



*Full credit is given to the above companies including the OS that this PDF file was generated!*

## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'pvs.8' command***

**\$ man pvs.8**

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

NAME

pvs ? Display information about physical volumes

SYNOPSIS

pvs

[ option\_args ]

[ position\_args ]

DESCRIPTION

pvs produces formatted output about PVs.

USAGE

pvs

[ -a|--all ]

[ -o|--options String ]

[ -S|--select String ]

[ -O|--sort String ]

[ --segments ]

[ --aligned ]

[ --binary ]

[ --configreport log|vg|lv|pv|pvseg|seg ]

[ --foreign ]

[ --ignorelockingfailure ]

[ --logonly ]

[ --nameprefixes ]

[ --noheadings ]  
[ --nosuffix ]  
[ --readonly ]  
[ --reportformat basic|json|json\_std ]  
[ --rows ]  
[ --separator String ]  
[ --shared ]  
[ --unbuffered ]  
[ --units [Number]r|R|h|H|b|B|s|S|k|K|m|M|g|G|t|T|p|P|e|E ]  
[ --unquoted ]  
[ COMMON\_OPTIONS ]  
[ PV|Tag ... ]

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

--aligned

Use with --separator to align the output columns

-a|--all

Show information about devices that have not been initialized by LVM, i.e. they are not PVs.

--binary

Use binary values "0" or "1" instead of descriptive literal values for columns that have exactly two valid values to report (not counting the "unknown" value which denotes that the value could not be determined).

--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.

--configreport log|vg|lv|pv|pvseg|seg

See lvmreport(7).

-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 lvmdevices(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.

`--foreign`

Report/display foreign VGs that would otherwise be skipped. See `lvmsystemid(7)` for more information about foreign 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.

`--lockopt String`

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

`--logonly`

Suppress command report and display only log report.

`--longhelp`

Display long help text.

`--nameprefixes`

Add an "LVM2\_" prefix plus the field name to the output. Useful with `--noheadings` to produce a list of field=value pairs that can be used to set environment variables (for example, in `udev` rules).

`--noheadings`

Suppress the headings line that is normally the first line of output. Useful if grepping the output.

`--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.

`--nosuffix`

Suppress the suffix on output sizes. Use with `--units` (except `h` and `H`) if processing the output.

`-o|--options` String

Comma-separated, ordered list of fields to display in columns.

String arg syntax is: `[+|-|#]Field1[,Field2 ...]` The prefix `+`

will append the specified fields to the default fields, `-` will

remove the specified fields from the default fields, and `#` will

compact specified fields (removing them when empty for all rows.) Use `-o help` to view the list of all available fields.

Use separate lists of fields to add, remove or compact by re-

peating the `-o` option: `-o+field1,field2 -o-field3,field4`

`-o#field5`. These lists are evaluated from left to right. Use

field name `lv_all` to view all LV fields, `vg_all` all VG fields,

`pv_all` all PV fields, `pvseg_all` all PV segment fields, `seg_all`

all LV segment fields, and `pvseg_all` all PV segment columns.

See the `lvm.conf(5)` report section for more config options. See

`lvmreport(7)` for more information about reporting.

`--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'.

`--readonly`

Run the command in a special read-only mode which will read on-

disk metadata without needing to take any locks. This can be used to peek inside metadata used by a virtual machine image while the virtual machine is running. No attempt will be made to communicate with the device-mapper kernel driver, so this option is unable to report whether or not LVs are actually in use.

`--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.

`--rows`

Output columns as rows.

`--segments`

Produces one line of output for each contiguous allocation of space on each PV, showing the start (`pvseg_start`) and length (`pvseg_size`) in units of physical extents.

`-S|--select String`

Select objects for processing and reporting based on specified criteria. The criteria syntax is described by `--select help` and `lvmreport(7)`. For reporting commands, one row is displayed for each object matching the criteria. See `--options help` for selectable object fields. Rows can be displayed with an additional "selected" field (`-o selected`) showing 1 if the row matches the selection and 0 otherwise. For non-reporting commands which process LVM entities, the selection is used to choose items to process.

`--separator String`

String to use to separate each column. Useful if grepping the output.

--shared

Report/display shared VGs that would otherwise be skipped when `lvmlckd` is not being used on the host. See `lvmlckd(8)` for more information about shared VGs.

-O|--sort String

Comma-separated ordered list of columns to sort by. Replaces the default selection. Precede any column with `-` for a reverse sort on that column.

-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.

--unbuffered

Produce output immediately without sorting or aligning the columns properly.

--units [Number|r|R|h|H|b|B|s|S|k|K|m|M|g|G|t|T|p|P|e|E]

All sizes are output in these units: human-(r)eadable with '`<`' rounding indicator, (h)uman-readable, (b)ytes, (s)ectors, (k)ilobytes, (m)egabytes, (g)igabytes, (t)erabytes, (p)etabytes, (e)xabytes. Capitalise to use multiples of 1000 (S.I.) instead of 1024. Custom units can be specified, e.g. `--units 3M`.

--unquoted

When used with `--nameprefixes`, output values in the field=value pairs are not quoted.

-v|--verbose ...

Set verbose level. Repeat from 1 to 4 times to increase the default of messages sent to `stdout` and `stderr`.

--version

Display version information.

-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 extents (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]...

**Tag** Tag name. See lvm(8) for information about tag names and using tags in place of a VG, LV or PV.

**String** See the option description for information about the string content.

### Size[UNIT]

Size is an input number that accepts an optional unit. Input units are always treated as base two values, regardless of capitalization, e.g. 'k' and 'K' both refer to 1024. The default input unit is specified by letter, followed by |UNIT. UNIT represents 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.

## NOTES

The pv\_attr bits are:

1 (d)uplicate, (a)llocatable, (u)sed

2 e(x)ported

3 (m)issing



## 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), cmirror(8),  
lvmdbusd(8), fsadm(8),  
lvmsystemid(7), lvmreport(7), lvmraid(7), lvmthin(7), lvmcache(7)

Red Hat, Inc.      LVM TOOLS 2.03.17(2) (2022-11-10)      PVS(8)