10 Things That Plague Most CF Servers

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This is an extended version of the slide deck used for my cf.objective() 2012 lightning talk. I didn’t want to clutter the slides there:

- Here I add an extra page after each with resources for more on each topic.
#10: Problems with hotfixes

- Failure to apply them at all
- Misinterpreting if installed
- Applying them incorrectly
#10 Resources


- [http://www.carehart.org/blog/client/index.cfm/2010/12/12/cfmyths_cumulative_hotfixes](http://www.carehart.org/blog/client/index.cfm/2010/12/12/cfmyths_cumulative_hotfixes)


#9: Coding surprises can burn you

- CFIMAGE action=‘resize’ can be **killer** slow
  - Use imageresize() or ImageScaleToFit() instead
    - Setting InterpolationMethod to lower quality

- CFDOCUMENT can be **killer** slow
  - Use Localurl attribute if appropriate
#9 Resources

- [http://help.adobe.com/en_US/ColdFusion/9.0/Developing/WSc3ff6d0ea77859461172e0811cbe512207-7fec.html#WSc3ff6d0ea77859461172e0811cbe512207-7fdc](http://help.adobe.com/en_US/ColdFusion/9.0/Developing/WSc3ff6d0ea77859461172e0811cbe512207-7fec.html#WSc3ff6d0ea77859461172e0811cbe512207-7fdc)


#8: Maxworkerthreads setting

- Real problem if you’re on CF9 with IIS
  - And want to get more than 20 concurrent requests

- You need to uncomment, change setting in jrun_iis6_wildcard.ini
#8 Resources


- [http://www.carehart.org/blog/client/index.cfm/2011/2/2/iis_request_execution_limits](http://www.carehart.org/blog/client/index.cfm/2011/2/2/iis_request_execution_limits)

#7: Error handlers gone wild

- Beware error handlers that may get called way more often than you realize
  - Whether CF error handlers, CF missing template handlers, web server configured to pass 404s to CF
  - Tempting for error handling flexibility

- Problem is: may be overwhelming to CF
  - Especially failures from spiders, bots
  - All the more if you ignore result
#7 Resources

- None, as yet
#6: Leaving CF Admin defaults

- Something you may have heard before
  - Actually many subpoints to this: bonus for you!
  - But perhaps different emphasis than you’ve heard
If not sufficient, real DB i/o’s still happen
  ◦ Default size is 100
  ◦ Can be filled by just one CFQUERY w/ dynamic SQL

Monitoring size
  ◦ CF 8/9 Enterprise Server Monitor
  ◦ FusionReactor FREC plugin
#6B: Inadequate Template Cache size

- If not sufficient, template reloading can be burden on server
  - Default size is 1024
  - “Save Classes” can help determine size

- Monitoring size
  - CF 8/9 Enterprise Server Monitor
  - FusionReactor FREC plugin
#6C: Client variables can kill

- Not about whether you USE them
  - Just whether they are enabled in your apps!

- Every page request updates repo by default
  - Bots create new entry per request

- Default storage of registry kills
  - Hardly better when in DB
#6D: Memory settings and misunderstandings

- Just because memory is high does not mean CF will crash

- Not all outofmemory errors are same
  - For some, increasing heap is NOT the answer!
#6 Resources

- Query Cache
  - None, as yet

- Template Cache
  - None, as yet

- Client variables

- Memory
#5: Not knowing # of sessions

- May be stunned to know how many active
  - Frequent cause of seeming CF “memory leak”

- See CF Server Monitor
  - Free ServerStats or CFTRacker tools otherwise
  - Also, FusionReactor 4 FREC plugin
#5 Resources

#4: Remaining blind to running requests (counts, details)

4.1: Knowing how many are running, queued
   - Vital to know whether CF is “busy” or not, why

Tools
   - CFSTAT, JRun Metrics, CFTracker
   - CF Server Monitor, FusionReactor, SeeFusion
#4: Remaining blind to running request counts, details (cont.)

- 4.2: Getting details of running requests
  - To know what a long-running request is doing
  - URL, duration, IP address, and much more

- Tools
  - CF Server Monitor, FusionReactor, SeeFusion
  - Also, JDBC wrapper features
4.3: Obtaining stack trace
   ◦ Can know currently executing line number of long-running request!

Tools
   ◦ JVM tools
   ◦ CF Server Monitor, FusionReactor, SeeFusion
#4: Remaining blind to running request counts, details (cont.)

- 4.4: Obtaining details by email
  - Since you can’t always be online to do stack trace
  - Can obtain by email, when alert condition arises

- Tools
  - CF Server Monitor, FusionReactor, SeeFusion
#4 Resources

- http://www.carehart.org/blog/client/index.cfm/2008/7/22/fusionreactor_datasource_monitoring
- http://www.carehart.org/blog/client/index.cfm/2010/10/15/Lies_damned_lies_and_CF_timeouts
- http://www.carehart.org/blog/client/index.cfm/2008/10/31/cf911_requests_not_responding
#3: Not leveraging CF monitoring tools you have

3.1: Misunderstanding “impact” of CF Server Monitor

- No impact at all, if no “start” buttons enabled

- But if enabled, they remain on if monitor is closed, and over CF restarts
#3: Not leveraging CF monitoring tools you have (cont.)

3.2 Not leveraging FusionReactor fully
   ◦ Don’t miss the marvelous logs it creates
     ✷ Consider FusionAnalytics to help analyze things
   ◦ Don’t miss FREC (CF Extensions) if using FR4 to see things otherwise only in CF Server Monitor
     ✷ And even if on CF Standard!
   ◦ FR can monitor not just CF
     ✷ but Railo/BD/OBD and any JEE server or app
#3 Resources

- http://www.carehart.org/blog/client/index.cfm/2008/7/30/45page_server_monitor_guide
- http://www.carehart.org/blog/client/index.cfm/2012/2/24/CF_Server_Monitor_start_buttons_remain_enabled
#2 Not understanding impact of spiders, bots

- These really can be killing you
  - Have mentioned impact many many times

- And really any frequent automated requests
  - Status/health checks, security scans, scheduled tasks, and more
#2 Not understanding impact of spiders, bots (cont.)

- Solutions beyond robots.txt
  - Throttle frequency of requests
  - Lower session timeout for automated requests
  - Review code run on “new session” to assess impact
#2 Resources

- [http://www.carehart.org/presentations/#sess clicrash](http://www.carehart.org/presentations/#sess clicrash)
#1: Not seeking troubleshooting help

- Have pointed out just a couple dozen problems
  - Again, see carehart.org/presentations for slide deck with resources
- When stuff hits the fan, will you remember it all?
- Several folks in CF community offer remote support
  - Myself included
  - See cf411.com/cfconsult for links to them