

2nd International Workshop on Software Testing in the Cloud

STITC 2010

Saturday, April 10, 2010; 9:00am – 4:00pm
Held as part of the 3rd IEEE ICST (Paris, France)



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Software testing is an important part of software engineering life cycle. Testing requires resources that are often not readily available, contributing to an inefficient testing process. Running large test suites of test cases can consume considerable time and resources, often precluding their use in an interactive setting.

Cloud computing has gained a significant amount of attention in the last few years. It includes virtualized hardware and software resources that are hosted remotely and made available on-demand using a services model (e.g., SOA). Instead of running or storing applications locally, one can host their application in the cloud and access it from anywhere using a thin client application such as a Web browser. Cloud computing promises to reduce cost by cutting down the need for buying large amount of hardware and software resources. It also promises efficiency, flexibility, and scalability.

Software testing in the cloud (STITC) lies at the intersection of these key areas: software testing, cloud computing, and system migration. According to the National Defense Industrial Association (NDIA), STITC is an area that will grow in importance in the next few years. The STITC 2010 workshop has three distinct facets:

- (1) Testing **IN** the cloud: Leveraging the resources provided by a cloud computing infrastructure to facilitate the concurrent execution of test cases in a virtualized environment.
- (2) Testing **OF** the cloud: Testing applications that are hosted and deployed in a cloud environment.
- (3) Migrating testing **TO** the cloud: Moving the testing process, test assets, and test infrastructure from their current state for testing **in** the cloud or testing **of** the cloud.

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Please turn over for workshop program...

STITC 2010 Workshop Program

| Time | Activity |
|-------------------|---|
| 8:00am - 9:00am | Registration |
| 9:00am - 9:30am | Welcome (Workshop Organizers) |
| 9:30am - 10:30am | Session 1: Migrating Software Testing <i>TO</i> the Cloud <ul style="list-style-type: none">▪ “Software Testing as an Online Service: Observations from Practice” Leah Muthoni Riungu (Lappeenranta University of Technology, Finland)▪ “When to Migrate Software Testing to the Cloud?” Tauhida Parveen (Florida Institute of Technology, USA)▪ Open Discussion |
| 10:30am - 11:00am | Coffee break |
| 11:00am - 12:30pm | Session 2: Software Testing <i>IN</i> the Cloud <ul style="list-style-type: none">▪ “Large-Scale Software Testing Environment using Cloud Computing Technology for Dependable Parallel and Distributed Systems” Toshihiro Hanawa (University of Tsukuba, Japan)▪ “YETI on the Cloud” Manuel Oriol (University of York, UK)▪ Open Discussion |
| 12:30pm - 2:30pm | Lunch |
| 2:30pm - 3:15pm | Session 3: Software Testing <i>OF</i> the Cloud <ul style="list-style-type: none">▪ “Migrating Autonomic Self-Testing to the Cloud” Annaji Sharma Ganti (North Dakota State University, USA)▪ Open Discussion |
| 3:15pm - 3:45pm | Session 4: A Research Agenda for STITC |
| 3:45pm - 4:00pm | Wrap-Up (Workshop Organizers) |

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Please turn over for workshop description...