



Co-funded by the European Union



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This project has received funding from the European Union's Horizon 2020 research and innovation programme, which is co-funded by the European Commission and the Swiss State Secretariat for Education, Research and Innovation, under grant agreement No 732638.

# MOCAP

## Measuring performance of cloud-based platform for interactive TV services delivery

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### Background & motivation

- Hard to test our platform in a real **large-scale environment** with a guarantee that existing end-users would not experience any bad side-effects
- Always keen to **improve** our product and deliver highest possible quality of service
- Obtain **useful information** about the bottle necks and plan future upgrades

### Goals & objectives

- To simulate high number of end-user requests from the Virtual Wall testbed to the test instance of our platform
- To execute the experiment on 15 test scenarios on multiple different ranges of number of end-user requests:
  - up to 1.000 end-users
  - up to 5.000 end-users
  - up to 10.000 end-users
  - up to 100.000 end-users
  - up to 500.000 end-users
  - up to 2.000.000 end-users

### Conclusion & business impact

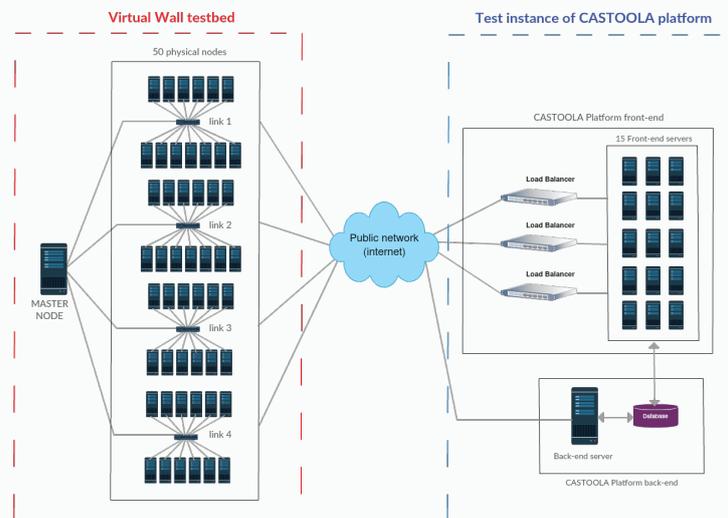
- Overall satisfied with the results
- Back-end part of the platform needs improvement
- Lots of useful information about the performance and bottlenecks
- Future development activities to be planned based on the results

### What is Castoola platform?

**Castoola Platform** is cloud-based platform for serving of interactive TV services based on HbbTV ("Hybrid broadcast-broadband TV") technology. Targeting TV operators and broadcasters, which would like to make their TV channel or network interactive, it is offering viewers the possibility to consume rich broadband content on top of the linear broadcast television.

### Set-up of the experiment

- Virtual Wall testbed (1 master node, 50 testing nodes)
- Test instance of Castoola Platform in the cloud (DigitalOcean)





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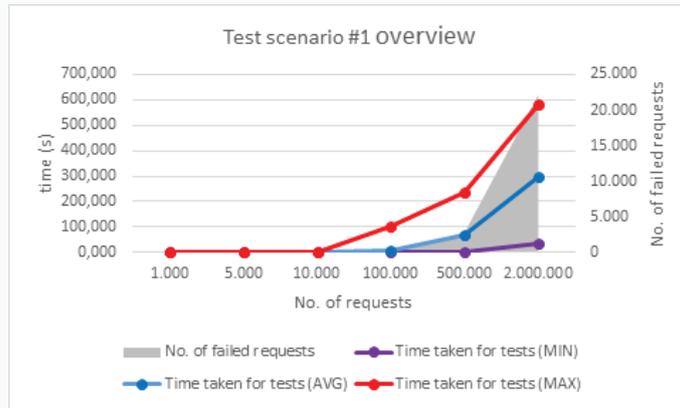
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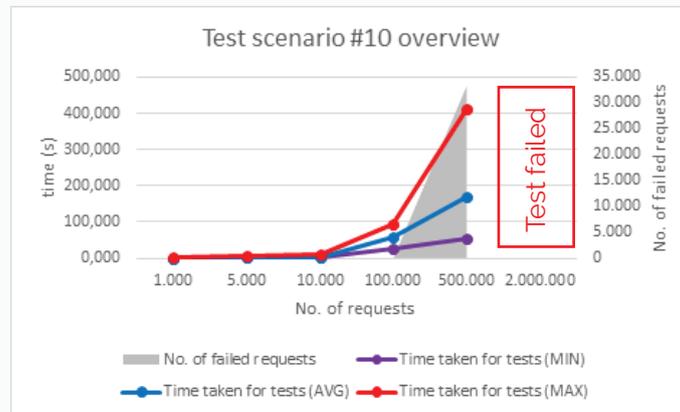
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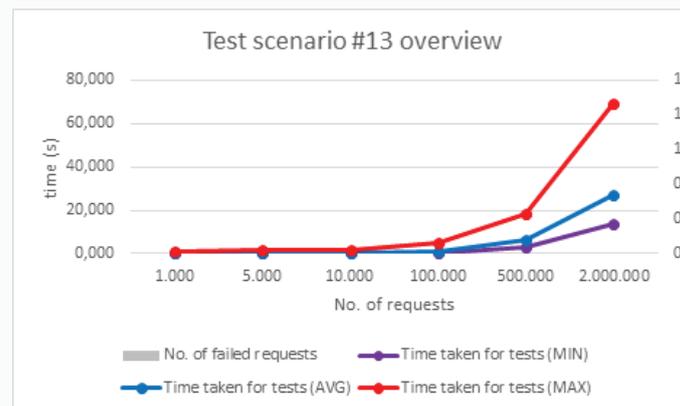
### Results



Example of the result on the front-end part of the platform



Example of the result on the back-end part of the platform (complex operation)



Example of the result on the back-end part of the platform (static cached file)

Thanks to the experiment we conducted within Fed4FIRE, Castoola platform will be able to serve as many as needed end-users with rich interactive TV services and will make old-fashioned linear TV more attractive and targeted, in the future.

