

# 知 CAS虚拟机因备份失败导致的磁盘快照，影响cloudos调整磁盘规格报错

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## 组网及说明

cloudos纳管CAS

## 问题描述

有个局点在cloudos上做云硬盘规格调整时，提示扩展失败。

计算与存储 > 云硬盘

云硬盘 是为云主机提供本地存储功能的硬件设备，可独立于云主机存在。一块云硬盘同一时刻只能加载至一台云主机上，加载完成后，云主机用户即可在操作系统中挂载和使用该云硬盘。

刷新	新建	更多操作	名称	查询			
用户	名称	运行状态	加载至云主机	容量(GB)	可启动	创建时间	
<input type="checkbox"/>	admin	volume <b>test2</b>	正常		10	否	2019-03-24 15:18:21
<input type="checkbox"/>	admin	volume <b>test</b>	扩展失败		5	否	2019-03-24 15:17:59

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## 过程分析

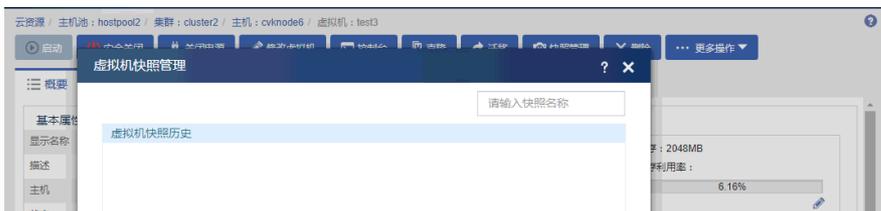
1、到cloudos的计算节点容器内查看/var/log/cinder/volume.log，发现报错，但未提示错误原因。

```
2019-03-24 17:04:52.756 580 INFO cinder.volume.drivers.cas.baseDriver [req-d1a11eea-296b-4c09-be2d-52efab6e4f65 - - - -] [c
as::] success to get volume pool state: {'volume_mode': ['thin', 'thick'], 'multiattach': True, 'provisioned_capacity_gb': 18
l, 'volume_backend_name': 'hostpool2(CVM172.31.6.6)', 'volume_format': ['qcow2', 'raw'], 'free_capacity_gb': 2024, 'total_cap
acity_gb': 'unknown', 'storage_pool': ['onestores'], 'vendor_name': 'cas', 'storage_protocol': 'cas'}
2019-03-24 17:05:38.829 580 ERROR cinder.volume.drivers.cas.volumeops [req-3bcdac5a-f40d-473c-bccl-af35f58f70ad 1df71957d7704
36493a84f24d9344853 9052ae85792143ff955c35c52e8e41bd - - -] fail to resize volume[volume-684ef249-50c1-415b-9c54-9599150fdabb
]. uri:/cas/casrs/cinder/volume/resize, xmlstr:<storageVolume><name>volume-684ef249-50c1-415b-9c54-9599150fdabb</name><size>1
0240</size></storageVolume>
2019-03-24 17:05:38.830 580 ERROR cinder.volume.drivers.cas.volumeops [req-3bcdac5a-f40d-473c-bccl-af35f58f70ad 1df71957d7704
36493a84f24d9344853 9052ae85792143ff955c35c52e8e41bd - - -] fail to resize volume[volume-684ef249-50c1-415b-9c54-9599150fdabb
]. failMsg:None
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager [req-3bcdac5a-f40d-473c-bccl-af35f58f70ad 1df71957d770436493a84f24d93
44853 9052ae85792143ff955c35c52e8e41bd - - -] Extend volume failed.
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager Traceback (most recent call last):
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager File "/usr/lib/python2.7/site-packages/cinder/volume/manager.py", l
ine 2137, in extend_volume
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager self.driver.extend_volume(volume, new_size)
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager File "/usr/lib/python2.7/site-packages/cinder/volume/drivers/cas/ba
seDriver.py", line 300, in extend_volume
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager self._volumeops.volume_resize_and_convert(volume['name'], (new_siz
e * units.Gi / units.Mi))
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager File "/usr/lib/python2.7/site-packages/cinder/volume/drivers/cas/v
olumeops.py", line 231, in volume_resize_and_convert
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager raise cas_error.CasVolumeException()
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager CasVolumeException: An unknown exception occurred.
2019-03-24 17:05:38.831 580 ERROR cinder.volume.manager
2019-03-24 17:05:52.626 580 INFO cinder.volume.drivers.cas.baseDriver [req-d1a11eea-296b-4c09-be2d-52efab6e4f65 - - - -] [c
```

2、我们跳转到CAS任务台、或者操作日志中查看下发记录，发现前台报错，提示该磁盘有快照；

任务名称	操作对象	任务状态	任务描述	操作员	操作IP	开始时间	完成时间	执行结果
调整存储卷"volume-684ef249-50c1-415b-9c54-9599150fdabb"大小	volume-684ef249-50c1-415b-9c54-9599150fdabb	100%	调整存储卷"volume-684ef249-50c1-415b-9c54-9599150fdabb"大小	admin@V...	172.31.6.248	2019-03-24 17:05:36	2019-03-24 17:05:36	失败
为虚拟机"test13"删除磁盘"vdb"	test13	100%	为虚拟机"test13"删除磁盘"vdb"			2019-03-24 16:59:49	2019-03-24 16:59:49	成功
启动虚拟机"test13"	test13	100%	启动虚拟机"test13"成功。			2019-03-24 16:58:09	2019-03-24 16:58:10	成功
关闭虚拟机"test13"电源。	test13	100%	关闭虚拟机"test13"电源失败。原因：虚拟机处于关闭状态，不允许。			2019-03-24 16:43:40	2019-03-24 16:43:40	失败

3、打开虚拟机的快照，未发现任何内容，而且未有做快照历史，后台使用virsh virsh snapshot-list do mainid查询不到快照；



```
root@cvknode6:~# virsh list
Id      Name                                State
-----
 1      serveryuanchengj1                  running
 12     cloudos3105h03-mahaiyang            running
 13     cloudos1139H05                      running
 22     test3-7                             running

root@cvknode6:~# virsh snapshot-list 22
Name      Creation Time                State
-----

```

4、这时我们可以通过qemu-img snapshot -l "volumename"查看磁盘文件是否有单独的快照，发现的确实存在S开头的快照，；

```

root@cvknode6:~# virsh domblklist test3-7
Target      Source
-----
vda         /vms/onestorec/eb4cce28-978e-4ae9-9c5b-539751c60b99
vdb         /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
hda         -

```

```

root@cvknode6:~# qemu-img info /vms/onestorec/eb4cce28-978e-4ae9-9c5b-539751c60b99
image: /vms/onestorec/eb4cce28-978e-4ae9-9c5b-539751c60b99
file format: qcow2
virtual size: 10G (10737418240 bytes)
disk size: 1.4G
cluster_size: 262144
Snapshot list:
ID      TAG          VM SIZE      DATE          VM CLOCK
1       S1553416853138  0 2019-03-24 16:40:53    00:01:20.828
Format specific information:
  compat: 0.10
  refcount bits: 16
root@cvknode6:~# qemu-img info /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
image: /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
file format: qcow2
virtual size: 5.0G (5368709120 bytes)
disk size: 2.0M
cluster_size: 262144
Snapshot list:
ID      TAG          VM SIZE      DATE          VM CLOCK
1       S1553416853138  0 2019-03-24 16:40:53    00:01:20.828
Format specific information:
  compat: 0.10
  refcount bits: 16

```

5、我们将S后面的前10位数字，使用date -d @时间戳转换成date格式，可以算出一个时间值；

```

root@cvknode6:~# date -d @1553416853
Sun Mar 24 16:40:53 CST 2019
root@cvknode6:~# date -d @1553416853
Sun Mar 24 16:40:53 CST 2019
root@cvknode6:~#

```

6、翻看虚拟机的任务或者cvm的日志，可以发现这个时间点虚拟机做过备份，并且备份任务失败了，此快照是备份时遗留的，按照正常流程该快照会在备份完成后删除。

## 解决方法

1、cp一份磁盘文件，做好备份操作；

```

root@cvknode6:~# cp /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb_backup201903241734
root@cvknode6:~# ll /vms/onestorec/volume-68*
-rw-r----- 1 root root 1311232 Mar 24 17:43 /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
-rw-r----- 1 root root 1311232 Mar 24 17:44 /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb_backup201903241734
root@cvknode6:~#

```

2、使用qemu-img snapshot -d tagname volumename 删除磁盘快照；

```

root@cvknode6:~# qemu-img snapshot -l /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
Snapshot list:
ID      TAG          VM SIZE      DATE          VM CLOCK
1       S1553416853138  0 2019-03-24 17:04:59    00:00:00.000
root@cvknode6:~# qemu-img snapshot -d S1553416853138 /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
root@cvknode6:~# qemu-img snapshot -l /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
root@cvknode6:~# qemu-img info /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
image: /vms/onestorec/volume-684ef249-50c1-415b-9c54-9599150fdabb
file format: qcow2
virtual size: 5.0G (5368709120 bytes)
disk size: 2.0M
cluster_size: 262144
Format specific information:
  compat: 0.10
  refcount bits: 16

```

3、重置云硬盘状态的方法有好几种：

- 连接cloudos数据库删除该云硬盘的相关信息，在CAS上为虚拟机添加这块云硬盘，然后重新纳管该虚拟机的云硬盘；
- 连接cloudos数据库修改云硬盘的状态为available；
- openstack容器中通过 cinder list --all-tenants 查询该磁盘的id，之后通过cinder reset-state --state available volumeid来更改；

```

[root@openstack-server /]# cinder list --all-tenants
+-----+-----+-----+-----+-----+-----+-----+-----+
| ID | Attached to | Tenant ID | Status | Name | Size | Volume Type | Backing |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 684ef249-50c1-415b-9c54-9599150fdabb | 9052ae85792143ff955c35c52e8e41bd | in-use | volumetest7 | 5 | - | f | |
| eb4cce28-978e-4ae9-9c5b-539751c60b99 |  |  |  |  |  |  |  |
| 97e7a299-f5b9-4778-80a2-e2e2d9b9009c | 9052ae85792143ff955c35c52e8e41bd | in-use | volumetest8 | 10 | - | f |
| eb4cce28-978e-4ae9-9c5b-539751c60b99 |  |  |  |  |  |  |  |
| ed3004c9-ad58-4f1e-a37c-1ad97d680b5f | 9052ae85792143ff955c35c52e8e41bd | available | volumetest6 | 10 | onestore | f |
|  |  |  |  |  |  |  |  |
+-----+-----+-----+-----+-----+-----+-----+-----+

```

4、之后重新扩展云硬盘。