



SPACE4Clouds: a DevOps Environment for multi-Clouds Applications



Motivation

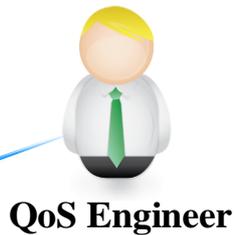
- Applications have grown in size and scope
- The rise of Cloud computing
- Need for quality-assurance
- DevOps philosophy



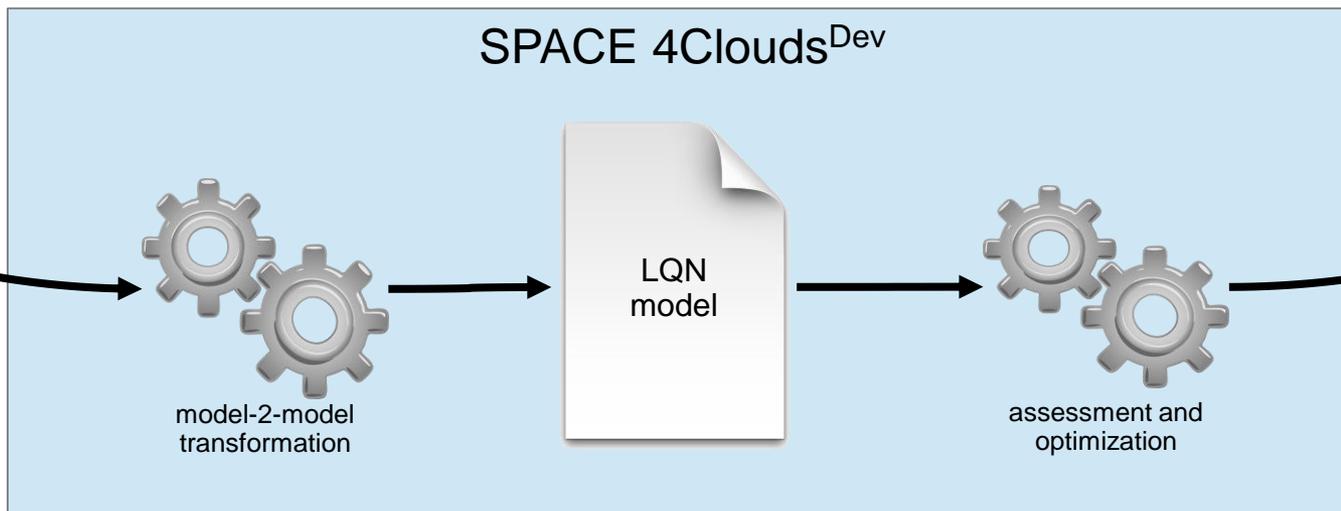
SPACE 4Clouds

- What is SPACE 4Clouds?
- The MODAClouds project
- Composed of two main tool
- Developed in Java under Apache 2.0 license

SPACE 4Clouds^{Dev}

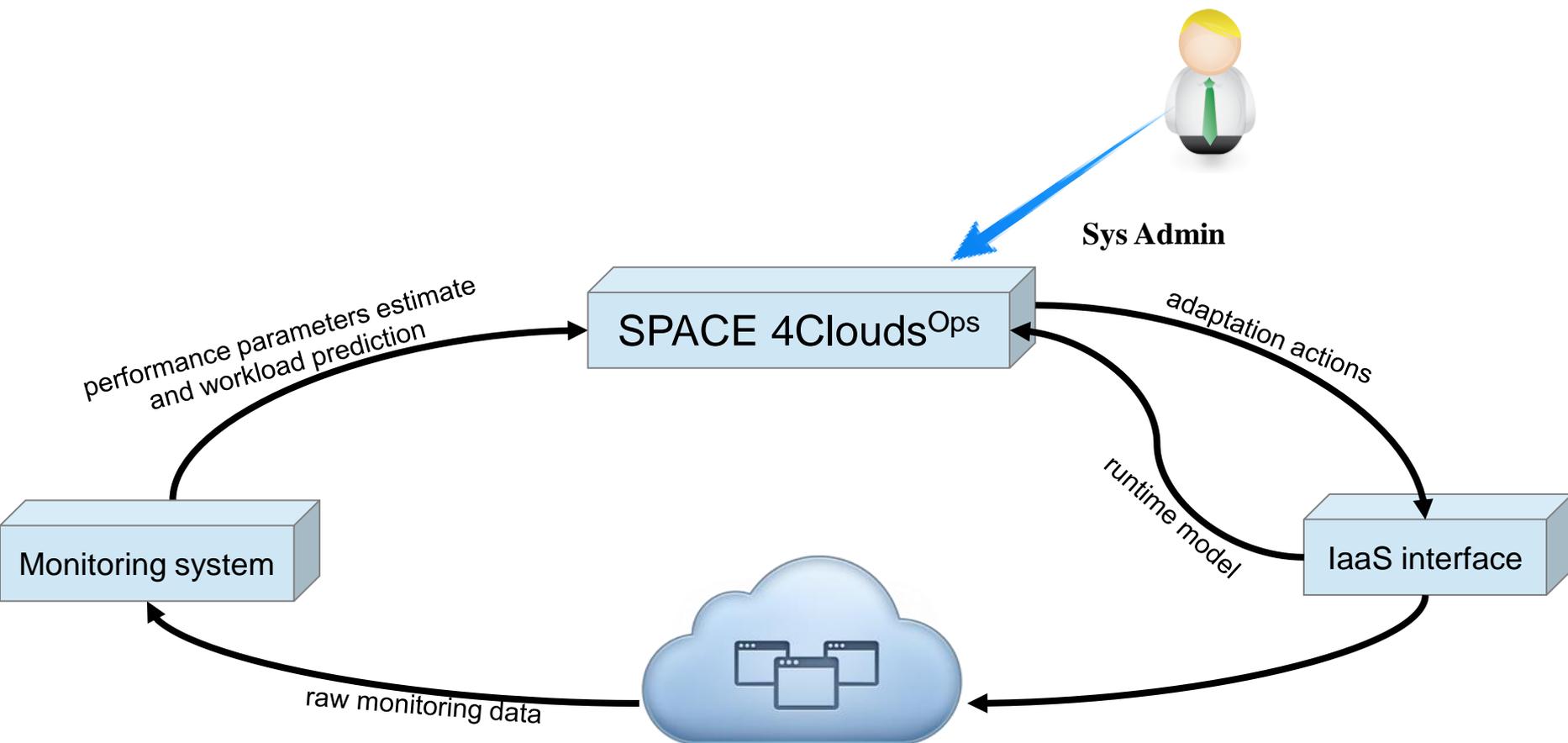


application model
in extended
PCM format

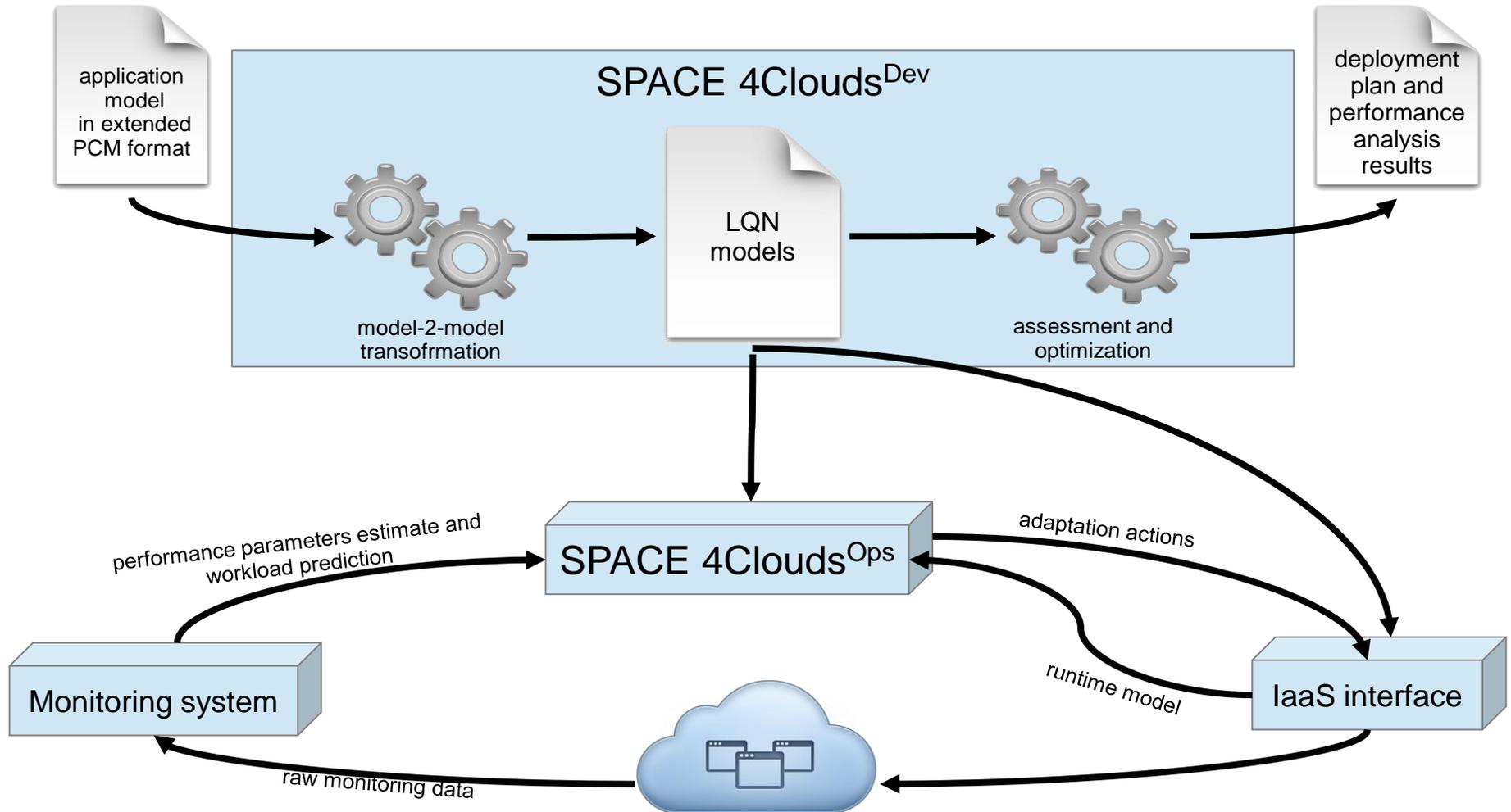


deployment plan and
Performance
analysis
results

SPACE 4Clouds^{Ops}

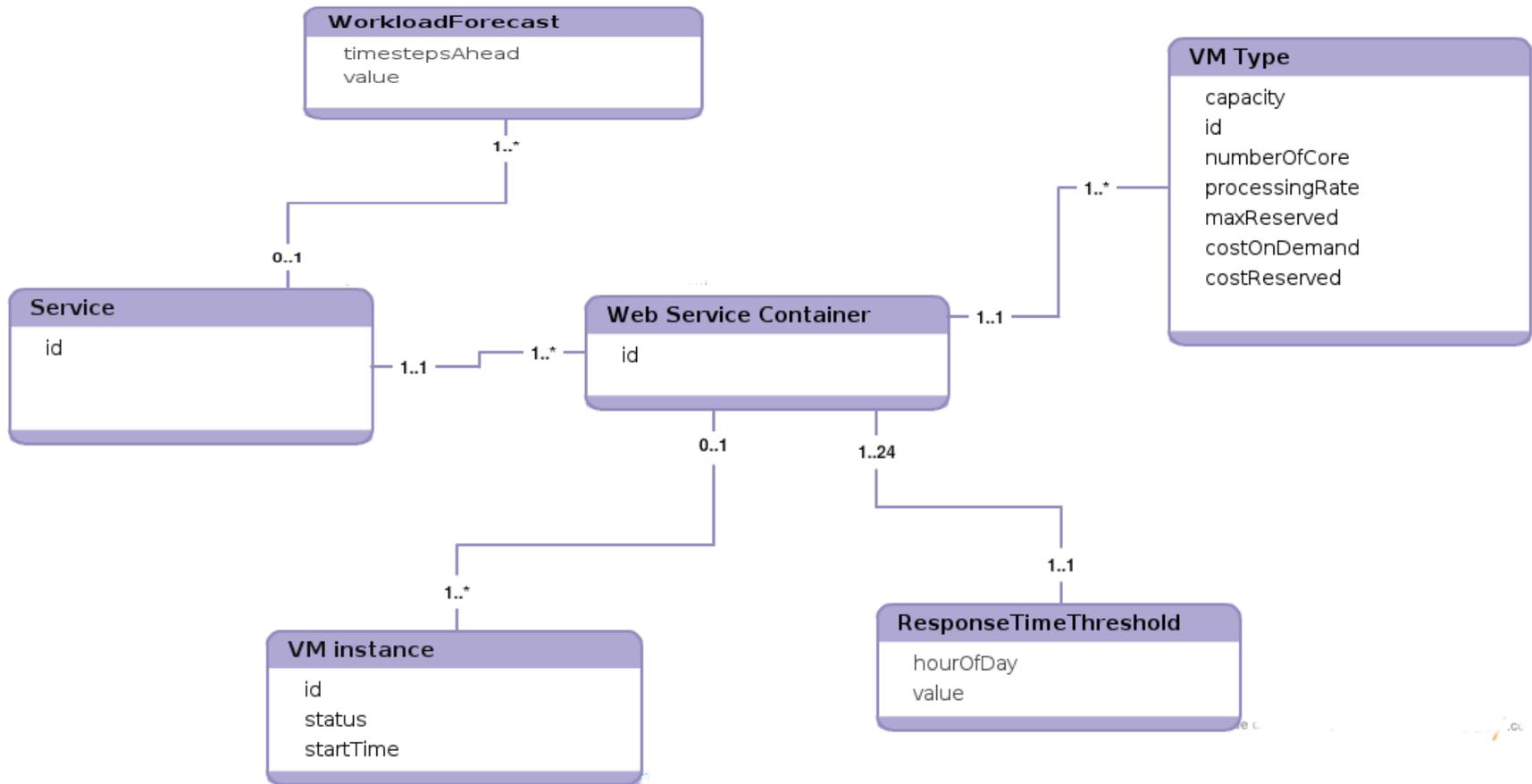


DevOps Environment

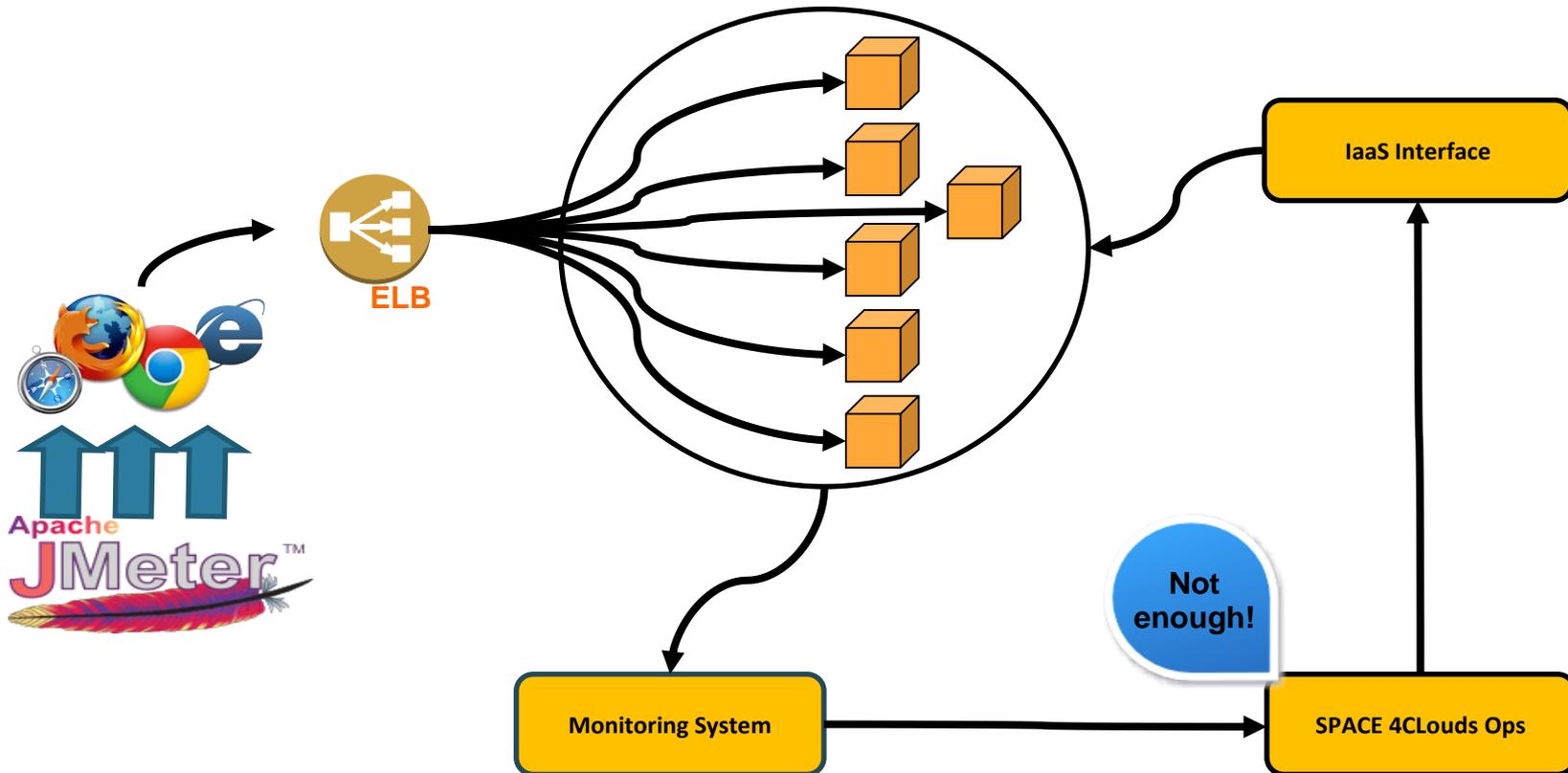




The adaptation model

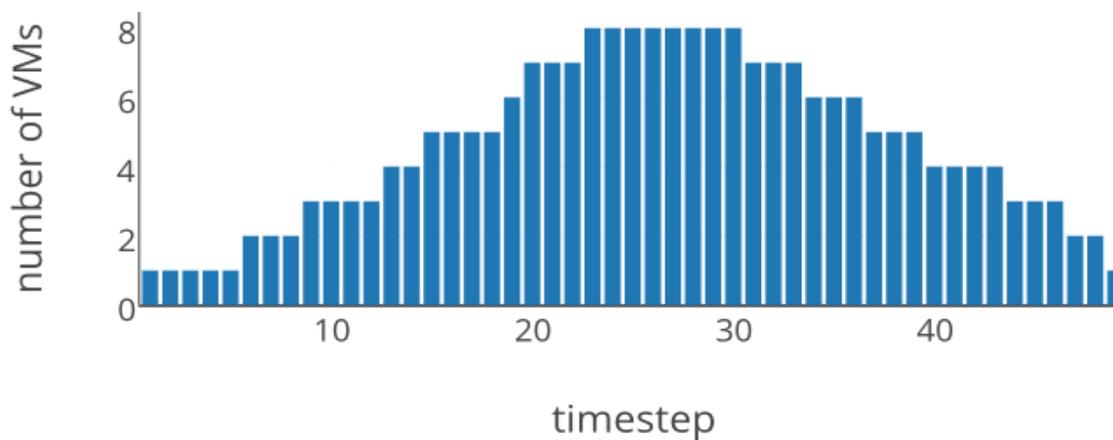
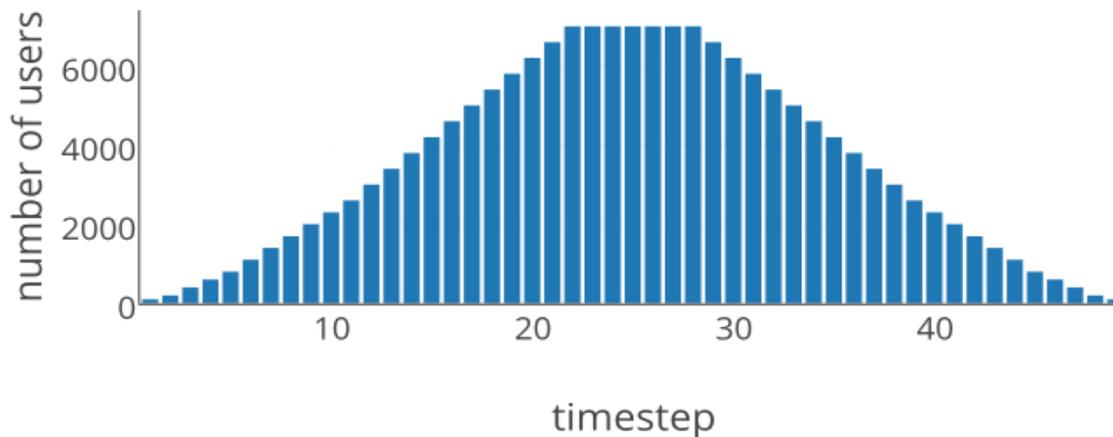


Design of the Experiments





Proof of Effectiveness





Conclusion and future works

- A joint DevOps environment for quality-aware Cloud applications
- Future works:
 - 1) More performance analysis
 - 2) Management of PaaS platforms and multi-Cloud applications
 - 3) Feedback mechanism
 - 4) Toward the DICE project



Request for feedback & a provoking question

- How to correctly set up multiple components time-scales?
- Is Cloud just Ops? How much do design time decisions impact on runtime performance and costs?

Q&A

