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Service Availability

First International Service Availability Symposium, ISAS 2004
Munich, Germany, May 13-14, 2004
Revised Selected Papers

Springer

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Open Specifications for Service Availability™

Manfred Reitenspieß[1], ISAS 2005 General Chair

The continuous availability of services has always been a metric for the success of telecommunications applications: the phone system must always be operational. Today, IP data network providers and enterprise IT departments face the same requirements. Service availability architectures and feature sets have traditionally been highly proprietary and customized to individual telecom equipment provider and application requirements. Each application and hardware platform had to be designed to fit with the specific service availability environment.

Today's market dynamics require companies to be able to raise the bar and meet new and aggressive time-to-market goals. By standardizing the interfaces for high-availability functions and management, the Service Availability Forum aims to create an open, off-the-shelf infrastructure for implementers and operators of highly available services.

The Service Availability Forum is unifying functionality to deliver a consistent set of interfaces, thus enabling consistency for applications developers and network architects alike. This means significantly greater reuse and a much quicker turnaround for the introduction of new products.

As the telecom and IT market recovery accelerates, meeting both functional and time-to-market goals will be essential for success. The Service Availability Forum offers a way forward for maximizing time-to-market advantage through the adoption of a consistent and standardized interface set. The set of open standard software building blocks includes functions for managing the hardware platform components (Hardware Platform Interface), high-availability service functions used by applications (Application Interface Specification), and functions for their associated management (System Management Services).

The International Service Availability Symposium 2004 brought together scientists, technical experts and strategists to discuss availability under a number of aspects:

1. Availability in the Internet and databases
2. High availability based on Service Availability Forum specifications
3. Measurements, management and methodologies
4. Networks of dependable systems
5. Standards and solutions for high availability

The Service Availability Forum is a consortium of industry-leading communications and computing companies working together to develop and publish high availability and management software interface specifications. The Service Availability Forum then promotes and facilitates specification adoption by the industry.

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Program Chair's Message

The 1st International Service Availability Symposium (ISAS 2004) was the first event of its kind where a forum was provided for academic and industrial researchers and engineers who focus on next-generation solutions where services will dominate and their dependability will be expected and demanded in virtually all applications.

As with the birth of a new baby so it was with the first symposium: It was somewhat an unpredictable event and we did not really know how many paper submissions to expect. We were nicely surprised with 28 (including three invited ones), considering the rather specialized topic and short lead time to organize this meeting. We will broaden the scope of the Symposium next year by making it clear that anything that concerns computer services might be worthwhile presenting at ISAS to a good mix of academic and industrial audiences.

A significantly increased interest in dependable services should not be a surprise as we are expecting a paradigm shift where "everything" may become a service. Computer evolution began with data types and formats. Then the concept of objects was discovered and transformed later into components. A set of components (including a set of one as well) forms a service and this concept will dominate computing, ranging from sensor networks to grid computing, for the foreseeable future. In order to make services a viable replacement and/or extension to existing forms of computing they have to be highly available, reliable and secure. The main computer and communication companies, service providers, and academics are searching for innovative ways of increasing the dependability of services that are growing in complexity and will use mainly distributed resources. This trend will continue as computer services are bound to pervade all aspects of our lives and lifestyles. No matter whether we call the computing services of the future "autonomic," "trustworthy" or simply "reliable/available" the fact of the matter is that they will have to be there seven days a week, 24 hours a day, independent of the environment, location and the mode of use or the education level of the user. This is an ambitious challenge which will have to be met. Service availability cannot be compromised; it will have to be delivered. The economic impact of unreliable, incorrect services is simply unpredictable.

All submissions were subject to a rigorous review process. Hence only 15 papers were accepted. Unfortunately, many good, worthwhile manuscripts did not make it into the program due to the high quality threshold set up by the Program Committee. Each paper was reviewed by three Program Committee members. I would like to thank wholeheartedly our PC members whose hard work was exemplary. Those who spent time at the virtual PC meeting deserve an additional recognition. Our paper selection went extremely smoothly thanks to the tremendous effort of the reviewers and solid support from my secretary Sabine Becker and my Ph.D. student Nikola Milanovic of Humboldt University Berlin. Also, Prof. Joerg Kaiser from the University of Ulm deserves a special credit

for editing the symposium's proceedings and preparing the Springer volume of Lecture Notes in Computer Science. I thank all of them very much. And last but not least I would like to express my gratitude to Manfred Reitenspieß whose involvement and support were very helpful throughout the program preparation process.

The attendees enjoyed the final program as well as the lively presentations, got involved in many heated discussions, struck up new frienships, and, hopefully, got inspired to contribute to next year's symposium to be held in Berlin on April 25-26, 2005.

Munich, May 13, 2004

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