ATC-07 CFP

The 4th International Conference on

Autonomic and Trusted Computing (ATC-07)

- Bring Safe, Self-x and Organic Computing Systems into Reality -

http://www.atc-conference.org/2007/ and http://ehpclab.stfx.ca/~atc07/

Organized by Hong Kong Polytechnic University, China
In Cooperation with the IEEE Computer Society

Hong Kong, China, July 11-13, 2007

Further questions, please contact with

ATC07 Secretariat <atc07@googlegroups.com>

* To be confirmed.

Computing systems including hardware, software, communication and networks are growing towards an ever increasing scale and heterogeneity, becoming overly complex. Such complexity is getting even more critical with the ubiquitous permeation of embedded devices and other pervasive systems. To cope with the growing and ubiquitous complexity, Autonomic Computing (AC) focuses on self-manageable computing and communication systems that exhibit self-awareness, self-configuration, self-optimization, self-healing, self-protection and other self-x operations to the maximum extent possible without human intervention or guidance. Organic Computing (OC) additionally emphasizes natural-analogue concepts like self-organization and controlled emergence.

Any autonomic or organic system must be trustworthy to avoid the risk of losing control and retain confidence that the system will not fail. Trust and/or distrust relationships in the Internet and in pervasive infrastructures are key factors to enable dynamic interaction and cooperation of various users, systems and services. Trusted/Trustworthy Computing (TC) aims at making computing and communication systems as well as services available, predictable, traceable, controllable, assessable, sustainable, dependable, persist-able, security/privacy protect-able, etc.

A series of grand challenges exist to achieve practical self-manageable autonomic systems with truly trustworthy services. ATC-07 addresses the most innovative research and development in these challenging areas and includes all technical aspects related to autonomic/organic computing (AC/OC) and trusted computing (TC). ATC-07 is a successor of the First Int'l Workshop on Trusted and Autonomic Ubiquitous and Embedded Systems (TAUES-05, Japan, Dec.), the Int'l Workshop on Trusted and Autonomic Computing Systems (TACS-06, Austria, Apr.), and the 3rd International Conference on Autonomic and Trusted Computing (ATC-06, Three Gorges, China, Sep.).

Topics include but are not limited to the following:

- **AC/OC Theory and Models**
  Nervous/organic models, negotiation, cooperation, competition, self-organization, emergence, etc.
- **AC/OC Architectures and Systems**
  Autonomic elements & their relationship, frameworks, middleware, observer/controller architectures, etc.
- **AC/OC Components and Modules**
  Memory, storage, database, device, server, proxy, software, OS, I/O, etc.
- **AC/OC Communication and Services**
  Networks, self-organized net, web service, grid, P2P, semantics, agent, transaction, etc.
- **AC/OC Tools and Interfaces**
  Tools/interfaces for AC/OC system development, test, monitoring, assessment, supervision, etc.
- **Trust Models and Specifications**
  Models and semantics of trust, distrust, mistrust, over-trust, cheat, risk, reputation, reliability, etc.
- **Trust-related Security and Privacy**
  Trust-related secure architecture, framework, policy, intrusion detection/awareness, protocols, etc.
- **Trusted Reliable and Dependable Systems**
  Fault-tolerant systems, hardware redundancy, robustness, survivable systems, failure recovery, etc.
- **Trustworthy Services and Applications**
  Trustworthy Internet/web/grid/P2P e-services, secured mobile services, novel applications, etc.
- **Trust Standards and Non-Technical Issues**
  Trust standards and issues related to personality, ethics, sociology, culture, psychology, economy, etc.

IMPORTANT DATES

Submission Deadline:	**January**	**15,**	**2007**
Authors Notification:	**March**	**15,**	**2007**
Final Manuscript Due:	**April**	**15,**	**2007**

ELECTRONIC SUBMISSION

Prepare your paper with free styles not more than 15 pages in PDF file. Submit your paper(s) at the ATC-07 submission site: http://ehpclab.stfx.ca/~atc07/sub/

PAPER PUBLICATION

Accepted papers will be published by Lecture Note in Computer Science (LNCS). Authors of accepted papers, or at least one of them, are requested to register and present their work at the conference, otherwise their papers will be removed from the digital library after the conference.

Distinguished papers, after further revisions, will be published in special issues of the Journal of Autonomic and Trusted Computing (JoATC), and the International Journal of High Performance Computing and Networking (IJHPCN). A set of high quality papers of the conference, after further revisions, also will be published in an edited book published by Springer, Germany, and in an edited book published by IDEA Publishing Group, USA, respectively.