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 'vgextend.8' command

$ man vgextend.8

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

NAME

vgextend ? Add physical volumes to a volume group

SYNOPSIS

vgextend position_args

[option_args]

DESCRIPTION

vgextend adds one or more PVs to a VG. This increases the space avail?

able for LVs in the VG.

Also, PVs that have gone missing and then returned, e.g. due to a tran?

sient device failure, can be added back to the VG without re-initializ?

ing them (see --restoremissing).

If the specified PVs have not yet been initialized with pvcreate, vgex?

tend will initialize them. In this case pvcreate options can be used,

e.g. --labelsector, --metadatasize, --metadataignore, --pvmetadata?

copies, --dataalignment, --dataalignmentoffset.

USAGE

vgextend VG PV ...

[-A|--autobackup y|n]

[-f|--force]

[-Z|--zero y|n]

[-M|--metadatatype lvm2]

[--labelsector Number]

[--metadatasize Size[m|UNIT]]

[--pvmetadatacopies 0|1|2]

[--metadataignore y|n]

[--dataalignment Size[k|UNIT]]

[--dataalignmentoffset Size[k|UNIT]]

[--reportformat basic|json|json_std]

[--restoremissing]

[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|--autobackup y|n

Specifies if metadata should be backed up automatically after a change. Enabling this is strongly advised! See vgcfgbackup(8) for more information.

--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) set? tings. The String arg uses the same format as lvm.conf(5), or may use section/field syntax. See lvm.conf(5) for more informa? tion about config.

--dataalignment Size[k|UNIT]

Align the start of a PV data area with a multiple of this num? ber. To see the location of the first Physical Extent (PE) of an existing PV, use pvs -o +pe_start. In addition, it may be shifted by an alignment offset, see --dataalignmentoffset. Also specify an appropriate PE size when creating a VG.

--dataalignmentoffset Size[k|UNIT]

Shift the start of the PV data area by this additional offset.

-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 op? tion can be repeated, or accepts a comma separated list of de? vices. 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) com? mand. 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.

-f|--force ...

Override various checks, confirmations and protections. Use

with extreme caution.

-h|--help

Display help text.

--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. out? put: record the default command output. debug: record full com? mand debugging.

--labelsector Number

By default the PV is labelled with an LVM2 identifier in its second sector (sector 1). This lets you use a different sector near the start of the disk (between 0 and 3 inclusive - see LA? BEL_SCAN_SECTORS in the source). Use with care.

--lockopt String

Used to pass options for special cases to lvmlockd. See lvm? lockd(8) for more information.

--longhelp

Display long help text.

--metadataignore y|n

Specifies the metadataignore property of a PV. If yes, metadata areas on the PV are ignored, and lvm will not store metadata in the metadata areas of the PV. If no, lvm will store metadata on the PV.

--metadatasize Size[m|UNIT]

The approximate amount of space used for each VG metadata area. The size may be rounded.

-M|--metadatatype lvm2

Specifies the type of on-disk metadata to use. lvm2 (or just 2) is the current, standard format. lvm1 (or just 1) is no longer used.

--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 pro? duce incorrect results.

--profile String

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

--pvmetadatacopies 0|1|2

The number of metadata areas to set aside on a PV for storing VG metadata. When 2, one copy of the VG metadata is stored at the front of the PV and a second copy is stored at the end. When 1, one copy of the VG metadata is stored at the front of the PV. When 0, no copies of the VG metadata are stored on the given PV. This may be useful in VGs containing many PVs (this places limi? tations on the ability to use vgsplit later.)

-q|--quiet ...

Suppress output and log messages. Overrides --debug and --ver? bose. 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.

--restoremissing

Add a PV back into a VG after the PV was missing and then re? turned, e.g. due to a transient failure. The PV is not reini?

tialized.

-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 un? usual 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 de? tail 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.)

-Z|--zero y|n

Controls if the first 4 sectors (2048 bytes) of the device are wiped. The default is to wipe these sectors unless either or both of --restorefile or --uuid are specified.

VARIABLES

VG Volume Group name. See lvm(8) for valid names.

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.

EXAMPLES

Add two PVs to a VG.

vgextend vg00 /dev/sda4 /dev/sdn1

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), lvmraid(7), lvmthin(7), lvmcache(7)