CF911:
SOLVING FREQUENT CF SERVER PROBLEMS IN NEW/BETTER WAYS

Charlie Arehart
Independent Consultant

charlie@carehart.org / @carehart
WHY WE’RE HERE

- People face CF server problems quite often
  - Server “crashes” or “locks up”
  - CPU or memory go “way up”
  - What’s the common solution?
- There is a better way…
A BETTER WAY

• I help people with such problems every day
  • Remote, short-term shared desktop sessions
  • Solving problems while educating them
• Sharing here my experience doing that for past several years
  • I focus on diagnostics, rather than “try this” approach
  • I find that most people are not aware of many resources, tools
• We’ll focus here on several of those resources/tools in this talk
  • Will point to resources at end with links to more details
• Might want to move forward in the room
WHAT WE’LL BE COVERING

• Logs: there’s more to them than you may think
• Monitoring CF: perhaps some unexpected discoveries
• Beyond "watching monitors“
• Watching specific trouble spots
NOTES

- Will focus on ColdFusion in this session
  - Concepts apply as well to Railo, BD, OpenBD, JEE servers
- Not focused here on CF10 particularly. Will make some mention
- Will show Windows, but concepts and some tools apply to *nix
ABOUT CHARLIE AREHART

Independent Consultant
• 15+ yrs CF experience (30+ Enterprise IT)
• Certified Adv CF Developer, Instructor
• Adobe Forum MVP, Doc wiki moderator
• Co-author CFWACK books: 8, 9, 10
• Living in Alpharetta, Georgia (Atlanta)

Web home at www.carehart.org
• 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
LOGS: THERE’S MORE TO THEM THAN YOU MAY THINK
• Log file locations
• Key log file content
• Configuring still more logging
• Using logs with crashes/hangs
• Viewing logs
• Searching logs
• Saving logs over time
• New logs in cf10 (metrics, access) more later
MONITORING CF: PERHAPS SOME UNEXPECTED DISCOVERIES
• CF Standard vs Enterprise, CF8/9/10 vs CF7/6
• Low-end solutions
  • CFSTAT (command line tool)
  • JRun metrics logging (CF9 and earlier)
  • CF10 metrics log
- ColdFusion Enterprise Server Monitor (CF 8 Ent and above)
  - Impact, depends on “start” buttons enabled
  - Sidebar: What if no “start” buttons appear?
  - Free stuff (even if no “start” buttons enabled)
  - More aspects of monitor later
- Sidebar: CF10 Admin “single user at a time” problem
• **FusionReactor and SeeFusion**
  • Third party commercial CF monitoring solutions
  • FR actually works with Railo, BD, OpenBD, Solr
    • Indeed, any Java server (and in FR5, any Java app)
  • Both have free trials
  • Some overlap among the 3 monitors, each has distinctives
  • Will show off each as we proceed
• Sidebar: Monitoring multiple instances at once
BEYOND "WATCHING MONITORS"
- Stack tracing: What's happening right now in a request
- Alerts: Warn me when I'm not watching/can't watch monitor(s)
- What has happened vs what is happening
  - Monitor history features
  - Logs (CFSM, SeeFusion, FusionReactor)
- Sidebar: FusionAnalytics
WATCHING SPECIFIC TROUBLE SPOTS
- Memory
- Request activity
- Queries
- Sessions
- Query caching
- Template caching
- Client activity
SOME PARTICULAR, COMMON CHALLENGES

• Configuring CF Admin “Request Tuning” page
• Timeouts and killing requests
• Spiders, bots, and other automated requests
• Client variables, perhaps unexpected impact
• CFDocument, image resize unexpected impact
• Changes in CF10 caching: now per-app by default
• Need to update CF10 connector after some updates
• Properly applying updates to CF9 and earlier
SUMMARY

• We covered a lot of ground
  • Logs: there’s more to them than you may think
  • Monitoring CF: perhaps some unexpected discoveries
  • Beyond "watching monitors"
  • Watching specific trouble spots
• Fortunately, nearly all topics are covered to some degree in docs, blogs, presentations, etc
  • ....
RESOURCES

- CF911.com
  - A repository of CF server troubleshooting resources
- CF411.com/cfconsult
  - A list of CF server troubleshooting consultants
- CArehart.org/consulting
  - Recall my approach: remote, using diagnostics, teaching you
  - Can help with troubleshooting, migration, config, security, etc.
  - See page for approach, rates, satisfaction guarantee, more
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
• With that, did you enjoy the session?
  • Don’t forget to fill out your evaluations!
  • Any questions?