

# FusionReactor Webinar: More on FusionReactor Log Analysis via Excel

**INTERGRAL**  
information solutions

 fusion  
reactor™

## Introductions



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(Focused on server troubleshooting)

# Agenda

- Foreword
- Brief review of part 1
- Importing Data into Excel
- Preparing the Data Displayed in Excel
- Filtering Data, Many Ways
- Sorting, Charting Data
- Using Pivot Tables
- Possibilities if queries are logged
- Considering FusionAnalytics
- Questions & answers

# Foreword

- Audience: presumed to already be using FR
  - But perhaps not using it—and especially logs—to fullest extent
  - Or not yet using/appreciating opportunities for analyzing them via Excel
  - Many of these can be done also in OpenOffice Calc or Google Sheets
- Concepts apply generally to any Java/CFML server that FR can monitor
- Preso is being recorded, so you will be able to revisit details

## Brief review of part 1

- About FR logs: purpose, configurability, accessing them
- Online help:
  - <https://docs.fusion-reactor.com/display/FR62/Log+Files+Available+in+FusionReactor>
- Header files: <https://github.com/JCSuthe/Fusion-Reactor-Coldfusion-Log-Tools/>
- Alternative tools for viewing them
  - Log Parser, Log viewers
  - Also showed Excel, but didn't have time to detail it as I would have liked

# Importing Data into Excel

- Two approaches, each has value
- Via *File>Open* (then as *Delimited by space*)
  - Or can open from File Explorer, by right-clicking and using “open with”
    - But this does not work when viewing files in a zip
      - Could extract files, or...
- Via copy/paste (then *Data>Text to Columns*)
  - Also helpful if copying data from file on server down to Excel on desktop
  - Bonus: subsequent pastes will remember this conversion (until Excel restarted)

# Preparing the Data Displayed in Excel

- Resizing/expanding columns
- Formatting columns (date, time, numbers)
- Hiding columns (why better than deleting)
- Adding header row
- Freezing columns
- Selecting all rows and columns
  - Ctrl-A sometimes not enough
  - Click icon in top corner between Column A and Row 1

# Filtering Data, Many Ways

- Data>Filter
  - Then shows all vals for that column, and you can select to see only rows with selected value
  - Tip: if you do not select a column before clicking Filter button, it appears for all cols
    - And you can drill down your filtering by multiple cols/values
    - May need to use “select all” trick to see on ALL columns
  - Can filter different column data types in different ways , see numeric, date/time, text
- Can also just right-click a cell, choose *Filter>Filter by Selected Cell’s Value*
  - Then shows only rows with THAT value in that cell
  - And this is additive to the filtering above
- Can copy resulting filtered data to a new sheet, if helpful
- ...



## Filtering Data, Many Ways (cont.)

- Finding rows with unique values (such as requests which started but didn't stop)
  - Using Home>Conditional Formatting
- Can also find unique values for a col by right-click, "pick from drop-down list"
  - Not meant for filtering, but for changing cell values
  - Also not very wide, and not scrollable

## Bonus topic: Templates

- You can save a “template” with all the preceding improvements, to easily reuse
- Can save:
  - Column headers
  - Columns as text
  - Cell formatting, freezing, hiding
  - Even filters!
- Use File>“Save as”, saving as a type of template (xltx)
  - You will want to delete all the rows of data, other than the header
  - Put cursor in A2, use Ctrl-shift-end to select all rows and cols other than first row, delete
- Use that when next opening a new spreadsheet/workbook
  - And all that will be remembered

# Sorting Data

- Fairly obvious, but can be useful

# Charting Data

- Use Insert button on Ribbon (not so obvious)
- Offers “Recommended Charts” or you can build your own manually
  - By selecting range or cols, etc.

# Using Pivot Tables

- Again, use Insert button on Ribbon
- Allows slicing and dicing many ways
- Best if a header columns has been added
- Again, offers recommended ones or you can build them manually
- Also called “Data Pilots” in OpenOffice Calc

## Possibilities if queries are logged

- As you should know, FR tracks all queries, including SPs, ORM calls, client var DB processing (in CF), etc
- But by default, it does not log these, which could be millions per day
- Can enable logging, in JDBC>Settings>Logging
  - And can limit logging to queries slower than X seconds
- With all or all slow queries logged, can do powerful analysis
- Will leave you to tie that into previous information shared today
- ...but what if you didn't need to do any of this analysis in Excel?...

# Considering FusionAnalytics

- Sister product to FusionReactor
- Pulls FR logs into a database on your server, but managed by FA
  - Data is aggregated, rolled up as it's imported
- Provides alternative and still more-powerful UI than FR for troubleshooting, tuning
- Offers very useful time picker/browser
- Can report by clustered instances, applications, and even CFML frameworks
- Offers powerful daily reports by email, and still more
- See <http://www.fusion-analytics.com/demo>
- Really worthy of its own webinar, TBD

## Resources

- Of course there are many (many) resources online for Excel
- Most google searches will inevitably lead to Microsoft's substantial docs
  - Not always the clearest, as they try to be very complete
- I'd recommend <http://www.excel-easy.com/>
- Of course, videos may be preferable
  - MS has many, as does Youtube
  - Consider also online training like Udemy, Pluralsight, Lynda



## Conclusion

- So as you can see, there are many ways to use Excel to analyze FR logs
  - Starting with simple improvements to easy seeing the data
  - To useful features to filter/sort data
  - To insightful charts
  - And powerful pivot tables
- Let me know in the questions pod how you may see ways to use this information
  - Or of course ask any outstanding questions and I'll be getting to them in a moment

## Other upcoming webinars

- Troubleshooting and Tuning with FusionAnalytics – TBA
- Troubleshooting and Identifying Issues using FusionReactor 6 - Part 2 – TBA
- What's new in FusionReactor 7 – TBA
- Registration: [www.fusion-reactor.com/webinars](http://www.fusion-reactor.com/webinars)
  - Recordings of past webinars also offered there

## Other FR resources

- **FR web site: [fusion-reactor.com](http://fusion-reactor.com)**
  - Downloads
  - Docs, videos, technotes, forums, and much more
- **Email: [sales@fusion-reactor.com](mailto:sales@fusion-reactor.com), [support@fusion-reactor.com](mailto:support@fusion-reactor.com)**
- **Phone: (978) 496-9990 (sales)**
- **Consulting assistance: [cfconsultant.com](http://cfconsultant.com)**
- We welcome your feedback on these or the other webinars, or any you would like to see

A photograph of several people in a dimly lit office or data center. They are sitting at desks with computer monitors, looking intently at the screens. The scene is illuminated by desk lamps, creating a focused and professional atmosphere. The text "Questions & Answers" is overlaid on the bottom half of the image.

# Questions & Answers