CephFS - Feature #10369

qa-suite: detect unexpected MDS failovers and daemon crashes

12/18/2014 07:10 AM - John Spray

Status: Resolved
Priority: Normal
Assignee: Jos Collin
Category: Testing
Target version: v15.0.0
Source: Development

Affected Versions:
Component(FS): qa-suite
Labels (FS): qa
Pull request ID: 28378

Description
Currently some of our tests can be run with standby MDSs, and a failover event might occur without our tests noticing.

In the workunit-type tests, this is mainly something we want to ignore, because systems are often unpredictably slow, and as long as the filesystem satisfies the workunit we don't necessarily care if a failover happened.

In the new functional tests, we **do** want to know if a failover occurred unexpectedly, because some of the tests are poking individual MDSs in quite specific ways, and if a failover happened then we should stop the test rather than proceeding into some arcane unexpected failure mode. These tests also generally expose the system to less load, so the "it was just slow" failovers shouldn't often happen, and in any other unexpected failover cases we would like to stop the test to see what/why happened.

An out-of-thread ticker might be challenging as interrupting the main thread to inject a failure is not a normal thing to do, so maybe put it in the wait_until* helpers and as a pre-check to some Filesystem methods, so that we will always detect reasonably early when something went weird. Once we have that checker method, we should also introduce a check that all the daemons are really running, so that if e.g. an OSD crashes unexpectedly, we detect it immediately rather than waiting a long time for at timeout of some kind to end the test.

Subtasks:
Bug # 41133: qa/tasks: update thrasher design

Related issues:
Related to CephFS - Bug #41398: qa: KeyError: 'cluster' in ceph.stop  Resolved
Duplicated by CephFS - Bug #11314: qa: MDS crashed and the runs hung without ... Duplicate
Duplicated by CephFS - Bug #12821: mds_thrasher: handle MDSes failing on startup Duplicate 08/28/2015

History
#1 - 12/18/2014 07:11 AM - John Spray
- Tracker changed from Fix to Feature

#2 - 08/28/2015 01:13 PM - Greg Farnum
- Priority changed from Normal to High

We just keep re-creating this feature: #12821

#3 - 08/28/2015 01:14 PM - John Spray
- Category set to Testing

#4 - 04/10/2018 11:10 PM - Patrick Donnelly
- Assignee set to Patrick Donnelly
- Target version set to v14.0.0
- Source changed from other to Development
- Component(FS) qa-suite added
- Labels (FS) qa added

#5 - 03/07/2019 11:20 PM - Patrick Donnelly
- Target version changed from v14.0.0 to v15.0.0

#6 - 06/11/2019 08:31 PM - Patrick Donnelly
- Assignee changed from Patrick Donnelly to Jos Collin
- Start date deleted (12/18/2014)

#7 - 06/11/2019 09:57 PM - Patrick Donnelly
- Status changed from New to Fix Under Review
- Pull request ID set to 28378

#8 - 06/11/2019 09:58 PM - Patrick Donnelly
- Related to deleted (Bug #11314: qa: MDS crashed and the runs hung without ever timing out)

#9 - 06/11/2019 09:58 PM - Patrick Donnelly
- Duplicated by Bug #11314: qa: MDS crashed and the runs hung without ever timing out added

#10 - 06/11/2019 09:59 PM - Patrick Donnelly
- Duplicated by Bug #12821: mds_thrasher: handle MDSes failing on startup added

#11 - 08/21/2019 05:59 PM - Patrick Donnelly
- Status changed from Fix Under Review to Resolved

#12 - 08/22/2019 03:59 PM - Patrick Donnelly
- Related to Bug #41398: qa: KeyError: 'cluster' in ceph.stop added