commandprofile String]

[--config String]

[--devices PV]

[--devicesfile String]

[--driverloaded y|n]

[--journal String]

[--lockopt String]

[--longhelp]

[--nohints]

[--nolocking]

[--profile String]

[--version]

OPTIONS

-a|--activate y|n|ay

Auto-activate LVs in a VG when the PVs scanned have completed the VG. (Only ay is applicable.)

--autoactivation String

Specify if autoactivation is being used from an event. This al?

lows the command to apply settings that are specific to event

activation, such as device scanning optimizations using `pvs_on?`

line files created by event-based pvscans.

`--cache`

Scan one or more devices and record that they are online.

`--checkcomplete`

Check if all the devices used by a VG or LV are present, and print "complete" or "incomplete" for each listed VG or LV. This option is used as a part of event-based autoactivation, so `pvs?` can will do nothing if this option is set and `event_activation=0` in the config settings.

`--commandprofile String`

The command profile to use for command configuration. See `lvm.conf(5)` for more information about profiles.

`--config String`

Config settings for the command. These override `lvm.conf(5)` settings. The String arg uses the same format as `lvm.conf(5)`, or may use section/field syntax. See `lvm.conf(5)` for more information about config.

`-d|--debug ...`

Set debug level. Repeat from 1 to 6 times to increase the detail of messages sent to the log file and/or syslog (if configured).

`--devices PV`

Restricts the devices that are visible and accessible to the command. Devices not listed will appear to be missing. This option can be repeated, or accepts a comma separated list of devices. This overrides the devices file.

`--devicesfile String`

A file listing devices that LVM should use. The file must exist in `/etc/lvm/devices/` and is managed with the `lvmdisks(8)` command. This overrides the `lvm.conf(5)` `devices/devicesfile` and `devices/use_devicesfile` settings.

`--driverloaded y|n`

If set to no, the command will not attempt to use device-mapper.

For testing and debugging.

-e|--exported

Only show PVs belonging to exported VGs.

-h|--help

Display help text.

--ignorelockingfailure

Allows a command to continue with read-only metadata operations after locking failures.

--journal String

Record information in the systemd journal. This information is in addition to information enabled by the `lvm.conf log/journal` setting. `command`: record information about the command. `output`: record the default command output. `debug`: record full command debugging.

--listlvs

Print a list of LVs that use the device.

--listvg

Print the VG that uses the device.

--lockopt String

Used to pass options for special cases to `lvmlockd`. See `lvmlockd(8)` for more information.

--longhelp

Display long help text.

-j|--major Number

The major number of a device.

--minor Number

The minor number of a device.

--nohints

Do not use the hints file to locate devices for PVs. A command may read more devices to find PVs when hints are not used. The command will still perform standard hint file invalidation where appropriate.

--nolocking

Disable locking. Use with caution, concurrent commands may produce incorrect results.

`--noudevsync`

Disables udev synchronisation. The process will not wait for notification from udev. It will continue irrespective of any possible udev processing in the background. Only use this if udev is not running or has rules that ignore the devices LVM creates.

`-n|--novolumegroup`

Only show PVs not belonging to any VG.

`--profile String`

An alias for `--commandprofile` or `--metadataprofile`, depending on the command.

`-q|--quiet ...`

Suppress output and log messages. Overrides `--debug` and `--verbose`. Repeat once to also suppress any prompts with answer 'no'.

`--reportformat basic|json|json_std`

Overrides current output format for reports which is defined globally by the `report/output_format` setting in `lvm.conf(5)`. `basic` is the original format with columns and rows. If there is more than one report per command, each report is prefixed with the report name for identification. `json` produces report output in JSON format. `json_std` produces report output in JSON format which is more compliant with JSON standard. See `lvmreport(7)` for more information.

`-s|--short`

Short listing format.

`-t|--test`

Run in test mode. Commands will not update metadata. This is implemented by disabling all metadata writing but nevertheless returning success to the calling function. This may lead to unusual error messages in multi-stage operations if a tool relies on reading back metadata it believes has changed but hasn't.

--udevoutput

Command output is modified to be imported from a udev rule.

-u|--uuid

Show UUIDs in addition to device names.

-v|--verbose ...

Set verbose level. Repeat from 1 to 4 times to increase the de?
tail of messages sent to stdout and stderr.

--version

Display version information.

--vgonline

The first command to see a complete VG will report it uniquely.

Other commands to see the complete VG will report it differ?

ently.

-y|--yes

Do not prompt for confirmation interactively but always assume
the answer yes. Use with extreme caution. (For automatic no,
see -qq.)

VARIABLES

PV Physical Volume name, a device path under /dev. For commands

managing physical extents, a PV positional arg generally accepts

a suffix indicating a range (or multiple ranges) of physical ex?

tents (PEs). When the first PE is omitted, it defaults to the

start of the device, and when the last PE is omitted it defaults

to end. Start and end range (inclusive): PV[:PE-PE]... Start

and length range (counting from 0): PV[:PE+PE]...

String See the option description for information about the string con?

tent.

Size[UNIT]

Size is an input number that accepts an optional unit. Input

units are always treated as base two values, regardless of capi?

talization, e.g. 'k' and 'K' both refer to 1024. The default

input unit is specified by letter, followed by |UNIT. UNIT rep?

resents other possible input units: b|B is bytes, s|S is sectors

of 512 bytes, k|K is KiB, m|M is MiB, g|G is GiB, t|T is TiB,
p|P is PiB, e|E is EiB. (This should not be confused with the
output control --units, where capital letters mean multiple of
1000.)

ENVIRONMENT VARIABLES

See `lvm(8)` for information about environment variables used by `lvm`.

For example, `LVM_VG_NAME` can generally be substituted for a required `VG` parameter.

SEE ALSO

`lvm(8)`, `lvm.conf(5)`, `lvmconfig(8)`, `lvmdevices(8)`,
`pvchange(8)`, `pvck(8)`, `pvcreate(8)`, `pvdisplay(8)`, `pvmove(8)`,
`pvremove(8)`, `pvresize(8)`, `pvs(8)`, `pvscan(8)`,
`vgcfgbackup(8)`, `vgcfgrestore(8)`, `vgchange(8)`, `vgck(8)`, `vgcreate(8)`,
`vgconvert(8)`, `vgdisplay(8)`, `vgexport(8)`, `vgextend(8)`, `vgimport(8)`,
`vgimportclone(8)`, `vgimportdevices(8)`, `vgmerge(8)`, `vgmknodes(8)`,
`vgreduce(8)`, `vgremove(8)`, `vgrename(8)`, `vgs(8)`, `vgscan(8)`, `vgsplit(8)`,
`lvcreate(8)`, `lvchange(8)`, `lvconvert(8)`, `lvdisplay(8)`, `lvextend(8)`,
`lvreduce(8)`, `lvremove(8)`, `lvrename(8)`, `lvresize(8)`, `lvs(8)`, `lvscan(8)`,
`lvm-fullreport(8)`, `lvm-lvpoll(8)`, `blkdeactivate(8)`, `lvmdump(8)`,
`dmeventd(8)`, `lvmpolld(8)`, `lvmlockd(8)`, `lvmlockctl(8)`, `cmirrord(8)`,
`lvmdbusd(8)`, `fsadm(8)`,
`lvmsystemid(7)`, `lvmreport(7)`, `lvraid(7)`, `lvthin(7)`, `lvmdcache(7)`

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