

AGENDA

- 1. Recap
- 2. HTTP POST
- 3. Database verification
- 4. External files
- 5. Performance

# Other JMeter posibilities



- DB connections and testing
- Using external files to upload the data
- Veryfing HTM and web services responses
- Parsing documents
- Distributed performance tests
- Recording tests
- And many many more...

## **Preparing application**

- 1. Download RCApp zip from GITRepository (lesson-6)
- 2. Unzip the archive and go to tomcat bin directory (... rcapp\_external\_db\rcapp\apache-tomcat-6.0.44\bin)
- 3. Run command line from that path and start tomcat by executing "startup" command
- 4. Once Tomcat server will be started go following url: http://localhost:8080/registrationform/?contestId=1
- 5. Check if you see the the screen similar to presented on the left
- 6. Administration panel should be available on <a href="http://localhost:8080/registrationpanel/">http://localhost:8080/registrationpanel/</a>

Login: admin

Passw:



Export All Entries

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## Using HTTP Request [POST] to register new user

- Create an empty Test Plan and change its name to Test Plan Task 3c
- Save the test plan by the name of Task\_3c.jmx.
- Add Thread Group.
- Add HTTP Request and change its name to HTTP Request register user. Change the relevant settings as below:

5.

- a. Server Name or IP: 127.0.0.1
- b. Port Number: 8080
- c. Protocol [http]: HTTP
- d. Method: POST
- e. Content encoding: UTF-8
- f. Path: /registrationform/registrations



- Run test plan response code 415
- Add HTTP Header Manager and parameter Content-Type: text/xml
- Run Test plan and check if user was registered !
- Run test plan again what happened?
- Add Assertion for the Response code

```
<?xml version="1.0" encoding="UTF-8"?>
<REGISTRATION>
<FIRST NAME>yourname/FIRST NAME>
<LAST NAME>yourlastname</LAST NAME>
<EMAIL>your.mailj@gft.com</EMAIL>
<QUESTION>Which one of the following keywords
allows to sort the query
result?
GROUP BY
ORDER FROM
ASC BY
ORDER BY</OUESTION>
<CHALLENGE>null</CHALLENGE>
<ANSWER>null</ANSWER>
<QUESTION ID>7</QUESTION ID>
<ANSWER INDEX>28</ANSWER INDEX>
</REGISTRATION>
```

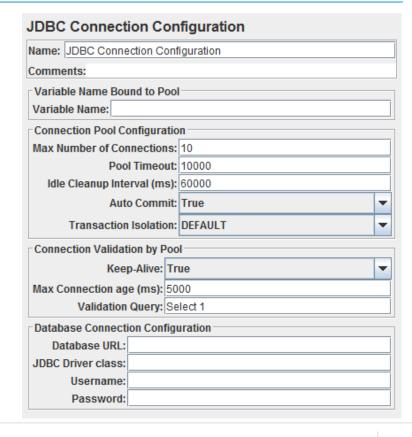
http://localhost:8080/registrationpanel/

Login: admin

Passw:

## **Preparing Jmeter for Database connection**

- Default Jmeter version comes with no database driver
- But it's fairly easy to add i.e MySQL one:
  - Go to http://dev.mysql.com/downloads/file/?id=459313
  - Download and unzip the driver
  - Copy jar file (mysql-connector-java-5.1.37-bin) to Jmeter lib dierectory
  - Restart Jmeter
- Main test plan elements when working with databases:
  - JDBC Connection Configuration
  - JDBC Request



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## **Practice JDBC Requests**

- In Test Plan from previous excercise add new config element – JDBC Connection Configuration and fill connection parameters
- Add JDBC Request from Samplers. Use VariableName from configuration and write simple select to check if your POST request was stored in DB
- Using the Counter element register more users (counter should be used to make emails unique)
- 4. Create new JDBC Request to clear generated data (use the "like" operator to not delete other data!)

VariableName	RCappDB			
Database URL	jdbc:mysql://db4free.net:3306/registr ationsmob			
JDBC Driver Class	com.mysql.jdbc.Driver			
Username	rcapp			
Password	Gfgjhjnybr!0			

SELECT \* FROM REGISTRATIONS WHERE EMAIL = 'your\_email';

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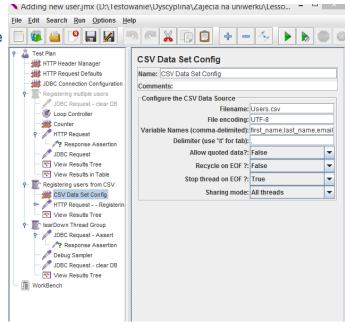
## Using external file in test scenario

# Often in real world examples there is a common need to prepare and keep test data in external files

- Create Users.csv file with few users data (first name, last name, email). Each
  user in new line and values separated by given delimiter (e.g. coma, pipe). Save
  file in the same place where JMX file is stored.
- 2. Add new Thread Group and disable recent one. **Check Forever checkbox.**
- Add CSV Data Set Config component and provide filename, encoding(UTF-8), variable names(e.g. first\_name,last\_name,email) and delimiter parameters.
   Other flags set to:
   Allow quoted data False

Recycle on EOF – False Stop thread on EOF – True Sharing mode – All Threads

- Copy HTTP Post from previous excercises and use email parameter in HTTP Request name and POST body
- 5. Add tearDown Thread Group
- 6. Add JDBC Request with Assertion element to check if users from CVS will be registered (use select count(\*) and Jmeter variable assertion).
- 7. Add JDBC Request for clearing DB after test.
- 8. Add Result Tree for both Thread groups and run Test Plan



#### Homework

#### The assignment is to prepare a test plan which:

- Registers 5 users in the application using the REST API.
  - 1. Checks in the database if the users are registered.
  - 2. The list of users is stored in external .csv file.
- Cleans the database up once the test is done (use tearDown Thread Group).
- 3. Using the Summary Report listener prepare a report which comes with Average Reponse Time and Standard Deviation regarding the HTTP Request (this one which registers users).
- 4. Send the
  - 1. .jmx file
  - csv file
  - the Summary Report

to piotr.sobieraj@gft.com no later than EOD of 23 Dec 2016.

Remark 1: to avoid race condition among other students you can use email with your initials, ex. for Jan Twardowsky it would be <a href="mailto:inity@math.uni.lodz.pl">inity@math.uni.lodz.pl</a>.

Remark 2: please do not hesitate to drop me an email if anything is not clear.

