



New-look database startup NuoDB gets \$10M to scale up and out

By [Barb Darrow](#) Jul. 9, 2012, 5:00am PT [No Comments](#)

The database category hasn't been all that exciting over the past 20 years, with market leaders Oracle, IBM, Microsoft, Sybase (now SAP trading off incremental updates every year or so. But that period of stasis ended with the advent of cloud computing, open source software and big data — a perfect storm that reinvigorated the field.

Now [NuoDB](#), a new-look database company that seeks to take advantage of that convergence is taking in \$10 million in Series B funding, led by Morgenthaler Ventures with additional contributions from existing backers Hummer Winblad Venture Partners and Longworth Venture Partners. The company also added database pioneer Gary Morgenthaler, a partner at Morgenthaler Ventures, to its board, joining another database luminary, Hummer Winblad partner Mitchell Kertzman.



[Morgenthaler](#) co-founded Ingres, an early relational database software company and co-founded Illustra with Michael Stonebraker a serial database entrepreneur who is now CTO of [VoltDb](#). Illustra was sold to Informix which was in turn bought by IBM for \$1 billion. Morgenthaler has also invested in Siri, Nuance Communications and Nominum. The \$10 million cash infusion — which brings total funding to \$12 million — will be used to expand the current beta beyond 700 testers and bring the product to market in the fall, according to NuoDB CEO Barry Morris.

In a recent interview, Morgenthaler told me that he'd tracked databases since the sale of Informix in 1986 but really hadn't seen anything of note. Until now.

“Honestly, I had not found anything sufficiently compelling to get me to re-enter a field I'd had success in. NuoDB is something different in terms of architecture and technology and the potential it represents is a quantum step forward, If I didn't think that, I wouldn't invest because I want an unblemished record,” he said with a laugh.

SQL, NoSQL, whatever

While NuoDB is often lumped in with NewSQL databases, Morris quibbles with that characterization. “SQL is just one personality for us. We can be NoSQL or SQL, the innovation we have is much deeper,” Morris told me in a recent interview. He likens NuoDB to BitTorrent

in the way it divvies up the task at hand to any number of processors — avoiding bottlenecks — but somehow managing to keep all that data organized, accessible and safe.

“Every database from Oracle to DB2 to SQL Server and including MongoDB and Couch has the same core architecture, which is to manage a file on a disk. That means concurrent access to that file is a problem — you cannot scale. For us, the disk is at the edge of the picture and we get away from that central control of everything,” Morris said.

The other analogy Morris likes to use to explain NuoDB’s is the flock of birds flying in formation: “No single bird is the brain, no one bird is in charge,” he said. “Every bird does something simple, but doesn’t even know how many birds are in the flock or where the flock is going. The bird just knows, ‘If the bird on the right flies toward me, I fly a little bit left’. The idea is, you can have lots of simple things collaborating.”

Following that model, NuoDB can distribute that task to any number of processors across geographies as needed, Morris said.

That the Cambridge, Ma.-based startup, one of several [hot database companies around Boston](#), has been able to draw from the ranks of premier database talent— including Morgenthaler and Kertzman — is a testament to this idea. And to NuoDB’s founder and CTO [Jim Starkey](#), a Digital Equipment Corp. veteran who went on to develop the Interbase database. He is considered a database superstar.

Database allstars

Kertzman, like Morgenthaler, thought he was through with databases when he left Sybase in 1998 and joined Hummer Winblad five years later. “Let’s face it, databases got boring,” he said.

But, Morris was able to sell him on NuoDB. “We looked at a lot of new database companies and didn’t invest until Jim and Barry got my attention. Jim is probably one of the top five database scientists [in the world] and this is one category where experience really matters. Not just technical experience but understanding what a SQL online transaction processing [OLTP] database needs to do,” Kertzman said. “Unless you’ve been in this business you might think a database is a list of features but it’s really demanding. The difference between a pretty good database and one that people will build their business on is pretty big.”

Morgenthaler said NuoDB is just what the era of cloud computing and big data calls for. What is needed, he said, are “massive scale, horizontal scaleout systems that are largely self organizing with modern management tools around them and that have very flexible architectures that allow you to adapt to the application while its running. [And they need to] run globally distributed in a way that’s flexible to change, change in the size of database needed and the number of nodes running,” he noted, while acknowledging that’s a very tall order.

“Things like Hadoop or Cassandra are great, but developers need choice. We looked at this and said it’s what the market needs.”

