

ΔΙΑΛΕΞΗ



Scalable Persistence for Data Stream Processing Systems

Κώστας Μαγκούτης
ICS - FORTH



Περίληψη

Abstract: Data stream processing systems (DSPS) have attracted significant interest in recent years due to their applicability in monitoring applications requiring the use of continuous queries. In the past, DSPS have offered limited support for data persistence, for two main reasons: First, early DSPS applications focused on the processing of live rather than stored streams, a trend that is currently shifting towards putting equal weight on both cases; second, scalable persistence solutions, which are required by modern scalable DSPS, have not been thoroughly studied on write-intensive DSPS-type workloads.

The work I will describe in this talk advances the state of the art by providing DSPS with a scalable path to persistent storage. This path has low impact on the performance properties of DSPS and allows two fundamental enhancements to their capabilities: First, it allows stream persistence that scales with the number of persisted streams in both capacity and performance; second, fault tolerance is achievable by checkpointing and stream replay schemes that are not constrained by limitations of direct-attached storage systems.

Σύντομο Βιογραφικό

Dr. Kostas Magoutis is a Researcher at the Institute of Computer Science (ICS), Foundation for Research and Technology Hellas (FORTH) in Heraklion, Greece. His research interests focus on improving the performance and manageability of scalable computer systems and on the design and engineering of flexible IT services. Prior to joining ICS-FORTH, Dr. Magoutis served as a Research Staff Member at the IBM T. J. Watson Research Center and as adjunct professor at Columbia University in New York, USA. Dr. Magoutis received his Ph.D. in Computer Science from Harvard University.

Πληροφορίες: Ευαγγ. Πιτουρά.

Ο κ. Μαγκούτης είναι υποψήφιος σε θέση ΔΕΠ με αντικείμενο «Κατανεμημένα Συστήματα».

Τετάρτη, 17 Φεβρουαρίου 2010 – ώρα 12:00
Αίθουσα Σεμιναρίων, Κτίριο Πληροφορικής
Πανεπιστήμιο Ιωαννίνων