

Installer - Bug #34130

Puppetserver runs under Java 8 instead of Java 11 in Katello scenario

12/10/2021 04:58 PM - Eric Helms

Status: New							
Priority: Normal							
Assignee:							
Category:							
Target version:							
Difficulty:	Fixed in Releases:						
Triaged: No	Found in Releases:						
Bugzilla link:	Red Hat JIRA:						
Pull request:							
Description							
<p>The puppet-candlepin configuration we have is designed to install and ensure Java 11 is present and Tomcat runs under this version. Which it does:</p>							
<ul style="list-style-type: none">● <code>tomcat.service</code> - Apache Tomcat Web Application Container<ul style="list-style-type: none">Loaded: loaded (<code>/usr/lib/systemd/system/tomcat.service</code>; enabled; vendor preset: disabled)Active: active (running) since Fri 2021-12-10 16:11:33 UTC; 43min ago							
<pre>Main PID: 2405 (java) Tasks: 77 (limit: 50720) Memory: 1004.8M CGroup: /system.slice/tomcat.service └─2405 /usr/lib/jvm/jre-11/bin/java</pre>							
<p>However, one of the dependencies of Tomcat is <code>tomcatjss</code> which has a requires on <code>openjdk-1.8.0</code>:</p>							
<pre>[root@pipe-katello-server-nightly-centos8 vagrant]# rpm -q tomcatjss --requires apache-commons-lang3 java-1.8.0-openjdk-headless jpackage-utils >= 0:1.7.5-15 jss >= 4.9.0 jss < 5.0.0 pki-servlet-engine >= 1:9.0.7 rpmlib(CompressedFileNames) <= 3.0.4-1 rpmlib(FileDigests) <= 4.6.0-1 rpmlib(PayloadFilesHavePrefix) <= 4.0-1 rpmlib(PayloadIsXz) <= 5.2-1 slf4j slf4j-jdk14</pre>							
<p>This leads to the default java version being 8 and not 11:</p>							
<pre>[root@pipe-katello-server-nightly-centos8 vagrant]# update-alternatives --config java</pre>							
<p>There are 2 programs which provide 'java'.</p>							
<table border="1"><thead><tr><th>Selection</th><th>Command</th></tr></thead><tbody><tr><td>*+ 1</td><td>java-1.8.0-openjdk.x86_64 (/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.312.b07-2.e18_5.x86_64/jre/bin/java)</td></tr><tr><td>2</td><td>java-11-openjdk.x86_64 (/usr/lib/jvm/java-11-openjdk-11.0.13.0.8-3.e18_5.x86_64/bin/java)</td></tr></tbody></table>		Selection	Command	*+ 1	java-1.8.0-openjdk.x86_64 (/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.312.b07-2.e18_5.x86_64/jre/bin/java)	2	java-11-openjdk.x86_64 (/usr/lib/jvm/java-11-openjdk-11.0.13.0.8-3.e18_5.x86_64/bin/java)
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*+ 1	java-1.8.0-openjdk.x86_64 (/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.312.b07-2.e18_5.x86_64/jre/bin/java)						
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<p>Puppetserver's start up command relies on calling <code>/usr/bin/java</code> which is always set to whatever the current alternative is set to. This means that Puppetserver ends up running under Java 8 instead of the newer Java 11:</p>							
<ul style="list-style-type: none">● <code>puppetserver.service</code> - puppetserver Service<ul style="list-style-type: none">Loaded: loaded (<code>/usr/lib/systemd/system/puppetserver.service</code>; enabled; vendor preset: disabled)							

```
Active: activating (start) since Fri 2021-12-10 16:52:58 UTC; 8s ago
Cntrl PID: 20787 (bash)
Tasks: 37 (limit: 4915)
Memory: 503.2M
CGroup: /system.slice/puppetserver.service
├─20787 bash /opt/puppetlabs/server/apps/puppetserver/cli/apps/start
└─20816 /usr/bin/java
```

We either need to solve this packaging problem (we get tomcatjss from pki-core) or find a way to adjust the alternatives to ensure Java 11 is the default enabled.

History

#1 - 12/10/2021 05:05 PM - Ewoud Kohl van Wijngaarden

You should be able to run `--puppet-server-jvm-java-bin /usr/lib/jvm/jre-11/bin/java` to get it to use Java 11. This is not pretty and there should be a better way. However, it should provide a way to verify it works.

#2 - 12/13/2021 02:15 PM - Evgeni Golov

This makes me ask more questions than you originally signed up for, and I am already sorry.

1. For Puppet, I think puppet-puppet should just configure the right Java we want it to use, instead of using `/usr/bin/java`?
2. Why does tomcatjss depend on a specific JDK? To the best of my knowledge, compiling Java code with JDK N guarantees that the binary is (technically) compatible with EVERY N+x JDK

#3 - 03/14/2024 09:28 AM - Rune Filosof

It is no longer tomcatjss, but the result is still the same. pki-servlet-engine requires java-1.8.0.

```
dnf repoquery --whatdepends java-1.8.0-openjdk --installed
# java-1.8.0-openjdk-devel-1:1.8.0.402.b06-2.el8.x86_64
dnf repoquery --whatdepends java-1.8.0-openjdk-devel --installed
# ant-0:1.10.5-1.module+el8+2598+06babf2e.noarch
# pki-servlet-engine-1:9.0.50-1.module+el8.7.0+15761+f86c9a56.noarch
dnf repoquery --whatdepends pki-servlet-engine --installed
# candlepin-0:4.3.12-1.el8.noarch
```