



SESI *HANDS ON* PENGUJIAN PRESTASI MENGGUNAKAN JMETER (*BEGINNER LEVEL*)

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SYLLABUS

1. CREATING JMETER TEST PLAN

- ✓ Thread Group
- ✓ Config Element
- ✓ Controller
- ✓ Listener

2. RECORDING AND SCRIPTING

- ✓ JMeter Certificate (https recording)
- ✓ Script Recording

3. VERIFYING SCRIPT

- ✓ Recorded Transaction
- ✓ Running the Script
- ✓ View Result Tree
 - Regular Expression Extractor
 - Response Assertion

4. PERFORMING LOAD TEST

- ✓ CSV File
- ✓ Timer (Think Time)
- ✓ Plan your Load





01

CREATING TEST PLAN

- ✓ Thread Group
- ✓ Config Element
- ✓ Controller
- ✓ Listener

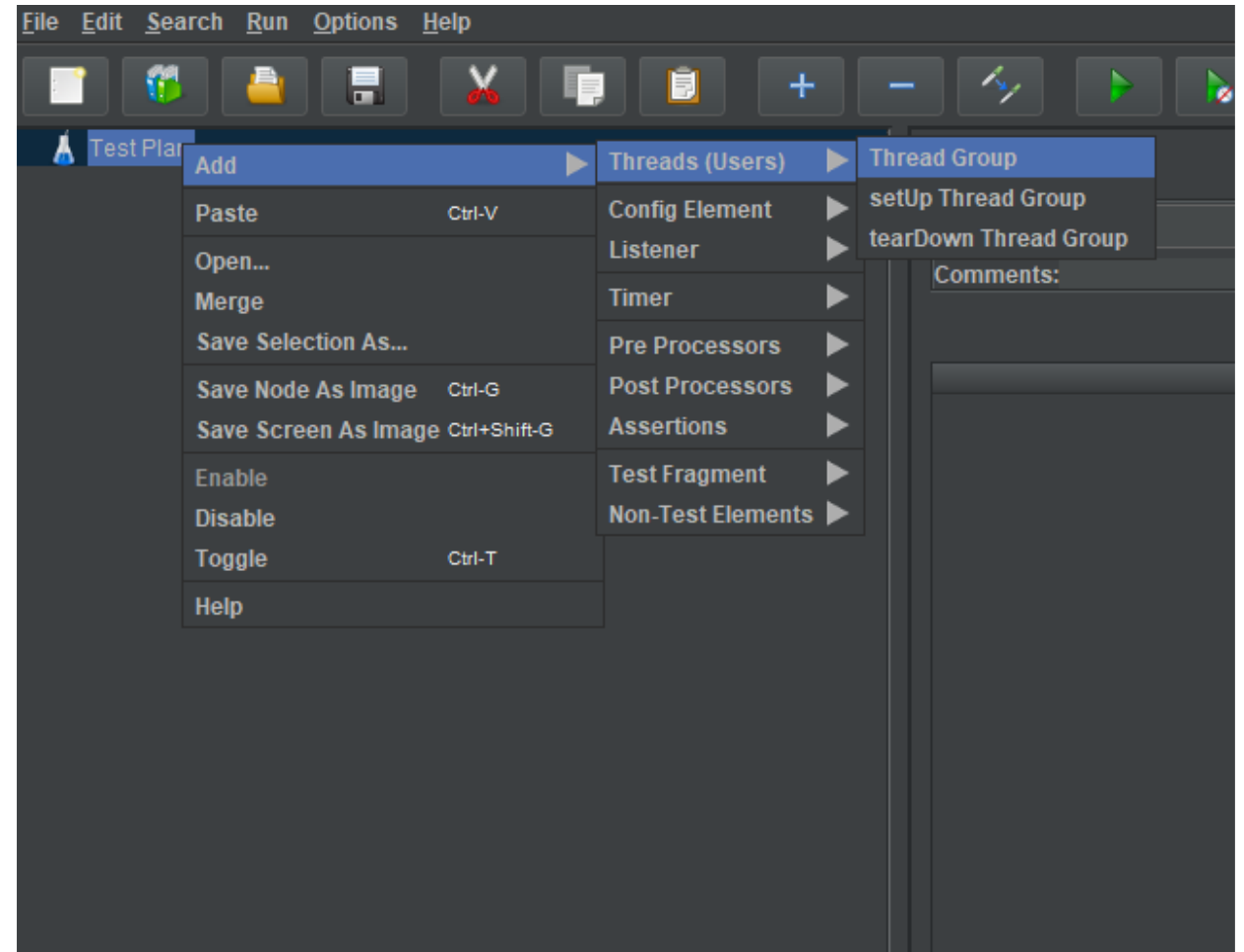
CREATING TEST PLAN

1. Adding Thread Group

Thread group element controls the number of threads JMeter will use to execute your test.

The controls for a thread group allow you to:

- ✓ Set the number of threads
- ✓ Set the ramp-up period
- ✓ Set the number of times to execute the test
- ✓ Scheduler



CREATING TEST PLAN

1. Adding Thread Group

Thread Group

Name:

Comments:

Action to be taken after a Sampler error

Continue Start Next Thread Loop Stop Thread Stop Test Stop Test Now

Thread Properties

Number of Threads (users):

Ramp-Up Period (in seconds):

Loop Count: Forever

Delay Thread creation until needed

Scheduler

Scheduler Configuration

Duration (seconds)

Startup delay (seconds)

Parameter that controlling number of thread (concurrent users)

CREATING TEST PLAN

1. Adding Thread Group

Thread Group

Name:

Comments:

Action to be taken after a Sampler error

Continue Start Next Thread Loop Stop Thread Stop Test Stop Test Now

Thread Properties

Number of Threads (users):

Ramp-Up Period (in seconds):

Loop Count: Forever

Delay Thread creation until needed

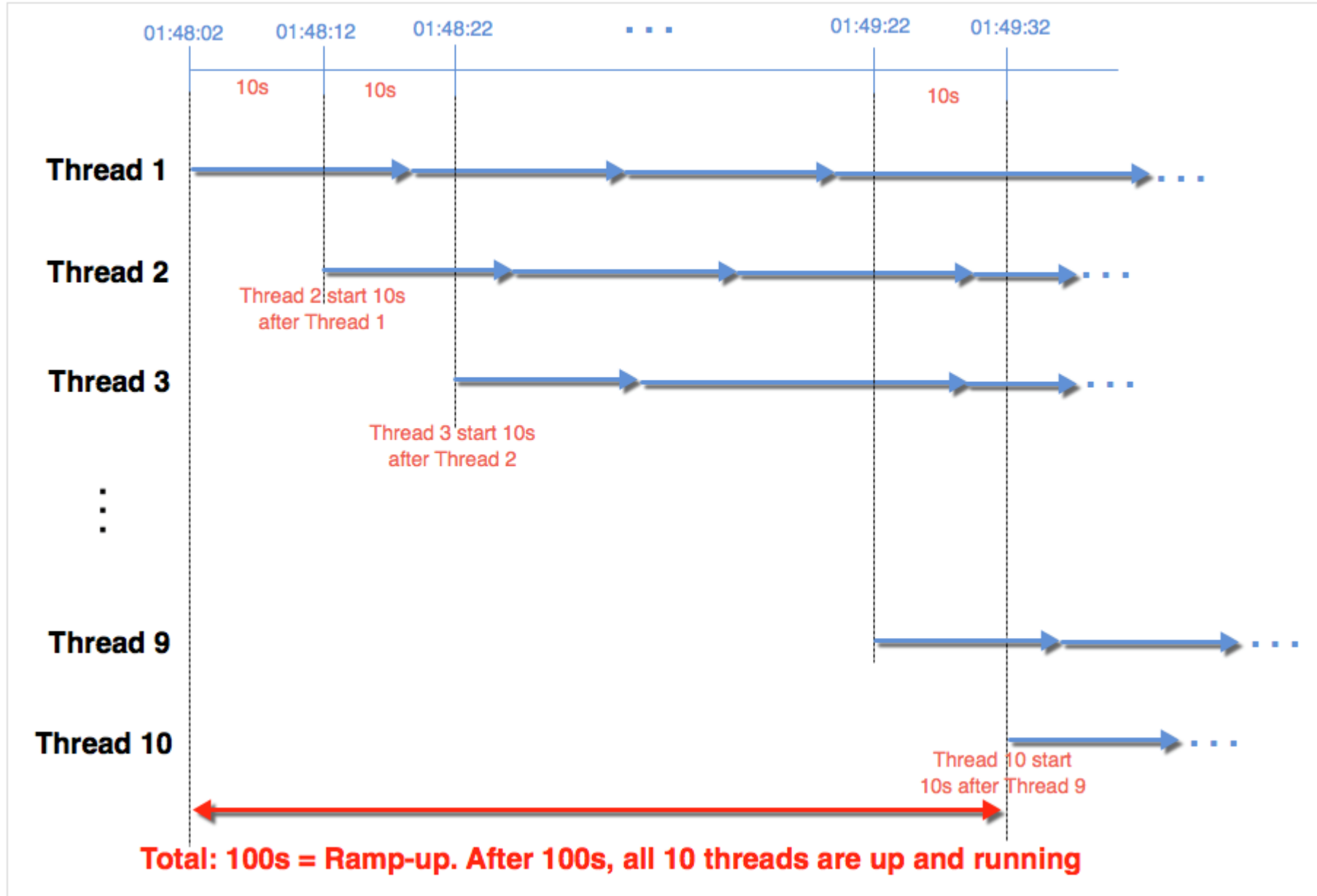
Scheduler

Scheduler Configuration

Duration (seconds)

Startup delay (seconds)

CREATING TEST PLAN



CREATING TEST PLAN

2. Adding Config Element

Config Element:

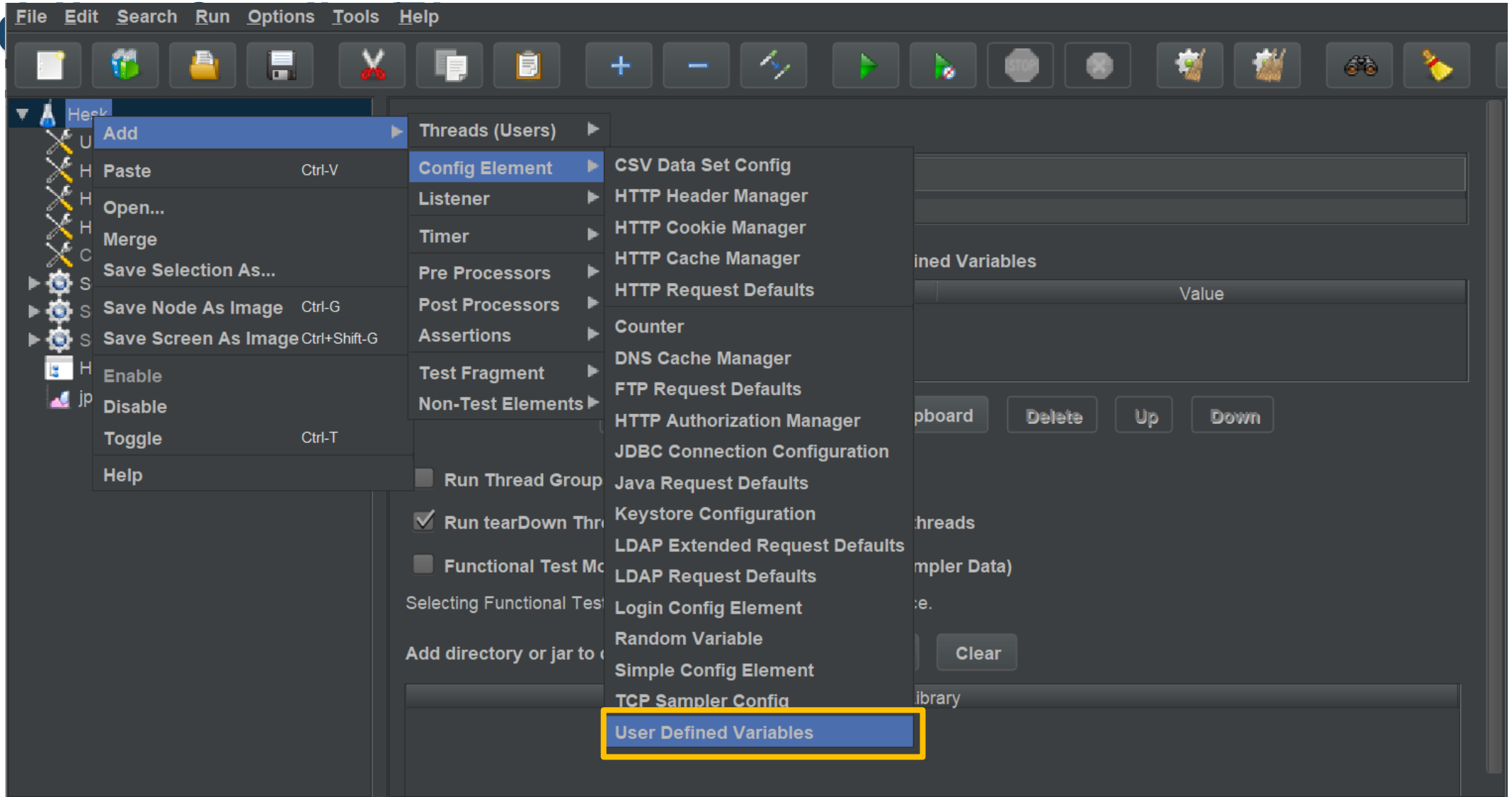
- ✓ User Defined Variables
- ✓ HTTP Request Defaults
- ✓ HTTP Cookie Manager
- ✓ HTTP Cache Manager

The main goals of using the HTTP Default Request is to:

- ✓ Avoid data duplication in tests.
- ✓ Make test scripts more (easily) maintainable.

CREATING TEST PLAN

2. Add



CREATING TEST PLAN

2. Adding Config Element

> User Defined Variables

User Defined Variables

Name:

Comments:

User Defined Variables

Name:	Value	Description
host	192.168.43.117	
skim	http	
path	hesk	

CREATING TEST PLAN

2. Adding Config Element > Http Request Default

HTTP Request Defaults

Name: HTTP Request Defaults

Comments:

Basic Advanced

Web Server

Protocol [http]: Server Name or IP: Port Number:

HTTP Request

Path: Content encoding:

Parameters Body Data

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?
-------	-------	-------------	--------------	-----------------

CREATING TEST PLAN

2. Adding Config Element

> Http Request Default (Optional)

HTTP Request Defaults

Name:

Comments:

Basic

Web Server

Protocol [http]: Server Name or IP: Port Number:

HTTP Request

Path: Content encoding:

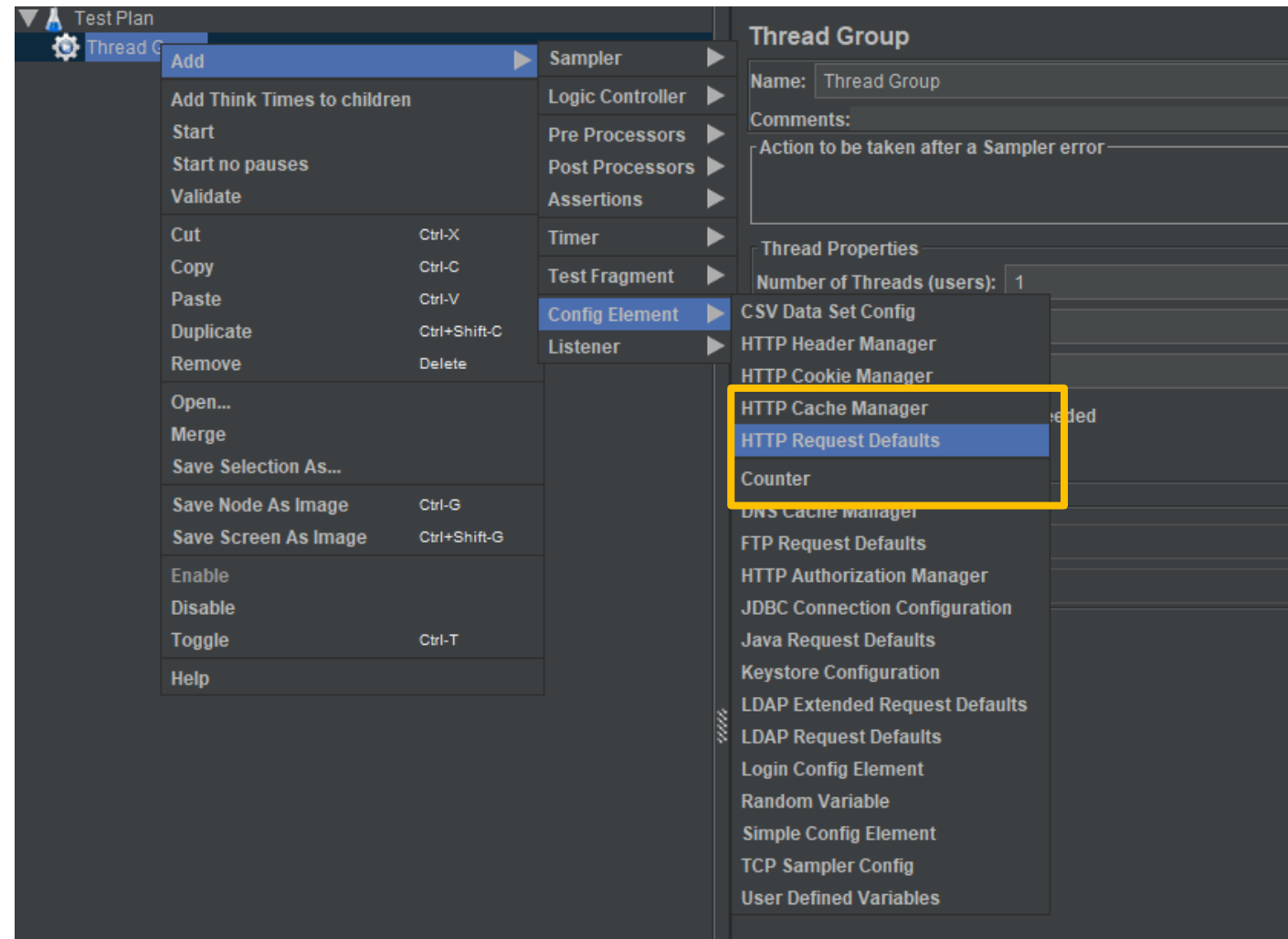
Parameters

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>

CREATING TEST PLAN

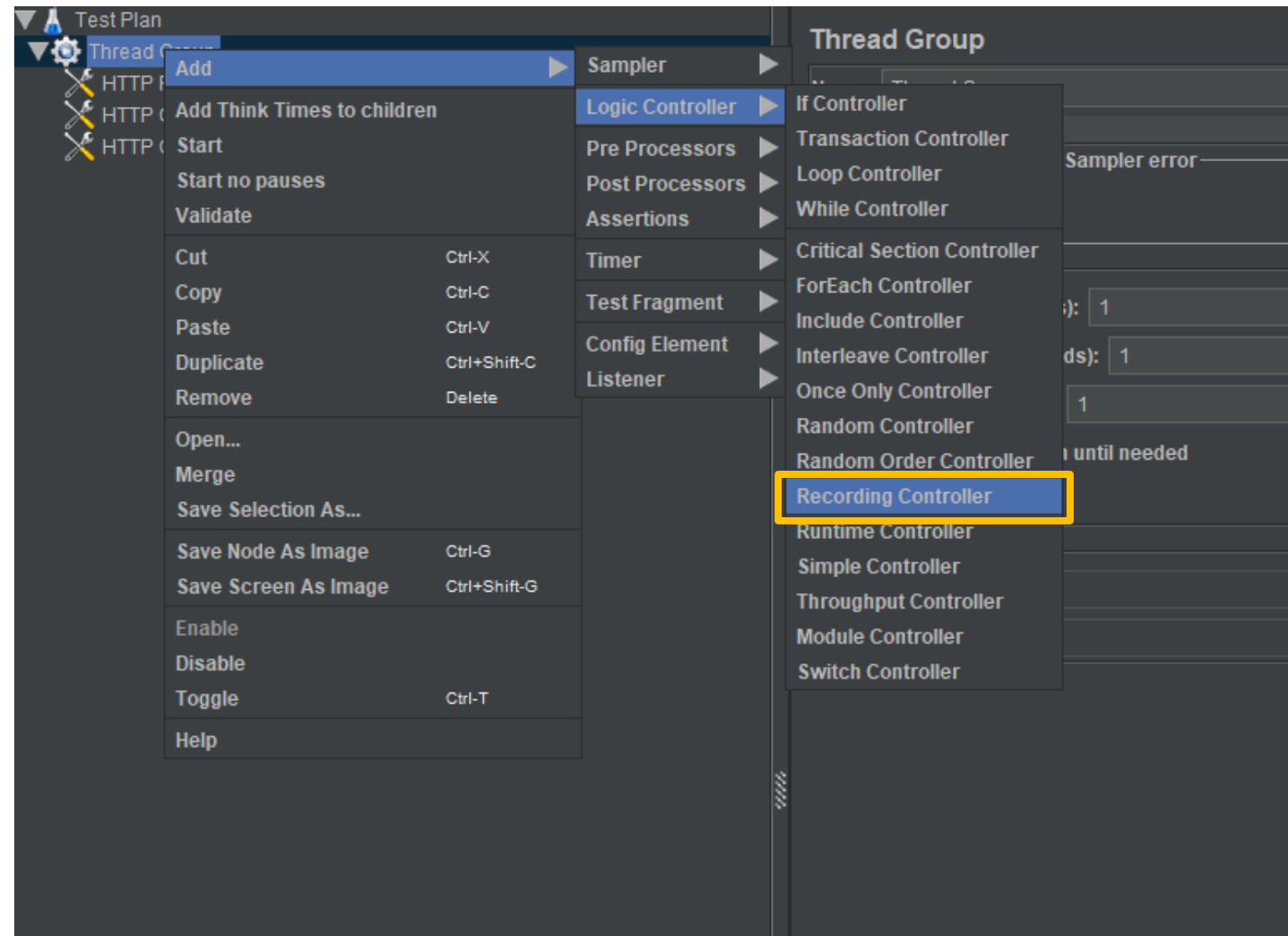
2. Adding Config Element > Http Request Default



CREATING TEST PLAN

3. Adding Controller

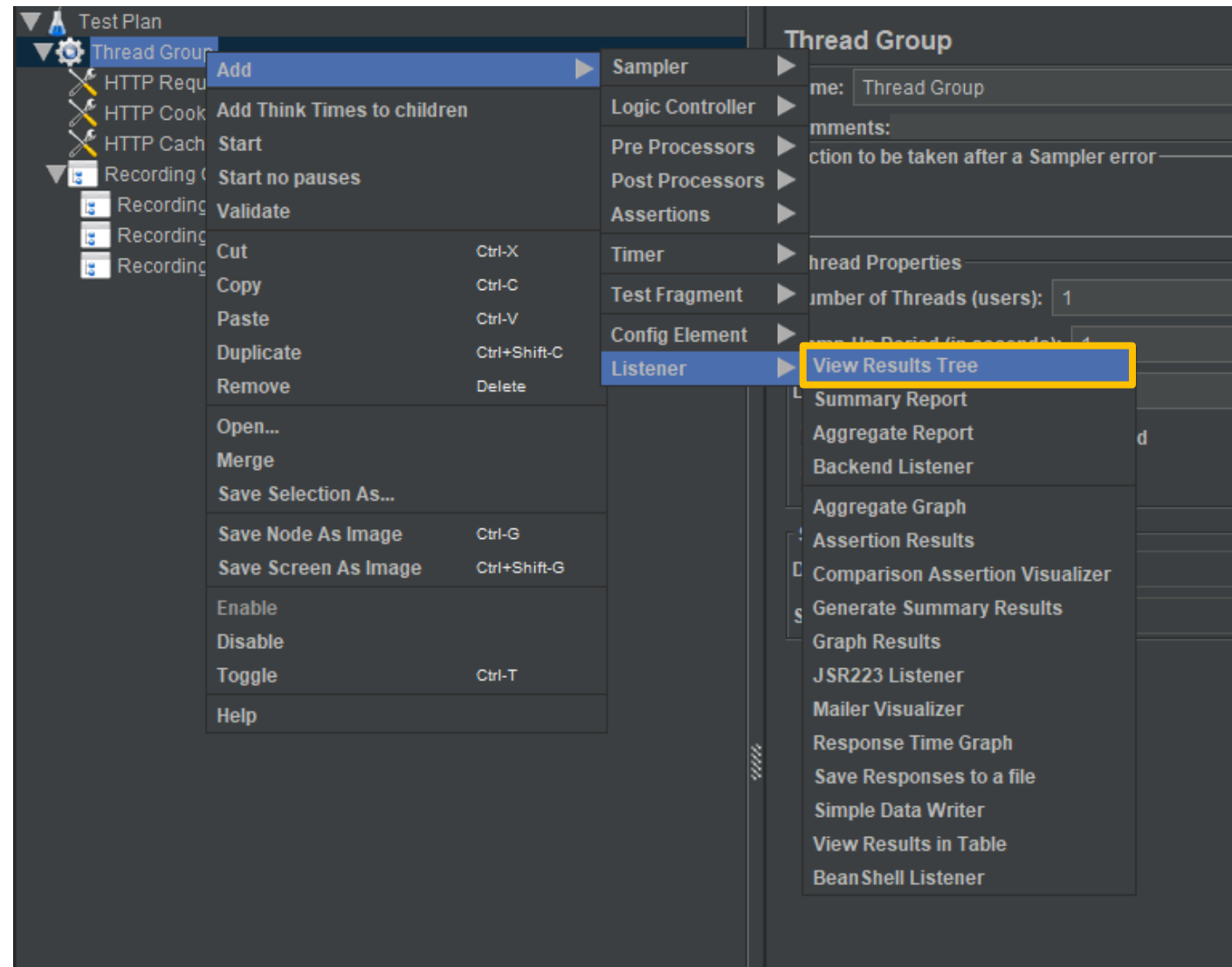
- JMeter can record your testing steps.
- Recording controller is a placeholder to store these recording steps.

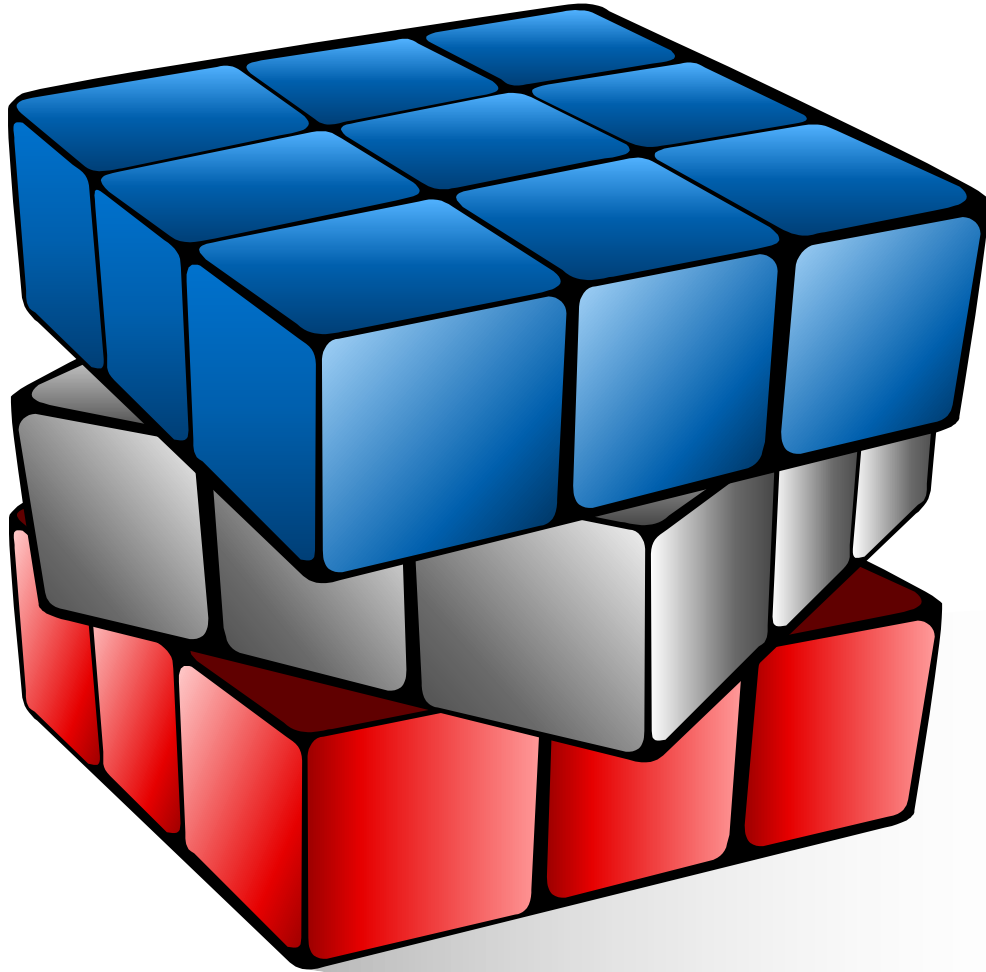


CREATING TEST PLAN

4. Adding Listener

- A listener is a component that shows the results of the samples.
 - ✓ View Results Tree - to view the contents of a response from any given sampler
 - ✓ Summary report - shows values about the measurement JMeter has done while calling the same page in tabular format





LET'S DO IT



02

RECORDING

- ✓ JMeter Certificate
- ✓ Script Recording

PERFORMING LOAD TEST

1. JMeter Certificate `ApacheJMeterTemporaryRootCA`

Chrome:

Setting > Manage Certificate > Trusted Root Certification Authorities > Import >

browse file > ..\apache-jmeter-5.1\bin

Firefox:

Option > Certificate > View Certificate > Authorities > Import

RECORDING

2. Script Recording

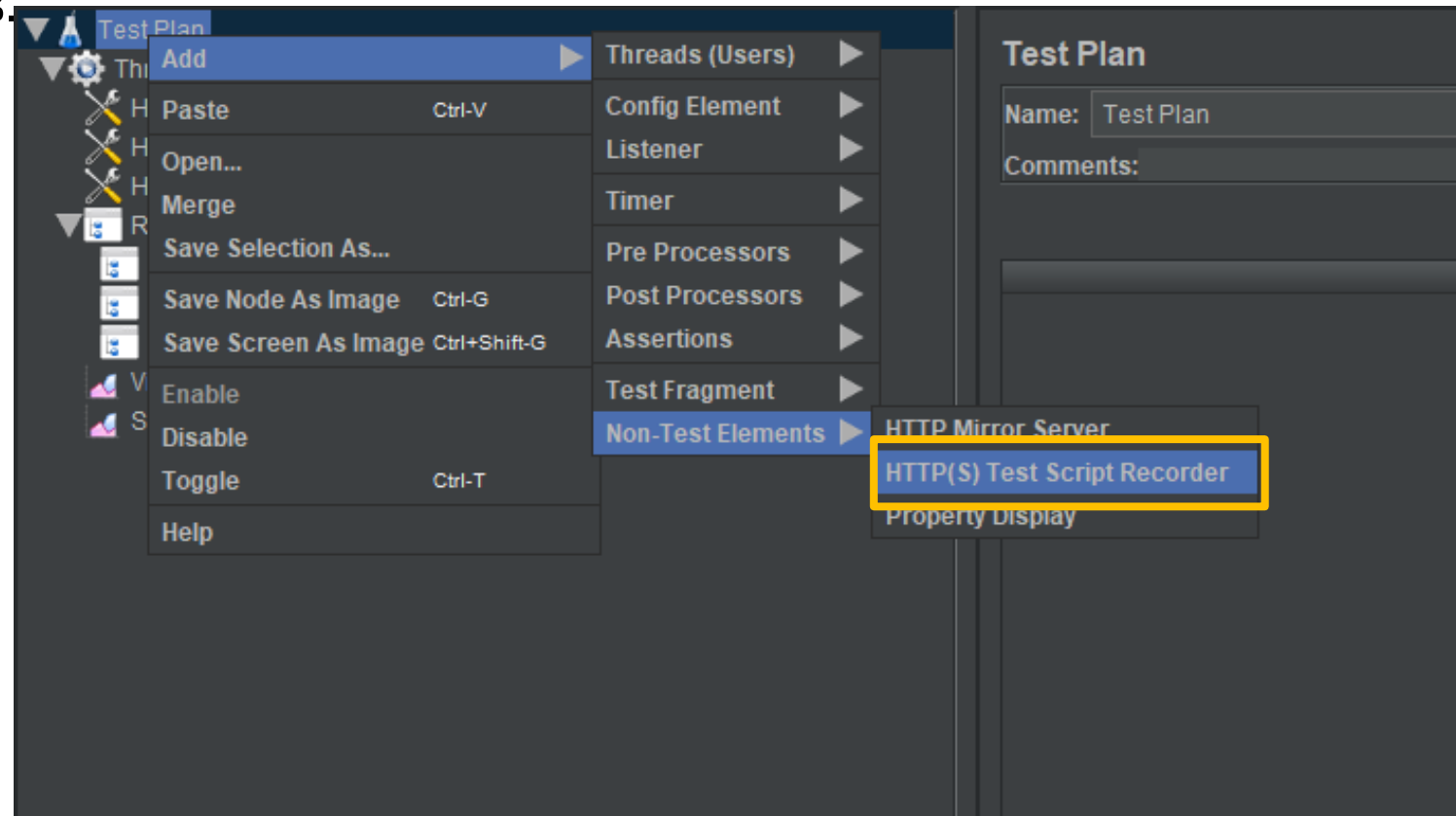
Steps of Script Recording

- ✓ Add Non-Test Element HTTP(s) Test Script Recorder
 - ✓ Certificate Check
 - ✓ Enter the port number which is not in use. (8888)
 - ✓ Apply proxy on the browser you want to record and use the same port number.
 - ✓ Start the JMeter Proxy Server
 - ✓ Record the Actions > Transaction Control

RECORDING

1. Add HTTP(S) Test Script Recorder

- Can be used to record all the requests which your web or mobile application is making to server.
- Capture only the HTTP(s) requests.



RECORDING

2. Add Port Number

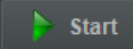
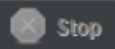
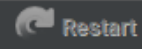
- Ensure the port number is not being used and tally with browser.

HTTP(S) Test Script Recorder

Name: HTTP(S) Test Script Recorder

Comments:

State

 Start  Stop  Restart

Global Settings

Port: HTTPS Domains:

Test Plan Creation **Requests Filtering**

Test plan content

Target Controller: Test Plan > Thread Group > Recording Controller

Grouping: Do not group samplers

HTTP Sampler settings

Prefix

Create new transaction after request (ms):

Retrieve All Embedded Resources

Redirect Automatically Follow Redirects

Use KeepAlive

Type:

RECORDING

3. Proxy Setting in Browser

- Firefox

-General -> Network Setting
-> setting -> Manual proxy configuration



- Chrome

-Setting -> Proxy-> Setting ->

Manual proxy configuration :

ON

Address: <http://localhost>

Port: **8888**



Connection Settings

Configure Proxy Access to the Internet

No proxy

Auto-detect proxy settings for this network

Use system proxy settings

Manual proxy configuration

HTTP Proxy Port

Use this proxy server for all protocols

SSL Proxy Port

FTP Proxy Port

SOCKS Host Port

SOCKS v4 SOCKS v5

Automatic proxy configuration URL

No proxy for

Port number must same with HTTP(S) Test Script Recorder

RECORDING

5. Start the JMeter Proxy Server

- Click Test Plan Creation
- Choose appropriate Target Controller
- Choose Grouping

HTTP(S) Test Script Recorder

Name: HTTP(S) Test Script Recorder

Comments:

State

Global Settings

Port: 8888 HTTPS Domains:

Test Plan Creation Requests Filtering

Test plan content

Target Controller: SPA9 > ThreadGroupDaftarBaru > RecordingPendaftaranPengguna

Grouping: Put each group in a new transaction controller Capture HTTP Headers Add Assertions Regex matching

HTTP Sampler settings

Transaction name: landingpage

Create new transaction after request (ms):

Retrieve All Embedded Resources

Redirect Automatically Follow Redirects

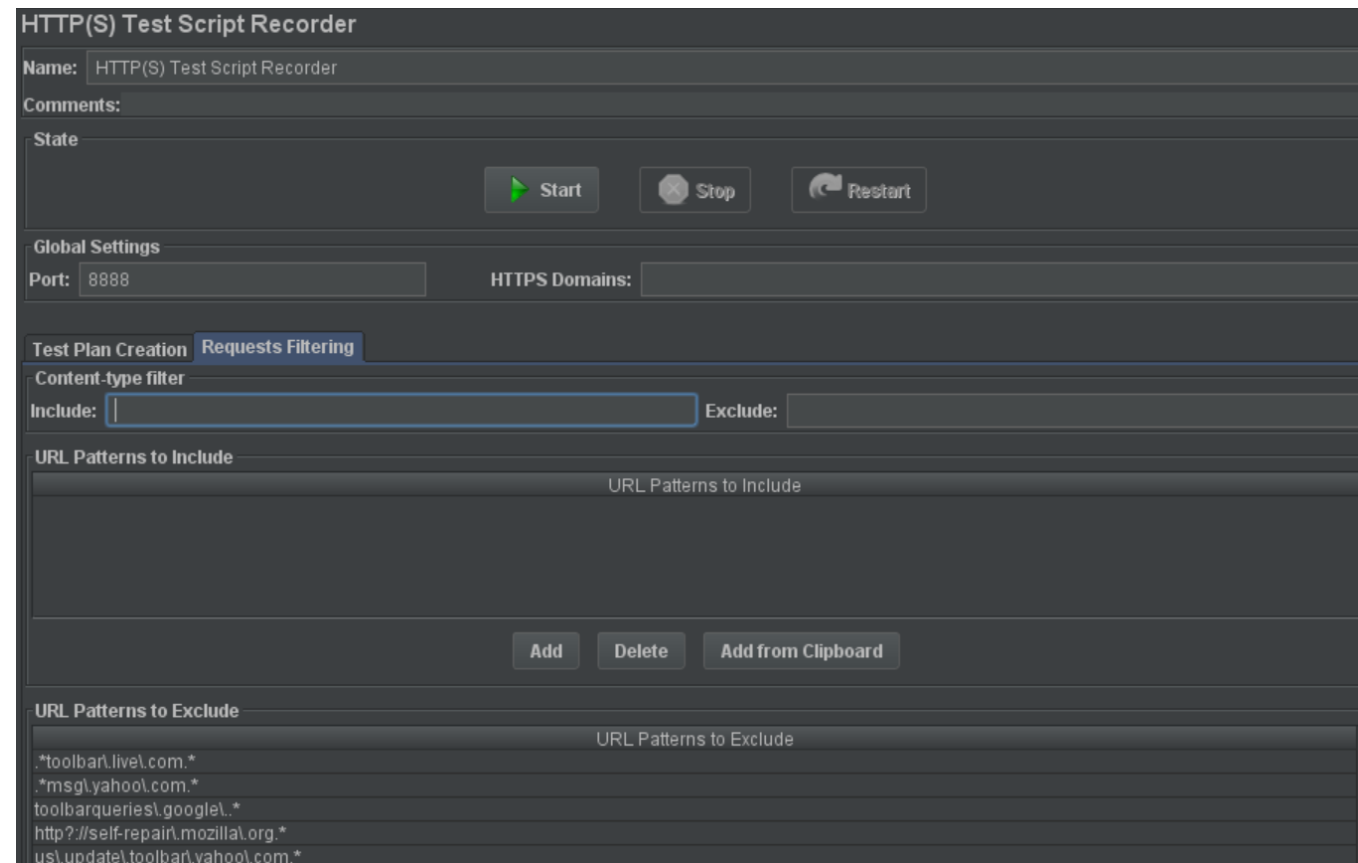
Use KeepAlive

Type:

RECORDING

5. Start the JMeter Proxy Server

- Click Request Filtering
- Add Url Pattern to Include or Exclude



The screenshot displays the 'HTTP(S) Test Script Recorder' configuration window in JMeter. The 'Requests Filtering' tab is active, showing the 'Content-type filter' section with 'Include' and 'Exclude' input fields. Below this, there are two sections for 'URL Patterns to Include' and 'URL Patterns to Exclude'. The 'URL Patterns to Exclude' section contains a list of patterns: '*.toolbar.live.com.*', '*.msg.yahoo.com.*', 'toolbarqueries.google.*', 'http://self-repair.mozilla.org.*', and 'us.update.toolbar.yahoo.com.*'. At the bottom of the window, there are 'Add', 'Delete', and 'Add from Clipboard' buttons.

HTTP(S) Test Script Recorder

Name: HTTP(S) Test Script Recorder

Comments:

State

Start Stop Restart

Global Settings

Port: 8888 HTTPS Domains:

Test Plan Creation Requests Filtering

Content-type filter

Include: Exclude:

URL Patterns to Include

URL Patterns to Include

Add Delete Add from Clipboard

URL Patterns to Exclude

URL Patterns to Exclude

- .*toolbar.live.com.*
- .*msg.yahoo.com.*
- toolbarqueries.google.*
- http://self-repair.mozilla.org.*
- us.update.toolbar.yahoo.com.*

RECORDING

5. Start the JMeter Proxy Server

- Click “Start” to initial the recording

The screenshot shows the JMeter HTTP(S) Test Script Recorder configuration window. The interface is dark-themed and includes several sections:

- Name:** HTTP(S) Test Script Recorder
- Comments:** (empty text area)
- State:** (empty text area)
- Buttons:** Start (with a green play icon), Stop (with a grey stop icon), and Restart (with a grey refresh icon).
- Global Settings:** Port: 8888, HTTPS Domains: (empty text area).
- Test Plan Creation / Requests Filtering:** Target Controller: SPA9 > ThreadGroupDaftarBaru > RecordingPendaftaranPengguna (highlighted with a yellow box). Grouping: Put each group in a new transaction controller. Checkboxes: Capture HTTP Headers, Add Assertions, Regex matching.
- HTTP Sampler settings:** Transaction name: landingpage. Create new transaction after request (ms): (empty text area). Checkboxes: Retrieve All Embedded Resources, Redirect Automatically, Follow Redirects, Use KeepAlive. Type: (empty dropdown menu).

Two blue callout boxes provide instructions:

- A callout box labeled "Click Here" points to the Start button.
- A callout box labeled "Choose the right one!" points to the Target Controller dropdown menu.

RECORDING

6. Record the Actions

- Transaction Control
 - ✓ Use to name the transaction
 - ✓ Input the name before proceeding to next transaction

Recorder: Transactions Control

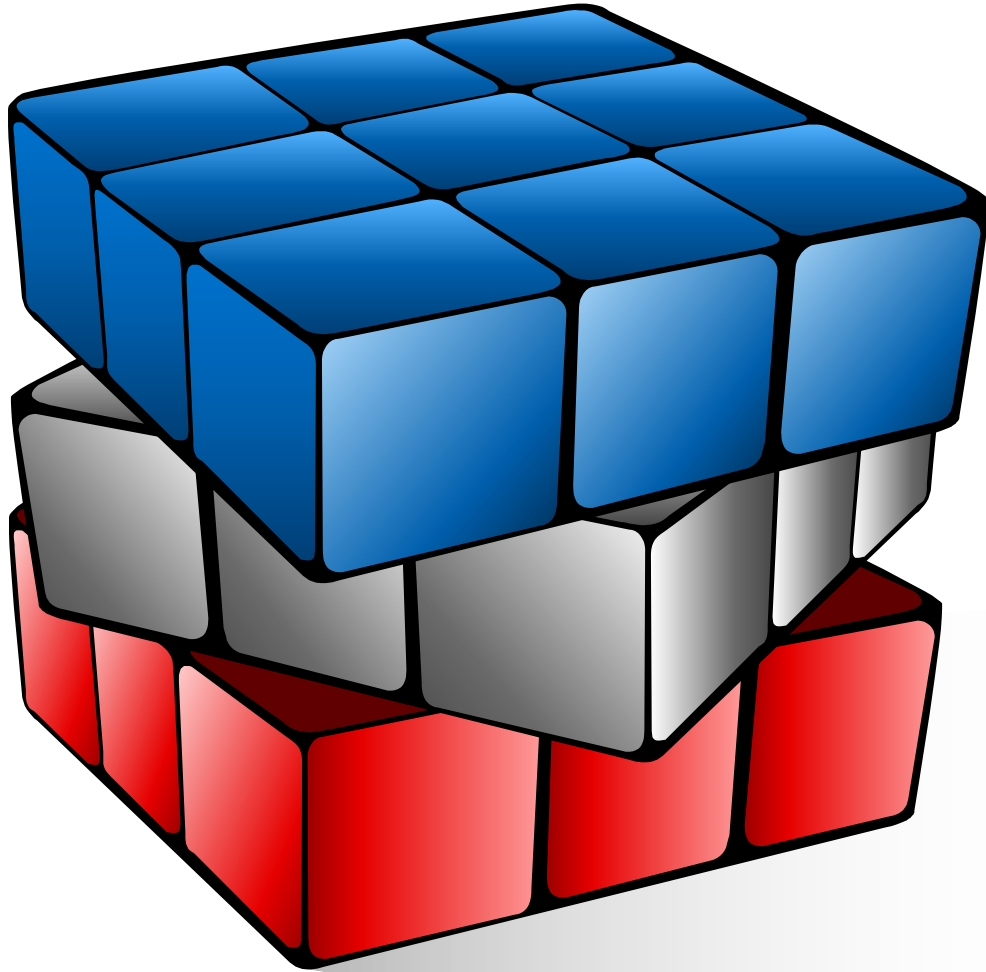


HTTP Sampler settings

Stop

Prefix

Create new transaction after request (ms):



LET'S DO IT

Prefix	Activities Create User
LandingPage	Click url 192.168.68.107/hesk/admin
Login	Fill up login credential Administrator, Administrator
User	Click tab users
UserAddNew	Fill up user info <ul style="list-style-type: none">• Fill up Profile Information<ul style="list-style-type: none">✓ Real name: user80✓ Email: user80@gmail.com✓ Username: user80✓ Password: Passw0rd✓ Confirm password: Passw0rd• Permission<ul style="list-style-type: none">✓ Choose : Staff✓ Choose : Can run reports (all)
CreateUser	Click Create
Logout	Click logout

Prefix	Activities Create Ticket
LandingPage	Click url 192.168.68.107/hesk/admin
LoginCredential	Fill up login credential pengguna01, Passw0rd
Ticket	Click tab + New Ticket
InsertNewTicket	Fill up the form
CreateTicket	Click Submit Ticket
GoHome	Click Home
Logout	Click Logout
Prefix	Activities View Report
LandingPage	Click url 192.168.68.107/hesk/admin
LoginCredential	Fill up login credential pengguna01, Passw0rd
Report	Click tab Reports
SelectDate	Select From 19/11/2019 to 19/11/2019
DisplayReport	Click Display Report
Logout	Click Logout

Prefix	Activities View Report
LandingPage	Click url 192.168.68.107 /hesk/admin
LoginCredential	Fill up login credential pengguna01, Passw0rd
Report	Click tab Reports
SelectDate	Select From 19/11/2019 to 19/11/2019
DisplayReport	Click Display Report
Logout	Click Logout



03

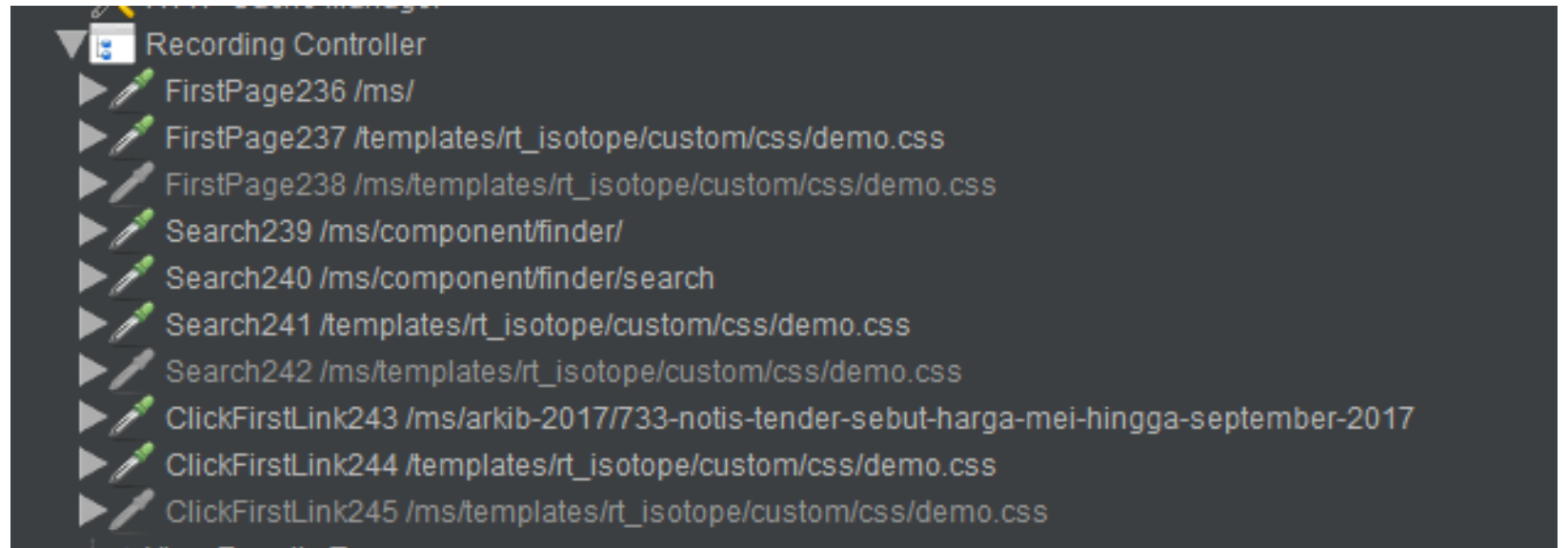
VERIFYING SCRIPT

- ✓ Recorded Transaction
- ✓ Running the Script
- ✓ View Result Tree
 - Rectify Error Found
 - Response Assertion
- ✓ View Summary Report

VERIFYING RESULT

1. Recorded Transactions

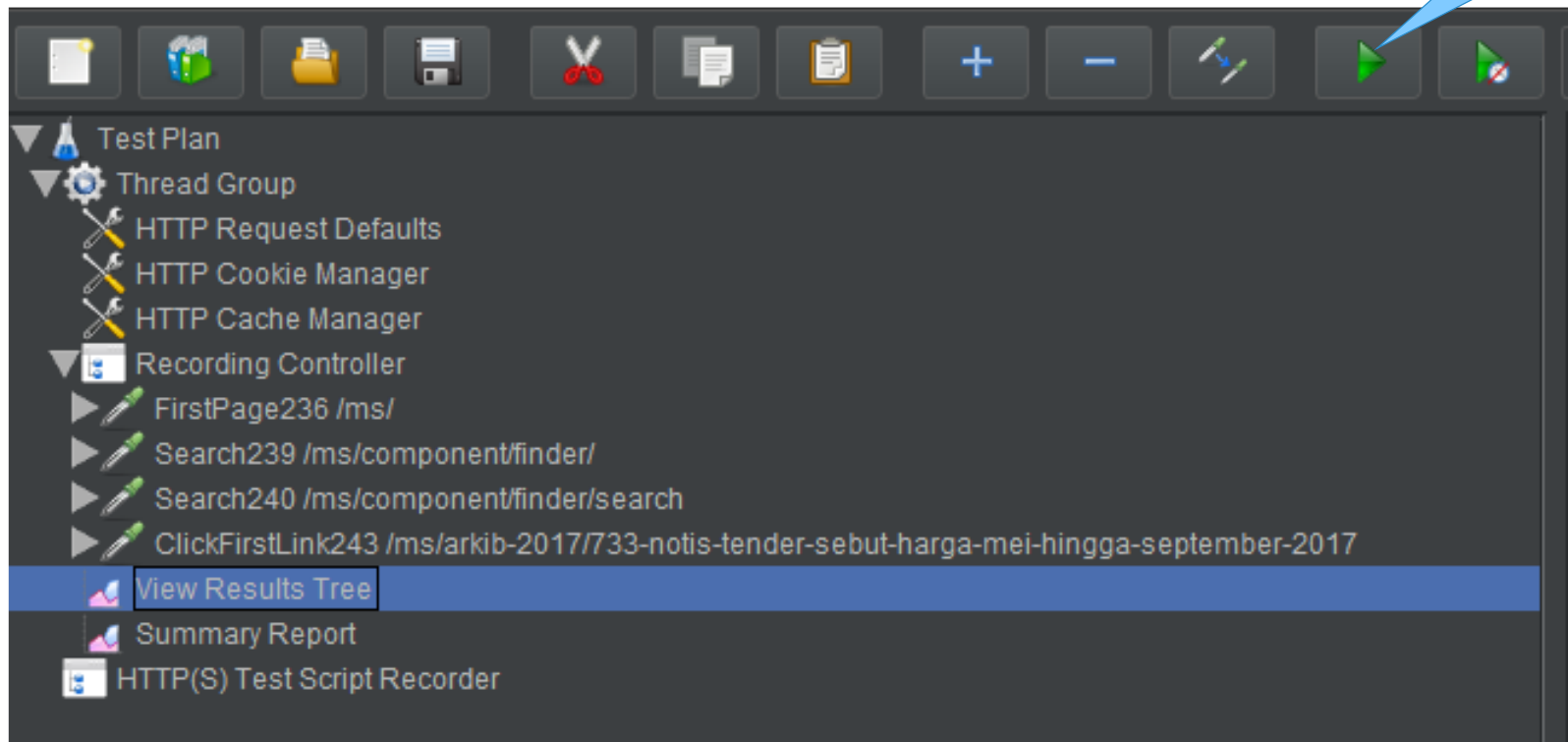
- All the transactions will be recorded under “Recording Controller”
- Can remove unnecessary component such as *.css, *.png, *.txt and so on.



VERIFYING RESULT

2. Running the Scripts

Click Start to run the script



VERIFYING RESULT

3. View Result Tree

- The View Results Tree shows:
 - ✓ A tree of all sample responses
 - ✓ Response code
 - ✓ Assertion result
 - ✓ Time it took to get this response

No error found!!

The screenshot displays the 'View Results Tree' and 'Sampler result' panels of a web testing tool. The 'View Results Tree' panel on the left shows a hierarchical list of test samples, each with a green checkmark icon indicating a successful result. The selected sample is 'FirstPage236 /ms/'. The 'Sampler result' panel on the right provides detailed information for the selected sample, including thread name, sample start time, load and connect times, latency, size in bytes, sent bytes, headers and body sizes, sample count, error count, data type, response code (200), and response message (OK). It also lists HTTPSampleResult fields: ContentType: text/html; charset=utf-8 and DataEncoding: utf-8.

Text	Sampler result	Request	Response data
FirstPage236 /ms/	Thread Name: Thread Group 1-1		
FirstPage236 /ms/	Sample Start: 2018-11-28 00:49:45 SGT		
Search239 /ms/component/finder/	Load time: 6356		
Search239 /ms/component/finder/	Connect Time: 18		
Search240 /ms/component/finder/search	Latency: 6326		
Search240 /ms/component/finder/search	Size in bytes: 19465		
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:	Sent bytes:329		
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:	Headers size in bytes: 525		
FirstPage236 /ms/	Body size in bytes: 18940		
FirstPage236 /ms/	Sample Count: 1		
Search239 /ms/component/finder/	Error Count: 0		
Search239 /ms/component/finder/	Data type ("text" "bin" "): text		
Search240 /ms/component/finder/search	Response code: 200		
Search240 /ms/component/finder/search	Response message: OK		
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:	HTTPSampleResult fields:		
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:	ContentType: text/html; charset=utf-8		
FirstPage236 /ms/	DataEncoding: utf-8		
FirstPage236 /ms/			
Search239 /ms/component/finder/			
Search239 /ms/component/finder/			
Search240 /ms/component/finder/search			
Search240 /ms/component/finder/search			
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:			
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:			
FirstPage236 /ms/			
Search239 /ms/component/finder/			
FirstPage236 /ms/			
Search239 /ms/component/finder/			
Search240 /ms/component/finder/search			
Search240 /ms/component/finder/search			
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:			
ClickFirstLink243 /ms/arkib-2017/733-notis-tender-sebut-h:			

VERIFYING RESULT

If error found?

- Check error code (401, 404..) in Response Body, Sampler Result
- Check if token used (variable need to be declared)
- Authentication issue – user account

VERIFYING RESULT

If error found?

- Check if there any token used (variable need to be declared)
- Replace the token value with (.+?)

1. Check the body where the token is created

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta name="csrf-token" content="6d3U1svQtRb7fBQSDgvlm3pcjRhoXLhfQCiQM5dG">
  <meta http-equiv="content-type" content="text/html; charset=UTF-8" />
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no, shrink-to-fit=no" />
  <link rel="shortcut icon" href="https://splask.mampu.gov.my/favicon.ico">

  <meta content="" name="description" />
  <meta content="" name="author" />
  <title>
    SPLaSK | Sistem Pemantauan Laman Web dan Servis Kerajaan
  </title>
  <link href="https://splask.mampu.gov.my/assets/plugins/pace/pace-theme-flash.css" rel="stylesheet" type="text/css" />
  <link href="https://splask.mampu.gov.my/assets/plugins/bootstrap/css/bootstrap.min.css" rel="stylesheet" type="text/css" />
  <link href="https://splask.mampu.gov.my/assets/plugins/font-awesome/css/font-awesome.css" rel="stylesheet" type="text/css" />
```

2. Right click page before token created

Click Add ->click Post Processors ->click Regular Expression Extractor
Fill up the details:

Name of created variable:	token
Regular Expression:	"csrf-token" content="(.+?)"
Template (\$i\$ where i is capturing group number, starts at 1):	\$1\$
Match No. (0 for Random):	1
Default Value:	<input type="text"/> <input type="checkbox"/> Use empty default value

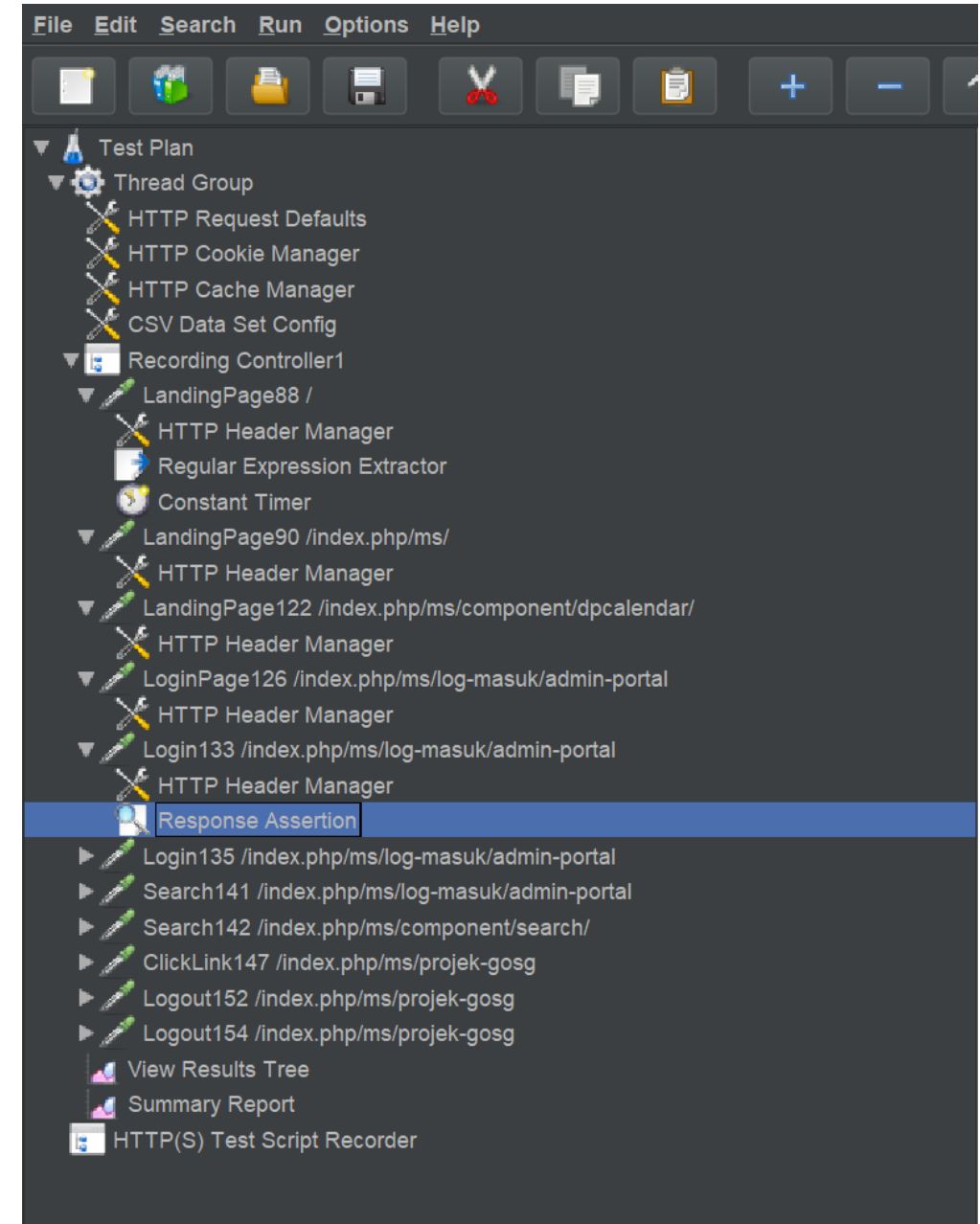
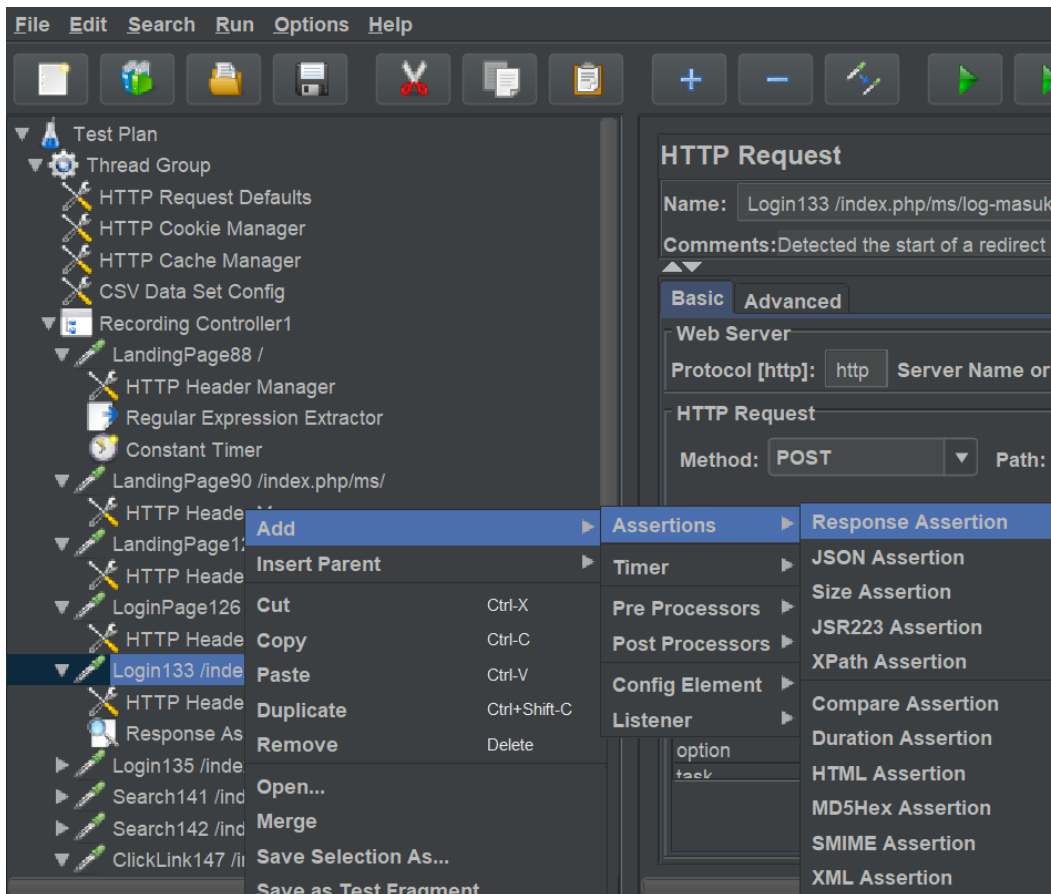
3. At the page where token is created, change the Value into variable defined as above.

Send Parameters With the Request				
Name:	Value	URL Encode?	Content-Type	Include Equals?
_token	\$(token)	<input type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
email	pat.splaskadm@gmail.com	<input checked="" type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
password	6WnpawAJkCS	<input type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>

VERIFYING RESULT

Add Response Assertion

- This let you define the pass or fail criteria for your test



VERIFYING RESULT

Response Assertion, TIPS!!

- Go to View Result Tree
- Choose HTML
- Click Response Data
- Choose Unique Word..

View Results Tree

Name: View Results Tree

Comments:

Write results to file / Read from file

Filename Log/Display Only: Errors Successes

Search: Case sensitive Regular exp.

HTML Sampler result Request Response data

Response Body Response headers

Find Case sensitive Regular exp.

751 landingpage
751 landingpage-0
751 landingpage-1
751 landingpage
753 kikkalipertama
753 kikkalipertama
757 isimaklumatpenggur
757 isimaklumatpenggur
759 kikklogmasuk
759 kikklogmasuk

Pendaftar Akaun Baru SPA9 Berjaya.

Pastikan anda membaca SOALAN LAZIM (FAQ) dan PANDUAN PENGGUNA Sebelum Menggunakan SPA9.

Sila klik di sini untuk [Log Masuk](#)

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Pendaftaran Pekerjaan Dalam Perkhidmatan Awam Am Persekutuan (SPA9)

VERIFYING RESULT

Response Assertion

Response Assertion

Name: Response Assertion-BerjayaDaftar

Comments:

Apply to:

Main sample and sub-samples Main sample only Sub-samples only JMeter Variable Name to use

Field to Test

Text Response

Response Code

Response Message

Response Headers

Request Headers

URL Sampled

Document (text)

Ignore Status

Request Data

Pattern Matching Rules

Contains

Matches

Equals

Substring

Not

Or

Patterns to Test

Patterns to Test

1 Pendaftar Akaun Baru SPA9 Berjaya

Add

Add from Clipboard

Delete

VERIFYING RESULT

3. View Summary Report

- The summary report creates a table row for each differently named request in your test
- JMeter takes into account the total time over which the requests have been generated

Summary Report

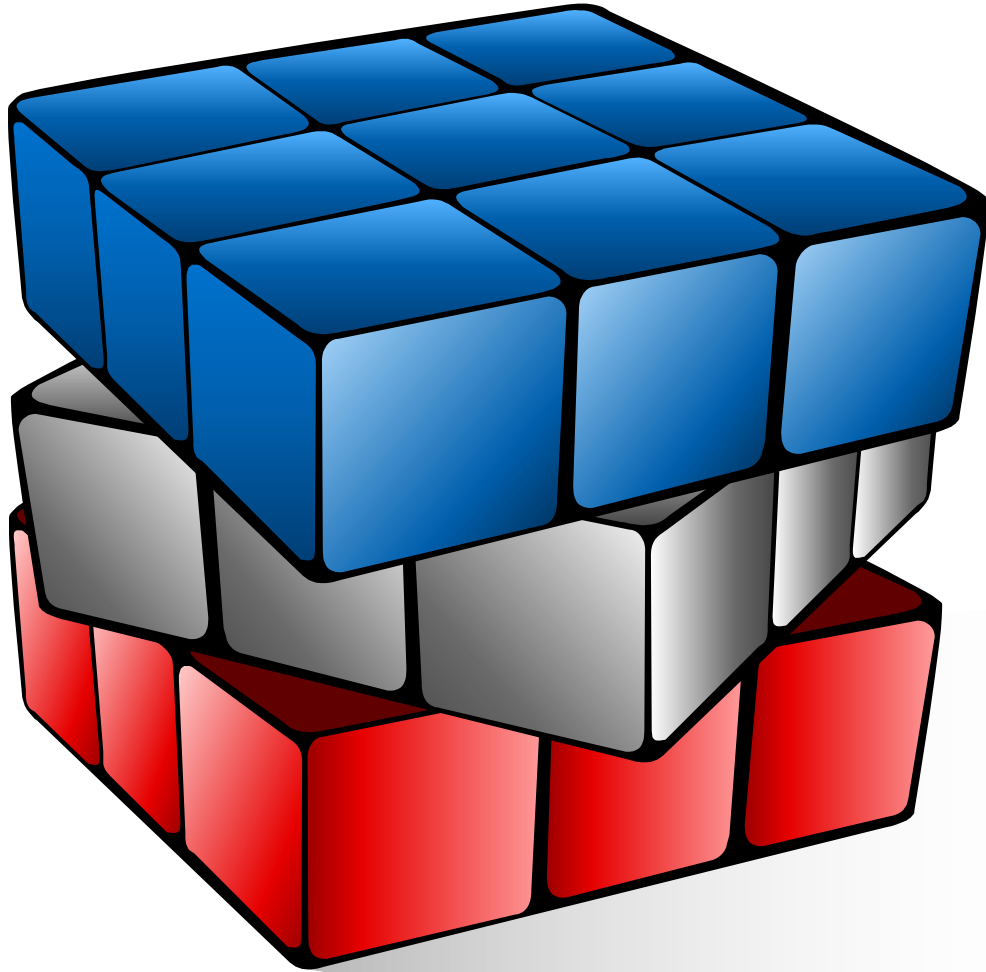
Name:

Comments:

Write results to file / Read from file

Filename Log/Display Only: Errors Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
FirstPage236 /ms/	8	5913	5011	7075	836.26	0.00%	8.2/min	2.60	0.05	19397.4
Search239 /ms/comp...	8	259	162	337	61.28	0.00%	9.2/min	0.07	0.07	435.0
Search240 /ms/comp...	8	5873	5145	6763	578.64	0.00%	8.4/min	1.92	0.07	14100.2
ClickFirstLink243 /ms...	8	5075	4614	5556	317.39	0.00%	8.5/min	2.47	0.08	17883.2
TOTAL	32	4280	162	7075	2405.41	0.00%	27.9/min	5.89	0.22	12954.0



LET'S DO IT



04

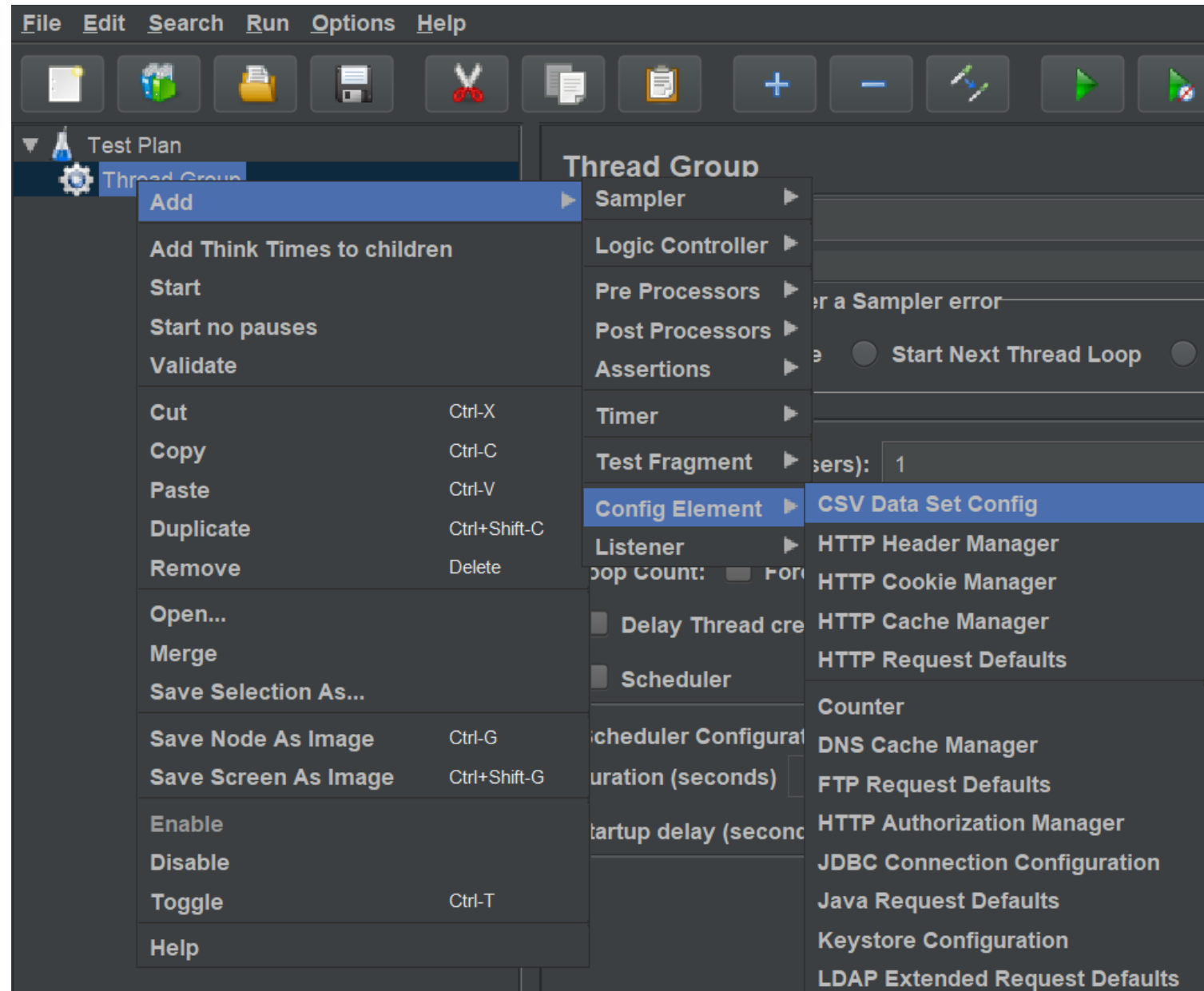
PERFORMING LOAD TEST

- ✓ CSV Data Set
- ✓ Timer (Think Time)
- ✓ Plan your Load

PERFORM LOAD TEST

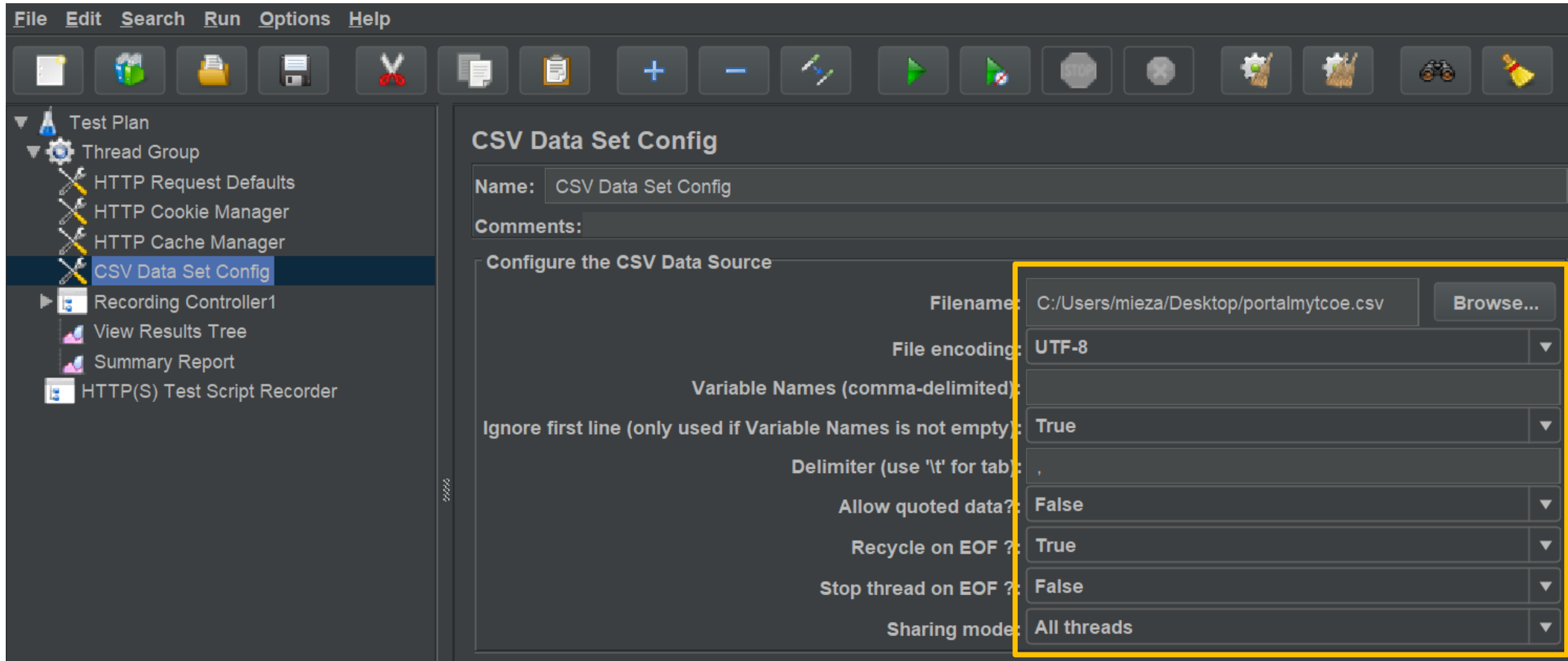
1. Add CSV File

- This element that allows you to use external data sets in a CSV format.



PERFORMING LOAD TEST

Add CSV File



The screenshot displays the Apache JMeter GUI. The left sidebar shows a tree view with 'Test Plan' expanded to 'Thread Group', where 'CSV Data Set Config' is selected. The main panel shows the configuration for this component. The 'Name' field is 'CSV Data Set Config'. The 'Comments' field is empty. The 'Configure the CSV Data Source' section contains the following settings:

Property	Value
Filename	C:/Users/mieza/Desktop/portalmtycoe.csv
File encoding	UTF-8
Variable Names (comma-delimited)	
Ignore first line (only used if Variable Names is not empty)	True
Delimiter (use '\t' for tab)	,
Allow quoted data?	False
Recycle on EOF ?	True
Stop thread on EOF ?	False
Sharing mode	All threads

A yellow rectangular box highlights the 'Filename', 'File encoding', 'Ignore first line', 'Delimiter', 'Allow quoted data?', 'Recycle on EOF?', 'Stop thread on EOF?', and 'Sharing mode' settings.

PERFORMING LOAD TEST

Add CSV File

CSV Data Set Config

Name: CSV Data Set Config

Comments:

Configure the CSV Data Source

Filename	C:/Users/mieza/Desktop/datasetesk2.csv	<input type="button" value="Browse..."/>
File encoding	UTF-8	▼
Variable Names (comma-delimited)	realname,username	
Ignore first line (only used if Variable Names is not empty)	True	▼
Delimiter (use '\t' for tab)	,	
Allow quoted data?	False	▼
Recycle on EOF ?	False	▼
Stop thread on EOF ?	True	▼
Sharing mode	All threads	▼

PERFORMING LOAD TEST

Add CSV File

HTTP Request

Name: Login133 /index.php/ms/log-masuk/admin-portal

Comments: Detected the start of a redirect chain

Basic | **Advanced**

Web Server

Protocol [http]: http Server Name or IP: Port Number:

HTTP Request

Method: POST Path: /index.php/ms/log-masuk/admin-portal Content encoding: utf-8

Redirect Automatically Follow Redirects Use KeepAlive Use multipart/form-data Browser-compatible headers

Parameters | **Body Data** | **Files Upload**

Send Parameters With the Request:

Name:	Value	URL Encode?	Content-Type	Include Equals?
username	\${loginid}	<input type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
password	\${password}	<input type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
Submit		<input type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
option	com_users	<input type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
task	user.login	<input type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>
return	...	<input checked="" type="checkbox"/>	text/plain	<input checked="" type="checkbox"/>

Detail Add Add from Clipboard Delete Up Down

PERFORMING LOAD TEST

Timer

- Timers are used to define the time period that you want to wait between requests
- By default, a JMeter thread sends requests without pausing between each request
- It is recommend that to specify a delay by adding one of the available timers to the Thread Group

The screenshot displays the Apache JMeter GUI. The left sidebar shows a tree view of the test plan structure. The 'Constant Timer' element is selected and highlighted in blue. The right pane shows the configuration for the 'Constant Timer' element, with the 'Thread Delay (in milliseconds)' field set to 300.

Test Plan

- Thread Group
 - HTTP Request Defaults
 - HTTP Cookie Manager
 - HTTP Cache Manager
 - CSV Data Set Config
 - Recording Controller1
 - LandingPage88 /
 - HTTP Header Manager
 - Regular Expression Extractor
 - Constant Timer**
 - LandingPage90 /index.php/ms/
 - HTTP Header Manager
 - LandingPage122 /index.php/ms/component/dpcalendar/
 - HTTP Header Manager
 - LoginPage126 /index.php/ms/log-masuk/admin-portal
 - HTTP Header Manager
 - Login133 /index.php/ms/log-masuk/admin-portal
 - HTTP Header Manager
 - Response Assertion
 - Login135 /index.php/ms/log-masuk/admin-portal
 - Search141 /index.php/ms/log-masuk/admin-portal
 - Search142 /index.php/ms/component/search/
 - ClickLink147 /index.php/ms/projek-gosg
 - Logout152 /index.php/ms/projek-gosg
 - Logout154 /index.php/ms/projek-gosg
 - View Results Tree
 - Summary Report
 - HTTP(S) Test Script Recorder

Constant Timer

Name: Constant Timer

Comments:

Thread Delay (in milliseconds): 300

PERFORMING LOAD TEST

Plan your Load

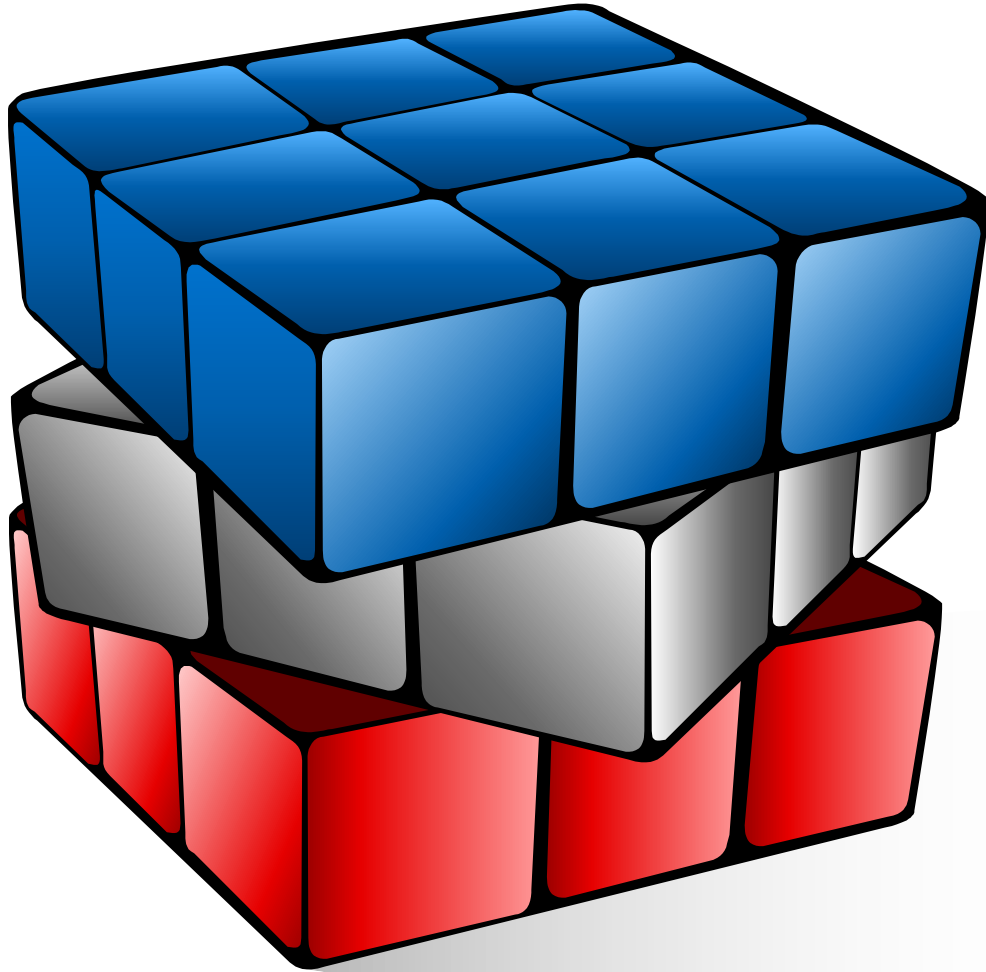
No	Business Transactions	Weightage (%)	No of Concurrent User			
			Iteration 1	Iteration 2	Iteration 3	Stress Test
1	<u>BizTxn 1:</u> Transaction 1	60	30	60	120	300
2	<u>BizTxn 2:</u> Transaction 2	10	5	10	20	50
3	<u>BizTxn 3:</u> Transaction 3	10	5	10	20	50
4	<u>BizTxn 4:</u> Transaction 4	20	10	20	40	100
	TOTAL	100	50	100	200	500

Transaction	Iteration 1	Thread Properties	Iteration 2	Thread Properties	Iteration 3	Thread Properties	Stress Test	Thread Properties
<u>BizTxn 1</u>	30	30 thread in 120 sec (2 min)	60	60 thread in 420 sec (7 min)	120	120 thread in 900 sec (15 min)	300	300 thread in 1800 sec (30 min)
<u>BizTxn 2</u>	5	5 thread in 10 sec	10	10 thread in 60 sec (1 min)	20	20 thread in 120 sec (2 min)	50	50 thread in 300 sec (5 min)
<u>BizTxn 3</u>	5	5 thread in 10 sec	10	10 thread in 60 sec (1 min)	20	20 thread in 120 sec (2 min)	50	50 thread in 300 sec (5 min)
<u>BizTxn 4</u>	10	10 thread in 60 sec (1 min)	20	20 thread in 240 sec (3 min)	40	40 thread in 600 sec (10 min)	100	100 thread in 1200 sec (20 min)
Scheduler	50	180 sec (3 min)	100	720 sec (12 min)	200	1200 sec (20 min)	500	2400 sec (40 min)

PERFORMING LOAD TEST

Test plan > Add > Listener > jp@gc – Active Threads Over Time

Monitor thread using jp@gc – Active Threads Over Time



LETS DO IT



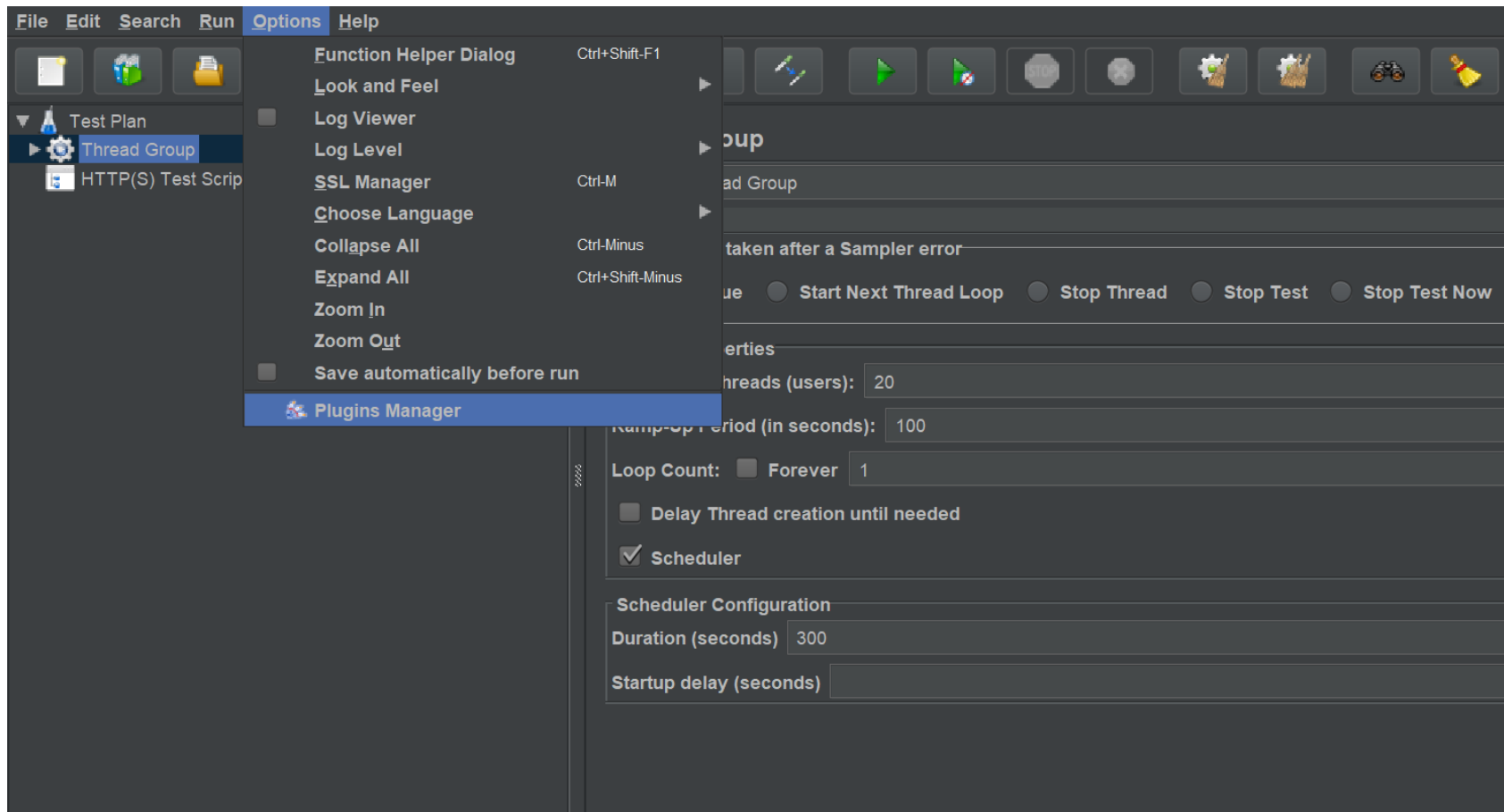
**SELAMAT
MENCUBA!!**

TERIMA KASIH

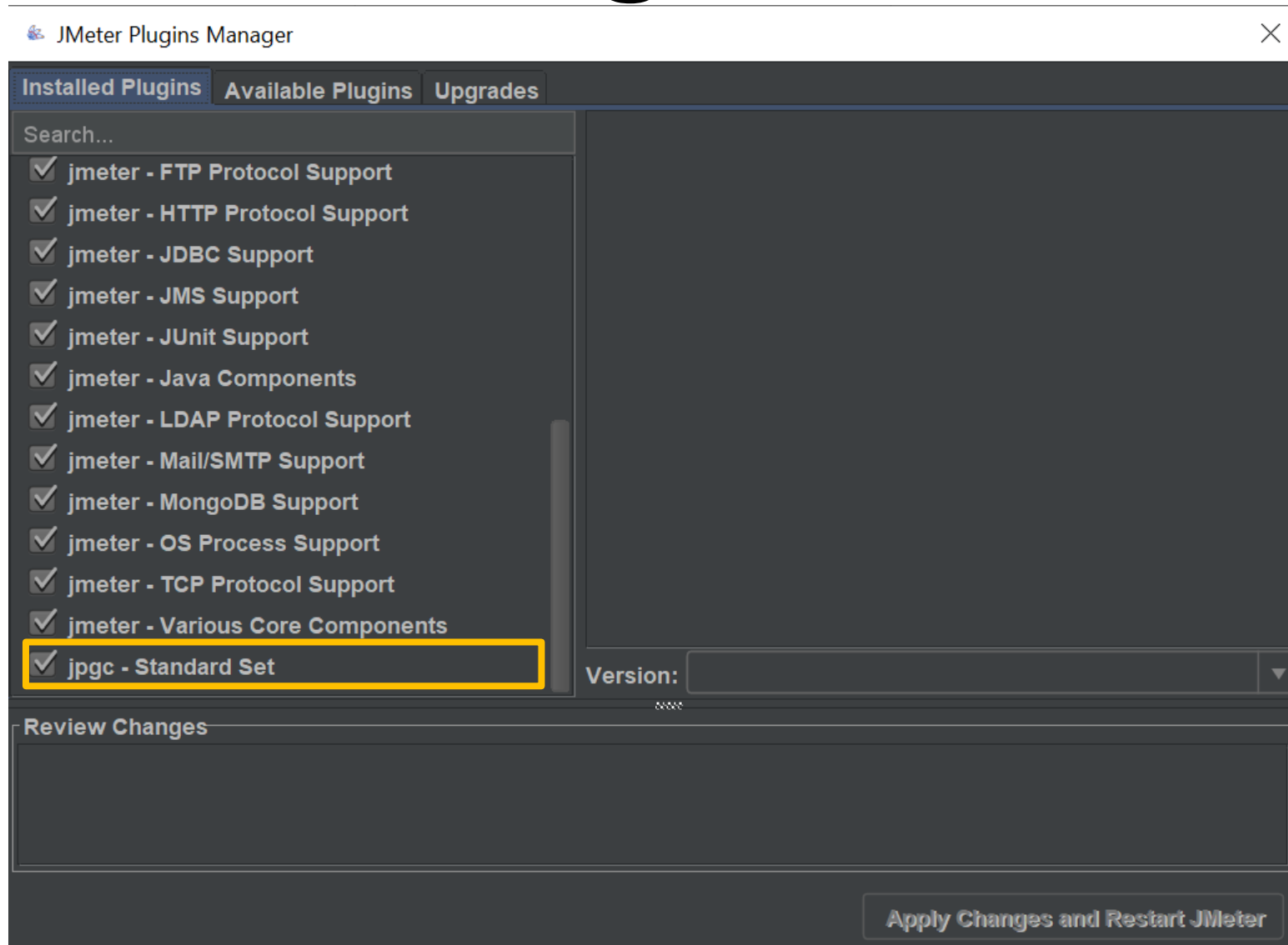


JMeter Plugins Installation Guide

Download [plugins-manager.jar](#) and put it into `lib/ext` directory, then restart JMeter.



JMeter Plugins Installation Guide



JMeter Plugins Installation Guide

Available Plugin > select jpgc-Standard Set > Apply Changes and Restart JMeter

