SDMCMM

2012 Workshop on Secure and Dependable Middleware for Cloud Monitoring and Management

Held in conjunction with **ACM/IFIP/USENIX ACM International Middleware Conference**,
Montreal, Quebec, Canada 3-7 December, 2012
http://sdmcmm.dei.uc.pt

Call for Papers

End users and businesses are increasingly relying on large-scale cloud computing systems to support Internet and telecommunication services such as e-Commerce, VoIP, business analytics etc., demanding quality of service (QoS) as well as quality of protection (QoP) guarantees from the system. Cloud providers typically use monitoring and management middleware to ensure that they can provide these guarantees to their end users.

The monitoring middleware needs to be able to detect failures when they occur in the system. The monitoring mechanisms should be capable of automatically inferring the root cause of any failures that occur in the system or be able to generate effective visualizations that allow system administrators to quickly verify the results of the automatic diagnosis or to quickly infer an alternative root cause of the problem. The monitoring middleware itself must be trustworthy and be capable of withstanding accidental as well as malicious faults. Building such a middleware is challenging due to the large amount of monitoring data that needs to be collected and analyzed, the necessity to recover and adapt in the presence of overloads or attacks, and ensuring the consistency of distributed and replicated monitoring activities. Furthermore, the networking support needed for resilient communications that provide the above mentioned dependability and security guarantees for the monitoring and management middleware raises security issues that have not been addressed by the conventional networking community.

The purpose of this workshop is to bring together researchers and system administrators who share the common goals of managing a cloud computing system to discuss new ideas and techniques for building resilient and trustworthy monitoring/management middleware for such systems. Participants will discuss novel ways of architecting such a middleware, verifying the resilience and trustworthiness of the middleware, their experience with using such a middleware in cloud computing systems and other hot topics in the area of secure and trustworthy monitoring and management.

Topics of interest include but are not limited to:
- Architectures for dependable, secure and trustworthy monitoring
- Techniques for analysis and visualization of system data
- Determination of malfunction or misuse based on system data
- Novel instrumentation sources and techniques for monitoring
- Intrusion tolerance in data centers and cloud infrastructures
- Dependability and security in virtualization technology
- Network architectures for the cloud monitoring
- Network resilience in cloud monitoring
- Energy efficient networking in the cloud
- Service tailored transport for resilience in the cloud
- Traffic and load balance monitoring in the cloud

Important Dates

Aug 15, 2012 - Paper Submission
Sep 21, 2012 - Notification of Acceptance
Oct 5, 2012 - Camera-ready paper due

Submission and Publication

Papers should be no longer than 6 pages in the standard ACM format and must be submitted through EasyChair. All papers will be peer-reviewed by at least two reviewers with expertise in the area. Accepted papers will appear in a Middleware 2012 companion proceedings including all workshop papers, which will be available in the ACM Digital Library. At least one of the authors will have to register for the workshop and present the paper.

Workshop Co-Chairs

António Casimiro, Univ. of Lisbon, Portugal
Rajeev Gandhi, Carnegie Mellon University
Filipe Araújo, Univ. of Coimbra, Portugal

Program Committee

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