

# Automating Performance Testing over the Cloud with *CLIF* and *ProActive* Workflows & Scheduling



Bruno Dillenseger - Orange Labs

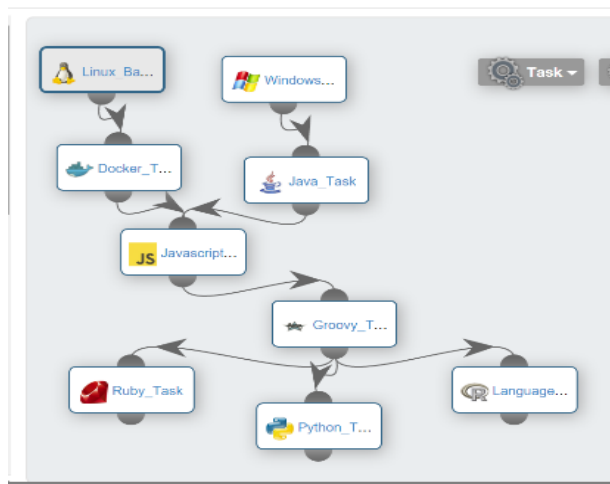
Brian Amedro, Denis Caromel, Laurent Pellegrino – ActiveEon SAS

**CW2** Member since ... *its creation*



**ActiveEon**  
SCALE BEYOND LIMITS

**Products:** *ProActive*   
*Parallel Suite*



**Data Processing  
Workflows  
& Parallelization**

Portal ▾ Admin ▾ Help ▾ Submit job Logout pa1750

Jobs list

Id	State	User	Progress
176	Running	pa1750	1 / 9
175	Running	pa1750	1 / 9
174	Finished	pa1750	10 / 10
173	Finished	pa1750	5 / 5
172	Finished	pa0651	8 / 8
171	Finished	pa0651	0 / 0

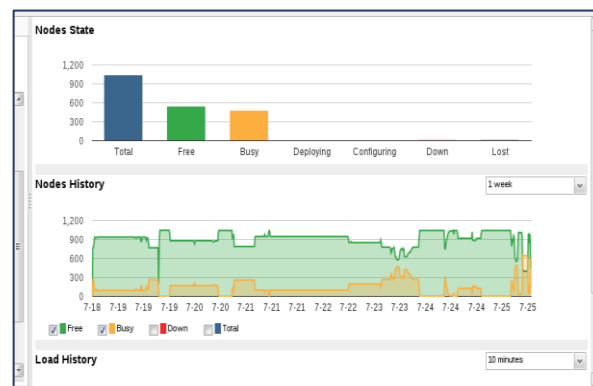
Details

Tasks Visualization Users Statistics Usage

Python...



**Scheduling &  
Orchestration**



**Deployment &  
Resource  
Management**



## Locations

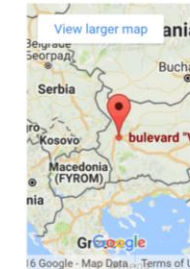
Sophia-  
Antipolis,  
France



San José,  
USA



Sofia,  
Bulgaria



London,  
UK



Paris,  
France



Lyon,  
France



## Some Customers

IT

Engineering

BioTech, Health

Finance, Media, IoT...



amadeus



AXISPOINT  
HEALTH

LA FRANÇAISE AM  
Investing together



McKESSON



L'ORÉAL



AIRBUS  
AN EADS COMPANY



JOYGLOBAL

# Fully automated performance testing

## → What for?

- Performance testing in Continuous Integration
- Continuous testing of User Quality of Experience

## → With which computing resources?

- preferably on-demand resources allocation for cost issues
- from the cloud (dedicated or shared)
- from the team workstations (community cloud)

## → With which features?

- Workload generation and performance measurements
- Resources management
- Test deployment orchestration
- Testing, reporting and alerting automation

# An OW2-powered solution

## → OW2 technologies

- CLIF
  - Workload generation and performance measurements
- ProActive Workflows & Sheduling
  - Computing resources management
  - Test deployment orchestration

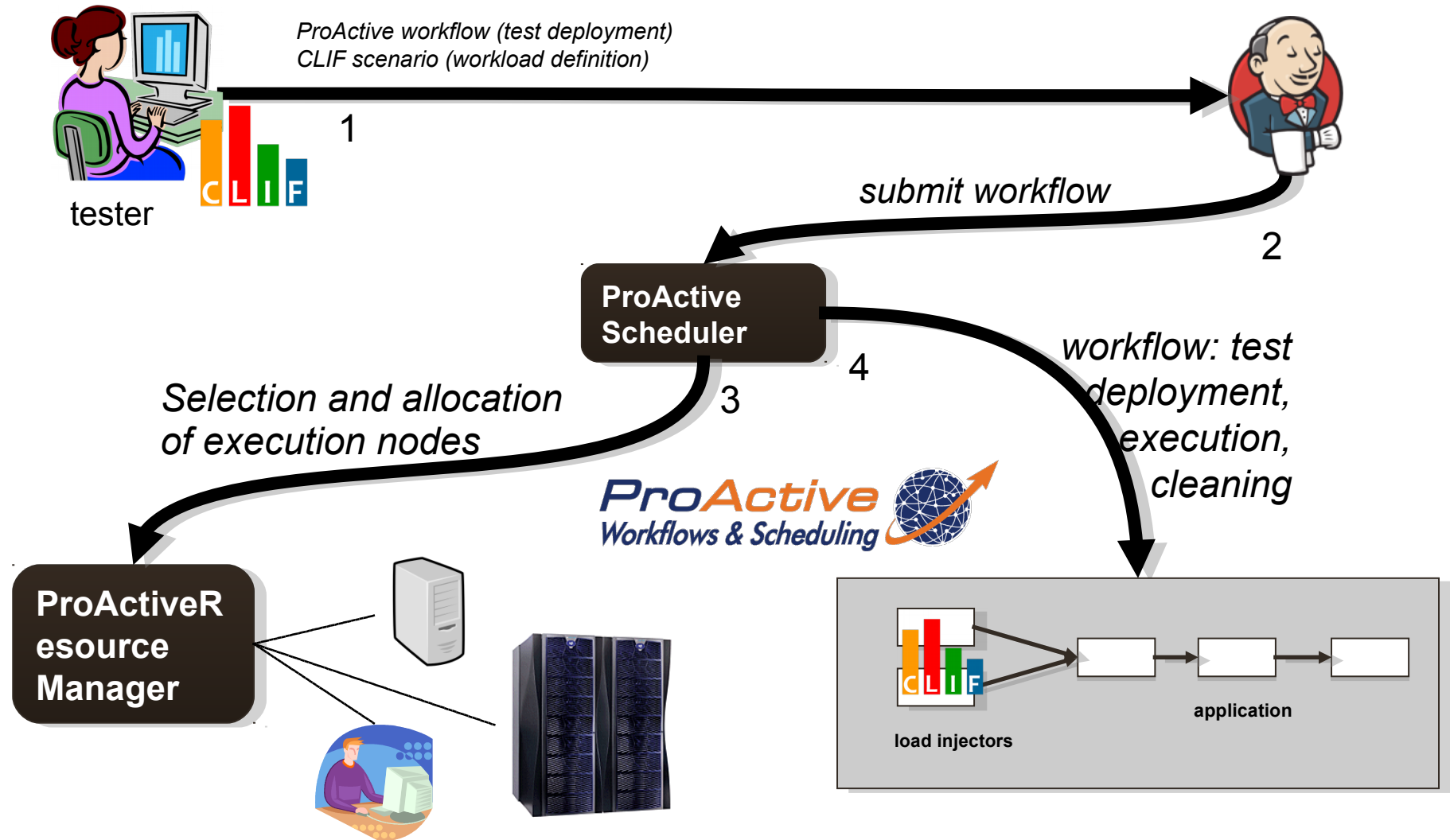


## → Jenkins

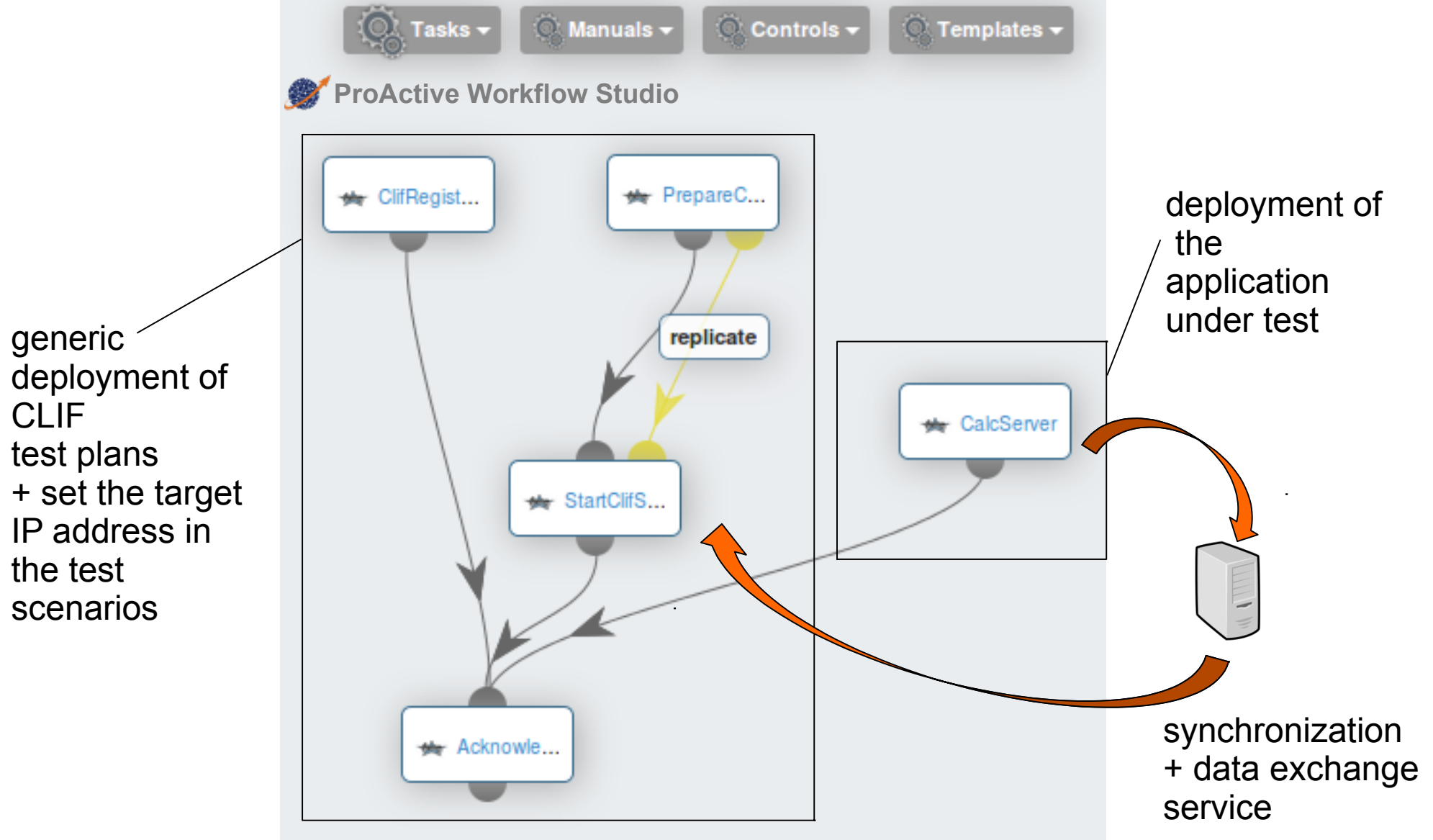
- Testing, reporting and alerting automation
- Performance report including trends with CLIF plug-in



# Overall process



# Test deployment workflow



# It's time for conclusion...

## → Benefits

- integrated solution for automated performance testing and monitoring
  - computing resources management
  - deployment-configuration-execution workflow
- write configuration scripts with your favorite languages
  - Ruby, Python, Goovy, javascript, bash...
- while benefitting from a user-friendly workflow editor

## → Limitation and achieved solution

- workflow tasks need to synchronize and exchange configuration data  
=> we enriched the Scheduler with a synchronization service (  
<https://github.com/ow2-proactive/>)

## → References

- CLIF <http://clif.ow2.org>, ProActive <http://proactive.ow2.org>
- Jenkins <http://jenkins.io>