

# DATABASE

## TRENDS AND APPLICATIONS

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### Industry Leader Interview



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## InterSystems Pursues a Two-track Strategy Aimed at ISVs and End-users

*The key elements of multivalued technology are now part of the Caché database, facilitating migration.*

**DBTA: About 15 months ago, InterSystems rolled out its Ensemble universal integration platform. What does the big picture look like at this point?**

Grabscheid: We have continued to grow. We are expecting to grow 20 to 25 percent this year. We have offices in 21 countries. And we are profitable. The business is still overwhelmingly Caché, but Ensemble is growing fast.

**DBTA: What is your strategy?**

Grabscheid: We have a two-track strategy with Caché. Historically, an important part of our business has been with other software companies that build applications for vertical markets. We continue to recruit new partners, and that is the engine of the business. The other area is selling directly to end-users in technology-savvy industries. We have good success in financial services and telecommunications. They are less inclined to buy packaged solutions. They are more inclined to buy technology and build for themselves. We are aggressively pursuing that.

**DBTA: For what applications are they using Caché?**

Grabscheid: They have aggressively adopted object technology as the way they are going to build applications, whether it is Java or C++ or .Net. Connecting a rich object model to a

relational database causes them a fair amount of development and runtime overhead. That is what has opened the door for us. They feel they have pushed the relational database as far as they can, and they are looking for something new. It is an interesting environment because health care is aggressive in adopting new medical technologies but not that aggressive in adopting new computer technology. The big financial institutions and telecommunications companies are much more aggressive in trying to get a competitive advantage by trying new things. Users tend to have big, performance-critical, transaction-processing applications.

**DBTA: What has been your experience with Ensemble?**

Grabscheid: We have about 35 sites and expect to add 70 to 80 more this year. We have found more acceptance in health care than we expected.

**DBTA: Why do you think that is?**

Grabscheid: The big push in health care is to try to connect the different parts of a person's medical record. The critical problem they have is that medical information is spread all over the place--in three or four doctors' offices, one or two hospitals. There is a barrier to delivering quality care, because there is incomplete information everywhere. And there is the annoyance factor that

every time you go to the doctor, they ask the same questions every other doctor asks. So there is a debate on how to get to wider adoption of electronic medical records and information-sharing while respecting privacy concerns. It is less about trying to integrate the departments within a hospital, and more about getting the other parts of the system working together productively.

**DBTA: How do you address that?**

Grabscheid: We have focused on being able to build new integrated applications very quickly. We have focused on the time-to-completion dimension, and we have something that is much faster than people are accustomed to. The Caché presence in health care means that we have good ways to connect to a lot of applications that are out there already. And we have seized the opportunity by adding some health care-specific things to Ensemble.

**DBTA: Such as?**

Grabscheid: HL-7 was the first broad effort to connect health care applications. There is a new standard, HL-7 version 3, which is XML-based. People need to integrate HL-7 version 2 and get to version 3. And there are other transaction standards that come out of HIPAA. We have incorporated standards and quasi-standards that are

becoming important into Ensemble.

**DBTA: Where is Ensemble going?**

Grabscheid: Five years from now, it should be a third to half of our business. Though we are doing well, the database market is growing two to three percent a year. I think the integration space -- the composite application technology space -- is growing by 10 to 20 percent.

**DBTA: What is your new technology aimed at the multivalued community?**

Grabscheid: We have added some multivalued capabilities designed to make it easy to move a multivalued application to Caché and take advantage of the Caché technology, as well as the multivalued technology.

**DBTA: What appealed to you about the multivalued community?**

Grabscheid: There is a focus on rapid application development, high performance, and scalability but not much marketing glitz, which is the background we come from. And it is a community that has a big investment in their existing technology. It doesn't want to jettison it but has an interest in using newer technologies in conjunction with their multivalued applications.

**DBTA: Where are you in the development of the technology?**

Grabscheid: In August of last year, we started working on first migrations and we have been working through the process. We have two more applications

in the queue. We will continue to perfect the technology by working one-on-one with customers, and I hope that by the second half of the year, we will be ready to start working with more companies. We will take it a step at a time. Our goal is to be able to bring an application into Caché, recompile it, and have it work, and to be able to access the data through our object technology and our SQL technology, as well.

**DBTA: Folks would develop on Caché?**

Grabscheid: That's right. It doesn't mean they will stop using their multivalued code, but they have to be interested in using something new. The multivalued community believes passionately in the technology they have. Our approach is to earn their respect gradually and earn our way into their hearts and minds. It is a five-to-10-year plan.

**DBTA: What are the big trends in data management?**

Grabscheid: There is a lot happening with XML, and there are several schools of thought. There is the idea to store XML and use Xpath as the query mechanism. We have tended in the other direction, which is take in XML and give back XML but store data in a more space-and-retrieval-efficient form internally. There is a lot of interest and attention on security. It started in the federal government sector. Right now, we are going through the Common Criteria Certification process. It is an arduous process. When the HIPAA reg-

ulations started to impose criminal sanctions on hospital CEOs, it made those issues less theoretical.

**DBTA: What does the move to Linux mean for InterSystems?**

Grabscheid: Rather than looking at a small number of big boxes, organizations are looking at farms of smaller boxes. They are demanding different sorts of configuration and systems management services. There is more interest in clustering and failover technologies. Linux is a small part of our business but growing quickly. It doubled last year as a share of our business.

**DBTA: How is the power used?**

Grabscheid: We are seeing huge increases in the size of the databases--multiple terabyte configurations are becoming more common. For one customer, we put together a four-terabyte database test configuration. The hardware cost \$20,000 and fits under your desk. The kinds of data volumes people are dealing with puts pressure on their backup strategies and other things. There are requirements to keep data for a long time.

**DBTA: What does InterSystems look like down the road?**

Grabscheid: I hope we are much the same as we are today, but bigger. We will still be focused on the transaction processing world and still serving application software companies and direct end-users. We keep chugging along.