

## RPM Support - Issue #3313

### rsync distributor broken on Fedora 27 due to SELinux denials

01/23/2018 06:19 PM - Ichimonji10

<b>Status:</b>	CLOSED - WORKSFORME	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	dalley	<b>Estimated time:</b>	0:00 hour
<b>Category:</b>			
<b>Sprint/Milestone:</b>			
<b>Severity:</b>	2. Medium	<b>Groomed:</b>	No
<b>Version:</b>		<b>Sprint Candidate:</b>	No
<b>Platform Release:</b>		<b>Tags:</b>	Pulp 2
<b>OS:</b>		<b>Sprint:</b>	Sprint 32
<b>Triaged:</b>	Yes	<b>Quarter:</b>	

#### Description

The rsync distributor for Pulp 2.15 nightlies is broken on Fedora 27 due to SELinux denials. The easiest way to figure this out is to run the functional tests for the rsync distributor with Pulp Smash:

```
python -m unittest pulp_smash.tests.pulp2.rpm.api_v2.test_rsync_distributor
```

Five of the eleven or so tests will fail, due to errors like this:

```
{'_href': '/pulp/api/v2/tasks/3996f1df-cf22-4156-8f8a-3dd8f26c6859/',
 '_id': {'$oid': '5a6769c62334faac0a6e2f8d'},
 '_ns': 'task_status',
 'error': {'code': 'PLP0001',
          'data': {'message': '['rsync', '-avrK', '-f+ */', '-e', u'ssh -l "'
                  'c42e1c4d-878 -i /tmp/tmp.9tuyMxN5aa -o "'
                  '"StrictHostKeyChecking no" -o "'
                  '"UserKnownHostsFile /dev/null"', '
                  "u'/var/cache/pulp/reserved_resource_worker-0@fedora-27-pulp-2-15-n
ightly/3996f1df-cf22-4156-8f8a-3dd8f26c6859/.tmp/', "
                  "u'c42e1c4d-878@fedora-27-pulp-2-15-nightly:/home/c42e1c4d-878/' ]\n
"
                  '/bin/sh: rsync: command not found\n'}},
 'description': 'A general pulp exception occurred',
 'sub_errors': []},
```

A quick look into `/var/log/audit/audit.log` on the target host indicates that SELinux is the culprit. To verify, I executed the following:

```
setenforce 0
echo > /var/log/audit/audit.log
semodule -R
```

I then re-ran the rsync distributor tests, and lo, they succeeded. The SELinux tools provide some guidance on what went wrong:

```
[root@fedora-27-pulp-2-15-nightly ~]# audit2allow -al

#===== celery_t =====

#!!!! This avc can be allowed using the boolean 'pulp_manage_rsync'
allow celery_t rsync_exec_t:file { execute execute_no_trans getattr map open read };

#!!!! This avc can be allowed using the boolean 'pulp_manage_rsync'
allow celery_t ssh_exec_t:file { execute execute_no_trans map open read };
[root@fedora-27-pulp-2-15-nightly ~]# grep denied /var/log/audit/audit.log

type=AVC msg=audit(1516727562.872:3915): avc: denied { getattr } for pid=5866 comm="sh" path="/
```



```
xec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727563.719:4015): avc: denied { open } for pid=5921 comm="sh" path="/usr
/bin/rsync" dev="dm-0" ino=433599 scontext=system_u:system_r:celery_t:s0 tcontext=system_u:object_
r:rsync_exec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727563.720:4016): avc: denied { execute_no_trans } for pid=5921 comm="sh
" path="/usr/bin/rsync" dev="dm-0" ino=433599 scontext=system_u:system_r:celery_t:s0 tcontext=syst
em_u:object_r:rsync_exec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727563.720:4017): avc: denied { map } for pid=5921 comm="rsync" path="/u
sr/bin/rsync" dev="dm-0" ino=433599 scontext=system_u:system_r:celery_t:s0 tcontext=system_u:objec
t_r:rsync_exec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727563.722:4018): avc: denied { execute } for pid=5922 comm="rsync" name
="ssh" dev="dm-0" ino=386915 scontext=system_u:system_r:celery_t:s0 tcontext=system_u:object_r:ssh
_exec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727563.722:4019): avc: denied { read open } for pid=5922 comm="rsync" pa
th="/usr/bin/ssh" dev="dm-0" ino=386915 scontext=system_u:system_r:celery_t:s0 tcontext=system_u:o
bject_r:ssh_exec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727563.722:4020): avc: denied { execute_no_trans } for pid=5922 comm="rs
ync" path="/usr/bin/ssh" dev="dm-0" ino=386915 scontext=system_u:system_r:celery_t:s0 tcontext=sys
tem_u:object_r:ssh_exec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727563.722:4021): avc: denied { map } for pid=5922 comm="ssh" path="/usr
/bin/ssh" dev="dm-0" ino=386915 scontext=system_u:system_r:celery_t:s0 tcontext=system_u:object_r:
ssh_exec_t:s0 tclass=file permissive=1
type=AVC msg=audit(1516727564.044:4050): avc: denied { getattr } for pid=5946 comm="sh" path="/
usr/bin/rsync" dev="dm-0" ino=433599 scontext=system_u:system_r:celery_t:s0 tcontext=system_u:obje
ct_r:rsync_exec_t:s0 tclass=file permissive=1
[snip!]
```

Here's the relevant packages on the F27 host:

```
[root@fedora-27-pulp-2-15-nightly ~]# rpm -qa | grep pulp | sort
pulp-admin-client-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
pulp-deb-admin-extensions-1.6.0-1.fc27.noarch
pulp-deb-plugins-1.6.0-1.fc27.noarch
pulp-docker-admin-extensions-3.1.1-0.2.beta.git.3.b0dfae3.git.3.b0dfae3.fc27.noarch
pulp-docker-plugins-3.1.1-0.2.beta.git.3.b0dfae3.git.3.b0dfae3.fc27.noarch
pulp-ostree-admin-extensions-1.3.0-1.fc27.noarch
pulp-ostree-plugins-1.3.0-1.fc27.noarch
pulp-puppet-admin-extensions-2.15.1-0.2.beta.git.4.b0dfae3.git.4.b0dfae3.fc27.noarch
pulp-puppet-plugins-2.15.1-0.2.beta.git.4.b0dfae3.git.4.b0dfae3.fc27.noarch
pulp-puppet-tools-2.15.1-0.2.beta.git.4.b0dfae3.git.4.b0dfae3.fc27.noarch
pulp-python-admin-extensions-2.0.2-1.fc27.noarch
pulp-python-plugins-2.0.2-1.fc27.noarch
pulp-rpm-admin-extensions-2.15.1-0.2.beta.git.6.53ade10.git.6.53ade10.fc27.noarch
pulp-rpm-plugins-2.15.1-0.2.beta.git.6.53ade10.git.6.53ade10.fc27.noarch
pulp-selinux-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
pulp-server-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
python-pulp-bindings-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
python-pulp-client-lib-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
python-pulp-common-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
python-pulp-deb-common-1.6.0-1.fc27.noarch
python-pulp-docker-common-3.1.1-0.2.beta.git.3.b0dfae3.git.3.b0dfae3.fc27.noarch
python-pulp-oid_validation-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
python-pulp-ostree-common-1.3.0-1.fc27.noarch
python-pulp-puppet-common-2.15.1-0.2.beta.git.4.b0dfae3.git.4.b0dfae3.fc27.noarch
python-pulp-python-common-2.0.2-1.fc27.noarch
python-pulp-repoauth-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
python-pulp-rpm-common-2.15.1-0.2.beta.git.6.53ade10.git.6.53ade10.fc27.noarch
python-pulp-streamer-2.15.1-0.2.beta.git.6.b0dfae3.git.6.b0dfae3.fc27.noarch
```

## History

**#1 - 01/26/2018 04:40 PM - dalley**

- Sprint/Milestone set to 53

- Triaged changed from No to Yes

**#2 - 01/29/2018 04:29 PM - dalley**

- Status changed from NEW to ASSIGNED

**#3 - 01/30/2018 03:22 PM - jortel@redhat.com**

- Sprint/Milestone changed from 53 to 54

**#4 - 01/31/2018 03:43 PM - dalley**

- Assignee set to dalley

**#5 - 02/01/2018 08:45 PM - Ichimonji10**

- Platform Release set to 2.15.2

**#6 - 02/01/2018 08:46 PM - Ichimonji10**

- Platform Release deleted (2.15.2)

**#7 - 02/01/2018 09:24 PM - dalley**

- Status changed from ASSIGNED to CLOSED - WORKSFORME

**#8 - 03/09/2018 12:32 AM - bmbouter**

- Sprint set to Sprint 32

**#9 - 03/09/2018 12:33 AM - bmbouter**

- Sprint/Milestone deleted (54)

**#10 - 04/15/2019 10:13 PM - bmbouter**

- Tags Pulp 2 added