
1st International Workshop on Service-Oriented P2P Networks

ServP2P 2009

Part of IEEE CCGrid 2009

18th – 21st May 2009, Shanghai, China

CALL FOR PAPERS

Peer-to-Peer networks first emerged in the late 90's as specialised systems & protocols to support distributed file sharing. Since then, the scientific community has gradually changed the way P2P networks are perceived; from file sharing applications to a general-purpose methodology that can be applied to design large scale resource discovery and sharing applications. The term resource is quite generic and encapsulates not just files but applications, services and computational resources such as storage and processing cycles.

So far the main emphasis of P2P research was on the optimisation of the design and performance of such networks in terms of file sharing. However, this work is not directly applicable to consumable resources such as services, storage and processing cycles. These resources have two main characteristics: Firstly they are non-replicable and secondly (because they are consumable) they possess a highly volatile and unpredictable availability. The combined effect of the above two attributes is that distributed hash tables and numerous successful informed search techniques cannot be directly applied to this type of resources. At the same time there is a growing demand for P2P-oriented systems that can successfully manage, retrieve and provide access to applications and computational resources in general rather than just files. Furthermore, Internet Service Providers (ISPs) and content providers are increasingly looking towards exploiting the P2P scalability and performance gains over traditional client-server architectures for efficiently distributing massive volumes of media content and services worldwide.

This workshop aims to address the need for more research into the theory and applicability of P2P networks on the scalable and efficient discovery and access to computational resources and services from processing cycles to complex Web Services. Areas of interest include, but are not limited to, the following:

- Search mechanisms and heuristics for computational resources
- Service discovery & utilisation
- P2P models of deployment and management of Web Services
- P2P storage systems
- Semantic computational sharing and cloud computing over P2P networks
- Peer-to-Peer workflow management systems
- Overlay self-organisation and management
- Performance measurement, optimisation and benchmarks
- Trust management and security systems for computational P2P networks
- Free-riding prevention models
- Profitable computational P2P systems and related P2P economy models

WORKSHOP ORGANISERS:

Dr. Nick Antonopoulos - *University of Surrey, UK* (N.Antonopoulos@surrey.ac.uk)

Dr. Maozhen Li - *Brunel University, UK* (Maozhen.Li@brunel.ac.uk)

IMPORTANT DATES:

Papers Due: **30th November 2008**

Notification of Acceptance: **15th January 2009**

Camera-Ready Papers: **15th February 2009**

WEBSITE:

<http://www.computing.surrey.ac.uk/personal/pg/S.Stafrace/ServP2P09/>