

Program 8th Cloud Control Workshop

Lövånger, Sweden February 1 – 3, 2016

Monday February 1		
10.00	Arrival at Lövånger kyrkstad – Coffee	
10.30	Workshop introduction, overview of the project, survey of ongoing and completed projects/papers Erik Elmroth, Umeå University, Karl-Erik Årzén och Maria Kihl, Lund University	
12.00	Lunch	
	Session Chair: Anders Robertsson	
13.00	 A wrap up on research done within the architecture community on Cloud Control research performed in the cloud community in parallel to the cloud control project relevant topics in cloud robotics Ahmed Ali-ElDin, Umeå University 	
13.25	Discussion 1: What are today's hot topics in clouds and at Ericsson? Brainstorming for topics, e.g., for potential new proposal <i>Johan Eker, Lund University, Erik Elmroth, Umeå University.</i>	
14.30	Scientific speed dating 1	
15.00	Coffee	
15.30	Discussion 2: How to use feedforward in cloud control? Karl-Erik Årzén, Lund University	
16.30	Team building activities	
19.00	Dinner	

Non-scheduled sessions:

- The schedule is deliberately done with a single track to leave room for additional planned or spontaneous sessions to be organized in parallel, i.e., for work in ongoing projects or to initiate new collaborations.
- People formally involved in WASP will have one such parallel session, preliminary on Tuesday at 13.00

Tuesday February 2		
	Session Chair: Karl-Erik Årzen	
8.15	Discussion 3: Introduction to Calvin and a Telco cloud testbed followed by discussion Johan Eker, Ericsson	
9.15	Scientific speed dating 2	
9.45	Coffee	
Session Chair: Maria Kihl		
10.15	Network bandwidth allocation for geo-replicated services - a control perspective Jonas Durango, Lund University	
10.30	System dynamics for Telco-cloud Amardeep Mehta, Umeå University	
10.45	Discussion 4: Decentralized resource allocation in datacenters and telco clouds Martina Maggio, Lund University and Amardeep Mehta, Umeå University	
12.00	Lunch	
Session Chair: Martina Maggio		
13.00	Dead-time compensated elasticity control Manfred Dellkrantz, Lund University	
	Using Dynamic Voltage Frequency Scaling and CPU Pinning for Energy Efficiency in Cloud Computing	
	Jakub Krzywda, Umeå University	
	Three Pieces of Ongoing Work Zheng Li, Lund University	
	Data-driven Latency Prediction for Web Services Olumuyiwa Ibidunmoye and Abel Souza, Umeå University	
14.00	Discussion 5: Analytics for cloud service and infrastructure management Olumuyiwa Ibidunmoye, Umeå University	
15.00	Coffee	
15.30	Discussion 6: How to work in the CC-project, routines and approaches for better collaborations Erik Elmroth, Umeå University	
16.30	Team building activities	
19.00	Dinner	

Wednesday February 3
Session Chair: Cristian Klein
Trends and research problems in HPC Gonzalo Rodrigo, Umeå University
Development of a Hybrid Resource Manager for HPC Abel Souza, Umeå University
Composition of services with buffer and deadline constraints: the Cloud use case Victor Millnert, Lund University
Discussion 7: Scheduling of workflows with deadline constraints Ewnetu Bayuh Lakew and Gonzalo Rodrigo, Umeå University
Coffee
Session Chair: P-O Östberg
State-of-the-Art in reducing tail latency? Ahmed Ali-ElDin, Umeå University
Discussion 8: Reproducible experiment design Cristian Klein, Umeå University
Discussion 9: Representative Experiment design. Are our results relevant? Ahmed Ali-ElDin, Umeå University
Lunch
Session Chair: Erik Elmroth
Discussion 10: New challenges and possibilities by moving from VMs to containers <i>Cristian Klein, Umeå University</i>
Concluding remarks Erik Elmroth, Umeå University
Coffee
Departure for participants from Lund