# 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

# 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 CF11/10 particularly, but will make some mention
- Will show Windows, but concepts and some tools apply to \*nix
- Hope to share also in "CArehart Quick Tips" Youtube videos
  - youtube.com/user/carehart/videos

# **ABOUT CHARLIE AREHART**

#### **Independent Consultant**

- 17+ yrs CF experience (30+ Enterprise IT)
- Certified Adv CF Developer, Instructor
- Adobe Forum MVP, CF CAB member
- Co-author CFWACK books: 8, 9, 10
- Living in Alpharetta, Georgia (Atlanta)

#### 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

# 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 CF11/10 (metrics, access)

# MONITORING CF: PERHAPS SOME UNEXPECTED DISCOVERIES

- CF Standard vs Enterprise, CF8/9/10/11 vs CF7/6
- Low-end solutions
  - CFSTAT (command line tool)
  - JRun metrics logging (CF9 and earlier)
  - CF11/10 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
  - Fixed in CF11

- 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 each as we proceed
- Sidebar: Monitoring multiple instances at once

# **BEYOND "WATCHING MONITORS"**

- Don't fall into trap of thinking "who wants to watch a monitor"
  - These tools offer SO MUCH more
- What has happened vs what is happening
  - Monitor history features
  - Logs
- Alerts: Warn me when I'm not watching/can't watch monitor(s)
- Stack tracing: What's happening right now in a request
- 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
- CF Standard "Enterprise Feature Routing"
- Changes in CF11/10 caching: now per-app by default
- On the need to update web connector after some CF10 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, or my Youtube videos
  - I even provide resources that point to other resources...

## RESOURCES

- CF911.com
  - A repository of CF server troubleshooting resources
- CF411.com/cfconsult
  - A list of CF server troubleshooting consultants
- CArehart Quick Tips on Youtube
  - youtube.com/user/carehart/videos
- 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
- Would like to take questions in a moment, but first...
- Did you enjoy the session?
  - Don't forget to fill out your evaluations!
- Any questions?