

UPDATING THE JAVA UNDERLYING COLDFUSION: CONSIDERING IT, DOING IT



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- ▶ Considering, planning the jvm update
 - ▶ What jvm do you have, what can you update to, why should you...
- ▶ Performing the jvm update
 - ▶ Where to get it, how to install it, how to configure CF to use it...
- ▶ Avoiding various potential gotchas when updating the JVM
 - ▶ Some affect few, some affect many ...
- ▶ How to be made aware of new JVM versions

- ▶ Commandbox fans: it simplifies one of those points, but the rest apply to you
- ▶ Lucee folks: again, nearly all I say applies to you as well

- ▶ I focus on CF server troubleshooting, as an independent consultant
 - ▶ Assist organizations of all sizes, experience levels
 - ▶ Work remotely 99% of the time, safe, secure, easy (via **shared desktop**)
 - ▶ **Solve most problems in less than an hour**, teaching you also as we go
 - ▶ **Satisfaction guaranteed**
 - ▶ More on rates, approach, etc at carehart.org/consulting
- ▶ But to be clear, I'm not selling anything in this session! 😊

- ▶ Presentation online at carehart.org/presentations

ABOUT ME

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CONSIDERING, PLANNING THE JVM UPDATE

- ▶ On the many “current” JVM versions
 - ▶ On Java vs jvm vs jdk vs jre
 - ▶ On Oracle vs OpenJDK
- ▶ What JVM version do you currently have?
- ▶ What version can you update to?
 - ▶ What can you NOT yet update to?
 - ▶ Does CF support other than Oracle Java?
- ▶ Why should you update?
 - ▶ Security fixes, bug fixes, enhancements
- ▶ Oracle Java licensing, changes over time
 - ▶ Do CF users need to license Oracle Java?

PERFORMING THE JVM UPDATE

- ▶ Where to get it
 - ▶ Adobe site, Oracle site
 - ▶ Automation URL?
- ▶ How to install it
 - ▶ Installer vs zip/archive to be extracted
- ▶ Where to install it on machine
- ▶ How to configure CF to use it
 - ▶ Admin vs jvm.config
 - ▶ How to revert to prior java version
- ▶ Commandbox, Lucee
- ▶ CF (Docker) containers

AVOIDING VARIOUS POTENTIAL GOTCHAS

- ▶ Zip64ExtraFieldValidation (Jul 2023 update)
- ▶ Java 11 installer change in Jan 2023
- ▶ Sha-1 issues (Oct 2022 jvm update)
- ▶ TLS version issues (Apr 2021 jvm update)
- ▶ Certificate issues: considering cacert imports
- ▶ On changing major Java version (like 8 to 11)
 - ▶ May need to clear CF's cfclasses folder
 - ▶ May need to copy msucr*.dll from jvm to CF lib
- ▶ Multiple “instances” in CF each have own jvm

HOW TO BE MADE AWARE OF NEW JVM VERSIONS

- ▶ Oracle “critical patch update” schedule
 - ▶ 3rd Tues of Jan, Apr, Jul, Oct
- ▶ Oracle Java release notes
- ▶ Hackmycf (hackmycf.com)
- ▶ Adobe CF forums; community resources
- ▶ My blog, carehart.org

- ▶ This recording:
 - ▶ youtube.com/watch?v=iAJf52IJ_TQ&list=PLG2EHZEbhy0-QirMKgSxhjkUyTSSTvHjL
- ▶ These slides:
 - ▶ carehart.org/presentations/Updating%20the%20Java%20underlying%20ColdFusion.pdf
- ▶ carehart.org/blog/2024/1/17/jvm_update_considerations
 - ▶ With brief summaries and links to blog posts where I elaborate on many points covered in this talk
- ▶ coldfusion.adobe.com/2021/01/table-of-java-to-cf-versions/
- ▶ helpx.adobe.com/coldfusion/kb/coldfusion-downloads.html#downloads3
- ▶ commandbox.ortusbooks.com/package-management/code-endpoints/java
- ▶ docs.lucee.org/guides/installing-lucee/installation-linux/upgrade-JRE.html
- ▶ docs.lucee.org/guides/installing-lucee/lucee-server-administration-windows/updating-memory-settings.html
- ▶ github.com/carehart/awesome-cf-compose/blob/master/cf-2021-specific-java-version/Dockerfile

RESOURCE LINKS

- ▶ Updating the JVM underlying CF is important, can be easy
 - ▶ There are various things to consider first, and beware while doing it
 - ▶ There are various ways to be notified of available JVM updates
- ▶ My contact info for follow-up:
 - ▶ Charlie Arehart
 - ▶ charlie@carehart.org
 - ▶ @carehart (Tw, Fb, Li, Slack, Skype, GitHub)
 - ▶ Slides: carehart.org/presentations

SUMMARY