

# Stack Tracing CFML Requests to Solve Problems

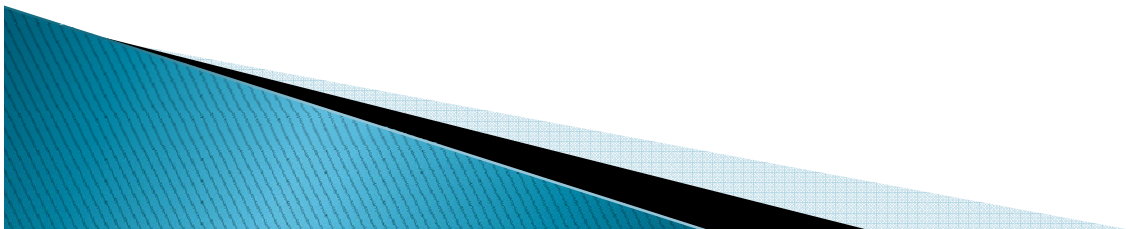
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Twitter comments welcome: @carehart

Last updated:7/9/2010



# Session Outline

- ▶ Help, my server is hung...or is it? (& demo)
  - ▶ Understanding and monitoring request threads (& demo)
  - ▶ Using stack traces to see "line of code" execution (& demo)
  - ▶ The value of multiple stack traces (& demo)
  - ▶ Different tools (free and commercial) to generate stack traces (& demo)
  - ▶ Getting stack traces sent automatically (& demo)
  - ▶ When a stack trace may not point to a line of code (& demo)
  - ▶ Common problems identified by stack tracing (& demo)
  - ▶ Resources for learning more
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- ▶ Notes (and slides) available online at [carehart.org/presentations/](http://carehart.org/presentations/)



# About Charlie Arehart

## Independent Consultant

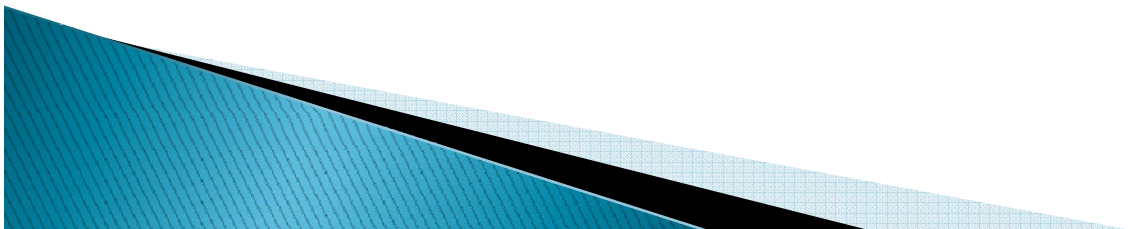
- 13 yrs CF experience (27 in Enterprise IT)
- Member, Adobe Community Experts
- Certified Adv CF Developer (4-8), Cert. Adobe Instructor
- Frequent speaker to user groups, conferences worldwide
- Run the Online ColdFusion Meetup (coldfusionmeetup.com)
- Living in Alpharetta, Georgia (Atlanta)

## Web home at [www.carehart.org](http://www.carehart.org)

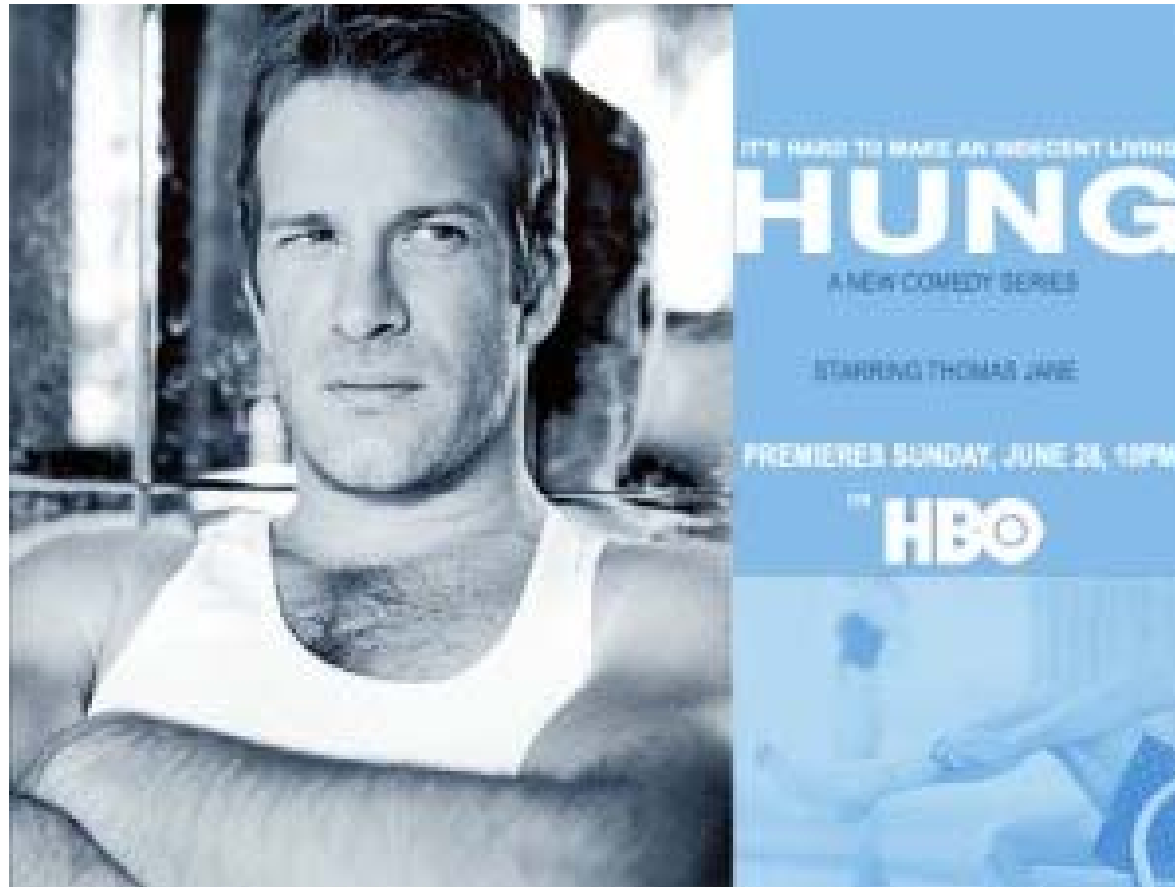
- Host ~300 blog entries, 70+ articles, 90+ presentations
- UGTV: recordings of 300+ presentations by ~200 speakers
- CF411.com – 1000+ tools/resources in 100+ categories
- Hosting courtesy of EdgeWeb Hosting
- Consulting: available for CF troubleshooting, tuning; training
  - Remote or on-site

# Initial Clarification

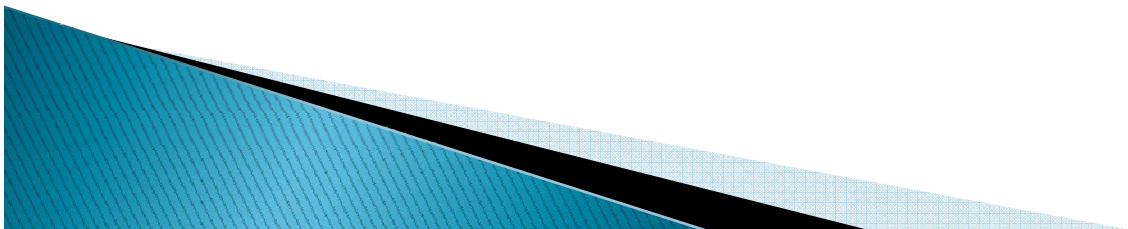
- ▶ Let me be clear on what I mean by “stack tracing”
  - I am **NOT** referring to the stack trace information shown in error messages!
  - I am referring instead to an **interactive problem-solving feature** available in CF (with the right tools)
    - Which shows exactly what line of code is running in a request, at any time
    - And which is thus valuable to solving many thorny problems



# Help, my server is hung ...or is it?



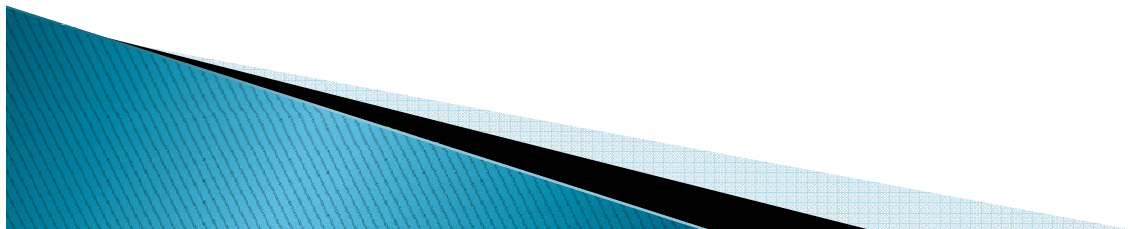
# Understanding and monitoring request threads



# Using stack traces to see "line of code" execution



Dr. Dmitry Debugalov  
Finds the bug on top  
of the Stack.



# The value of multiple stack traces

Unconventional method to get rid of Bugs: Introduce a hot lady bug



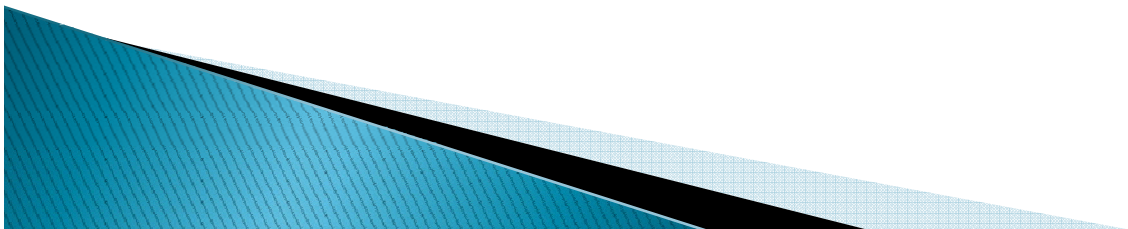


# Different tools to generate stack traces

Dr. Debugalov tests his new invention "BugSlasher" the fuzzy logic bug hunting robot.

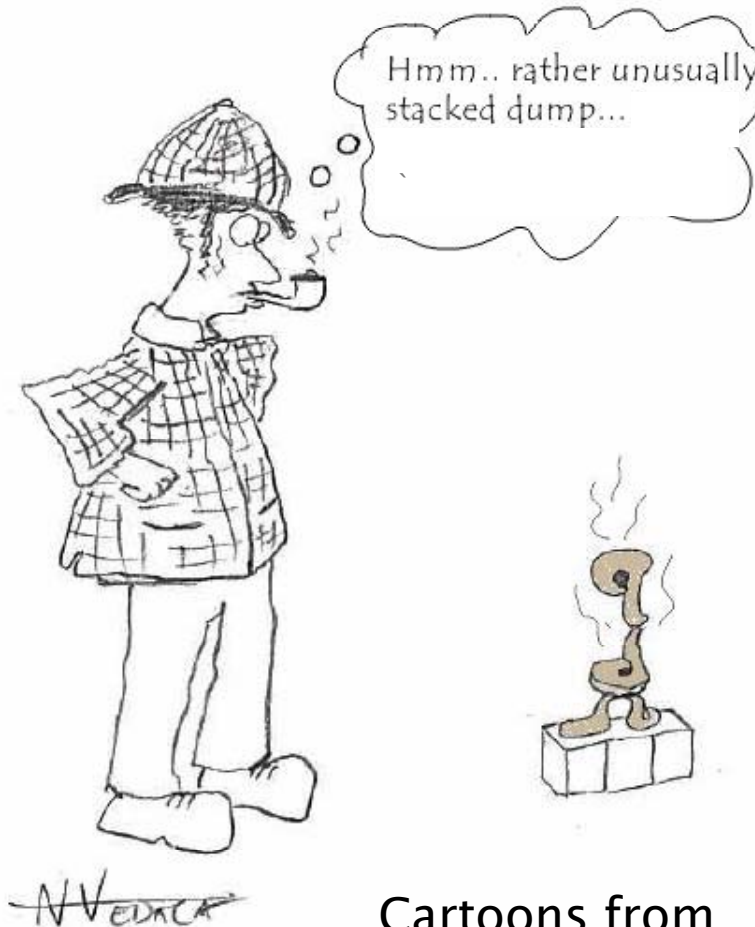


# Getting stack traces sent automatically



# When a stack trace may not point to a line of code

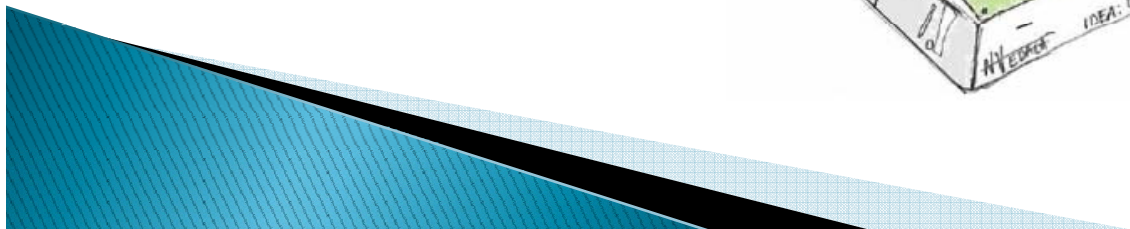
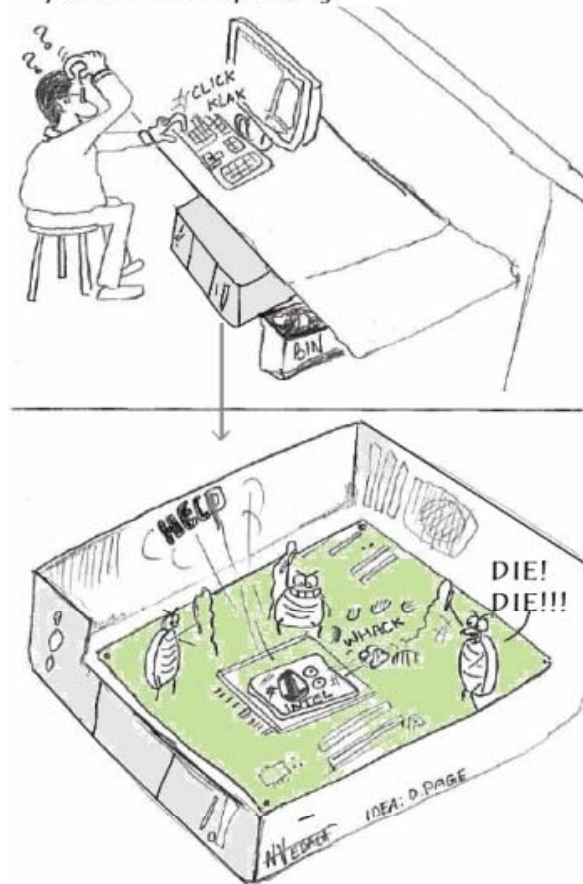
Sherlock Holmes ponders...



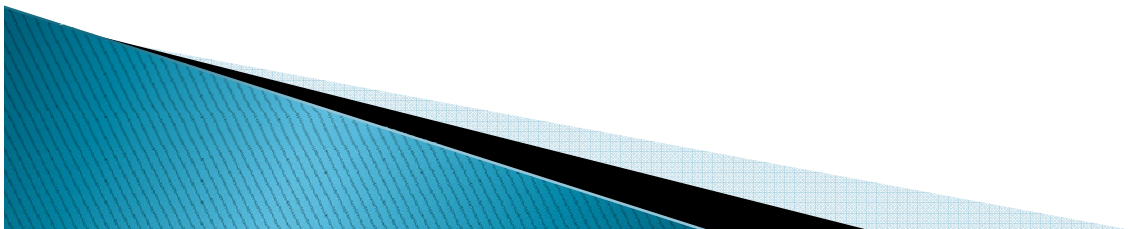
Cartoons from  
[dumpanalysis.org](http://dumpanalysis.org)

# Common problems identified by stack tracing

Unaware of cruelty inside his CPU and unaware of muffled screams of tortured processor, Dr. Debugalov wonders why his system is not responding.

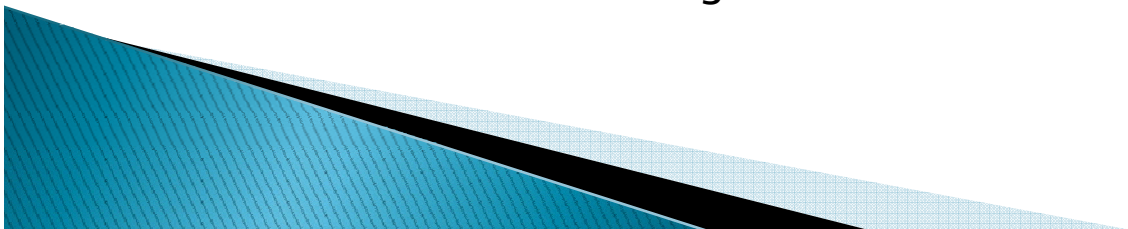


# Resources for learning more



# Summary

- ▶ With the right tools, CF is no longer a black box
  - Many situations where CF seems hung can be resolved, or their root cause found and resolved
- ▶ We covered
  - Understanding and monitoring request threads
  - Using stack traces to see "line of code" execution
  - The value of multiple stack traces
  - Different tools (free and commercial) to generate stack traces
  - Getting them sent automatically
  - When a stack trace may not point to a line of code
  - Common problems identified by stack tracing
  - Resources for Learning More



# Questions On Presentation

- ▶ Charlie Arehart
  - [charlie@carehart.org](mailto:charlie@carehart.org)
- ▶ I'd really appreciate your feedback
  - <http://carehart.org/feedback/>
- ▶ Available for ColdFusion troubleshooting
  - Remote or on-site
  - No time minimum, satisfaction guarantee
  - <http://carehart.org/consulting/>

