

2023 – Learn JMeter By Examples

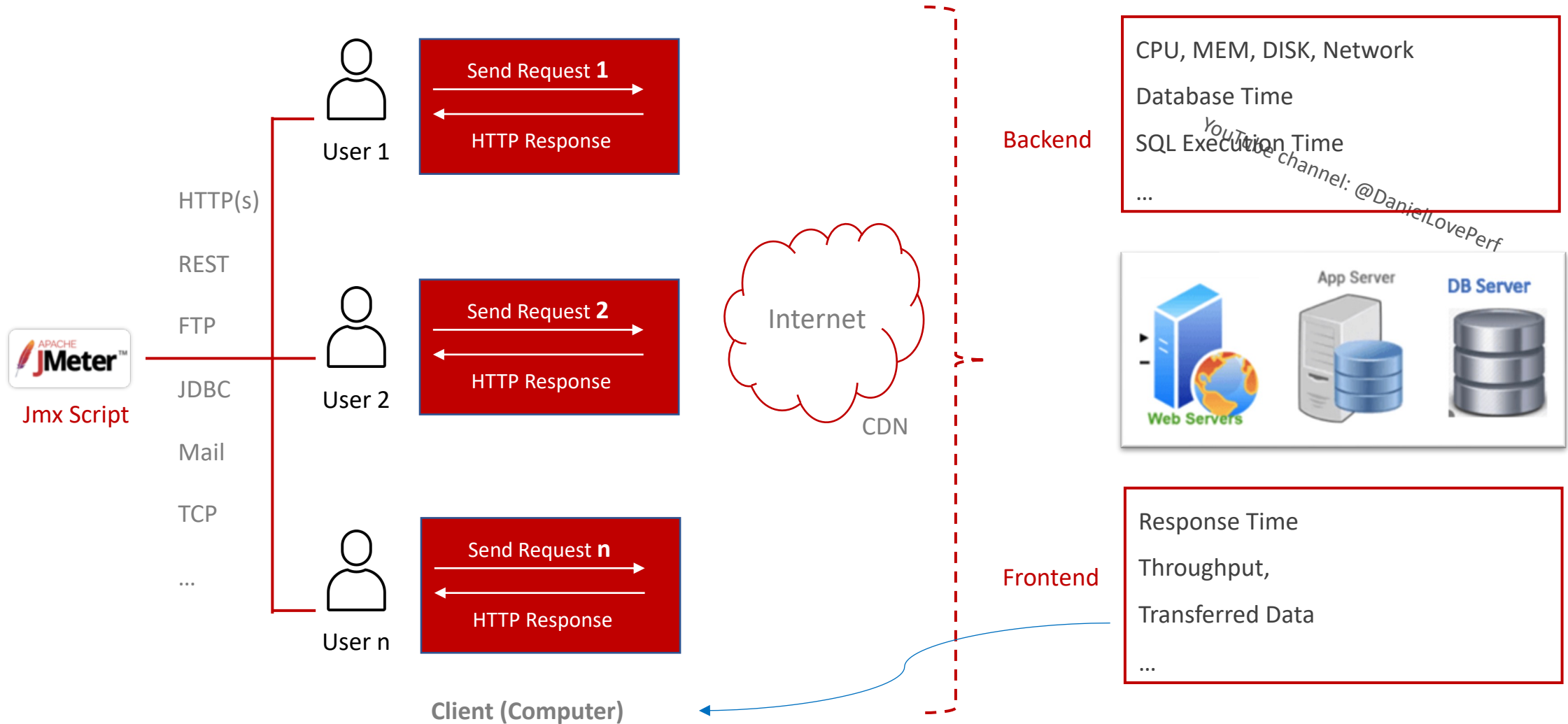
Session 2 – JMeter GUI Intro.

Performance TEST LabCN @DanielLovePerf

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How JMeter Works



JMeter GUI Structure

The screenshot displays the Apache JMeter (5.5) GUI with several components highlighted by red and blue boxes and labeled with text:

- Menu Bar:** Located at the top, containing menus: File, Edit, Search, Run, Options, Tools, Help.
- Tool Bar:** Located below the menu bar, containing various icons for file operations, execution, and help.
- Status bar:** Located at the top right, displaying the time (00:00:00), a warning icon, and progress (0/0).
- Test Plan Level Tree:** Located on the left side, showing a hierarchical tree of test components. The selected component is "HTTP Request" under "Transaction Controller -scenario2".
- Component Config Panel:** Located on the right side, showing the configuration for the selected "HTTP Request" component. It includes tabs for "Basic" and "Advanced", and sub-tabs for "Parameters", "Body Data", and "Files Upload".
- Log Panel:** Located at the bottom, displaying a list of log messages. The messages are as follows:

| Line | Timestamp | Level | Message |
|------|-------------------------|-------|--|
| 1 | 2023-03-13 09:46:42,680 | INFO | o.j.r.PluginManager: Plugins Status: [jpgc-graphs-basic=2.0, jpgc-graphs-advanced=2.0, jpgc-graphs-advanced=2.0, jpgc-graphs-advanced=2.0] |
| 2 | 2023-03-13 10:02:43,734 | INFO | o.a.j.p.h.s.HTTPSamplerBase: Parser for text/html is org.apache... |
| 3 | 2023-03-13 10:02:43,734 | INFO | o.a.j.p.h.s.HTTPSamplerBase: Parser for application/xhtml+xml is org... |
| 4 | 2023-03-13 10:02:43,735 | INFO | o.a.j.p.h.s.HTTPSamplerBase: Parser for application/xml is org... |
| 5 | 2023-03-13 10:02:43,735 | INFO | o.a.j.p.h.s.HTTPSamplerBase: Parser for text/xml is org.apache... |
| 6 | 2023-03-13 10:02:43,735 | INFO | o.a.j.p.h.s.HTTPSamplerBase: Parser for text/vnd.wap.wml is org... |
| 7 | 2023-03-13 10:02:43,735 | INFO | o.a.j.p.h.s.HTTPSamplerBase: Parser for text/css is org.apache... |

Tips of JMeter GUI

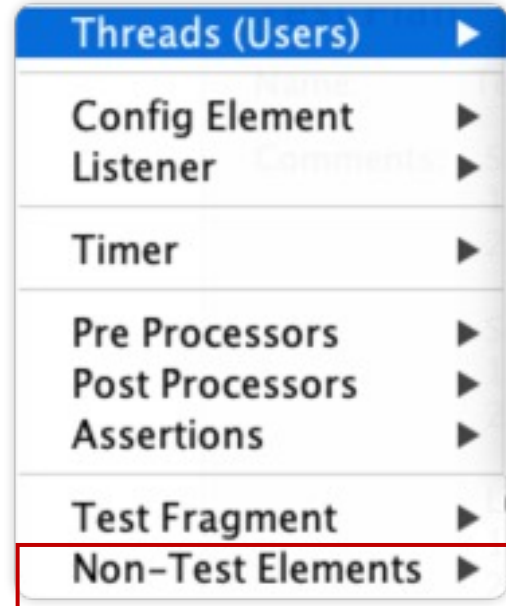
Commonly Used Features:

- Expand / Collapse All
- Global Search/Replace: Ctrl + F
- Reset Search
- Function Helper Dialog
- Debug Sampler
- Log Viewer Panel

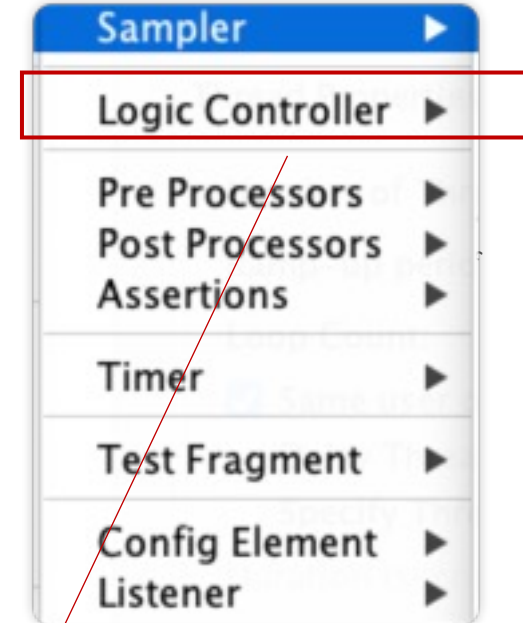
Easily Confused Elements:

- Stop: Stop Immediately
- Shutdown: Stop Gradually
- Clear: Clear data in selected Listeners
- Clear All: Clear data from all Listeners and log panel

Test Plan Level



Thread Group Level

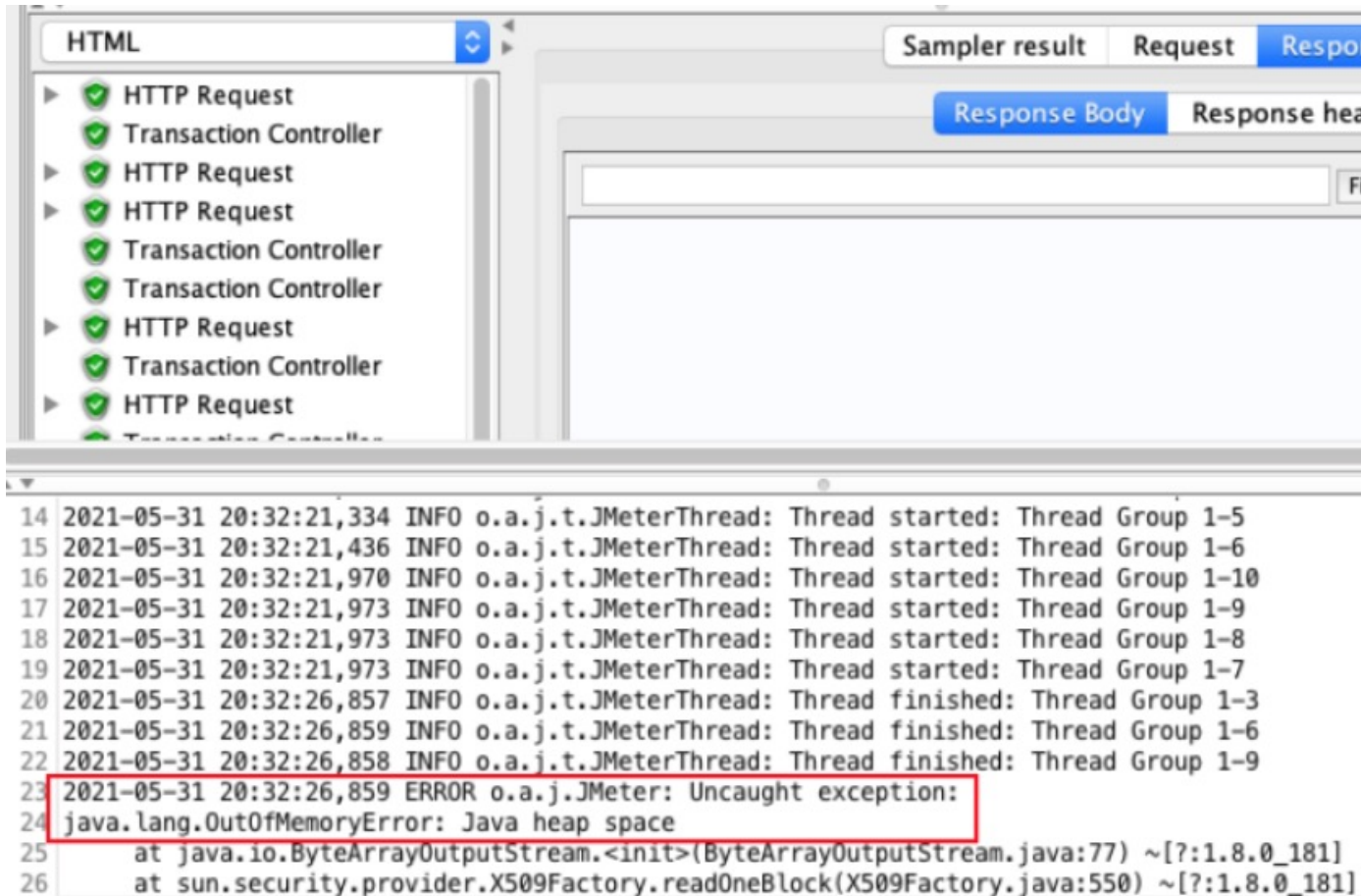


Differences

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JMeter Console Freeze

Problem: The Console Freezes or the Engine is Running Out of Memory



How to debug:

- Check CPU Usage
- Run script under command mode
- Using Distributed Architecture

| | | |
|---------|-------|--------|
| System: | total | 7.80% |
| User: | | 10.06% |
| Idle: | | 82.14% |

Suggestions:

- Use the GUI console for script development and debugging only.
- Use the GUI console for small loads (<50 simultaneous users).

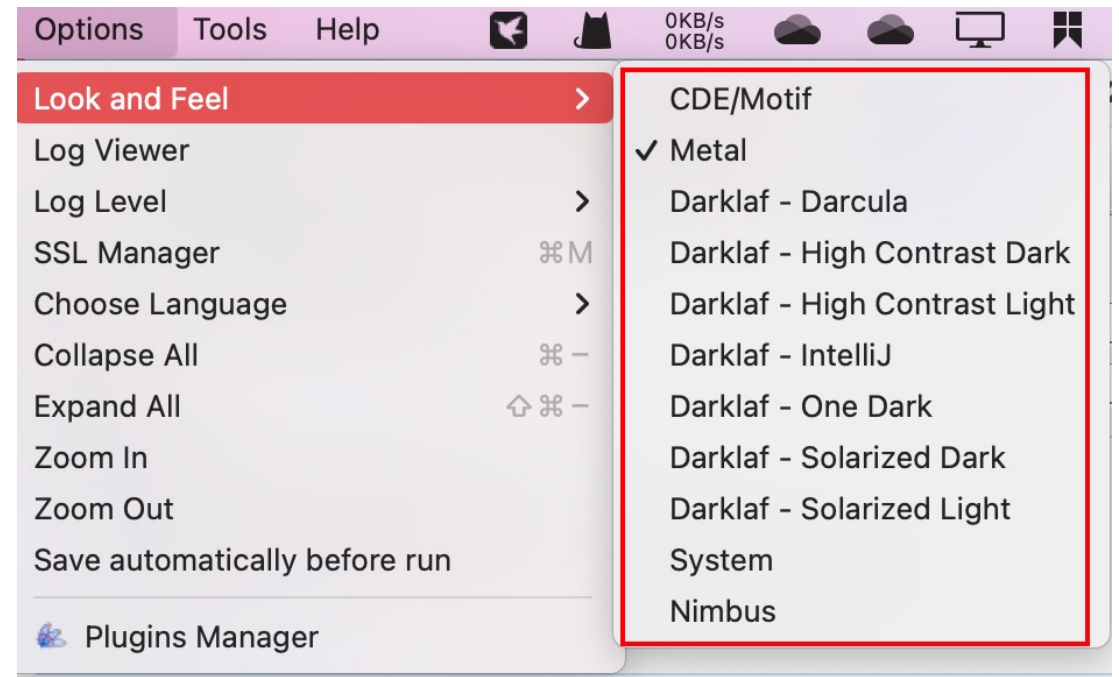
'Paste' Doesn't Work

Problem:

Sometimes, you copy/paste elements without issues, but it doesn't work when you try to copy/paste a text.

Solution:

Just change 'Look and Feel' to others, 'Metal' doesn't work.



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'Replace or Replace All' Doesn't Work

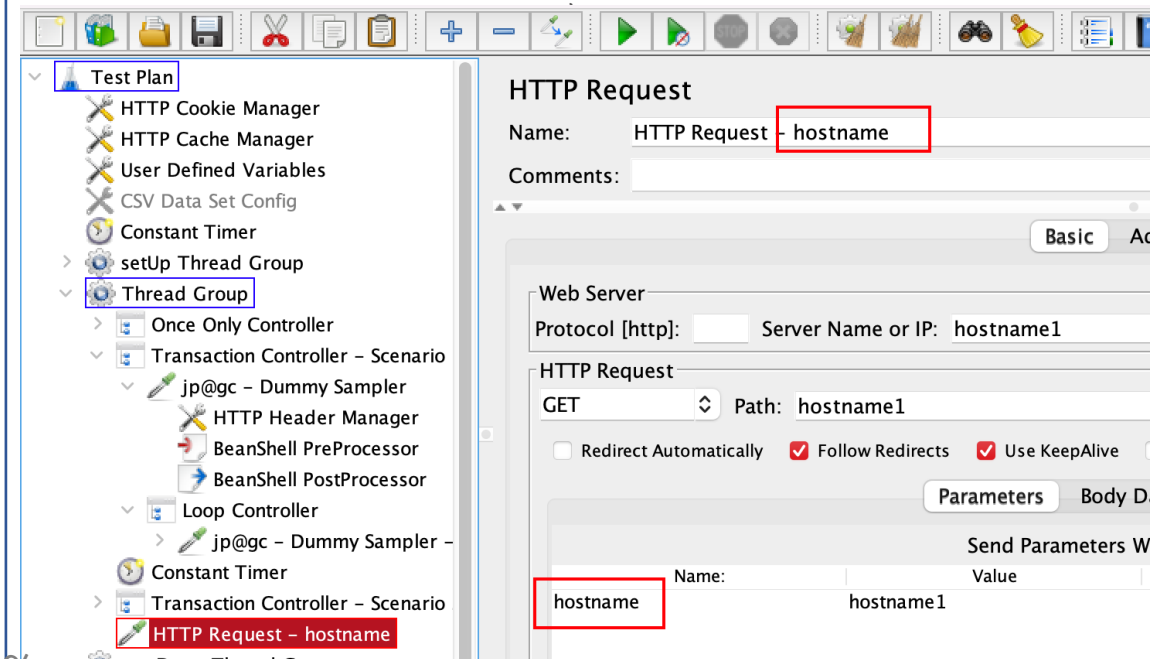
Problem:

Replace All doesn't work

Solution:

Replacement is limited to certain elements
(Header Manager, HTTP Request, AjpSampler,
AccessLogSampler). Examples(not work):

- Dummy Sampler
- Name of JMeter elements
- ...



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Suggestions & Rules

- 1) Always Use the **Latest JMeter Version**
- 2) Use the **Non-GUI Mode** to Run Large Scale Test
- 3) Add the **Cookie Manager** (unless your app specifically doesn't use cookies)
- 4) **Filter Out Irrelevant Requests** When Using the HTTP(S) Test Script Recorder
- 5) Include **User Variables**
- 6) **Avoid Scripting** Wherever Possible. Try using JMeter's built-in test elements and functions.

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Next Session: Start First Script

Thank

You!

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GitHub Link:

https://github.com/DanielLovePerf/2023_JMeter_Full_Course.git