

Installer - Bug #35089

Starting or Restarting foreman.socket will raise a harmless "TCP_NODELAY failed: Operation not supported" error in Red Hat Satellite 6.9/6.10/6.11

06/21/2022 11:09 AM - Evgeni Golov

Status: Closed	
Priority: Normal	
Assignee: Evgeni Golov	
Category:	
Target version:	
Difficulty:	Fixed in Releases: 3.4.0
Triaged: No	Found in Releases:
Bugzilla link: 2099620	Red Hat JIRA:
Pull request: https://github.com/theforeman/puppet-for-eman/pull/1062	

Description

Cloned from https://bugzilla.redhat.com/show_bug.cgi?id=2099620

Description of problem:

When we try to start the foreman.service, It triggers the startup of foreman.socket at the backend.

During this startup, we get to see "TCP_NODELAY failed: Operation not supported" printed in the system logs which is harmless in nature but unexpected to see.

Version-Release number of selected component (if applicable):

Red Hat Satellite 6.9
Red Hat Satellite 6.10
Red Hat Satellite 6.11

How reproducible:

Always

Steps to Reproduce:

1. Install a Satellite 6.9\6.10\6.11
2. Try;
 1. for i in stop start; do systemctl \$i foreman.socket; sleep 5; doneor simply # `systemctl restart foreman.socket`
- or
 1. foreman-maintain service stop
 2. foreman-maintain service start
3. Monitor /var/log/messages or check the status of foreman.socket using systemctl

Actual results:

Jun 21 16:17:37 satellite.example.com systemd¹: TCP_NODELAY failed: Operation not supported
Jun 21 16:17:37 satellite.example.com systemd¹: Starting Foreman HTTP Server Accept Sockets.
Jun 21 16:17:37 satellite.example.com systemd¹: Listening on Foreman HTTP Server Accept Sockets.

Expected results:

No "TCP_NODELAY failed: Operation not supported" message

Additional info:

The foreman.socket is actually a UNIX socket but it includes a TCP option in it i.e. "NoDelay=true" which is a TCP only option

```
1. grep NoDelay /usr/share/foreman/extras/systemd/foreman.socket /usr/lib/systemd/system/foreman.socket
   /usr/share/foreman/extras/systemd/foreman.socket:NoDelay=true
   /usr/lib/systemd/system/foreman.socket:NoDelay=true
```

```
1. man 7 tcp | grep TCP_NODELAY A4 | tail -6
```

TCP_NODELAY

If set, disable the Nagle algorithm. This means that segments are always sent as soon as possible, even if there is only a small amount of data.

When not set, data is buffered until there is a sufficient amount to send out, thereby avoiding the frequent sending of small packets, which results

in poor utilization of the network. This option is overridden by TCP_CORK; however, setting this option forces an explicit flush of pending output, even if TCP_CORK is currently set.

But since we explicitly mention "NoDelay" to "True" , When the unix socket starts, It tries to honor that option but fails because TCP_NODELAY is tcp only option.

Workaround:

- Edit /etc/systemd/system/foreman.socket.d/installer.conf and add "NoDelay=false" at the end of the file

```
1. cat /etc/systemd/system/foreman.socket.d/installer.conf
```

```
[Socket]
ListenStream=
ListenStream=/run/foreman.sock
SocketUser=apache
SocketMode=0600
NoDelay=false
```

- systemctl daemon-reload
- systemctl restart foreman.socket

Unless, my explanation is wrong or missing some important part and due to some reason, NoDelay should always be set to true in the case of foreman.socket, I will suggest having this properly handled by satellite-installer and set "NoDelay=false" in /etc/systemd/system/foreman.socket.d/installer.conf .

Associated revisions

Revision d7ab348a - 06/21/2022 03:07 PM - Evgeni Golov

Fixes #35089 - set NoDelay=false when deploying a UNIX socket

Upstream foreman.socket uses NoDelay=true with a TCP socket, but on UNIX sockets this just generates a useless warning. Explicitly setting it back to false in our override fixes the issue.

History

#1 - 06/21/2022 11:12 AM - The Foreman Bot

- Status changed from New to Ready For Testing
- Assignee set to Evgeni Golov
- Pull request <https://github.com/theforeman/puppet-foreman/pull/1062> added

#2 - 06/21/2022 03:07 PM - The Foreman Bot

- Fixed in Releases 3.4.0 added

#3 - 06/21/2022 04:01 PM - Evgeni Golov

- Status changed from Ready For Testing to Closed

Applied in changeset [puppet-foreman|d7ab348a03a2d74cfaa17174bc24beb41145a79e](#).