



# ICEIS 2009

## **11<sup>TH</sup> INTERNATIONAL CONFERENCE ON ENTERPRISE INFORMATION SYSTEMS**

### **Final Program and Book of Abstracts**

MILAN, ITALY – May 6 - 10, 2009

ORGANIZED BY



TECHNICAL CO-SPONSORSHIP



**SWIM**



IN COOPERATION WITH



Association for  
Computing Machinery  
(SIGMIS)

Paper 431  
11:00 - 11:30  
Poster Session 3  
Foyer

### DYNAMIC-AGENTS TO SUPPORT ADAPTABILITY IN P2P WORKFLOW MANAGEMENT SYSTEMS

A. Aldeeb, K. Crockett and M. J. Stanton

*Manchester Metropolitan University, Manchester, U.K.*

**Keywords:** Dynamic agents, Peer-to-Peer, Exception handling, Workflow adaptability.

**Abstract:** Peer-to-Peer (P2P) technology is being recognized as a new approach to decentralized workflow management systems to overcome the limitation of the current centralized Client/Server workflow management systems. However, the lack of supporting adaptability and exception handling at instance level of this approach seems to be responsible for the weakness of the P2P workflow management systems. Dynamic agents can be used within P2P workflow management systems architecture to facilitate adaptability and exception handling. This paper presents a novel dynamic-agent P2P workflow management system which integrates three major technologies: software agents, P2P networking and workflow systems. The adoption of dynamic agents within P2P network can help in overcoming the adaptability problem, reducing the need for human involvement in exception handling and improves the effectiveness of the P2P workflow management system.

Paper 487  
11:00 - 11:30  
Poster Session 3  
Foyer

### PROFILING COMPUTER ENERGY CONSUMPTION ON ORGANIZATIONS

Rui Pedro Lopes, Luís Pires, Tiago Pedrosa and Vasile Marian

*Polytechnic Institute of Bragança, Bragança, Portugal*

**Keywords:** Energy saving, Power management, Policy-based consumption optimization.

**Abstract:** Modern organizations depend on computers to work. Text processing, CAD, CAM, simulation, statistical analysis and so on are fundamental for maintaining high degree of productivity and competitiveness. Computers in an organization, consume a considerable percentage of the overall energy and, although a typical computer provides power saving technologies, such as suspending or hibernating components, this feature can be disabled. Moreover, the user can opt for never turning off the workstation. Well defined power saving policies, with appropriate automatic

mechanisms to apply them, can provide significant power savings with consequent reduction of the power expense. With several computers in an organization, it is necessary to build the profile of the energy consumption. We propose installing a software probe in each computer to instrument the power consumption, either directly, by using a power meter, or indirectly, by measuring the processor performance counters. This distributed architecture, with software probes in every computer and a centralized server for persistence and decision making tries to save energy, by defining and applying organization level power saving policies.

Paper 510  
11:00 - 11:30  
Poster Session 3  
Foyer

### INTEGRATING CASE-BASED REASONING WITH EVIDENCE-BASED PRACTICE FOR DECISION SUPPORT

Expedito Carlos Lopes and Ulrich Schiel

*Federal University of Campina Grande, Campina Grande, Brazil*

**Keywords:** Case-based reasoning, Evidence-based practice, Decision support.

**Abstract:** Evidence-Based Practice (EBP), an emergent paradigm, uses the premise that decision making can be based on scientific proofs available in reliable data bases, usually found on sites over the Internet. However, the procedures of the EBP do not provide mechanisms for retention of information and knowledge strategic of the individual solutions, which could facilitate the learning of different end-users, in the future. On the other hand, Case-Based Reasoning (CBR) uses the history of similar cases to support decision making. But, the retrieval of cases may not be sufficient to give support to the solution of problems. Since both research evidences as well as similar cases are important for decision-making, this paper proposes the integration of the two paradigms for problem-solution support, regarding complex problems. An example of the justice area is presented.



Final Program and Book of Abstracts of the  
11<sup>th</sup> International Conference on Enterprise Information Systems – ICEIS 2009  
<http://www.iceis.org/>