



Products & Services > 问题 > LVM reports "Cannot use device with duplicates."

LVM reports "Cannot use device with duplicates."

🔒 SOLUTION 已验证 - 已更新 2018年六月七日05:10 - English ▾

环境

- Red Hat Enterprise Linux 7

问题

- When attempting to extend a VG, the below error is produced:

```
# vgextend example_vg /dev/mapper/mpatha
Error vgextend : Cannot use device /dev/mapper/mpatha with duplicates.
WARNING: Not using lvmetad because duplicate PVs were found.
WARNING: Use multipath or vgimportclone to resolve duplicate PVs?
WARNING: After duplicates are resolved, run "pvscan --cache" to enable lvmetad.
WARNING: PV xxxxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx on /dev/sdx was already found on
/dev/sdy.
WARNING: PV xxxxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx on /dev/sdy was already found on
/dev/sdz.
WARNING: PV xxxxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx on /dev/sdz was already found on
/dev/mapper/mpatha.
<...>
Cannot use device /dev/mapper/mpatha with duplicates.
```

- When attempting to create a new volume group, getting error
Cannot use device /dev/mapper/mpatha with duplicates.

决议

- A custom filter will need to be set in `/etc/lvm/lvm.conf`, including the global filter.
- Example from `/etc/lvm/lvm.conf`:

```
filter = [ "a|^/dev/sda5$|", "a|/dev/emcpower.*|", "r|.*)" ]
global_filter = [ "a|^/dev/sda5$|", "a|/dev/emcpower.*|", "r|.*)" ]
```

- Once the filter is in place, the `initramfs` will need to be rebuilt. Then update the LVM cache and attempt to execute the `vgextend` command again.

```
# cp /boot/initramfs-$(uname -r).img /boot/initramfs-$(uname -r).img.$(date +%m-%d-%H%M%S).bak
# dracut -f -v
# pvscan --cache
```

根源

- If there isn't a filter in place, then the `lvm.conf` file will default to accept all devices:

```
# This configuration option has an automatic default value.
# filter = [ "a|.*/|" ]
```

诊断步骤

- Check `/etc/lvm/lvm.conf` for filters

```
# Example
# Accept every block device:
#filter = [ "a|.*/|" ]
# Reject the cdrom drive:
# filter = [ "r|/dev/cdrom|" ]
# Work with just loopback devices, e.g. for testing:
# filter = [ "a|loop|", "r|.*/|" ]
# Accept all loop devices and ide drives except hdc:
# filter = [ "a|loop|", "r|/dev/hdc|", "a|/dev/ide|", "r|.*/|" ]
# Use anchors to be very specific:
# filter = [ "a|^/dev/hda8$|", "r|.*/|" ]
#
# This configuration option has an automatic default value.
# filter = [ "a|.*/|" ]

# Configuration option devices/global_filter.
# Limit the block devices that are used by LVM system components.
# Because devices/filter may be overridden from the command line, it is
# not suitable for system-wide device filtering, e.g. udev and lvmetad.
# Use global_filter to hide devices from these LVM system components.
# The syntax is the same as devices/filter. Devices rejected by
# global_filter are not opened by LVM.
# This configuration option has an automatic default value.
# global_filter = [ "a|.*/|" ]
```

- If the default filter is set, change to filter to match your system's configuration

```
filter = [ "a|^/dev/sda5$|", "a|/dev/emcpower.*|", "r|.*)" ]
global_filter = [ "a|^/dev/sda5$|", "a|/dev/emcpower.*|", "r|.*)" ]
```

产品 (第) Red Hat Enterprise Linux **元件** lvm2 **类别** Configure

标记 configuration lvm lvm2 rhel rhel_7 storage

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2 评论



28 November 2018 3:55 AM

Kang Wei

COMMUNITY
MEMBER

32 Points

Be careful, There are two errors in the example:

```
filter = [ "a|^/dev/sda5$|", "a|/dev/emcpower.*|", "r|.*)" ]
global_filter = [ "a|^/dev/sda5$|", "a|/dev/emcpower.*|", "r|.*)" ]
```

After the reboot, I have the following problems:

<https://access.redhat.com/solutions/2515741> Messages "dracut-initqueue timeout - starting timeout scripts" are printed loop while booting then an Emergency shell is launched:

```
[ 193.845250] dracut-initqueue[779]: Warning: dracut-initqueue timeout -
starting timeout scripts
[...]
[ 198.557262] dracut-initqueue[779]: Warning: dracut-initqueue timeout -
starting timeout scripts
[ 198.557679] dracut-initqueue[779]: Warning: Could not boot.
[ 200.161146] dracut-initqueue[779]: Warning: /dev/rhel /root does not exist
[ 200.170895] systemd[1]: Starting Dracut Emergency Shell...
```

And I boot or reboot the system, I get the following message The message is A start job is running for dev-mapper....device.(4min 29s no limit).

Boot Red Hat Enterprise Linux to Rescue Mode:

<https://access.redhat.com/articles/3405661> pvs output:

PV	VG	Fmt	Attr	PSize	PFree
/dev/emcpowere	vg_filefwms2	lvm2	a--	1000.00g	0
/dev/emcpowerf	vg_filefwms2	lvm2	a--	1000.00g	0
/dev/emcpowerg	vg_filefwms2	lvm2	a--	1000.00g	0
/dev/emcpowerh	vg_filefwms2	lvm2	a--	1000.00g	0
/dev/emcpowerj	zcvg_file_fwms	lvm2	a--	15.00t	0
/dev/emcpoweru	vg_filefwms2	lvm2	a--	1000.00g	0

Because a root logical volume cannot be found on the system. The correct configuration is as follows:

```
#from /etc/lvm/lvm.conf
filter = [ "a|/dev/sda[1-9]$|", "a|/dev/emcpower.*|", "r|.*)" ]
global_filter = [ "a|/dev/sda[1-9]$|", "a|/dev/emcpower.*|", "r|.*)" ]
```

Restore the initial ramdisk image using a backup and modify the wrong Settings in safe mode: <https://access.redhat.com/solutions/1958?band=se#backup>

pvs output:

```
[root@zcfj1 log]# pvscan --cache
PV                VG                Fmt  Attr  PSize    PFree
/dev/emcpowere    vg_filefwms2      lvm2 a--   1000.00g    0
/dev/emcpowerf    vg_filefwms2      lvm2 a--   1000.00g    0
/dev/emcpowerg    vg_filefwms2      lvm2 a--   1000.00g    0
/dev/emcpowerh    vg_filefwms2      lvm2 a--   1000.00g    0
/dev/emcpowerj    zcvg_file_fwms    lvm2 a--    15.00t    0
/dev/emcpoweru    vg_filefwms2      lvm2 a--   1000.00g    0
/dev/sda2         rhel               lvm2 a--    277.46g    0
```

↩ 回复



10 January 2020 2:46 PM

Chris Harrell

NEWBIE

7 Points

Hello I'm trying to extend an emcpower device to my logical volume and I'm still receiving the duplicates error when running vgextend.

↩ 回复