

## ceph-volume - Bug #24952

### ceph-volume fails to list osds (KeyError: 'devices')

07/16/2018 10:06 PM - Sébastien Han

<b>Status:</b>	Resolved	<b>Start date:</b>	07/16/2018
<b>Priority:</b>	Immediate	<b>Due date:</b>	
<b>Assignee:</b>	Alfredo Deza	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Reviewed:</b>	
<b>Source:</b>		<b>Affected Versions:</b>	v12.2.6
<b>Tags:</b>		<b>ceph-qa-suite:</b>	
<b>Backport:</b>		<b>Pull request ID:</b>	
<b>Regression:</b>	No		
<b>Severity:</b>	3 - minor		

#### Description

```
[2018-07-16 22:04:05,983][ceph_volume.process][INFO ] stdout ceph.cephx_lockbox_secret=,ceph.cluster_fsid=58fd7180-2887-4f01-9320-d194482712a2,ceph.cluster_name=ceph,ceph.crush_device_class=None,ceph.data_device=/dev/test_group/data-lv2,ceph.data_uuid=8E8pnM-AsEd-1lnI-P3DW-iLz9-PET5-eChI3b,ceph.encrypted=0,ceph.journal_device=/dev/journals/journal1,ceph.journal_uuid=obc6SR-cvkg-MbWh-cqC5-augU-hs4r-ha715Y,ceph.osd_fsid=106b105a-a7a2-49aa-901e-b2c8442f1c1a,ceph.osd_id=1,ceph.type=data,ceph.vdo=0";"/dev/test_group/data-lv2";"data-lv2";"test_group";"8E8pnM-AsEd-1lnI-P3DW-iLz9-PET5-eChI3b
[2018-07-16 22:04:05,983][ceph_volume.process][INFO ] Running command: /usr/sbin/lvs --noheadings --readonly --separator=";" -o lv_tags,lv_path,lv_name,vg_name,lv_uuid
[2018-07-16 22:04:06,394][ceph_volume.process][INFO ] stdout ";"/dev/VolGroup00/LogVol100";"LogVol00";"VolGroup00";"j6b8IV-KEw3-7bTw-Oqy8-1Ud3-juFC-SJBg12
[2018-07-16 22:04:06,394][ceph_volume.process][INFO ] stdout ";"/dev/VolGroup00/LogVol101";"LogVol01";"VolGroup00";"IAjIC6-ScnM-tvH6-7BTy-TN31-hd82-bgDSzd
[2018-07-16 22:04:06,394][ceph_volume.process][INFO ] stdout ceph.cephx_lockbox_secret=,ceph.cluster_fsid=58fd7180-2887-4f01-9320-d194482712a2,ceph.cluster_name=ceph,ceph.crush_device_class=None,ceph.data_device=/dev/test_group/data-lv2,ceph.data_uuid=8E8pnM-AsEd-1lnI-P3DW-iLz9-PET5-eChI3b,ceph.encrypted=0,ceph.journal_device=/dev/journals/journal1,ceph.journal_uuid=obc6SR-cvkg-MbWh-cqC5-augU-hs4r-ha715Y,ceph.osd_fsid=106b105a-a7a2-49aa-901e-b2c8442f1c1a,ceph.osd_id=1,ceph.type=journal,ceph.vdo=0";"/dev/journals/journal1";"journal1";"journals";"obc6SR-cvkg-MbWh-cqC5-augU-hs4r-ha715Y
[2018-07-16 22:04:06,394][ceph_volume.process][INFO ] stdout ceph.cephx_lockbox_secret=,ceph.cluster_fsid=58fd7180-2887-4f01-9320-d194482712a2,ceph.cluster_name=ceph,ceph.crush_device_class=None,ceph.data_device=/dev/test_group/data-lv1,ceph.data_uuid=2svevT-iOWB-NALz-MjH5-X8zk-jbYj-Wl67HD,ceph.encrypted=0,ceph.journal_device=/dev/sdc1,ceph.journal_uuid=2b09dbb7-b12b-402f-9971-04855f0dd1a6,ceph.osd_fsid=41bald2c-2a5a-47b3-a0f9-fc7e6e274348,ceph.osd_id=0,ceph.type=data,ceph.vdo=0";"/dev/test_group/data-lv1";"data-lv1";"test_group";"2svevT-iOWB-NALz-MjH5-X8zk-jbYj-Wl67HD
[2018-07-16 22:04:06,394][ceph_volume.process][INFO ] stdout ceph.cephx_lockbox_secret=,ceph.cluster_fsid=58fd7180-2887-4f01-9320-d194482712a2,ceph.cluster_name=ceph,ceph.crush_device_class=None,ceph.data_device=/dev/test_group/data-lv2,ceph.data_uuid=8E8pnM-AsEd-1lnI-P3DW-iLz9-PET5-eChI3b,ceph.encrypted=0,ceph.journal_device=/dev/journals/journal1,ceph.journal_uuid=obc6SR-cvkg-MbWh-cqC5-augU-hs4r-ha715Y,ceph.osd_fsid=106b105a-a7a2-49aa-901e-b2c8442f1c1a,ceph.osd_id=1,ceph.type=data,ceph.vdo=0";"/dev/test_group/data-lv2";"data-lv2";"test_group";"8E8pnM-AsEd-1lnI-P3DW-iLz9-PET5-eChI3b
[2018-07-16 22:04:06,394][ceph_volume.process][INFO ] Running command: /usr/sbin/blkid -t PARTUUID="2b09dbb7-b12b-402f-9971-04855f0dd1a6" -o device
[2018-07-16 22:04:06,829][ceph_volume.process][INFO ] stdout /dev/sdc1
[2018-07-16 22:04:06,829][ceph_volume.process][INFO ] Running command: /usr/sbin/lvs --noheadings --readonly --separator=";" -o lv_tags,lv_path,lv_name,vg_name,lv_uuid
[2018-07-16 22:04:07,215][ceph_volume.process][INFO ] stdout ";"/dev/VolGroup00/LogVol100";"LogVol00";"VolGroup00";"j6b8IV-KEw3-7bTw-Oqy8-1Ud3-juFC-SJBg12
[2018-07-16 22:04:07,216][ceph_volume.process][INFO ] stdout ";"/dev/VolGroup00/LogVol101";"LogVol01";"VolGroup00";"IAjIC6-ScnM-tvH6-7BTy-TN31-hd82-bgDSzd
[2018-07-16 22:04:07,216][ceph_volume.process][INFO ] stdout ceph.cephx_lockbox_secret=,ceph.clus
```

```

ter_fsid=58fd7180-2887-4f01-9320-d194482712a2,ceph.cluster_name=ceph,ceph.crush_device_class=None,
ceph.data_device=/dev/test_group/data-lv2,ceph.data_uuid=8E8pnM-AsEd-1lnI-P3DW-iLz9-PEt5-eChI3b,ce
ph.encrypted=0,ceph.journal_device=/dev/journals/journal1,ceph.journal_uuid=obc6SR-cvkg-MbWh-cqC5-
augU-hs4r-ha715Y,ceph.osd_fsid=106b105a-a7a2-49aa-901e-b2c8442f1c1a,ceph.osd_id=1,ceph.type=journa
l,ceph.vdo=0";"/dev/journals/journal1";"journal1";"journals";"obc6SR-cvkg-MbWh-cqC5-augU-hs4r-ha71
5Y
[2018-07-16 22:04:07,216][ceph_volume.process][INFO ] stdout ceph.cephx_lockbox_secret=,ceph.clus
ter_fsid=58fd7180-2887-4f01-9320-d194482712a2,ceph.cluster_name=ceph,ceph.crush_device_class=None,
ceph.data_device=/dev/test_group/data-lv1,ceph.data_uuid=2svevT-iOWB-NAlz-MjH5-X8zk-jbYj-Wl67HD,ce
ph.encrypted=0,ceph.journal_device=/dev/sdc1,ceph.journal_uuid=2b09dbb7-b12b-402f-9971-04855f0dd1a
6,ceph.osd_fsid=41ba1d2c-2a5a-47b3-a0f9-fc7e6e274348,ceph.osd_id=0,ceph.type=data,ceph.vdo=0";"/de
v/test_group/data-lv1";"data-lv1";"test_group";"2svevT-iOWB-NAlz-MjH5-X8zk-jbYj-Wl67HD
[2018-07-16 22:04:07,216][ceph_volume.process][INFO ] stdout ceph.cephx_lockbox_secret=,ceph.clus
ter_fsid=58fd7180-2887-4f01-9320-d194482712a2,ceph.cluster_name=ceph,ceph.crush_device_class=None,
ceph.data_device=/dev/test_group/data-lv2,ceph.data_uuid=8E8pnM-AsEd-1lnI-P3DW-iLz9-PEt5-eChI3b,ce
ph.encrypted=0,ceph.journal_device=/dev/journals/journal1,ceph.journal_uuid=obc6SR-cvkg-MbWh-cqC5-
augU-hs4r-ha715Y,ceph.osd_fsid=106b105a-a7a2-49aa-901e-b2c8442f1c1a,ceph.osd_id=1,ceph.type=data,c
eph.vdo=0";"/dev/test_group/data-lv2";"data-lv2";"test_group";"8E8pnM-AsEd-1lnI-P3DW-iLz9-PEt5-eCh
I3b
[2018-07-16 22:04:07,217][ceph_volume][ERROR ] exception caught by decorator
Traceback (most recent call last):
  File "/usr/lib/python2.7/site-packages/ceph_volume/decorators.py", line 59, in newfunc
    return f(*a, **kw)
  File "/usr/lib/python2.7/site-packages/ceph_volume/main.py", line 153, in main
    terminal.dispatch(self.mapper, subcommand_args)
  File "/usr/lib/python2.7/site-packages/ceph_volume/terminal.py", line 182, in dispatch
    instance.main()
  File "/usr/lib/python2.7/site-packages/ceph_volume/devices/lvm/main.py", line 38, in main
    terminal.dispatch(self.mapper, self.argv)
  File "/usr/lib/python2.7/site-packages/ceph_volume/terminal.py", line 182, in dispatch
    instance.main()
  File "/usr/lib/python2.7/site-packages/ceph_volume/devices/lvm/listing.py", line 300, in main
    self.list(args)
  File "/usr/lib/python2.7/site-packages/ceph_volume/decorators.py", line 16, in is_root
    return func(*a, **kw)
  File "/usr/lib/python2.7/site-packages/ceph_volume/devices/lvm/listing.py", line 120, in list
    pretty_report(report)
  File "/usr/lib/python2.7/site-packages/ceph_volume/devices/lvm/listing.py", line 53, in pretty_r
eport
    device_metadata_item_template.format(tag_name='devices', value=', '.join(device['devices']))
KeyError: 'devices'

```

## History

### #1 - 07/17/2018 12:25 PM - Alfredo Deza

Can you expand on what circumstances you are producing this error?

### #2 - 07/17/2018 12:29 PM - Alfredo Deza

On the container side of things, it seems everything is using `--format=json` but this traceback is for pretty reporting. Is it happening for both?

### #3 - 07/17/2018 12:42 PM - Sébastien Han

This is happening when running "ceph-volume lvm list".

More info about the layout/setup:

```

[root@osd0 /]# lsblk
NAME                                MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda                                  8:0    0   50G  0 disk
sdb                                  8:16   0   50G  0 disk
|-test_group-data--lv1             253:2   0   25G  0 lvm
`-test_group-data--lv2             253:3   0  12.5G  0 lvm
sdc                                  8:32   0   50G  0 disk
|-sdc1                              8:33   0   25G  0 part
`-sdc2                              8:34   0   25G  0 part
  `--journals-journal1             253:4   0   25G  0 lvm

```

```

vda                252:0    0   41G  0 disk
|-vda1             252:1    0    1M  0 part
|-vda2             252:2    0    1G  0 part
`-vda3             252:3    0   39G  0 part
  |-VolGroup00-LogVol100 253:0    0  37.5G  0 lvm  /var/lib/ceph
  `--VolGroup00-LogVol101 253:1    0   1.5G  0 lvm  [SWAP]
[root@osd0 /]# lvs
LV          VG          Attr      LSize   Pool Origin Data%  Meta%  Move Log Cpy%Sync Convert
LogVol100  VolGroup00 -wi-ao---- <37.47g
LogVol101  VolGroup00 -wi-ao----  1.50g
journal1   journals    -wi-a----- <25.00g
data-lv1   test_group -wi-a----- <25.00g
data-lv2   test_group -wi-a----- 12.50g
[root@osd0 /]# vgs
VG          #PV #LV #SN Attr   VSize   VFree
VolGroup00  1   2   0 wz--n- <38.97g    0
journals    1   1   0 wz--n- <25.00g    0
test_group  1   2   0 wz--n- <50.00g 12.50g
[root@osd0 /]# pvs
PV          VG          Fmt  Attr PSize   PFree
/dev/sdb    test_group lvm2  a--  <50.00g 12.50g
/dev/sdc2   journals    lvm2  a--  <25.00g    0
/dev/vda3   VolGroup00 lvm2  a--  <38.97g    0

```

#### #4 - 07/17/2018 12:51 PM - Sébastien Han

Note that when using `--format=json` the output works:

```

[root@osd0 /]# ceph-volume lvm list --format=json
{
  "0": [
    {
      "devices": [
        "/dev/sdb"
      ],
      "lv_name": "data-lv1",
      "lv_path": "/dev/test_group/data-lv1",
      "lv_tags": "ceph.cephx_lockbox_secret=,ceph.cluster_fsid=05d71da5-97fc-47ea-baa4-8b3f2cfabc78,ceph
.cluster_name=ceph,ceph.crush_device_class=None,ceph.data_device=/dev/test_group/data-lv1,ceph.data_uuid=19Ld1
t-6Y07-lj30-WTEy-f
SCi-gPAC-BWQo6m,ceph.encrypted=0,ceph.journal_device=/dev/sdc1,ceph.journal_uuid=b8df36ef-1a49-41a3-ad1d-9e2d7
cf3f87c,ceph.osd_fsid=1216d5e8-ac1f-45d1-af2a-ef43d375687,ceph.osd_id=0,ceph.type=data,ceph.vdo=0",
      "lv_uuid": "19Ld1t-6Y07-lj30-WTEy-fSCi-gPAC-BWQo6m",
      "name": "data-lv1",
      "path": "/dev/test_group/data-lv1",
      "tags": {
        "ceph.cephx_lockbox_secret": "",
        "ceph.cluster_fsid": "05d71da5-97fc-47ea-baa4-8b3f2cfabc78",
        "ceph.cluster_name": "ceph",
        "ceph.crush_device_class": "None",
        "ceph.data_device": "/dev/test_group/data-lv1",

```

```

        "ceph.data_uuid": "19Ldlt-6YO7-1j30-WTEy-fSCi-gPAC-BWQo6m",
        "ceph.encrypted": "0",
        "ceph.journal_device": "/dev/sdc1",
        "ceph.journal_uuid": "b8df36ef-1a49-41a3-ad1d-9e2d7cf3f87c",
        "ceph.osd_fsid": "1216d5e8-ac1f-45d1-af2a-fff43d375687",
        "ceph.osd_id": "0",
        "ceph.type": "data",
        "ceph.vdo": "0"
    },
    "type": "data",
    "vg_name": "test_group"
},
{
    "path": "/dev/sdc1",
    "tags": {
        "PARTUUID": "b8df36ef-1a49-41a3-ad1d-9e2d7cf3f87c"
    },
    "type": "journal"
}
],
"1": [
    [9/1613]
    {
        "devices": [
            "/dev/sdc2"
        ],
        "lv_name": "journal1",
        "lv_path": "/dev/journals/journal1",
        "lv_tags": "ceph.cephx_lockbox_secret=,ceph.cluster_fsid=05d71da5-97fc-47ea-baa4-8b3f2cfabc78,ceph
        .cluster_name=ceph,ceph.crush_device_class=None,ceph.data_device=/dev/test_group/data-lv2,ceph.data_uuid=c0Vdn
        C-dU5I-sPfv-Ubc0-o
        cjh-VG7Z-FjTIIQ,ceph.encrypted=0,ceph.journal_device=/dev/journals/journal1,ceph.journal_uuid=yitj0u-VefX-fYxR
        -nAYa-Ddmy-QGLs-S6L7CO,ceph.osd_fsid=ed87126c-718d-4ab1-9350-4c1fc4b46b96,ceph.osd_id=1,ceph.type=journal,ceph
        .vdo=0",
        "lv_uuid": "yitj0u-VefX-fYxR-nAYa-Ddmy-QGLs-S6L7CO",
        "name": "journal1",
        "path": "/dev/journals/journal1",
        "tags": {
            "ceph.cephx_lockbox_secret": "",
            "ceph.cluster_fsid": "05d71da5-97fc-47ea-baa4-8b3f2cfabc78",
            "ceph.cluster_name": "ceph",
            "ceph.crush_device_class": "None",
            "ceph.data_device": "/dev/test_group/data-lv2",
            "ceph.data_uuid": "c0VdnC-dU5I-sPfv-Ubc0-ocjh-VG7Z-FjTIIQ",
            "ceph.encrypted": "0",
            "ceph.journal_device": "/dev/journals/journal1",
            "ceph.journal_uuid": "yitj0u-VefX-fYxR-nAYa-Ddmy-QGLs-S6L7CO",
            "ceph.osd_fsid": "ed87126c-718d-4ab1-9350-4c1fc4b46b96",
            "ceph.osd_id": "1",
            "ceph.type": "journal",
            "ceph.vdo": "0"
        },
        "type": "journal",
        "vg_name": "journals"
    },
    {
        "devices": [
            "/dev/sdb"
        ],
        "lv_name": "data-lv2",
        "lv_path": "/dev/test_group/data-lv2",
        "lv_tags": "ceph.cephx_lockbox_secret=,ceph.cluster_fsid=05d71da5-97fc-47ea-baa4-8b3f2cfabc78,ceph
        .cluster_name=ceph,ceph.crush_device_class=None,ceph.data_device=/dev/test_group/data-lv2,ceph.data_uuid=c0Vdn
        C-dU5I-sPfv-Ubc0-o
        cjh-VG7Z-FjTIIQ,ceph.encrypted=0,ceph.journal_device=/dev/journals/journal1,ceph.journal_uuid=yitj0u-VefX-fYxR
        -nAYa-Ddmy-QGLs-S6L7CO,ceph.osd_fsid=ed87126c-718d-4ab1-9350-4c1fc4b46b96,ceph.osd_id=1,ceph.type=data,ceph.vd
        o=0",
        "lv_uuid": "c0VdnC-dU5I-sPfv-Ubc0-ocjh-VG7Z-FjTIIQ",
        "name": "data-lv2",
        "path": "/dev/test_group/data-lv2",
        "tags": {
            "ceph.cephx_lockbox_secret": "",
            "ceph.cluster_fsid": "05d71da5-97fc-47ea-baa4-8b3f2cfabc78",
            "ceph.cluster_name": "ceph",

```

```

        "ceph.crush_device_class": "None",
        "ceph.data_device": "/dev/test_group/data-lv2",
        "ceph.data_uuid": "c0VdnC-dU5I-sPfV-UbC0-ocjh-VG7Z-FjTI1Q",
        "ceph.encrypted": "0",
        "ceph.journal_device": "/dev/journals/journal1",
        "ceph.journal_uuid": "yitj0u-VefX-fYxR-nAYa-Ddmy-QGLs-S6L7CO",
        "ceph.osd_fsid": "ed87126c-718d-4ab1-9350-4c1fc4b46b96",
        "ceph.osd_id": "1",
        "ceph.type": "data",
        "ceph.vdo": "0"
    },
    "type": "data",
    "vg_name": "test_group"
}
]
}

```

#### #5 - 07/17/2018 01:06 PM - Alfredo Deza

- Status changed from New to Verified
- Assignee set to Alfredo Deza
- Priority changed from Normal to Immediate

The problem here is that GPT partitions don't have devices, and the code assumes 'devices' is always going to be there. The fix is:

```

diff --git a/src/ceph-volume/ceph_volume/devices/lvm/listing.py b/src/ceph-volume/ceph_volume/devices/lvm/listing.py
index 6bc84a1686..40ea0c847b 100644
--- a/src/ceph-volume/ceph_volume/devices/lvm/listing.py
+++ b/src/ceph-volume/ceph_volume/devices/lvm/listing.py
@@ -49,8 +49,11 @@ def pretty_report(report):
     value=value
     )
-    output.append(
-        device_metadata_item_template.format(tag_name='devices', value=','.join(device['devices'])))
+    if not device.get('devices'):
+        continue
+    else:
+        output.append(
+            device_metadata_item_template.format(tag_name='devices', value=','.join(device['devices']
+)))

print(''.join(output))

```

**#6 - 07/19/2018 05:13 PM - Alfredo Deza**

- *Status changed from Verified to Resolved*

Master PR <https://github.com/ceph/ceph/pull/23129>