IFIP Workshop on Dependability of Large-Scale and Dynamic Systems

Fabíola Greve & Paulo Veríssimo

53nd Meeting Working Group 10.4 - Dependability and Fault Tolerance

21-25 February, Natal - Brazil

Why dynamic systems ?

- Modern applications
- P2P, Grids, Overlay Nets, Manets, Sensor Nets, …
- Dynamism, self-organization, self-scaling, decentralization, mobility
- Dynamic x Static
  - A new model with many challenges more restrictions more uncertainties more faults

Many challenges

- What models ?
- What kind of consistency requirements can be ensured ?
- How to deploy services and data in order to achieve high availability and better utilization of peer capacities ?
- How to find the services and data ?
- How to build efficient and secure mechanisms ?
- How can applications adapt themselves to the instability and inherent dynamism of the system ?

Program
Day 1

- Reliability in Dynamic and Self-Organizing Systems (Moderator: Luca Simoncini)
  - Roberto Baldoni, Univ. Roma La Sapienza, Italy
  - Michel Raynal, IRISA, France
- Software Adaptability (Moderator: Kishor Trivedi)
  - Thaís Batista, UFRN, Brazil
  - Rick Schlichting, AT&T, USA
- Large Scale, Storage and Content Distribution (Moderator: Henrique Madeira)
  - Elias Procópio Jr., UFPR, Brazil
  - Francisco Brasileiro, UFCG, Brazil
  - David Powell, LAAS, France

Program
Day 2

- Trust Management and Security (Moderator: Takashi Nanya)
  - Marinho Barcellos, Unisinos, Brazil
  - Ricardo Dahab, UNICAMP , Brazil
- Dependability X Adaptability (Moderator: Jean Arlat)
  - Raimundo Macêdo, UFBA, Brazil
  - Antonio Casimiro, University of Lisboa, Portugal
- Applications and Test (Moderator: Eliane Martins)
  - Ana Cavalli, INT, France

Structure

- Presentations in sequence (45 min.)
- Discussions at the end of each session (15 min.)
- At the end of the workshop
  - Wrap up with synthesis made by moderators and conclusions

Why a so large spectrum ?

- A lot of assumptions common to all those systems
- Problems and responses can be common