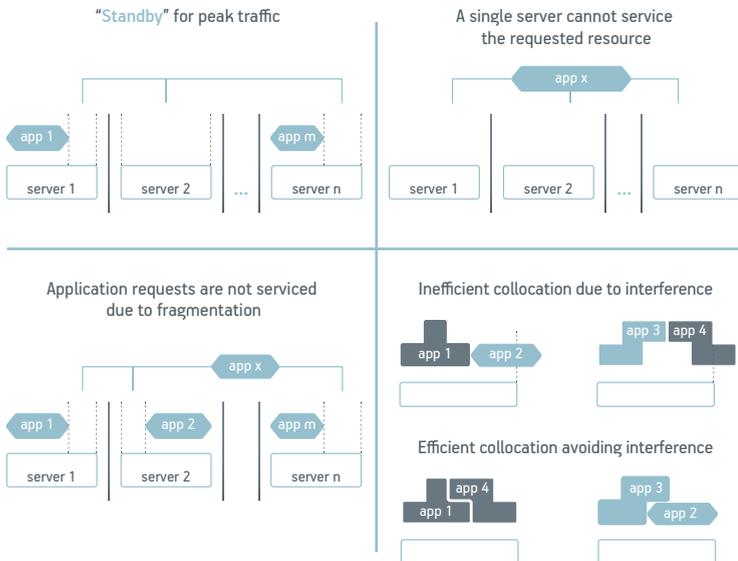


ACTiCLOUD in a nutshell

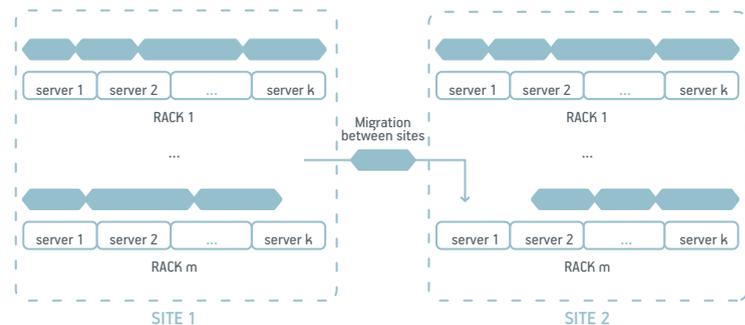
- > ACTiCLOUD is motivated by the severe resource inefficiency in the cloud
- > Targets at least 1.5 improvement in resource utilization by:
 - pooling resources at the rack scale
 - enforcing effective application collocations
 - enabling resource management across geographically distributed cloud sites
- > Works across the entire stack from the hypervisor up to the database engine to deliver cloud resources to large, in-memory databases

The problem: resource inefficiency in the cloud



The ACTiCLOUD approach

- > Breaks the two critical barriers that hinder fluidity of cloud resources today
 - the server barrier
 - the data center barrier
- > Utilizes European technology provided by NUMASCALE and KALEAO for hardware-assisted resource disaggregation.
- > Extends OnApp's MicroVisor to pool resources at the rack scale



ACTiCLOUD service offer

- > Resource efficiency at three levels:
 - Rack level
 - Cloud-site level
 - Cross-site
- > Cloudification of in-memory databases (MonetDB, Neo4j)
- > Enhanced services for IaaS, PaaS & DBaaS providers

CONSORTIUM



CONTACT PERSON:
Prof. Nectarios Koziris
Dr. Georgios Goumas
WWW.ICCS.GR



CONTACT PERSON:
Dr. Julian Chesterfield
WWW.ONAPP.COM

NUMASCALE

CONTACT PERSON:
Einar Rustad
Atle Vesterkjær
WWW.NUMASCALE.COM



CONTACT PERSON:
Prof. John Goodacre
WWW.KALEAO.COM



CONTACT PERSON:
Dr. Jim Webber
WWW.NEO4J.COM



CONTACT PERSON:
Prof. Dr. Martin L. Kersten
Dr. Ying Zhang
WWW.MONETDB.ORG



CONTACT PERSON:
Dr. Mikel Lujan
Dr. Christos Kotselidis
WWW.MANCHESTER.AC.UK



CONTACT PERSON:
Prof. Erik Elmroth
WWW.UMU.SE

CONTACTS

Project Coordinator: Prof. Nectarios Koziris, nkoziris@cslab.ece.ntua.gr › www.acticloud.eu
Scientific Manager: Dr. Georgios Goumas, goumas@cslab.ece.ntua.gr › twitter.com/ACTiCLOUD



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ACTiCLOUD: ACTivating Resource Efficiency
and Large Databases in the CLOUD

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