



Action IC0804

Energy Efficiency in Large Scale Distributed Systems
Budapest, Hungary, May 19th 2011
8:00 – 16:00

8:00 Welcome to participants / Registration

8:30 Introduction by Jean-Marc Pierson, Chair of the Action (15mn)

8:45 Working Group 1: State of the art and continuous learning of hardware adaptation possibilities

- Presentation of the WG1 Brochure on “Hardware Leverages for Energy Efficiency in Large Scale Distributed Systems”, Georges Da Costa, Davide Careglio, WG1 Chairs (10mn)
- TBA (20mn)

9:15 Working Group 2: Characterization of energy consumption and energy efficiency

- Introduction, Alberto E. Garcia, Karin A. Hummel, WG2 Chairs (10mn)
- Giuseppe Anastasi, Italy: A WSN-based Testbed for Energy Efficiency in Buildings (20mn)
- Michal Witkowski, Poland: Power Consumption Estimation for Real Life HPC Applications (20mn)
- Helmut Hlavacs and Thomas Treutner, Austria: Migration of Virtual Machines: Performance and QoS (20mn)
- Alberto E. Garcia, Spain: Energy consumption efficiency over virtualized multi-access environments (20mn)

10:45 Break

11:15: Working Group 3: Adaptive actions for distributed systems

- WG3 news. Laurent Lefèvre and Hermann De Meer, WG3 Chairs (5 mn)
- Ivona Brandic, Austria : Time shared VMs and monitoring of time shared VMs (20mn)
- Jean-Marc Pierson, France : Impact of DVFS on job placement (20mn)
- Paolo Monti, Sweden : Green Lightpath Provisioning in Resilient WDM Networks with Resources in Sleep Mode (20mn)

12:20 Lunch



13:45 WG3 Continuation

- Emrah Cem, Turkey: Power aware hierarchical epidemics in P2P systems (20mn)
- Florian Niedermeier, Germany : Energy-Efficient Resource Management Based on Power Consumption Models (20mn)
- Stéphane Vialle, France : Energy optimization of distributed computations on GPU clusters (20mn)

14 :45 : Working Group 4 : Characterization of performance-energy saving trade-off

- WG4 news. Rastin Pries and Tuan A. Trinh, WG4 Chairs (10 mn)
- István Gódor from Ericsson Research, Budapest, Hungary: The FP7 EARTH Project (20mn)
- Raffaele Bolla, Italy: Greening wired networks: the Econet FP7 project and current works (20mn)

15:35 Focus Groups Presentations

Presentations of the Focus Groups of the COST Action: 5 mn each

FG on Green Wireless: Karin A. Hummel, Rastin Pries

FG on Energy and QoS-aware Workload Management in Clouds : Ivona Brandic, Eugen Feller

FG on Computing and Energy Optimisation using CPUs and GPUs : Stéphane Vialle

FG on Wired Green Networks : Lars Dittmann, Chris Philipps and Laurent Lefèvre

16:00 Closure and End of Workshop

16:30 Management Committee meeting

Friday, May 20th 2011.

8:30 – 10:30: Focus Group on Green Wireless

Introduction to the FG : Karin A. Hummel and Rastin Pries

Carmela Comito, Italy: An energy-aware clustering scheme for mobile networks

Torsten Braun, Switzerland: Solar-powered wireless mesh networks for environmental monitoring

Giuseppe Anastasi, Italy: Energy conservation in static and mobile WSNs

Karin Anna Hummel, Austria: Energy-efficient Wireless Mesh Networks utilizing client mobility prediction

10:30: Break

11h – 11h20: Focus Group on Computing and Energy Optimisation using CPUs and GPUs

Introduction to the FG : Stéphane Vialle

11:20 – 13:00: Focus Group on Energy and QoS-aware Workload Management in Clouds

Introduction to the FG : Ivona Brandic and Eugen Feller.

Helmut Hlavacs and Thomas Treutner, Austria: Privacy Risks for Virtual Machines in a Cloud

Sonja Klingert, Germany: Green SLA and Energy Efficient Scheduling

Sebastien Lafond, Finland: System Level Power Management for Web Clusters

Ivona Brandic, Austria: Knowledge Management in Energy-Efficient Clouds