4th International Workshop on Net-Centric Computing

Sept. 25, 2005; Budapest, Hungary

NCC 2005

Middleware: The Next Generation

Welcome!

www.NetCentricComputing.org/2005

Workshop Organizers

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Net-Centric Computing

- The underlying principle of Net-Centric Computing (NCC) is a distributed environment where applications and data are downloaded from servers and exchanged with peers across a network on as as-needed basis

- NCC is an ongoing area of interest to a wide-variety of software engineering researchers and practitioners, in part because it is an enabling technology for modern distributed systems (e.g., Web applications)

Net-Centric Computing …

- Knowledge of NCC is an essential requirement in architecting, constructing, and evolving the complex software systems that power today's enterprises
- NCC is an exciting, dynamic, and interdisciplinary research area

NCC Workshop Background

- NCC '97: Held w/STEP '97 in London
- NCC '98: Held w/IRIS meeting in Toronto
- NCC 2001: Held w/ICSE 2001 in Toronto
  Theme: *Migrating to the Web*

- NCC 2005:
  - Held w/STEP 2005 in Budapest
  - Theme: *Middleware - The Next Generation*
  - Includes papers from PRDS 2005

Middleware and NCC

- A key component of NCC technology is middleware - the "glue" that connects disparate components in a heterogeneous environment across a network

- In an NCC context, middleware functionality informs the decisions made by all stakeholders, since applications must be engineered within the constraints of the available technology

Middleware and NCC ...

- As NCC applications become more pervasive, the need for new developments in middleware technology becomes apparent

- The unique requirements of today's NCC operational environment, such as the need to incorporate security policies across all aspects of the system, expose gaps in current offerings

- The identification of such shortcomings in turn provides opportunities for novel developments in the area in the coming years

Workshop Topics

- Recent developments and emerging trends in NCC technology
- The state of thin-client computing
- Gap analysis of current middleware
- Empirical studies of middleware as an enabling technology for NCC applications
- Forecasts for new directions in NCC and middleware in the coming years

Workshop Goals

- Produce a roadmap for middleware in an NCC context for the next five years

- Continue momentum in the community
- Foster information exchange
- Identify research opportunities

- Have fun! ☺

Workshop Program

10:15am – 10:30am	**Welcome** Scott Tilley (Florida Institute of Technology, USA) Kostas Kontogiannis (University of Waterloo, Canada)
10:30am – 11:30am	**Session 1** • *Integration of Perspectives and Issues of Different Types of Stakeholders in Service Oriented Architecture* Dennis Smith (Carnegie Mellon Software Engineering Institute, USA) • *Knowledge Sharing in Multi-Layer P2P Networks* Paraskevi Raftopoulou (Technical University of Crete, Greece) • *Towards Developing Grid Middleware for Software Evolution* Hongji Yang (De Montfort University, UK) • Open Discussion
11:30am – 11:45am	Coffee break

Workshop Program …

11:45am – 12:45pm	**Session 2**

- *Change Minder: Towards a General Web-Change Notification System Based on HTML Differencing*
  Eleni Stroulia (University of Alberta, Canada)

- *Open Challenges in Ubiquitous and Net-Centric Computing Middleware*
  Thierry Bodhuin (University of Sannio, Italy)

- *On the Challenges of Redocumenting Net-Centric Computing Applications*
  Scott Tilley (Florida Institute of Technology, USA) [Part of PRDS 2005]

- Open Discussion

12:45pm – 1:00pm	**Wrap-Up**