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

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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 disctinctives
 - 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

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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?