UPDATING/HOTFIXING COLDFUSION: TIPS AND TRAPS

(updated 5/29/15)

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OUTLINE

- CF11/10 Updates (auto-update mechanism)

    - Basics, Tips/Tricks

    - Gotchas/Traps (when updates fail, connector updates, more)

- CF9/8 Hotfixes (manual update process)

    - Basics, Tips/Tricks, Gotchas/Traps

- Some Issues Common to CF 8-11

- Resources

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ABOUT CHARLIE AREHART

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- 18 yrs CF experience (33 in Enterprise IT)
- Certified Adv CF Developer, Instructor
- Adobe Forum MVP, CF CAB member
- Co-author CFWACK books: 8, 9, 10
- Living on a farm in rural Kentucky!

Web home at www.carehart.org

- CArehart Quick Tips on Youtube
- 100+ presentations, 80+ articles, 400+ blog entries
- UGTV: recordings of 600+ presos by 300+ speakers
- CF411.com: 1800+ tools/resources, 150+ categories
- CF911.com: CF server troubleshooting resources
- Hosting courtesy of EdgeWeb Hosting
- Consulting: available for CF troubleshooting, tuning
  - Remote or on-site; on-demand, single instance is ok

NOTES

- Presentation available online at carehart.org/presentations

    - Lots of text, but much of it is links to resources with still more info

- I've shrunken the font size for some URLs so they fit on one line

    - Some folks were having trouble clicking links in PDF version

    - Didn't do with some that would be too tiny then. Just watch out

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ABOUT CF11/10 UPDATES
(AUTO-UPDATE MECHANISM)

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CF11/10 UPDATE BASICS

- CF11/10 auto update mechanism, in CF Admin>Server Updates
    - Or via starburst in top right (if available updates not installed)
- Always cumulative in nature: need only apply latest available
- Nice: if you're running multiple instances (CF Enterprise)
    - The updater (in cfusion instance) detects/offers to update all
- As easy as it should be, some gotchas (discussed later)
    - Mandatory update (for CF10)
    - Rebuilding web connector (for CF10 and 11)
    - What if no updates ever appear available?
- Quick demo

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CF11/10 UPDATE BASICS (CONT)

- CF10/11 update mechanism covers both bug fixes & security updates

  - So far 16 for CF10, 5 for CF11

  - Sometimes hundred+ bugfixes!

- Location of hotfixes jars (downloaded and installed)

  - \[*ColdFusion*]*cfusion*\hf-updates (or *instancename*)

- Subdirectory for each update applied

  - includes logs (including what changed), backups, and uninstall feature (more on uninstall later)

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GETTING STARTED RESOURCES

- Resources for CF11/10 update basics

    - http://www.shilpikhariwal.com/2012/04/coldfusion-10-hot-fix-installer.html

    - https://wikidocs.adobe.com/wiki/display/coldfusionen/Using+the+ColdFusion+Administrator#UsingtheColdFusionAdministrator-ServerUpdatesection

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CF11/10 UPDATE TIPS/TRICKS

- Beware: read update page carefully

  - Note whether connector update needed

  - Note available link to technote

- Consider "Download" vs "Download and Install"

- On "install", if it seems to fail, wait to see if the instance is back up!

  - CF11 improves the UI giving status and checking for restart

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CF11/10 UPDATE TIPS/TRICKS (CONT.)

- Can uninstall updates: see "Installed Updates" tab

- Don't miss "settings" tab on HF page

  - Option to checks for updates on each Admin login

  - Option to send email from your server when new updates found

    - But you must have CF admin mail page correct

- Consider the update "prerelease" offers from Adobe (on CF blog)

  - http://blogs.coldfusion.com

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MORE GETTING STARTED RESOURCES

- I offer 2 youtube videos with much of these basics, tips, and tricks from CF10 timeframe (still applicable to CF11):

    - https://www.youtube.com/watch?v=BbiIQzP3sFg

    - https://www.youtube.com/watch?v=b_vJ6fxKGBA

- DO NOT MISS the Adobe CF HF Guide (I call it the "CFHFFAQ")

    - http://blogs.coldfusion.com/post.cfm/coldfusion-hotfix-installation-guide

    - Written in CF10 timeframe, mostly still applicable to CF11

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CF11/10 UPDATE GOTCHAS/TRAPS

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MANY ISSUES TO CONSIDER

- "Mandatory update", for CF10 only

- Rebuilding connector (for CF10 and 11, and for IIS and Apache)

- What if no updates ever appear in Admin?

- Manually obtaining updates

- Manually applying updates

- When updates fail

- Other issues

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"MANDATORY UPDATE" (CF10 ONLY)

- When you first try to apply any updates to CF10 (after update 7), you will get "Signature verification failed" error on download of CF10 update

  - What is this about?

- Steps to resolve

  - Download "mandatory update" manually from http://www.adobe.com/support/coldfusion/downloads_updates.html

  - Save JAR file to a directory (beware some browsers saving as .zip)

  - Open command prompt (as admin), cd to location of download and then run the command as follows

    - C:\ColdFusion10\jre\bin\java -jar cf10_mdt_updt.jar

  - Follow the on-screen instructions

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"MANDATORY UPDATE" (CONT.)

- For help on working from command prompt in WIndows, and as admin, see my video

  - https://www.youtube.com/watch?v=N5dRtcLfOnU

- Resources on Mandatory Update:

  - http://helpx.adobe.com/coldfusion/kb/coldfusion-10-mandatory-update.html

  - http://www.adobe.com/support/coldfusion/downloads_updates.html

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REBUILDING CONNECTOR (IIS AND APACHE)

- IS also "mandatory", after some CF10 and CF11 updates

    - Mentioned in update interface, easily missed

    - Entails re-running web server config tool, wsconfig (GUI or cmd-line)

- Don't forget to "Run as admin", if Windows

- Demo

- Also, if multiple instances, must run wsconfig from within CF instance to be "connected" (\[*ColdFusion*]\[*instance*]\runtime\bin\)

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REBUILDING CONNECTOR (IIS AND APACHE)

- More

  - http://www.carehart.org/blog/client/index.cfm/2013/9/13/why_you_must_update_cf10_webserver_connector

  - http://www.carehart.org/blog/client/index.cfm/2013/11/8/still_more_reasons_to_update_your_CF10_webconnector

- Of related interest:

  - http://blogs.coldfusion.com/post.cfm/video-learn-about-iis-connectors-in-coldfusion10

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WHAT IF NO UPDATES EVER APPEAR IN ADMIN?

- First question: do you see 3 tabs on Server Updates page?

  - If not, problem is likely that CFIDE/scripts is blocked for web site

  - That keeps browser from accessing needed UI elements/JS

- Second question: have you clicked "check for updates"?

- If you DO see the 3 tabs, and HAVE checked for updates, and know you should see some and don't…

WHAT IF NO UPDATES EVER APPEAR IN ADMIN?

- Likely because your CF server is behind proxy or firewall

- If behind proxy:

    - Can configure CF startup to specify needed proxy info

    - See "What can be done if the ColdFusion server is behind a proxy server and can't access the Adobe's Update site URL?" in CFHFFAQ

- If behind firewall:

    - Can obtain hotfix files manually…

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MANUALLY OBTAINING UPDATES

- RSS feed of all CF11/10 updates, listed in Admin update settings page

    - http://download.adobe.com/pub/adobe/coldfusion/xml/updates.xml

    - See also http://blogs.coldfusion.com/post.cfm/can-i-get-an-update-if-you-re-looking-for-coldfusion-updaters

- Seeing no links in RSS feed, as viewed in browser? Use "view source"

- URL for a given fix, for example:

    - https://cfdownload.adobe.com/pub/adobe/coldfusion/11/hotfix_005.jar

- Demo

- Just to download that hotfix jar and apply it manually…

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MANUALLY APPLYING UPDATES

- Need to run at command line

  - Remember to "run as admin" (or use sudo in Linux)

  - Need to use Java command. If not installed, use CF's java

- Here's how for CF11 update 5 on Windows, as example:

  - cd c:\coldfusion11\cfusion\hf-updates

  - c:\ColdFusion11\jre\bin\java -jar hotfix_005.jar

- Demo

- Again, check out my youtube video on using Windows command line

  - https://www.youtube.com/watch?v=N5dRtcLfOnU

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MANUALLY OBTAINING, APPLYING CF11/10 UPDATES (CONT.)

- More resources

    - http://blogs.coldfusion.com/post.cfm/how-to-download-and-install-coldfusion-10-hotfix-directly

    - http://blogs.coldfusion.com/post.cfm/video-on-hotfix-installation-in-coldfusion-10

        - First 5 mins on mandatory update, then on manual updates

    - http://help.adobe.com/en_US/ColdFusion/10.0/Admin/WSe61e35da8d318518-33adffe0134c60cd31c-7ffe.html

    - CFHFFAQ section:

        - "What can be done if the ColdFusion server is behind the firewall and can't access the Adobe's Update site URL?"

        - http://blogs.coldfusion.com/post.cfm/coldfusion-hotfix-installation-guide

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WHEN UPDATES FAIL

- If update reports error, or CF fails to start, or admin fails to load:

  - Look at update log. Again in folder for the update applied

  - Error status is near the top (not bottom)!

- Common problem is that CF did not stop, or a file was locked

  - Solution: stop CF and run the update from command line instead

  - Can just run update again, without uninstalling first

- This simple tip can save enormous heartache!

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OTHER ISSUES

- Download of CF10/11 you get today is not fully updated

    - Need to apply mandatory update (CF10), then latest update, then do connector rebuild

    - Actually, you can no longer download CF10 from Adobe

        - See instead http://bit.ly/cfdownloads

- May need to install MS Visual C++ 2012 runtime

    - http://blogs.coldfusion.com/post.cfm/resolving-500-internal-server-error-with-coldfusion-10-update-14

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OTHER ISSUES (CONT.)

- Change in OS file permissions may be required after lockdown

  - http://blogs.coldfusion.com/post.cfm/not-able-to-apply-hotfix-from-coldfusion-10-administrator-on-windows-with-lockdown-guide-imposed-on-server-how-to-set-it-up-to-make-it-work

- Silent install support

  - See "What if an Organization has other customary methods to apply/automate Hotfixes and wants only the Hotfix files that are Modified/Added/Deleted to be applied?" in CFHFFAQ

- JEE-specific deployment tips/tricks

  - See related JEE discussions in CFHFFAQ

ABOUT CF9/8 HOTFIXES
(ALL THREE TYPES)

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CF9/8 HOTFIX BASICS

- Should be simple in concept, is challenging in practice
  - Discussion applies to CF 7/6, but those are very old. Own issues
- Hotfix types
  - Cumulative nature of CHFs, secHFs
  - Melding of these types by 2012
  - Challenge: easy to misapply (more later)
- Hotfix download locations
  - http://www.carehart.org/blog/client/index.cfm/2012/5/31/Getting-ColdFusion-89-downloads-with-Verity-ways-that-may-work-even-after-today
  - Bit.ly/cfdownloads
- Hotfix technote steps: follow them closely!

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CF9/8 HOTFIX TIPS/TRICKS

- Determining current hotfix level

    - http://www.carehart.org/blog/client/index.cfm/2012/6/18/what_hotfixes_have_been_applied

- Unofficial updater

    - http://uu2.riaforge.org/

- A review of resources with tips and traps

    - http://www.carehart.org/blog/client/index.cfm/2014/3/14/cf9_and_earlier_hotfix_guide

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CF9/8 HOTFIX GOTCHAS/TRAPS

- Misapplying Hotfixes

  - Updating wrong dirs CF dirs (many "lib" dirs, for instance)

  - Multiple CFIDE locations (more later)

  - Extracting zips incorrectly (eg, extracting a folder under a folder)

  - Mistakes during merge process (eg, mistakenly choosing "skip")

  - See
    http://www.carehart.org/blog/client/index.cfm/2011/10/21/why_chfs_may_break

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CF9/8 HOTFIX GOTCHAS/TRAPS

- Challenge finding hotfix download details

- CF8/9 no longer formally supported , no 9 updates since 2012

- For CF9.x, beware that while security hotfixes are generally cumulative, APSB13-19 must be applied even after APSB13-27

- For CF9.0.1, note potential jpedal.jar issue

  - http://blogs.coldfusion.com/post.cfm/jpedal-jar-for-coldfusion-9-0-1-cumulative-hotfix-4

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CF9/8 HOTFIX GOTCHAS/TRAPS

- If updating to Java 1.7 in CF 9/8 (after CHF in Jan 2013), Windows users may find CF does not start

  - See CHF doc: may need to copy msvcr100.dll from jvm to CF

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ISSUES COMMON TO CF 11/10/9/8

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THE NEW HOTFIX NOTES DOC (8, 9, 10, 11)

- Finally a list of what tweaks can be made to undo security hole closures

    - http://helpx.adobe.com/coldfusion/kb/important-hotfix-related-notes.html

- Example (session fixation, form post max)

    - http://helpx.adobe.com/coldfusion/kb/security-hotfix-coldfusion-8-8.html

    - http://www.cutterscrossing.com/index.cfm/2012/3/27/ColdFusion-Security-Hotfix-and-Big-Forms

- My resources on this document/issues

    - http://www.carehart.org/blog/client/index.cfm/2013/5/21/new_adobe_summary_of_security_hotfix_tweaks

    - youtube.com/watch?v=_EFVIc37a1I

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JVM UPDATES (8, 9, 10, 11)

- Java 1.6 no longer supported by Oracle, 1.7 soon no longer updates

- What version of Java is supported for CF 11, 10, 9?

  - http://blogs.coldfusion.com/post.cfm/which-jdk-is-supported-with-coldfusion-9-10-and-11Changing the JVM

- Applying update to JVM for CF?

  - https://www.youtube.com/watch?v=zzC31EAlZ8Y

  - http://www.carehart.org/blog/client/index.cfm/2014/12/11/help_I_updated_CFs_JVM_and_it_wont_start

- On move to Java 8, may need to copy tools.jar

  - http://blogs.coldfusion.com/post.cfm/coldfusion-10-and-11-support-with-java-8

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THE CHALLENGE OF MULTIPLE CFIDE LOCATIONS

- Good news in CF10/11: CF puts CFIDE in the instance wwwroot
  - Points to it in web servers with a virtual directory
- Problem in CF9 and earlier is that you may have multiple CFIDE locations
  - The one installed by CF 9 or earlier
    - Which could be in an IIS/Apache site docroot, or CF's wwwroot
    - Also, one created with each new instance (Enterprise option) in instance's wwwroot
  - Then may be copies made by admins/developers
  - Can still trouble you in CF10, 11 as well, if brought with old code
- Solution: you must remember to update ALL of them in CF9 and earlier, or risk trouble

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RESOURCES

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RESOURCES RELATED TO UPDATES (11, 10)

- Have pointed out many throughout talk, from Adobe, others on:

    - CF10/11 update basics, gotchas

    - CF10 update details ("CFHFFAQ")

- Follow the Adobe CF team blog

    - http://blogs.coldfusion.com/

- Especially (related to updates):

    - http://blogs.coldfusion.com/archives.cfm/category/hotfix

    - http://blogs.coldfusion.com/archives.cfm/category/updates

HOW CAN I HELP, LATER?

- CArehart Quick Tips on Youtube

  - youtube.com/user/carehart/videos

- Don't struggle to solve CF problems, challenges on your own

  - CArehart.org/consulting

  - Remote or on-site, scheduled or on-demand, short-term

  - Satisfaction guaranteed or no payment expected

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REVIEW

- CF11/10 update mechanism is indeed "one click"

  - But with mandatory update issue in CF10, and web connector rebuild for 10/11, it's not really that simple

  - And obviously, there are other gotchas, such as if updates fail, if your server cannot access the updates over internet, etc

- But Adobe has anticipated many challenges, made tool flexible

  - And the "CFHFFAQ" really does answer nearly every challenge

  - Beyond that, CF team blog entries cover the rest

- Shared some other tips, tricks, traps for CF11/10 and CF9/8

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CONCLUSION

- Hope you feel that you learned a lot

    - Use the resources mentioned to remind you, learn still more

    - Contact me personally if you need a pointer to anything mentioned

- Any questions?

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