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Workshop on System Management Techniques, Processes and Services

Workshop Description:

In today's high-performance computing, system management and related services play a key role. With service business accounting for more than half of the U.S. economy, in our third year of SMTPS we would like to broaden the scope of our workshop to cover all aspects of system management, going beyond scientific computing. In order to satisfy the systems needs of both commercial and scientific applications, the focus on system management now includes not only the tools and user interfaces, but also other aspects such as services, processes and system control. Businesses in the IT area are focusing more and more on innovative techniques, processes and methods to manage commercial or scientific systems remotely, in order to optimize the use of resources by minimizing system down time. As a result, there are requirements not only to revisit some of the traditional methods used to develop system management tools for today's servers but also to evaluate the implications and benefits the new programming models can provide for parallel and distributed systems in terms of system services performance and utilization. This workshop is intended to bring together researchers and practitioners to identify the new challenges imposed by this trend and investigating efficient software tools, techniques and service processes to improve the performance, reliability and operation of enterprise servers including parallel and distributed systems.

Topics of interest include but are not limited to:

- Scalable operating system design
- Scalable resource management tools
- Efficient failure diagnosis, failure prediction and failure recovery tools
- Scalable job scheduling tools
- Scalable check-pointing tools

- Self-healing and self-management tools
- Power management for enterprise servers leading to efficient systems management
- System bring-up and control tools
- Ease of system maintenance, services including system management experiences
- Performance, system utilization implications
- Scalable I/O and file system management
- Optimization techniques for services management
- Services engineering and utility computing techniques
- Web services and Services oriented architecture and implications to system management aspects

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