levi nine
Technology Services

HUSTEF
HUNGARIAN SOFTWARE TESTING FORUM

HOW CAN WE MANAGE PERFORMANCE TESTING?

Dušanka Lečić

Budapest, 2022

AGENDA

01 Introduction

02 Performance testing and introducing it into the project

03 Understanding and managing performance tests

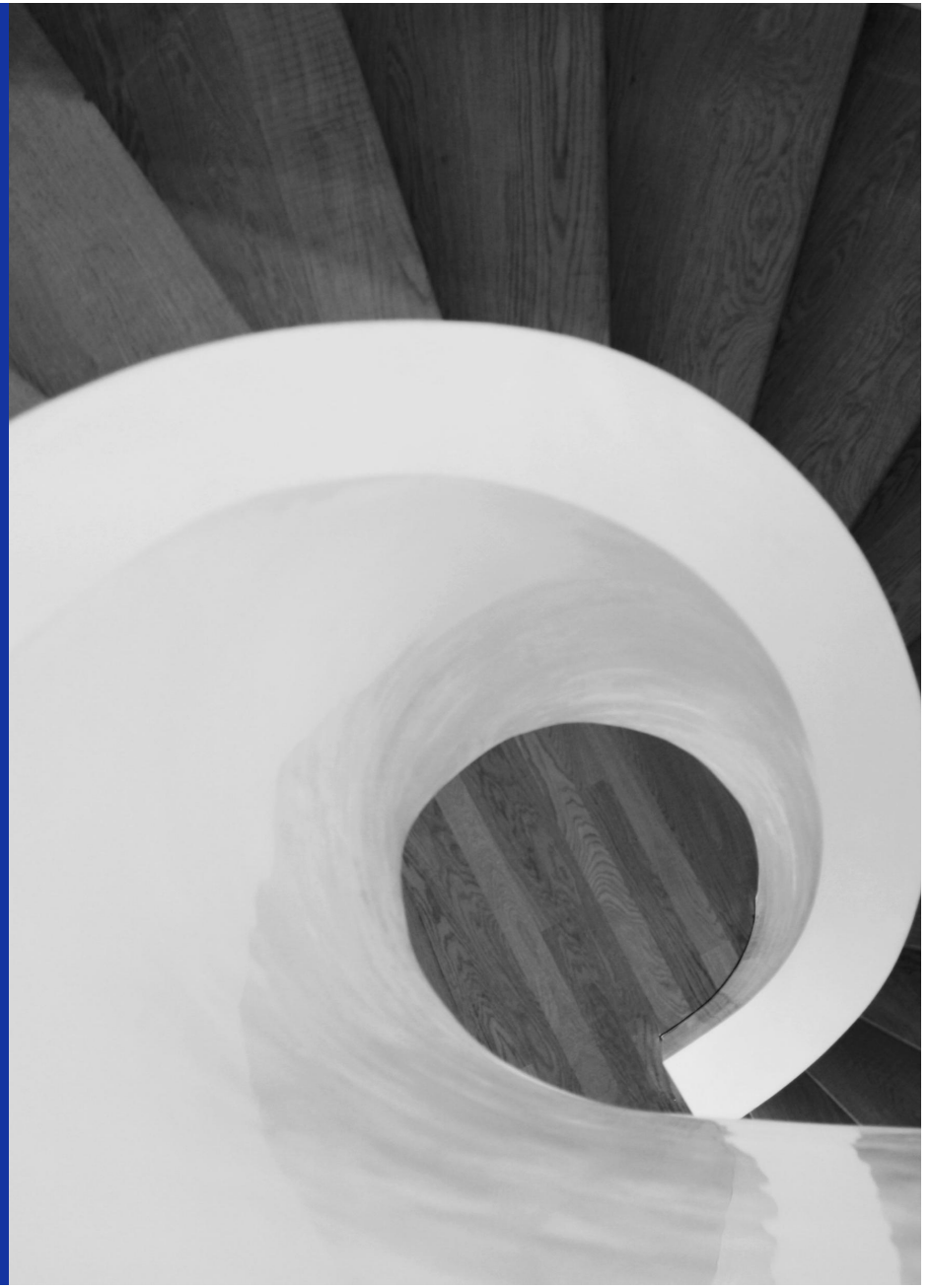
04 Performance testing in practice

05 Conclusions

06 Question

01

INTRODUCTION



INTRODUCTION

- Test Lead in Levi9 IT Services
- Department Manager
- PhD of Technical Science
- Number of conferences

02

PERFORMANCE TESTING AND INTRODUCING IT INTO THE PROJECT

PERFORMANCE TESTING AND INTRODUCING IT INTO THE PROJECT

- Idea about introduce performance testing into the project
- Non-functional testing
- Performance testing is a type of non-functional testing
- The goals of introducing performance testing into the project

03

UNDERSTANDING AND MANAGING PERFORMANCE TESTS

UNDERSTANDING AND MANAGING PERFORMANCE TESTS

- Understanding our needs on the project regarding performance tests
- All phases of developing performance tests
- Implementation phases into the project and pitfalls during the implementation

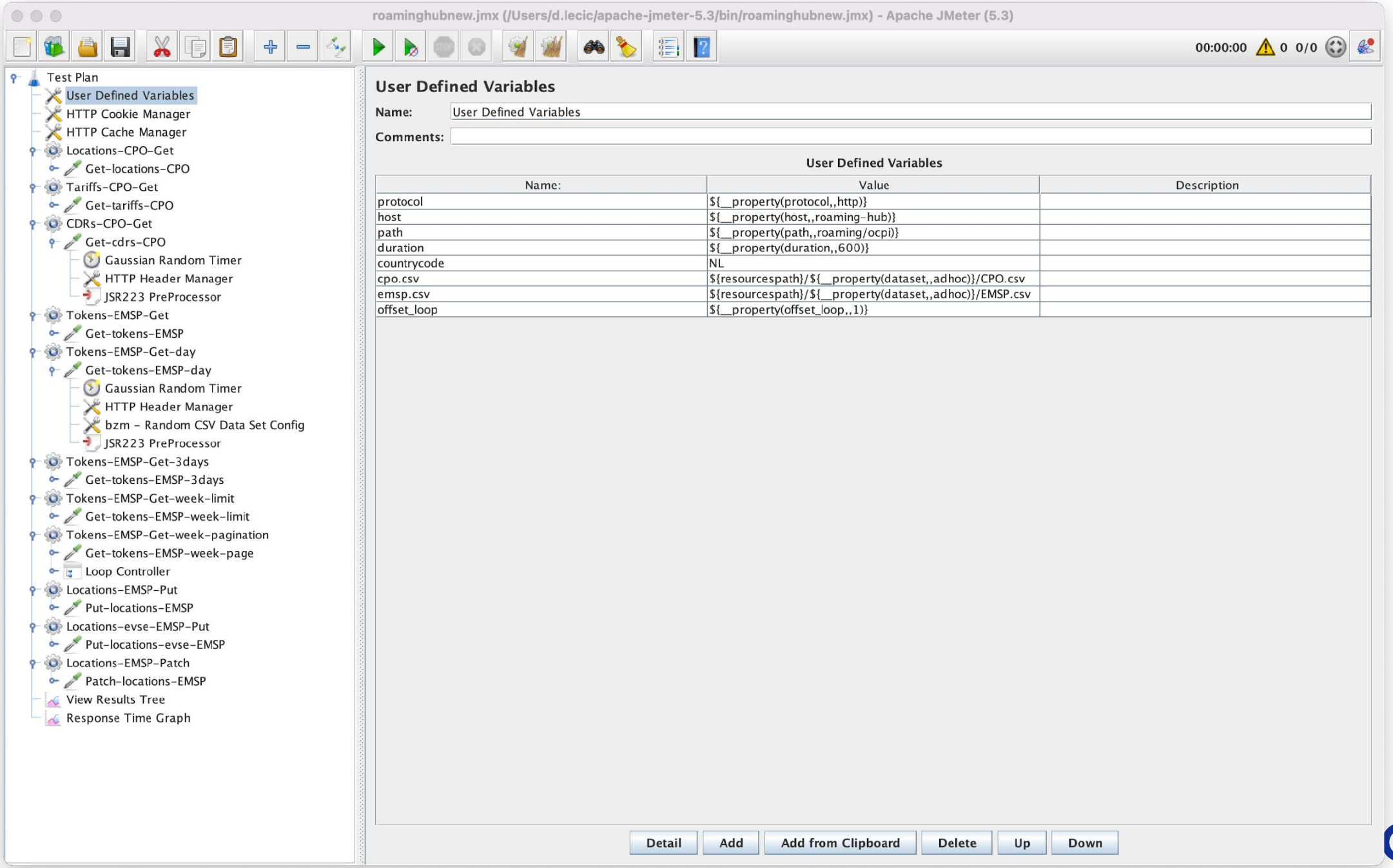
UNDERSTANDING AND MANAGING PERFORMANCE TESTS

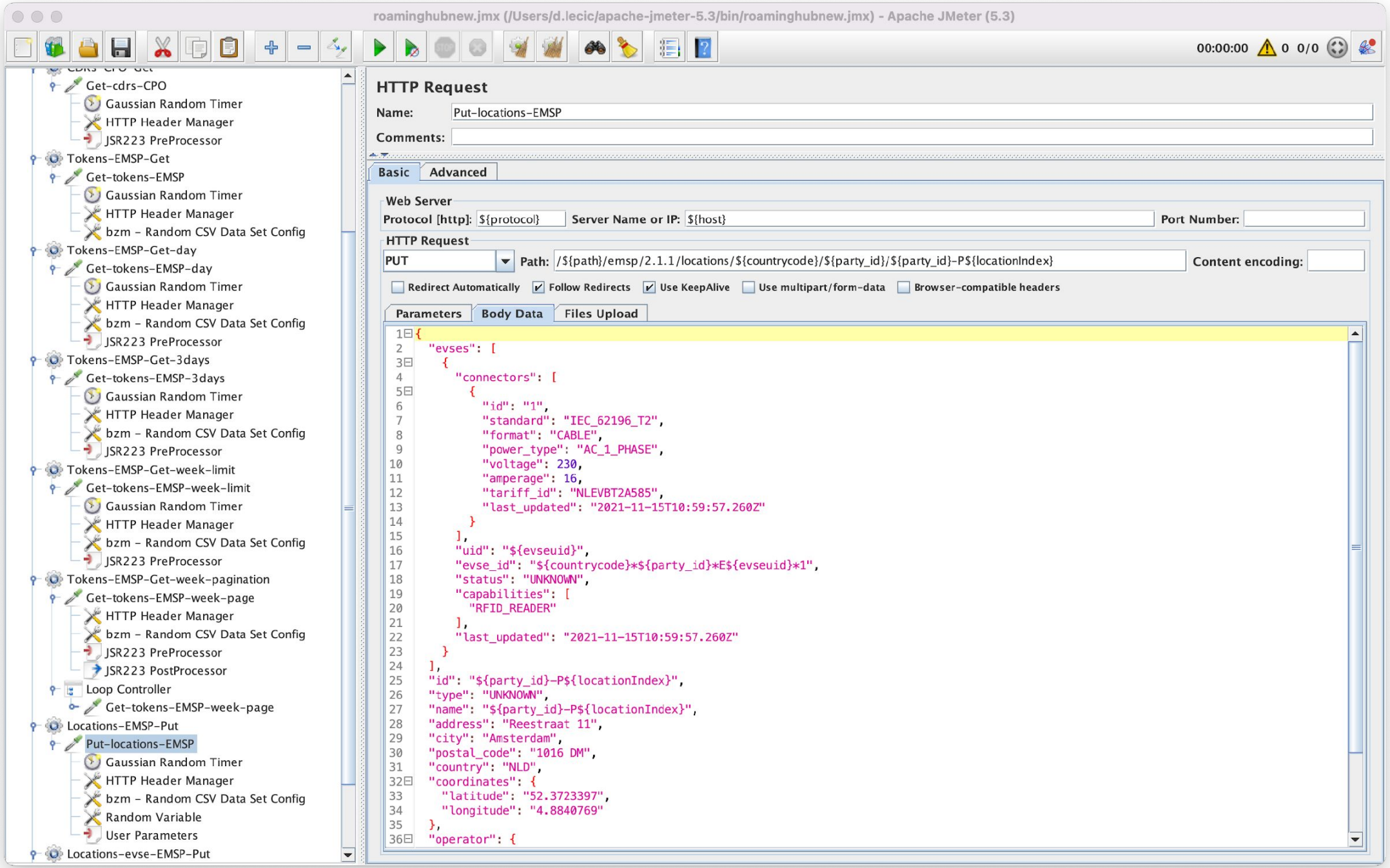
04

PERFORMANCE TESTING IN PRACTICE?

PERFORMANCE TESTING IN PRACTICE

- Generating all needed data for performance testing
- Writing the scripts for running Jmeter tests
- Avoiding main pitfalls


roaminghubnew.jmx (/Users/d.lecic/apache-jmeter-5.3/bin/roaminghubnew.jmx) - Apache JMeter (5.3)
00:00:00 0 0/0
Test Plan
User Defined Variables
HTTP Cookie Manager
HTTP Cache Manager
Locations-CPO-Get
Get-locations-CPO
Tariffs-CPO-Get
Get-tariffs-CPO
CDRs-CPO-Get
Get-cdrs-CPO
Gaussian Random Timer
HTTP Header Manager
JSR223 PreProcessor
Tokens-EMSP-Get
Get-tokens-EMSP
Tokens-EMSP-Get-day
Get-tokens-EMSP-day
Gaussian Random Timer
HTTP Header Manager
bzm - Random CSV Data Set Config
JSR223 PreProcessor
Tokens-EMSP-Get-3days
Get-tokens-EMSP-3days
Tokens-EMSP-Get-week-limit
Get-tokens-EMSP-week-limit
Tokens-EMSP-Get-week-pagination
Get-tokens-EMSP-week-page
Loop Controller
Locations-EMSP-Put
Put-locations-EMSP
Locations-evse-EMSP-Put
Put-locations-evse-EMSP
Locations-EMSP-Patch
Patch-locations-EMSP
View Results Tree
Response Time Graph
User Defined Variables
Name: User Defined Variables
Comments:
User Defined Variables
Name: Value Description
protocol ${__property(protocol,,http)}
host ${__property(host,,roaming-hub)}
path ${__property(path,,roaming/ocpi)}
duration ${__property(duration,,600)}
countrycode NL
cpo.csv ${resourcespath}/${__property(dataset,,adhoc)}/CPO.csv
emsp.csv ${resourcespath}/${__property(dataset,,adhoc)}/EMSP.csv
offset_loop ${__property(offset_loop,,1)}
Detail
Add
Add from Clipboard
Delete
Up
Down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JSR223 PreProcessor
JSR223 PostProcessor
Loop Controller
Get-tokens-EMSP-week-page
Locations-EMSP-Put
Put-locations-EMSP
Gaussian Random Timer
HTTP Header Manager
bzm - Random CSV Data Set Config
Random Variable
User Parameters
Locations-evse-EMSP-Put
HTTP Request
Name: Put-locations-EMSP
Comments:
Basic
Advanced
Web Server
Protocol [http]: ${protocol}
Server Name or IP: ${host}
Port Number:
HTTP Request
PUT
Path: /${path}/emsp/2.1.1/locations/${countrycode}/${party_id}/${party_id}-P${locationIndex}
Content encoding:
Redirect Automatically
Follow Redirects
Use KeepAlive
Use multipart/form-data
Browser-compatible headers
Parameters
Body Data
Files Upload
{
"evses": [
{
"connectors": [
{
"id": "1",
"standard": "IEC_62196_T2",
"format": "CABLE",
"power_type": "AC_1_PHASE",
"voltage": 230,
"amperage": 16,
"tariff_id": "NLEVBT2A585",
"last_updated": "2021-11-15T10:59:57.260Z"
}
],
"uid": "${evseuid}",
"evse_id": "${countrycode}*${party_id}*E${evseuid}*1",
"status": "UNKNOWN",
"capabilities": [
"RFID_READER"
],
"last_updated": "2021-11-15T10:59:57.260Z"
}
],
"id": "${party_id}-P${locationIndex}",
"type": "UNKNOWN",
"name": "${party_id}-P${locationIndex}",
"address": "Reestraat 11",
"city": "Amsterdam",
"postal_code": "1016 DM",
"country": "NLD",
"coordinates": {
"latitude": "52.3723397",
"longitude": "4.8840769"
},
"operator": {

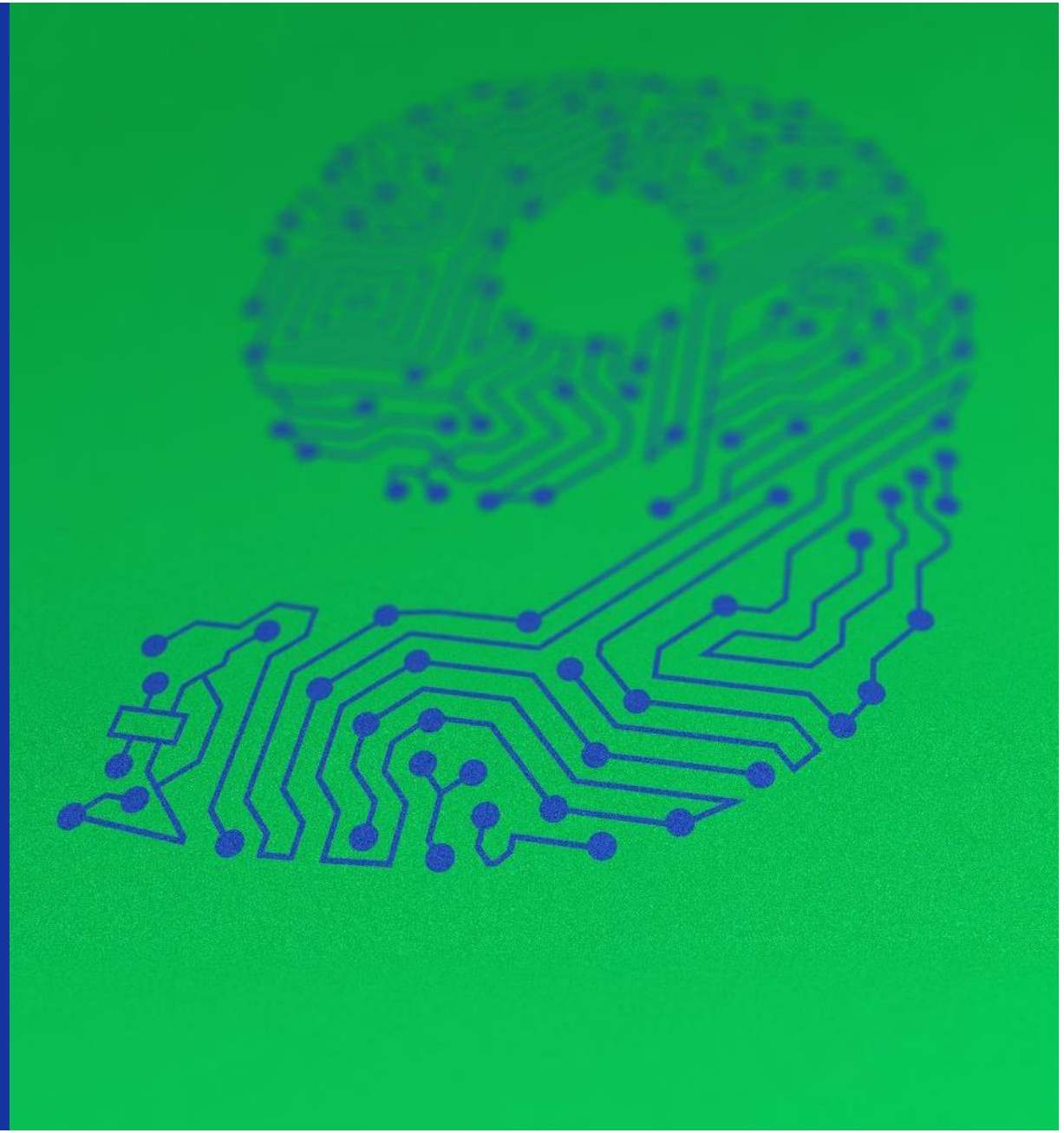
05

CONCLUSIONS

CONCLUSIONS

- Non-functional testing is equally important as functional testing.
- Managing performance testing is also equally important as writing performance tests.
- We must plan performance testing.
- The result is reliable tests.
- Founded bottlenecks
- We get a better-quality product.

QUESTIONS



THANK YOU

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