

INFORMATION TECHNOLOGY

Apostles of Open Data Share Vision of Frictionless Future



Satisfaction ruled at the Kongressenter in Oslo, Norway, as 15 software developers networked their laptops and performed a miracle before 300 true-believers of open data exchange.

Presenting at a June 1 International Alliance for Interoperability event, developers used a string of European construction-related programs that import and export object-based 3-D data as *.ifc*-files. They sequentially modified a project in their own programs before saving as *.ifc* and passing it on. Transfers were swift, apparently flawless and gained an audit trail of changes as they progressed.

Patrick MacLeamy, CEO in the San Francisco office of architectural and engineering firm HOK, and chair of the International Alliance for Interoperability, pronounced himself—with some help from the audience—*Fjetret*. Loosely translated from Norwegian, it means “blown away.”

IAI's standard-setting work on a build-

▲ **White Knuckles.** The tension lay in building the network. The software simply worked.

ing data scheme called the Industry Foundation Classes, or IFCs, enabled the exchange. MacLeamy says the most recent edition of the IFCs, 2x2, shows the system is ready for business. “The first

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— PATRICK MACLEAMY

five years were spent getting to a complete package that was usable,” he says. Now, IAI is refocusing from building technical content “to getting the word out that the IFCs really work.”

Norway, with a population of 4.5 million and a cohesive construction industry, is one country taking the lead on interoperability, and it is embracing the IFCs. But also in the forefront and using the IFCs is Singapore, of similar population

and with a similarly cohesive industry. Both countries have government-sponsored drives to increase economic efficiency across multiple sectors, including construction, through the integration of information and communications technology, or ICT, that encourages “frictionless” data exchange.

Cheng Tai Fatt, senior manager of Singapore's building plan department in the building construction authority, showed “ePlanCheck,” a 3-D model checking system built around IFC mapping to local building regulations. It can automatically review designs for code compliance. Designers can repeatedly submit models, or even parts of models, over the Internet for preliminary checks that flag issues likely to block approval.

Fatt says the goal is to remove inconsistent interpretations, give 24-hour self-checking capabilities to designers and reduce the rejection rate of final submissions. He says Singapore intends “to re-engineer the industry business process through IT and achieve a quantum leap in turn-around time and productivity.”

After seeing ePlanCheck in October 2003, Norwegian building authorities began planning their own IFC-based system for application review, with a difference. They began by working with IAI to map the IFC building data scheme to zoning and planning data in Norway's geographic information systems. The project will be done this month. The system will feed into ByggSøk, a national regulatory information and permitting e-submissions system already in place. The IFC-GIS tool will be used to automate checks of zoning submissions of *.ifc*-compliant models. “We're on target,” says Oivind Rooth, project manager of ByggSøk. ■

By Tom Sawyer in Oslo



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