TECHNISCHE UNIVERSITÄT DRESDEN

Zentrum für Informationsdienste und Hochleistungsrechnen (ZIH)

Einladung zum ZIH-Vortrag

Titel: Software Agents as Resource Brokers in Grid

Referenten: Maria Ganzha, Marcin Paprzycki

Systems Research Institute of the Polish Academy of Science Warsaw, Poland
http://www.ibspan.waw.pl/~paprzyck/mp/cvr/research/agent.html

Abstract:

Since 1994 (seminal work of P. Maes) we are told that software agents will become the next revolution in information technology. One of the areas where software agents are expected to play an important role is the Grid. Claims to this effect, as well as research results can be found in work of Beniamino diMartino, Omer Rana, Bhanu Prasad and others. In our work we have taken a different approach to these researchers and proposed that agent teams should be utilized for resource brokering and management.

The aim of the presentation will be to discuss our approach and it will cover in some detail the following issues:

1. Overview of the proposed agent-based Grid resource brokering and management system
2. Ontologies as mechanism for agent communication / understanding
3. Finding team to execute a job
4. Finding team to join
5. Interfacing JADE agents with Globus middleware

Marcin Paprzycki (Senior Member of the IEEE and Senior Fulbright Lecturer) has received his M.S. Degree in 1986 from Adam Mickiewicz University in Poznań, Poland and his Ph.D. in 1990 from Southern Methodist University in Dallas, Texas. His initial research interests were in high performance computing and parallel computing, high performance linear algebra in particular. Over time they evolved toward distributed systems and Internet-based computing; in particular, agent systems. He has deliver more than 100 invited presentations at conferences and seminars and has published more than 250 research papers. He was also invited to Program Committees of over 300 international conferences and is a member of editorial boards of 15 journals and a book series.

Maria Ganzha obtained MS and her Ph.D. in Applied Mathematics from Moscow State University, Moscow, Russia in 1987 and 1991 respectively. Her initial research interests were in the area of differential equations, solving mixed wave equations in space with disappearing obstacles in particular, currently she works in the areas of software engineering, distributed computing and agent systems in particular. She has published more than 70 research papers and is on editorial boards of 5 journals and a book series and was invited to Program Committees of over 40 conferences.

Ort: Trefftz-Bau, Visitor-Center

Zeit: Mittwoch, den 11. Februar 2009, 10.00 Uhr