



- ▲** 9/19/19 14:45:00 UTC: We have identified the issues affecting downloads and are implementing fixes. We continue to work 24x7 to resolve these issues. Updates will be communicated on status.redhat.com (<https://status.redhat.com/>).



Systemd Service Fails To Start With 'Refusing to accept PID outside of service control group, acquired through unsafe symlink chain' Error.

🔍 SOLUTION UNVERIFIED - Updated September 6 2019 at 5:27 PM - English ▾ ()

Environment

- Red Hat Enterprise Linux 7.7 (RHEL 7.7)

Issue

- A customer-made systemd service, that use to work under RHEL 7.6 and below, now fails when started in RHEL 7.7.

Resolution

Modify the script referenced in the systemd service file's `ExecStart=` field to use `runuser` instead of `su`. Please refer to the "Considerations about su" and "Resolution" sections of Understanding why a legacy SysV service on RHEL7 gets terminated too early during system shutdown (<https://access.redhat.com/articles/2978021>) for further explanation.

Root Cause

RHSA-2019:2091 (<https://access.redhat.com/errata/RHSA-2019:2091>), which was release as part of RHEL 7.7, fixed low impact security vulnerability CVE-2018-16888 (<https://access.redhat.com/security/cve/cve-2018-16888>).

The custom systemd service unit file (/etc/systemd/system/flyaway.service):

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```
[Unit]
Description=Action for migratory aves.

[Service]
Type=forking
User=root
Group=anatidae
ExecStart=/usr/local/bin/liftoff.sh
ExecStop=/usr/local/bin/touchdown.sh
PIDFile=/path/to/flyaway.pid

[Install]
WantedBy=default.target
```

...references a custom script in its `ExecStart` field. That script performs two actions that, together, run afoul of the tighter security:

- `exec /usr/bin/su -p goose -c "/usr/local/bin/flapwings"`, and
- `echo $processid > /path/to/flyaway.pid`

Diagnostic Steps

The system's journal (and subsequently the `/var/log/messages` file) contains entries like these:

```
systemd[1]: Starting flyaway...
su[4132]: (to goose) root on none
systemd[1]: Created slice User Slice of goose.
systemd[1]: Started Session c5 of user goose.
su[4132]: pam_unix(su:session): session opened for user goose by (uid=0)
su[4132]: pam_unix(su:session): session closed for user goose
systemd[1]: Refusing to accept PID outside of service control group, acquired through unsafe
symlink chain: /path/to/flyaway.pid
systemd[1]: Refusing to accept PID outside of service control group, acquired through unsafe
symlink chain: /path/to/flyaway.pid
systemd[1]: Failed to start flyaway.
systemd[1]: Unit flyaway.service entered failed state.
systemd[1]: flyaway.service failed.
```

Product(s) Red Hat Enterprise Linux (/taxonomy/products/red-hat-enterprise-linux)

Component systemd (/taxonomy/components/systemd)

Category Troubleshoot (/category/troubleshoot)

Tags [service_files \(/tags/servicefiles\)](/tags/servicefiles) [systemd \(/tags/systemd\)](/tags/systemd) [CUSTOMER\(https://access.redhat.com/\)](https://access.redhat.com/)



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1 Comments



BF

15 September 2019 11:08 PM (<https://access.redhat.com/solutions/4397951#comment-1621631>)


[Ben Formosa \(/user/23354201\)](/user/23354201)

[\(/user/23354201\)](/user/23354201) Is there a resolution to this issue when the service is a script in /etc/init.d/ ?

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