

NAME

pvresize – Resize physical volume(s)

SYNOPSIS

```
pvresize position_args
      [ option_args ]
```

DESCRIPTION

pvresize resizes a PV. The PV may already be in a VG and may have active LVs allocated on it.

USAGE

```
pvresize PV ...
      [ --setphysicalvolumesize Size[m|UNIT] ]
      [ --reportformat basic|json ]
      [ COMMON_OPTIONS ]
```

Common options for lvm:

```
[ -d|--debug ]
[ -h|--help ]
[ -q|--quiet ]
[ -t|--test ]
[ -v|--verbose ]
[ -y|--yes ]
[ --commandprofile String ]
[ --config String ]
[ --driverloaded y|n ]
[ --lockopt String ]
[ --longhelp ]
[ --nolocking ]
[ --profile String ]
[ --version ]
```

OPTIONS

- 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 settings. The *String* arg uses the same format as lvm.conf, 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).
- driverloaded** *y|n*
If set to no, the command will not attempt to use device-mapper. For testing and debugging.
- h|--help**
Display help text.
- lockopt** *String*
Used to pass options for special cases to lvmlockd. See **lvmlockd(8)** for more information.
- longhelp**
Display long help text.
- nolocking**
Disable locking.

- 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**
Overrides current output format for reports which is defined globally by the `report/output_format` setting in `lvm.conf`. **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. See [lvmreport\(7\)](#) for more information.
- setphysicalvolumesize** *Size*[m|UNIT]
Overrides the automatically detected size of the PV. Use with care, or prior to reducing the physical size of the device.
- 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.
- v|--verbose** ...
Set verbose level. Repeat from 1 to 4 times to increase the detail 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]...`

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: **bBsSkKmMg-GtTpPeE**. b|B is bytes, s|S is sectors of 512 bytes, k|K is kilobytes, m|M is megabytes, g|G is gigabytes, t|T is terabytes, p|P is petabytes, e|E is exabytes. (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

`pvresize` will refuse to shrink a PV if it has allocated extents beyond the new end.

EXAMPLES

Expand a PV after enlarging the partition.

```
pvresize /dev/sda1
```

Shrink a PV prior to shrinking the partition (ensure that the PV size is appropriate for the intended new partition size).

```
pvresize --setphysicalvolumesize 40G /dev/sda1
```

SEE ALSO

lvm(8) lvm.conf(5) lvmconfig(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) vgmerge(8) vgmknodes(8) vgreduce(8) vgrename(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) lvm2-activation-generator(8) blkdeactivate(8) lvmddump(8)

dmeventd(8) lvmpolld(8) lvmlockd(8) lvmlockctl(8) cmirrorord(8) lvmdbusd(8)

lvmsystemid(7) lvmreport(7) lvmraid(7) lvmthin(7) lvmcache(7)