CephFS - Bug #40085

FSAL_CEPH assertion failed in Client::_lookup_name: "parent->is_dir()"

05/30/2019 02:42 PM - Jeff Layton

<table>
<thead>
<tr>
<th>Status:</th>
<th>Resolved</th>
<th>% Done:</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>Normal</td>
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<tr>
<td>Assignee:</td>
<td>Jeff Layton</td>
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<tr>
<td>Category:</td>
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</tr>
<tr>
<td>Target version:</td>
<td>v15.0.0</td>
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<tr>
<td>Source:</td>
<td>Community (user)</td>
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<td>Tags:</td>
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<tr>
<td>Backport:</td>
<td>nautilus,mimic,luminous</td>
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<td>Regression:</td>
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<td>Affected Versions:</td>
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Description:
A customer reported a crash in nfs-ganesha that indicated a problem down in libcephfs:

```cpp
#0 0x00007f5c88c1a207 in __GI_raise (sig=sig@entry=6) at ../nptl/sysdeps/unix/sysv/linux/raise.c:55
#1 0x00007f5c88c1b8f8 in __GI_abort () at abort.c:90
#2 0x00007f5c7f13d4d4 in ceph::_ceph_assert_fail (assertion=assertion@entry=0x7f5c77d9856b "parent->is_dir()") at /usr/src/debug/ceph-12.2.8/src/client/Client.cc:8371
    file=fileEntry=0x7f5c77d945a0 "/builddir/build/BUiLD/ceph-12.2.8/src/client/Client.cc", line=line@entry=8371,
    func=funcEntry=0x7f5c77d9ae80 <Client::_lookup_name(Inode*, Inode*, UserPerm const*)>::PRETTY_FUNCTION__ "int Client::_lookup_name(Inode*, Inode*, const UserPerm*)") at /usr/src/debug/ceph-12.2.8/src/common/assert.cc:66
#3 0x00007f5c77d0117e in Client::_lookup_name (this=this@entry=0x561bea8048d0, ino={val = 1099616490059}, perms= @0x561bea77560: {m_uid = 4294967295, m_gid = 4294967295, gid_count = 0, gids = 0x0, allocated_gids = false}) at /usr/src/debug/ceph-12.2.8/src/client/Client.cc:10410
#4 0x00007f5c77c0e26b in Client::ll_lookup_inode (cmount=optimized out, ino={val = 1099616490059}, perms= @0x561bea77560: {m_uid = 4294967295, m_gid = 4294967295, gid_count = 0, gids = 0x0, allocated_gids = false}, inode=inode=0x7f5c384f0b8) at /usr/src/debug/ceph-12.2.8/src/libcephfs.cc:1396
```

06/06/2021
The issue seems to be that _lookup_parent can return 0 without setting the parent pointer, leaving it uninitialized.

Related issues:
- Copied to CephFS - Backport #40160: luminous: FSAL_CEPH assertion failed in Client::_lookup_name: "parent->is_dir()" added
- Copied to CephFS - Backport #40161: nautilus: FSAL_CEPH assertion failed in Client::_lookup_name: "parent->is_dir()" added
- Copied to CephFS - Backport #40162: mimic: FSAL_CEPH assertion failed in Client::_lookup_name: "parent->is_dir()" added

History

#1 - 05/30/2019 02:45 PM - Jeff Layton
- Assignee set to Jeff Layton

#2 - 06/03/2019 05:24 PM - Patrick Donnelly
- Target version set to v15.0.0
- Start date deleted (05/30/2019)
- Source set to Community (user)
- Backport set to nautilus,mimic,luminous
- Component(FS) Client added
- Labels (FS) crash added

#3 - 06/03/2019 05:44 PM - Jeff Layton
This set should fix it:
https://github.com/ceph/ceph/pull/28324

#4 - 06/03/2019 06:40 PM - Patrick Donnelly
- Status changed from In Progress to Fix Under Review
- Pull request ID set to 28324

#5 - 06/05/2019 12:38 AM - Patrick Donnelly
- Status changed from Fix Under Review to Pending Backport

#6 - 06/05/2019 06:44 AM - Nathan Cutler
- Copied to Backport #40160: luminous: FSAL_CEPH assertion failed in Client::_lookup_name: "parent->is_dir()" added

#7 - 06/05/2019 06:44 AM - Nathan Cutler
While running with --resolve-parent, the script "backport-create-issue" noticed that all backports of this issue are in status "Resolved" or "Rejected".