



# 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



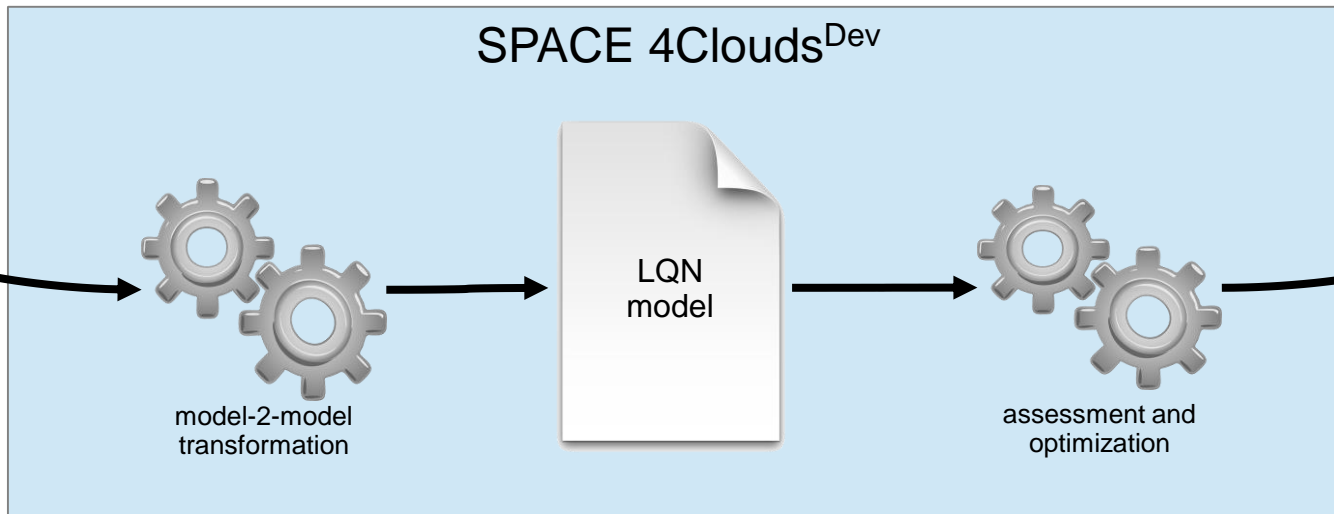
# SPACE 4Clouds

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

# SPACE 4Clouds<sup>Dev</sup>

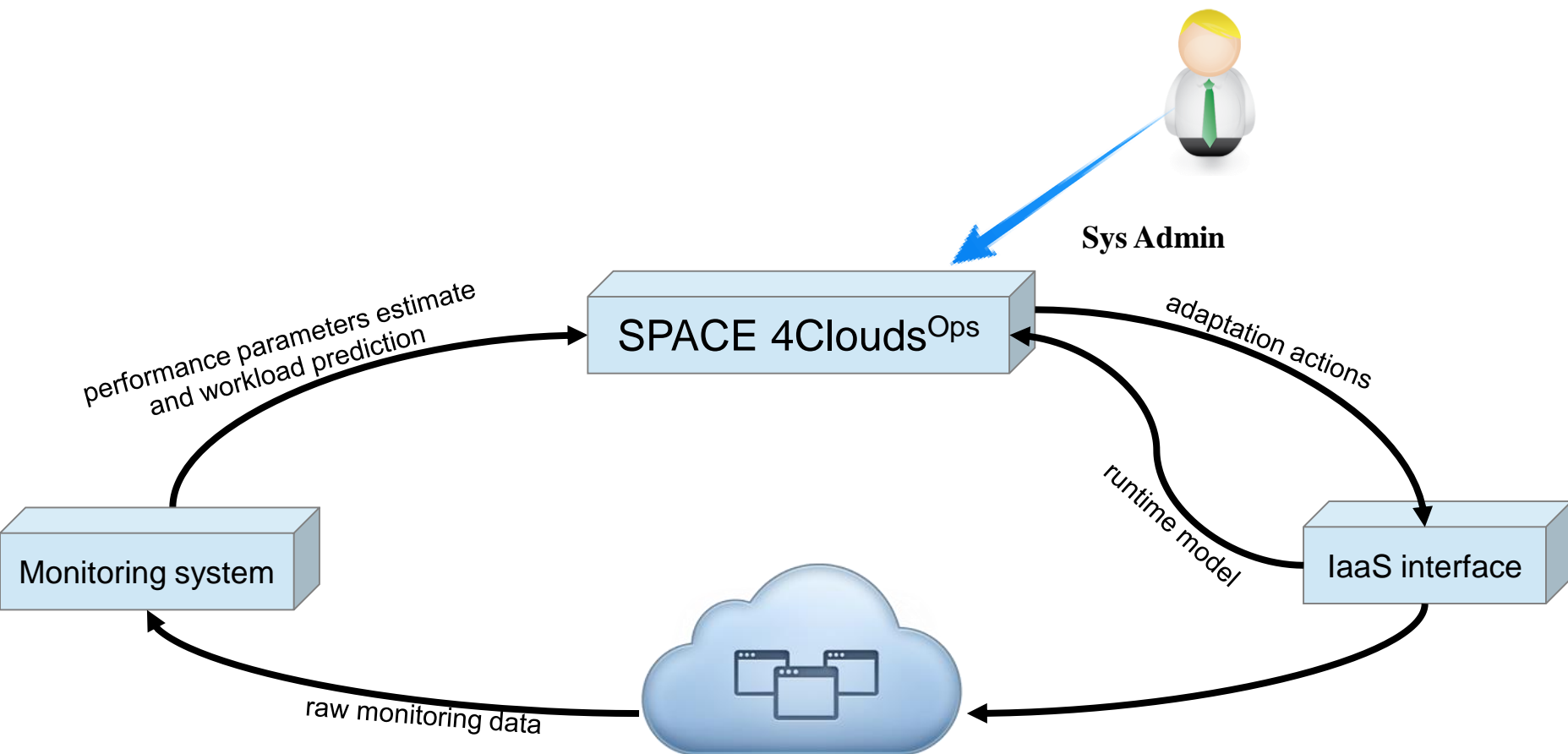


application model in extended PCM format

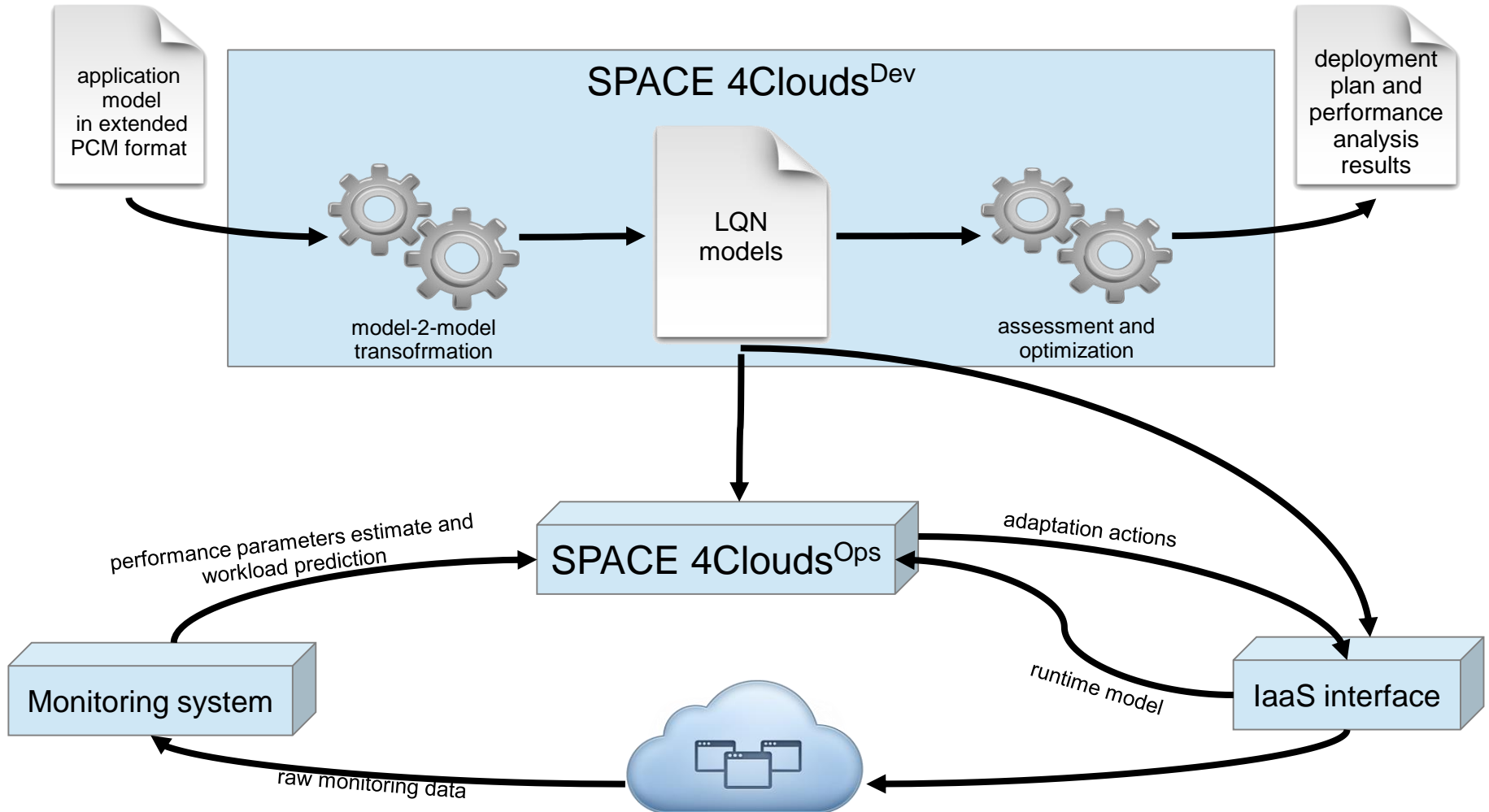


deployment plan and Performance analysis results

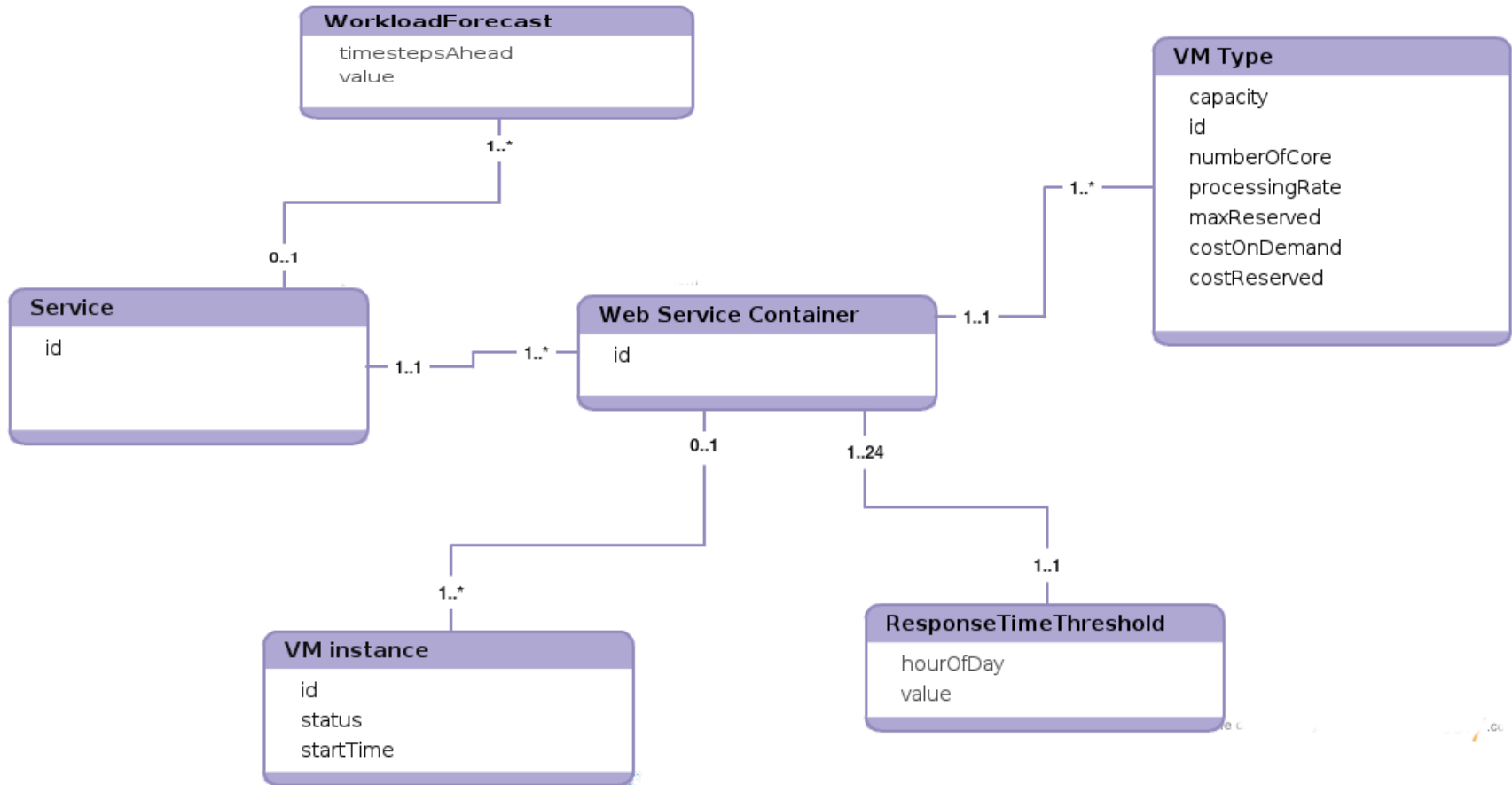
# SPACE 4Clouds<sup>Ops</sup>



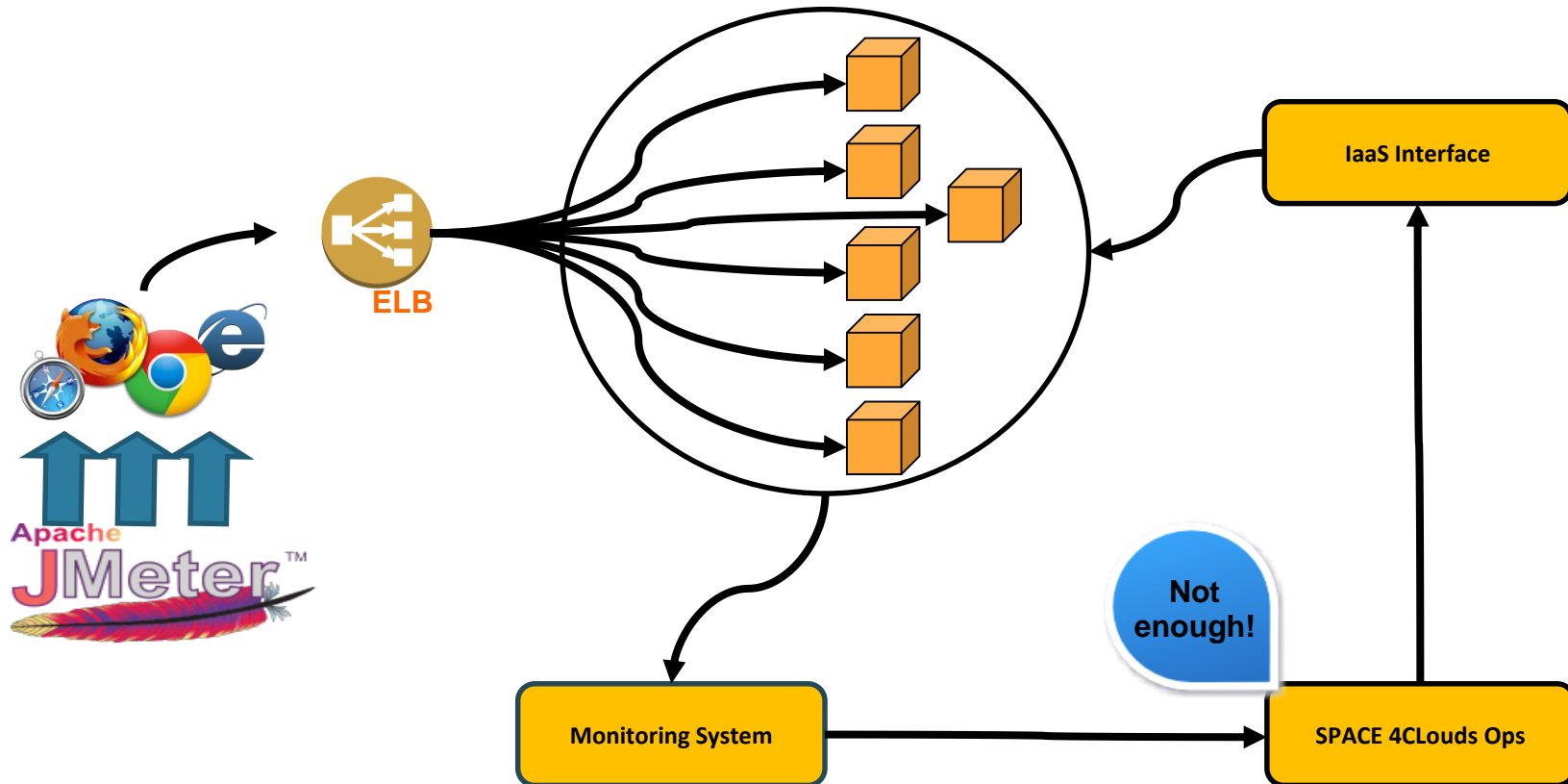
# DevOps Environment



# The adaptation model



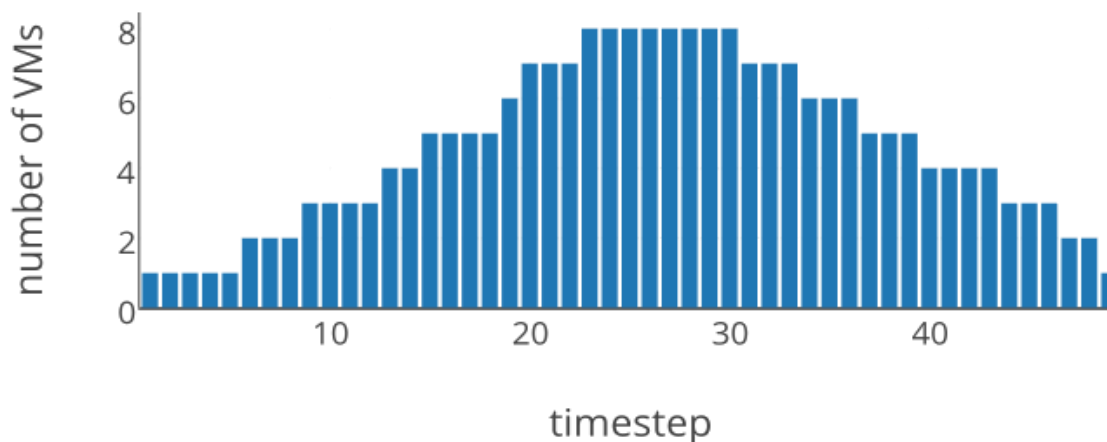
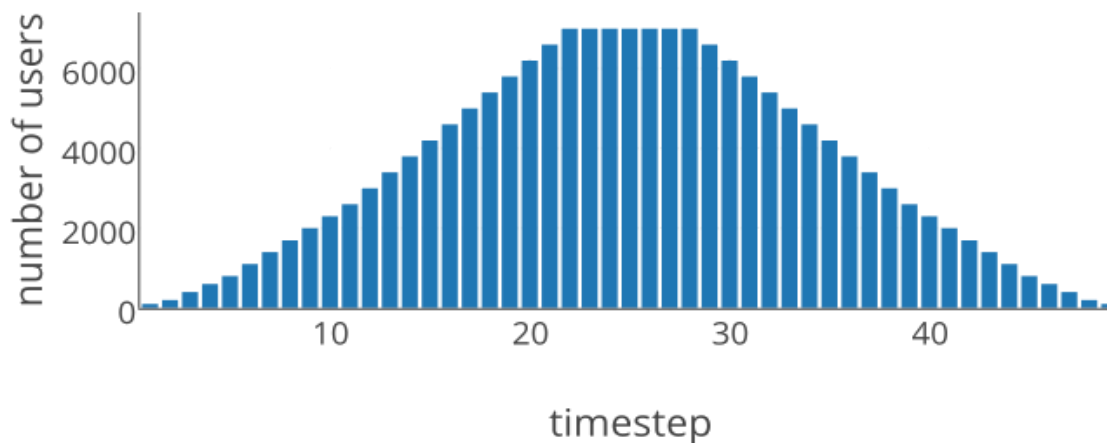
# Design of the Experiments







# 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

