

“Honey, I Shrunk the Database”: Footprint, Mobility, and Beyond

Panel Session

Praveen Seshadri

Cornell University
4108 Upson Hall
Ithaca, NY 14850
(607) 255 1045

praveen@cs.cornell.edu

ABSTRACT

The small-scale mobile computing market (palmtops, handhelds, smartphones, smartcards, etc.) is showing the most explosive growth in the history of computing. Within the last year, most database vendors have announced plans to build "small footprint" versions of their DBMS products to run on these small and mobile platforms. What are the real database systems issues? What are the likely markets? What are the challenges, and the dangers? Every specific vendor seems to have a different answer to these questions. They all agree on only one thing: there is a tremendous opportunity here. Our motivation for this panel is to get a number of the central decision-makers into a room and debate the issues.

Keywords

Mobile computing, small-footprint database.

1. ISSUES

At a high-level there are several controversial issues to discuss:

- 1) *Does Footprint Matter?* Right now, the different vendors are competing with each other to deliver the "smallest footprint" dbms. Does this matter and for how long?

- 2) *Does SQL Matter?* The initial applications on these devices are essentially PIM. Is there really a need for SQL databases (or even more fancy OR and OO DBs?)
- 3) *Does Java vs C Matter?* Cloudscape and DataBahn are betting on Java and the rest of the database industry is not. Which way is it heading?
- 4) *Will Wireless Networking make this Discussion Redundant?* If there is really fast networking for the mobile devices, does anyone really need more than a database engine on the backend server?
- 5) *Does Mobility require special smarts?* From the database systems viewpoint, do we have all the answers, or are there new challenges?

The eventual questions are of course: in the year 2002, will we carry many devices or just one? And will database systems manage the data on them, or will we miss the boat?

2. PANELISTS

The panelists include leaders from the database industry who are working on small-footprint database systems, and experts on mobile computing technology.