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Sven Pecher is a *Senior Consultant* with several years in IT consulting with IBM Global Business Services.

Q1. Please explain briefly what are your application domains and your role in the enterprise.

Sven Pecher: I am Application Consultant for J2EE projects.

Q2. When the data models used to persistently store data (whether file systems or database management systems) and the data models used to write programs against the data (C++, Smalltalk, Visual Basic, Java, C#) are different, this is referred to as the "impedance mismatch" problem. Do you have an "impedance mismatch" problem?

Sven Pecher: Not really, sometimes it's difficult to handle bidirectional associations, but in general the impedance mismatch can be kept low by careful data (and data mapping) design. But I see a major mismatch in the area of constraint definitions. While on object there are powerful solutions like OCL, on (relational) DB side often SQL constraints can't be utilized effectively for complex OR mappings.

Q3. What solution(s) do you use for storing and managing persistence objects? What experience do you have in using the various options available for persistence for new projects? What are the lessons learned in using such solution(s)?

Sven Pecher: Hibernate as OR mapper. Lesson learned: For complex applications that handle multiple business transaction in parallel, hibernate session and DB transaction handling becomes quite complex. Spring integration is not very mature. Use named queries. Mappings and query strategies have to be optimized.

Q4. Do you believe that Object Database systems are a suitable solution to the "object persistence" problem? If yes why? If not, why?

Sven Pecher: While from a technical point of view object databases would be quite interesting, I personally think that it's very difficult (or almost impossible) to convince customers to replace their proven relational databases. Instead it would be more attractive to integrate Object based approaches into existing DBMS, like it has been done for XML within Viper.

Q5. What would you wish as new research/development in the Area of Object Persistence in the next 12-24 months?

Sven Pecher: Three areas:

1. Integrate expressive constraint definition in to OR mapping frameworks.
2. Integrate handling of historic data into OR mapping frameworks.
3. Develop successors for hibernate.