ProActive Cloud Automation: Workflow, Scheduling & Orchestration
Use Case: Finance Machine Learning with Docker and Language R
A leading edge HPC & Cloud editor since 2007

- **1999**: INRIA research team creation
- **2003**: First developments on ProActive
- **2007**: ProActive get into the OW2 Open Source community
- **2010**: Creation of ActiveEon as an INRIA spin-off, Strong software IP
- **2012**: R&D for Product Development
- **2014**: First Production Customers and Partnerships
- **2014**: Fund raising for commercial development
Products & Solutions
Innovative Technology

**Cloud & Grid IaaS**

**Scheduling & Orchestration**

**Workflow & Distribution**
Key Benefits

- Business agility with automation and auto-scaling
- Accelerate application deployment and execution
- Save on IT and administration costs

At a glance

With ActiveEon’s Cloud solution, automate the deployment of complex multi-VMs applications. You simplify self-service deployment, as well as automate the delivery of in production services. You set and control application elasticity with automated scaling-up and down, horizontally and vertically. Once you define the service deployment, you are able to deploy anywhere with workflow reversibility. With unified cloud management, applications execute on multi-vendor private, public and hybrid clouds.
ProActive Cloud Automation

- Automatic Deployment of Many Vms Applications
- Synchronization of Composite Services
- Monitoring (Physical, Virtual, Functional)
- Auto-Scaling
- Multi-Cloud Management with Bursting
- Reversibility (e.g. VMware ⇔ OpenStack)
Workflow Designer Studio
Available directly in SaaS
Design, Run and Optimize your computational workflows
Use Case: Finance Machine Learning with Docker and R Language
Use Case:
Finance Machine Learning with Docker and R Language

- SaaS Workflow design
- Integrated fast deployment in Docker containers

Use Case:

- Machine Learning application
- Using the Statistical R Language:
  - SVM classification (Support Vector Machine) in a financial context
- Predicts next month S&P500, Standard & Poor's 500, stock market index
Use Case: Finance Machine Learning with Docker and Language R

1. Design the Workflow:
Use Case: Finance Machine Learning with Docker and Language R

2. Launch it on the Scheduler
Use Case:
Finance Machine Learning with Docker and Language R

3. See and Monitor Execution
Use Case:
Finance Machine Learning with Docker and Language R

4. Automatically get the results where you want it
Tackling the next challenge: Automation of Application in the Cloud
Workflow, Deployment, Scheduling, Maintenance, …

Thanks for your attention!
Key Benefits

- Business agility with automation and auto-scaling
- Accelerate application deployment and execution
- Save on IT and administration costs

At a glance

With ActiveEon’s Cloud solution, automate the deployment of complex multi-VMs applications. You simplify self-service deployment, as well as automate the delivery of in production services. You set and control application elasticity with automated scaling-up and down, horizontally and vertically. Once you define the service deployment, you are able to deploy anywhere with workflow reversibility. With unified cloud management, applications execute on multi-vendor private, public and hybrid clouds.
Key Benefits

- Federate resources and control computations
- Accelerate computation and improve productivity
- Save on IT and administration costs

Overview

ProActive Workflows & Scheduling allows you to **easily execute all your company jobs** and business application, monitor activity and quickly access job results. Allowing your IT to **scale up and down according to your actual workload**, it will ensure the optimal match between disponibility and cost. It ensures more work done with fewer resources, managing heterogeneous platforms and multiple sites with advanced usage policies. Thanks to its flexibility, ProActive Workflows & Scheduling will help you for any expansion, federation and integration project.
Key Benefits

- Accelerate application deployment and execution
- Save on license costs
- Save on IT and administration costs

At a glance

With ProActive Parallel Scientific Toolbox, you can accelerate your scientific and statistical computations. As modern scientific and engineering problems grow in complexity, the computation time and memory requirement increase and parallel computing becomes a necessity. ProActive integrates with de-facto standards in scientific and engineering environments such as Matlab, Scilab and R. Directly from within these familiar environments, it provides users with the capacity to parallelize executions and manage data transfers on other Desktop machines, Clusters, Grids and Clouds. A single tool for accelerating all your scientific languages.
Contacts

Denis Caromel, CEO
Denis.Caromel@ActiveEon.com
+33 9 88 77 76 69
+33 6 76 87 54 09

Contact
ActiveEon
2000, Route des Lucioles
Les Algorithmes - Pythagore B
06560 Sophia Antipolis
FRANCE

Tel: +33 (0) 9 88 77 76 60
Fax: +33 (0) 9 88 77 76 61
eMail: contact@activeeon.com

www.activeeon.com